

**PATTERNS OF MORTALITY IN
LOS ANGELES COUNTY
2008-2017**



Los Angeles County Department of Public Health

Barbara Ferrer, PhD, MPH, MEd

Director

Muntu Davis, MD, MPH

Health Officer

Paul Simon, MD, MPH

Chief Science Officer

Office of Health Assessment and Epidemiology

Rashmi Shetgiri, MD, MSHS, MSCS

Director

Megha Shah, MD, MPH, MS

Chief, Population Health Assessment Unit

Alex Ho, MPH

Supervising Epidemiologist

Heena Hameed, MPH

Epidemiologist

Louise Rollin-Alamillo, MS

Chief Research Analyst

Aida Angelescu, MS

Senior Geographic Information Systems Analyst

Rishwa Patel, MPH

Epidemiology Analyst

Amy S. Lightstone, MPH, MA

Chief, Epidemiology and Data Coordination Unit

Suggested Citation

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Message from the Director

Just as health care providers assess the individual needs of their patients, health departments are responsible for “taking the pulse” of their communities. We at the Los Angeles County Department of Public Health gain valuable insights from our many community partners on the most pressing health challenges facing their communities and the strategies to best address them. In addition, we rely on a variety of data sources to assess the health of the population and the underlying social, economic, and environmental conditions that impact health. One of the most important data sources is the information contained on death certificates, which are recorded for almost all the nearly 60,000 deaths in the county each year.

In this report, *Patterns of Mortality in Los Angeles County*, we describe recent trends in mortality countywide, in specific regions of the county, and in various sub-populations defined by gender, age group, and race/ethnicity. The statistics reveal important patterns that highlight significant inequities in health across our different communities and population groups. In addition, the report indicates that the steady progress made in reducing mortality over past decades has stalled, and in some groups mortality has even increased.

We provide this information with the recognition that the observed patterns of mortality raise as many questions as they answer. Most importantly, how do we more effectively address the longstanding inequities in mortality, and in health overall, seen across the county? How do we return to a path of sustained reductions in mortality and improvements in health? How do we best address the leading causes of mortality and premature mortality in the county population? The answers to these questions have important implications for ensuring that all county residents have the opportunities, resources, and support to achieve optimal health and well-being.

We offer this report with the hope that your perspectives and insights on the findings will help create a deeper understanding of the actions needed to address the observed inequities in our communities, and that the report will support your efforts, and our collective efforts, to maximize the health of our residents.

If you have suggestions, questions, or other feedback, please do not hesitate to contact us at epi@ph.lacounty.gov.

In gratitude,

A handwritten signature in black ink that reads "Barbara Ferrer". The signature is written in a cursive, flowing style.

Barbara Ferrer, PhD, MPH, MEd
Director, Los Angeles County Department of Public Health

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Introduction

Mortality is one of the most fundamental indicators of the health of a population. Although mortality statistics provide a relatively incomplete picture of the overall health of a population, these statistics include important information on the leading causes of death which, in turn, inform health care and public health planning and resource allocations as well as priorities for research and prevention. In addition, these statistics identify populations and communities disproportionately impacted by excess mortality, helping to better focus resources for treatment and prevention, including strategies to address the inequitable societal conditions that contribute to the disproportionately high rates of mortality in some groups. Mortality data also provide important information for identifying and characterizing emerging public health threats. For example, after many decades of steady decline in mortality in the U.S., alarming increases in mortality have been observed in many regions of the nation over the last several years, a trend that has been largely attributed to rising rates of drug overdose deaths and suicides.¹

In this report, data are presented on the leading causes of death and premature death in Los Angeles County. Premature death is defined as a death before 75 years of age, a standard cut-off used in mortality analyses. Data on mortality trends are presented for the period 2008 through 2017, the last year for which data on all deaths, including deaths among county residents that occurred outside the county, are available. Data are presented for the total county population and are also broken out by gender, age group, race/ethnicity,* and geographic region (as defined by Service Planning Area) to highlight disparities in mortality seen across different populations in the county. The observed disparities are to a large degree fueled by inequitable social, economic, and environmental conditions experienced by these groups. These conditions are frequently referred to as the social determinants of health.

Key findings are presented in the body of the report. Additional detailed data tables, figures, and technical notes are provided in the appendices.

Trends in Mortality

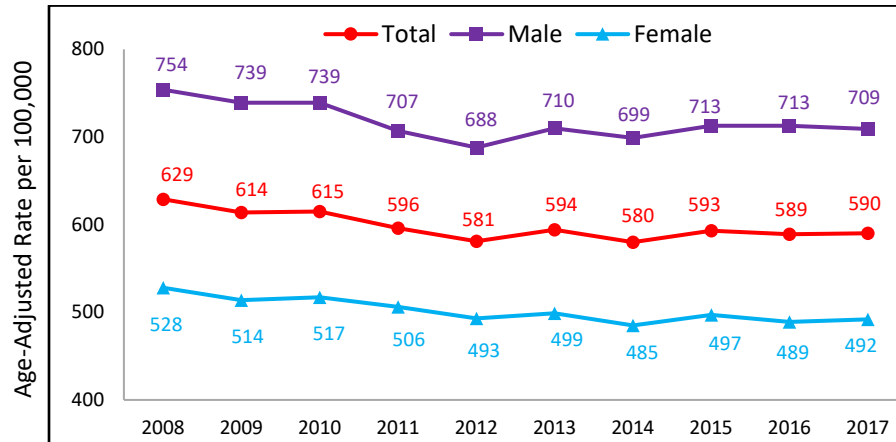
- From 2008 to 2017, the mortality rate[†] in Los Angeles County decreased by 6.2%, from 629 deaths to 590 deaths per 100,000 population. However, all of this decrease occurred between 2008 and 2012. From 2012 to 2017 the mortality rate did not decline for females, and among males increased 3.1%, from 688 deaths to 709 deaths per 100,000 (Figure 1).

*Much of this report presents data for four racial/ethnic groups (Latino, white, black, and Asian). Due to small population sizes for Native Hawaiians and other Pacific Islanders and for American Indians/Alaska Natives data for these groups are presented, where possible, as an aggregated four-year estimate (2014-2017).

[†]All mortality rates are age-adjusted using the 2000 US Standard Population except for the age-specific mortality rates.

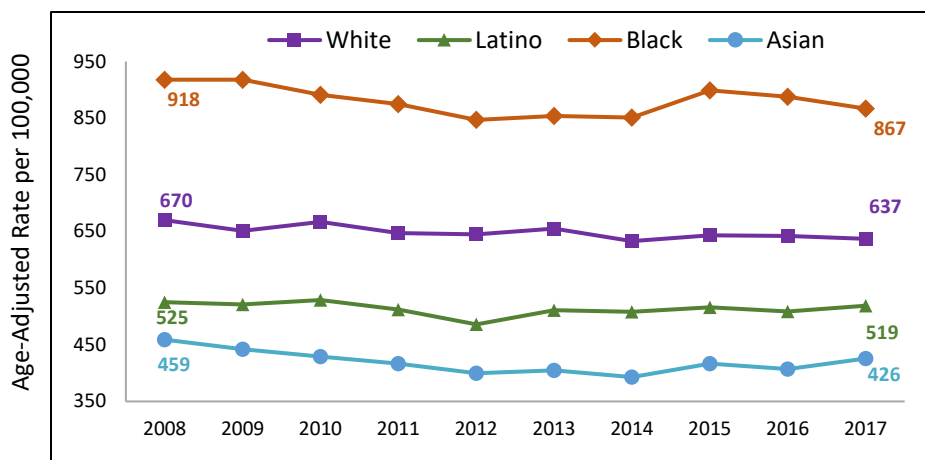
- Mortality was higher among males than females throughout the 10-year period. In 2017, the mortality rate for males (709 deaths per 100,000) was 44% higher than the rate for females (492 deaths per 100,000) (Figure 1).

Figure 1: Mortality Rate in Los Angeles County and by Gender, 2008-2017
Mortality Rate Significantly Higher for Males Though Overall Decline in Past 10 Years



- Wide disparities were also observed by race/ethnicity. Throughout the 10-year period, the mortality rate was highest among blacks, followed by whites, Latinos, and Asians, with no appreciable change in the magnitude of the disparities (Figure 2).
- From 2012 to 2017, the mortality rate increased 6.7% among Latinos, 6.6% among Asians, and 2.3% among blacks (Appendix D, Table D-16).

Figure 2: Mortality Rate in Los Angeles County and by Race/Ethnicity[†], 2008-2017
Mortality Rate Consistently the Highest among Blacks for Past 10 Years

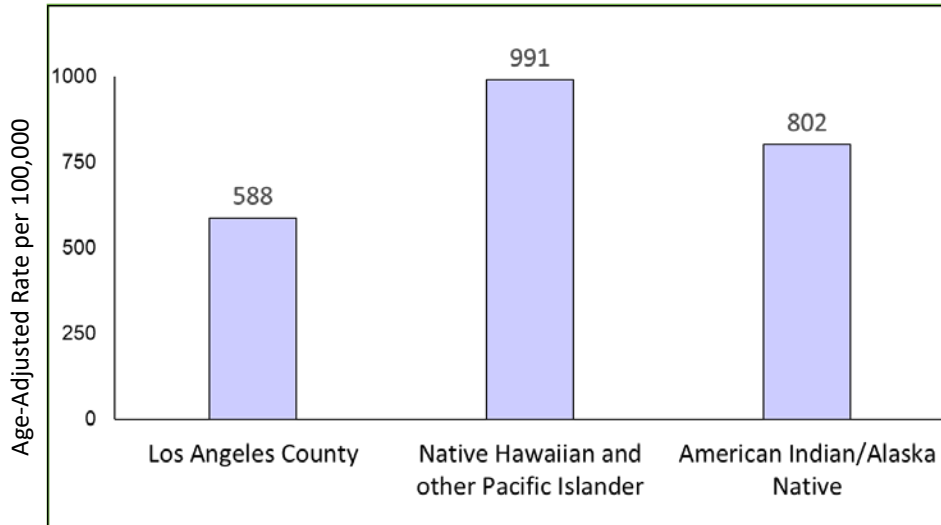


[†]From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiians and other Pacific Islanders). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

- Although we were unable to reliably track annual trends in deaths among American Indians/Alaska Natives (AIANs) and Native Hawaiians and other Pacific Islanders (NHOPIs) due to small population sizes, the four-year average mortality rates in these two groups were 802 and 991 per 100,000, respectively, in 2014-2017 (Figure 3).

Figure 3: Mortality Rate for Native Hawaiian and Other Pacific Islander and for American Indian/Alaska Native, 2014-2017

Both Groups Have Higher Mortality Rates Compared to LA County Overall



*Because of the small number of annual deaths among Native Hawaiians and other Pacific Islanders and for American Indians/Alaska Natives, a four-year average was calculated from data for 2014-2017; for comparison purposes, the Los Angeles County rate presented here is also a 2014-2017 four-year average.

- The mortality rate among all age groups declined from 2008 to 2017; the largest decline was seen among the 0-17 year age group (Table 1).

Table 1: Crude Mortality Rates & Number of Deaths in Los Angeles County by Age Group
Past 10 Years Saw One-Third Decline in Crude Mortality Rate (CMR) for Ages 0-17 Years

| | 2008 | | 2017 | | 2008-2017 |
|-------------|-------------|-------|-------------|-------|--------------|
| | # of Deaths | CMR* | # of Deaths | CMR* | CMR % Change |
| 0-17 years | 1,201 | 48 | 738 | 32 | -33% |
| 18-44 years | 3,837 | 95 | 3,705 | 92 | -3% |
| 45-64 years | 11,439 | 498 | 12,388 | 464 | -7% |
| 65+ years | 41,042 | 3,901 | 46,896 | 3,564 | -9% |

* for 100,000 population

- The mortality rate decreased in all eight Services Planning Areas (SPAs) of the county except the Antelope Valley SPA (Table 2).
- In addition, among the SPAs, Antelope Valley (SPA 1) had the highest mortality rate in 2017 (819 deaths per 100,000), followed by the South LA SPA (SPA 6; 735 deaths per 100,000). The West LA SPA (SPA 5) had the lowest mortality rate (476 per 100,000), and also had the largest decrease (11%) in mortality from 2008 to 2017.

Table 2: Mortality Rates & Number of Deaths in Los Angeles County by Service Planning Area
Only the Antelope Valley SPA Had an Increase in Mortality Rate in the Last 10 Years

| | 2008 | | 2017 | | 2008-2017 |
|----------------------------|-------------|-------------|-------------|-------------|---------------------|
| | # of Deaths | Death Rate* | # of Deaths | Death Rate* | Death Rate % Change |
| SPA 1: Antelope Valley | 2,165 | 795.4 | 2,759 | 818.5 | 3% |
| SPA 2: San Fernando Valley | 12,259 | 603.7 | 13,840 | 567.7 | -6% |
| SPA 3: San Gabriel Valley | 10,616 | 594.8 | 11,841 | 554.5 | -7% |
| SPA 4: Metro LA | 6,210 | 575.7 | 6,416 | 522.8 | -9% |
| SPA 5: West LA | 4,112 | 533.5 | 4,105 | 475.6 | -11% |
| SPA 6: South LA | 5,614 | 794.7 | 6,005 | 735.0 | -8% |
| SPA 7: East | 7,130 | 619.7 | 7,817 | 600.0 | -3% |
| SPA 8: South Bay | 9,415 | 649.6 | 10,646 | 636.1 | -2% |

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

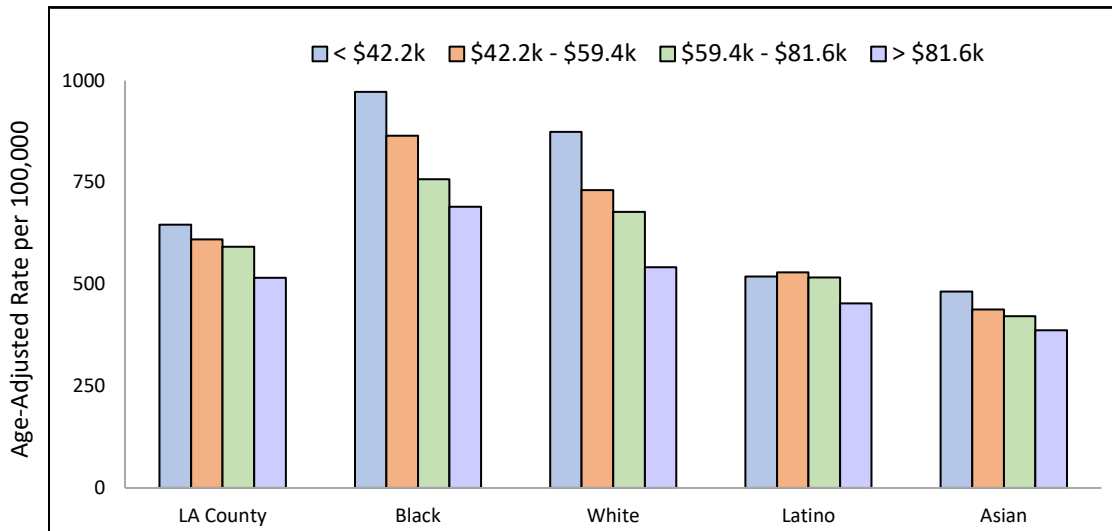
Mortality and Income

In most populations around the world, mortality is inversely related to socioeconomic status, as measured by levels of income, education, or employment. For example, mortality rates are typically higher among populations with lower average incomes than higher average incomes. This relationship reflects a complex array of factors related to privilege, wealth, power, and opportunity as well as access to healthcare and other supportive services.

To assess the relationship between income and mortality in Los Angeles County, all persons who died in 2017 were grouped into four income groups, from lowest to highest, based on the median household income of the census tract in which they resided at the time of their death. This measure of income, while limited, was used because the death certificate data used for the analysis did not include information on an individual's level of income or wealth at the time of death. Results are shown in Figure 4.

Figure 4: Mortality Rates by Race/Ethnicity and Census Tract-Level Median Household Income, 2017

Mortality Rate Was Highest Among Blacks Within All Income Groups



Data sources:

Median Household Income (MHI): U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates [B19013: MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS – Universe: Households]

Population: July 1, 2017 Population Estimates, prepared by Hedderson Demographic Services for Los Angeles County Internal Services Department, 5/7/2018

- In the overall county population, mortality was highest among those in the lowest income group (646 deaths per 100,000 population) and steadily decreased to a low of 516 deaths per 100,000 in the highest income group.
- This inverse relationship was seen in all racial/ethnic groups but was most pronounced among blacks and whites.
- Within income groups, large disparities in mortality remained. For example, among populations in the lowest income group, the mortality rate was highest among blacks (972 deaths per 100,000) followed by whites (874 deaths per 100,000), Latinos (519 deaths per 100,000), and Asians (482 deaths per 100,000).
- Mortality among blacks and whites in the highest income group (690 deaths and 542 deaths per 100,000, respectively) was higher than mortality among Latinos and Asians in all income groups, even the lowest (519 deaths and 482 deaths per 100,000, respectively).

Leading Causes of Death

The leading causes of death for 2017 are shown in Table 3. More detailed information on the leading causes of death and the trends are presented in Appendix B (Tables B-1 to B-6) and Appendix D (Tables D-1 to D-16 and Figure D-1). Highlights include the following:

Table 3: Mortality Rates and Number of Deaths for the Top 10 Leading Causes of Death
Largest 10-Year Increase in Mortality Rate was for Alzheimer's Disease & Hypertension

| | 2008 | | 2017 | | 2008-2017 |
|------------------------------|-------------|-------------|-------------|-------------|---------------------|
| | # of Deaths | Death Rate* | # of Deaths | Death Rate* | Death Rate % Change |
| Coronary Heart Disease (CHD) | 13,428 | 145.6 | 11,211 | 102.9 | -29% |
| Alzheimer's Disease | 2,121 | 22.6 | 4,179 | 38.7 | 71% |
| Stroke | 3,280 | 35.9 | 3,749 | 35.0 | -2% |
| COPD [‡] | 2,889 | 32.3 | 2,927 | 27.6 | -15% |
| Diabetes Mellitus | 2,190 | 24.2 | 2,658 | 24.7 | 2% |
| Lung Cancer | 2,910 | 32.9 | 2,556 | 24.0 | -27% |
| Pneumonia/Influenza | 2,171 | 23.6 | 1,957 | 18.4 | -22% |
| Colorectal Cancer | 1,365 | 15.0 | 1,449 | 13.4 | -10% |
| Liver Disease/Cirrhosis | 1,134 | 11.9 | 1,412 | 12.5 | 5% |
| Hypertension | 900 | 10.1 | 1,402 | 13.0 | 29% |

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

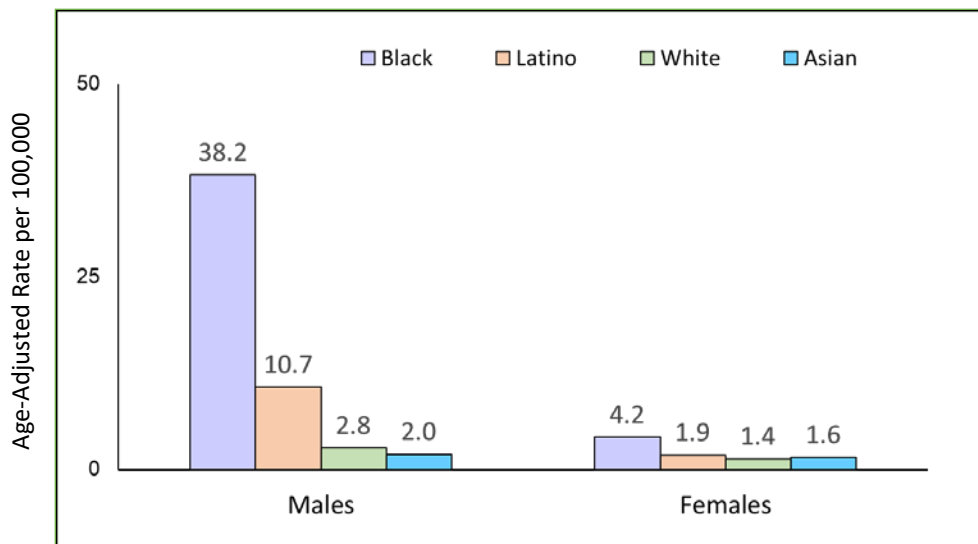
[‡]Chronic Obstructive Pulmonary Disease

- The leading cause of death[‡] in Los Angeles County in 2017 was coronary heart disease, accounting for 11,211 (17.7%) of the 63,429 total deaths that occurred in the county population that year, equating to a mortality rate of 103 deaths per 100,000.
- The next five leading causes of death were Alzheimer's disease (39 deaths per 100,000), stroke (35 deaths per 100,000), chronic obstructive pulmonary disease (28 deaths per 100,000), diabetes (25 deaths per 100,000), and lung cancer (24 deaths per 100,000).
- The mortality rate associated with most of the leading 10 causes of death decreased between 2008 and 2017, with the largest decrease seen for coronary heart disease mortality (29% decrease). A notable exception was Alzheimer's disease, which increased 71% over this 10-year period. Liver disease/cirrhosis increased 5%.

[‡]Causes of death are based on the underlying cause of death reported on the death certificate. Additional information regarding this is presented in Appendix A.

- The leading causes of death in 2017 varied by age group (Appendix B, Table B-3). For example,
 - among those 5-14 years of age, motor vehicle crash was the leading cause of death;
 - among those 15-24 years of age, homicide was the leading cause of death;
 - among those 25-44 years of age, drug overdose was the leading cause of death; and
 - among those 45 and older, coronary heart disease was the leading cause of death.
- Significant disparities in cause-specific mortality rates were observed across gender and racial/ethnic groups (Appendix B, Tables B-1 to B-6; Appendix D, Tables D-1 to D-16). For example, in 2017,
 - coronary heart disease mortality was approximately two times higher among blacks (158 deaths per 100,000) and one and one-half times higher among whites (117 deaths per 100,000) than among Latinos (81 deaths per 100,000), and Asians (75 per 100,000), with the highest rate among black men (202 deaths per 100,000) and the lowest rate among Asian women (57 deaths per 100,000);
 - homicide mortality was higher among men than women for all racial/ethnic groups; and was nearly 20 times higher among black men (38 deaths per 100,000) than among Asian men (2 deaths per 100,000) (Figure 5);

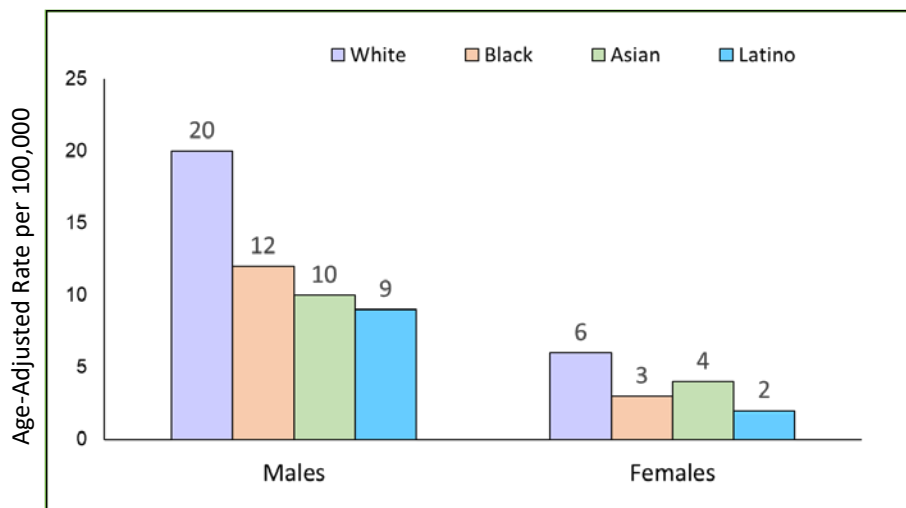
Figure 5: Homicide Mortality Rate by Gender and Race/Ethnicity, 2017
Black Males Homicide Mortality Rate Substantially Higher than Other Groups



- liver disease mortality was nearly two times higher among Latinos (19 deaths per 100,000) than among blacks and whites (10 and 11 deaths per 100,000, respectively), and almost five times higher than among Asians (4 deaths per 100,000); among Latinos, the rate was nearly three times higher among men (29 deaths per 100,000) than among women (11 deaths per 100,000);

- the rate of suicide was nearly two times higher among whites (13 deaths per 100,000) than among Asians and blacks (7 deaths per 100,000) and more than two times higher than among Latinos (5 deaths per 100,000). Rates varied by gender and race/ethnicity (Figure 6)

Figure 6: Suicide Mortality Rate by Gender and Race/Ethnicity, 2017
White Males Suicide Mortality Rate Over Twice Most Other Groups



- Similar to other racial/ethnic groups, the leading cause of death for Native Hawaiians and other Pacific Islanders and for American Indians/Alaska Natives was coronary heart disease with 152 and 116 deaths, respectively.*
- The second leading cause of death for Native Hawaiians and other Pacific Islanders was diabetes (52 deaths) and the third leading cause was lung cancer (41 deaths).*
- Stroke was the second leading cause of death (40 deaths) for American Indians/Alaska Natives, and diabetes was the third leading cause of death (38 deaths).*
- Significant disparities in cause-specific mortality were also observed across geographic areas (Appendix D, Tables D-1 to D-16). For example,
 - the rate of homicide was nearly two times higher in the South LA SPA (15 deaths per 100,000) than in any other SPA; and
 - motor vehicle crash mortality was nearly two times higher in the Antelope Valley SPA (23 deaths per 100,000) than in any other SPA.

*The number of deaths from 2014-2017 were combined due to small sample sizes for Native Hawaiians and other Pacific Islanders (NHOPIs) and for American Indians/Alaska Natives (AIANs).

Leading Causes of Premature Death

The leading causes of premature death, or years of potential life lost (YPLLs) before the age of 75, were assessed for the total county population (Table 4), and by gender, race/ethnicity, and SPA. Detailed results are provided in Appendix C (Tables C-1 to C-5). Highlights are provided below:

Table 4: Years of Potential Life Lost (YPLLs) for the Top 10 Leading Causes of Premature Death, 2017

Unintentional Drug Overdose Was the Second Leading Cause of Premature Death

| Rank | Leading Cause of Premature Death | YPLLs |
|------|----------------------------------|--------|
| 1 | CHD | 51,515 |
| 2 | Drug Overdose (Unintentional) | 27,743 |
| 3 | Suicide | 26,016 |
| 4 | Motor Vehicle Crash | 25,915 |
| 5 | Homicide | 24,769 |
| 6 | Liver Disease/Cirrhosis | 21,604 |
| 7 | Diabetes Mellitus | 19,102 |
| 8 | Stroke | 16,085 |
| 9 | Lung Cancer | 13,427 |
| 10 | Breast Cancer | 12,224 |

- The leading cause of premature death in the overall county population was coronary heart disease, followed by drug overdose, suicide, motor vehicle crashes, and homicide.
- The leading causes of premature death varied by gender, race/ethnicity, and geographic region. For example,
 - although coronary heart disease was the leading cause of premature death for both males and females, homicide was the second leading cause among males while breast cancer was the second leading cause among females;
 - coronary heart disease was also the leading cause of premature death among the four racial/ethnic groups examined; however, drug overdose was the second leading cause among whites, homicide the second leading cause among blacks and Latinos, and suicide the second leading cause among Asians;
 - coronary heart disease was the leading cause of premature death for Native Hawaiians and other Pacific Islanders and for American Indians/Alaska Natives;*
 - the second and third leading causes of premature death for Native Hawaiian and other Pacific Islanders were conditions originating in the perinatal period and homicide, respectively;*
 - for American Indians/Alaska Natives, the second leading cause of premature death was drug overdose and the third leading cause was liver disease/cirrhosis;*

*The number of deaths from 2014-2017 were combined due to small sample sizes for Native Hawaiians and other Pacific Islanders (NHOPIs) and American Indians/Alaska Natives (AIANs).

- among the SPAs, coronary heart disease was the leading cause of premature death in San Fernando Valley (SPA 2), San Gabriel Valley (SPA 3), Metro LA (SPA 4), East (SPA 7), and South Bay (SPA 8), whereas motor vehicle crashes were the leading cause of premature death in Antelope Valley (SPA 1), drug overdose the leading cause in West LA (SPA 5), and homicide the leading cause in South LA (SPA 6).

Discussion

These findings indicate both favorable and unfavorable recent trends in mortality in Los Angeles County. On the positive side, mortality for many of the leading causes of death have declined in recent years. Of note, mortality from coronary heart disease, the leading cause of death in the county population, declined by approximately one-third between 2008-2017. This pattern has also been observed nationally and has been attributed to improved medical care for those with heart disease, more aggressive treatment of risk factors such as high blood pressure and elevated cholesterol and other lipid levels, and successful primary prevention efforts focused on reducing smoking, increasing physical activity, and improving nutrition.² The decline in lung cancer mortality also reflects successful prevention efforts that have greatly reduced rates of smoking, though concern remains that the recent proliferation of electronic cigarette use (i.e., vaping) among youth and young adults may produce a new generation addicted to nicotine.³

Despite these positive trends, the historical decline in overall mortality in the county population appears to have stalled since 2012 and in some groups mortality is even increasing. Further research is needed to better understand the factors contributing to this lack of continued progress in reducing mortality. Studies suggest that illicit and prescription drug misuse and mental health conditions have contributed to a recent increase in mortality in some regions of the country.^{4,5,6} In Los Angeles County, drug misuse is also a likely contributing factor, as the rate of drug overdose deaths increased 28% between 2008 and 2017. In addition, both the number and the rate of deaths associated with homelessness have increased across the county in recent years.⁷

Though mortality has declined in the county for many of the leading causes of death, there has been a lack of progress in reducing the large, long-standing disparities in mortality seen across demographic groups. These disparities stem from systemic inequities, in many cases rooted in racism, that persist in many of our institutions and have led to these profound health inequities. For example, inequities in access to high-quality education and employment opportunities as well as discriminatory housing practices have created socioeconomic inequities that, in turn, have contributed to the disproportionately high rates of mortality among blacks and Native Americans.^{8,9} Studies have shown that negative social experiences, such as discrimination, are also linked to higher mortality rates.¹⁰ Poor health outcomes and disproportionately high mortality rates among Native Hawaiians and other Pacific Islanders also have been attributed to socioeconomic disadvantages and historical trauma resulting from colonization.^{11,12} The relatively low mortality rate among Latinos, despite having a high level of

poverty, has been observed throughout the southwest U.S. and has been referred to as the Latino health paradox,¹³ thought in part to reflect a generally strong health profile among immigrant Latinos. However, high rates of obesity and diabetes among both U.S.-born and immigrant Latinos in the county¹⁴ threaten to eliminate this health advantage in the coming decades.

Large disparities in mortality across geographic regions of the county have also persisted over the past decade, with the highest mortality rates seen in the Antelope Valley and South Los Angeles SPAs. However, the patterns of mortality across these regions differ. For example, although the rate of homicide decreased 29% countywide from 2008 to 2017, the rate remained two times higher in the South Los Angeles SPA than in any other SPA. In the Antelope Valley SPA, the mortality rate associated with motor vehicle crashes was two times higher than in any other SPA, possibly reflecting longer distances traveled at high speeds on open highways among residents of this SPA relative to other SPAs.

Another concerning trend is the rise in Alzheimer's disease mortality. Because the mortality rates were age-adjusted, the rising rate cannot be attributed to the aging of the county population. The high rate could, in part, reflect an increased awareness of and screening for Alzheimer's disease in the senior

population, as well as increased reporting of Alzheimer's disease on death certificates. These issues notwithstanding, the rising mortality associated with Alzheimer's disease in the county, along with the aging of the county's population, suggest that meeting the health care and social service needs of those with this condition will be a major challenge in the coming years.

This analysis has several important limitations. First, the statistics on leading causes of death are based on what was reported as the underlying cause of death on the death certificate and do not include other conditions listed as contributing causes of death. In addition, the analysis does not account for conditions that rarely appear on deaths certificates but, nonetheless, are important sources of morbidity, such as depression and other mental health conditions. Second, the analyses by race/ethnicity were done using very broad racial/ethnic categories to ensure large enough numbers of deaths in each group to allow for analysis of trends. However, these analyses do not account for the considerable ethnic variation in mortality within these groups, particularly among Asians and Latinos.¹⁵ Third, though the analysis showed an inverse relationship between neighborhood income and mortality in each of the racial/ethnic groups examined, a more detailed assessment of the relationship between economic, social, and environmental factors and mortality could not be done because of limited data. These factors are known to be strong predictors of life expectancy and important contributors to the significant health inequities seen across many populations.^{10,16,17,18}

Despite these limitations, the results highlight important trends and disparities in mortality that should be considered in planning and prioritizing healthcare services and community health improvement efforts. The perspectives of community organizations and residents will be important for better understanding the factors contributing to the large and unremitting health inequities reflected in these mortality statistics and to more effectively mobilize efforts to address these factors.

Health equity is when everyone has access to the goods, services, resources and power they need for optimal health and well-being

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APPENDIX A

TECHNICAL NOTES

When a death occurs in California, state law requires that a death certificate be registered within eight days of death and before a decedent is buried or cremated. The death certificate is a legal document that serves as a permanent record of the death of an individual. To complete a certificate of death, the funeral director or medical facility collects identifying and demographic information about the decedent from family members and medical records. The decedent's physician or the coroner provides information about the medical conditions or events that precipitated the death. When the death certificate is complete, it is 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 death certificate is completed and later when it is processed. This report summarizes information obtained from certificates of death (Figure A-1) for all Los Angeles County residents who died in 2017 and mortality trends for 2008 through 2017. 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.

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.

Figure A-1: Sample California Certificate of Death

| | | STATE FILE NUMBER | | STATE OF CALIFORNIA USE BLACK INK ONLY / NO ERASURES, WHITEDOUTS OR ALTERATIONS | | LOCAL REGISTRATION NUMBER | | |
|--|--|----------------------------|--|---|--|--|---|--|
| DECEDENT'S PERSONAL DATA | 1. NAME OF DECEDENT - FIRST (Given) | | 2. MIDDLE | | 3. LAST (Family) | | | |
| | AKA, ALSO KNOWN AS - include full AKA (FIRST, MIDDLE, LAST) | | | | 4. DATE OF BIRTH mm/dd/yyyy | | 5. AGE Yrs. If UNDER ONE YEAR: Months _____ Days _____ If UNDER 90 HOURS: Hours _____ Minutes _____ | |
| | 9. BIRTH STATE/FOREIGN COUNTRY | 10. SOCIAL SECURITY NUMBER | 11. EVER IN U.S. ARMED FORCES? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK | | 12. MARITAL STATUS/SRDP* (at Time of Death) | | 7. DATE OF DEATH mm/dd/yyyy | |
| | 13. EDUCATION - Highest Level/Degree (see worksheet on back) | | 14/15. WAS DECEDENT HISPANIC/LATINO/A SPANISH? (if yes, see worksheet on back) <input type="checkbox"/> YES <input type="checkbox"/> NO | | 16. DECEDENT'S RACE - Up to 3 races may be listed (see worksheet on back) | | | |
| 17. USUAL OCCUPATION - Type of work for most of life. DO NOT USE RETIRED | | | 18. KIND OF BUSINESS OR INDUSTRY (e.g., grocery store, road construction, employment agency, etc.) | | | 19. YEARS IN OCCUPATION | | |
| USUAL RESIDENCE | 20. DECEDENT'S RESIDENCE (Street and number, or location) | | | | | | | |
| | 21. CITY | 22. COUNTY/PROVINCE | | 23. ZIP CODE | 24. YEARS IN COUNTY | 25. STATE/FOREIGN COUNTRY | | |
| | 26. INFORMANT'S NAME, RELATIONSHIP | | | 27. INFORMANT'S MAILING ADDRESS (Street and number, or rural route number, city or town, state and zip) | | | | |
| SPOUSE/SRDP AND PARENT INFORMATION | 28. NAME OF SURVIVING SPOUSE/SRDP - FIRST | | 29. MIDDLE | | 30. LAST (BIRTH NAME) | | | |
| | 31. NAME OF FATHER/PARENT - FIRST | | 32. MIDDLE | | 33. LAST | | 34. BIRTH STATE | |
| | 35. NAME OF MOTHER/PARENT - FIRST | | 36. MIDDLE | | 37. LAST (BIRTH NAME) | | 38. BIRTH STATE | |
| | 39. DISPOSITION DATE mm/dd/yyyy | | 40. PLACE OF FINAL DISPOSITION | | | | | |
| FUNERAL DIRECTORY/ LOCAL REGISTRAR | 41. TYPE OF DISPOSITION(S) | | 42. SIGNATURE OF EMBALMER | | | 43. LICENSE NUMBER | | |
| | 44. NAME OF FUNERAL ESTABLISHMENT | | 45. LICENSE NUMBER | 46. SIGNATURE OF LOCAL REGISTRAR | | | 47. DATE mm/dd/yyyy | |
| | 101. PLACE OF DEATH | | 102. IF HOSPITAL, SPECIFY ONE <input type="checkbox"/> IP <input type="checkbox"/> ER/OP <input type="checkbox"/> DCA | | 103. IF OTHER THAN HOSPITAL, SPECIFY ONE <input type="checkbox"/> Hospice <input type="checkbox"/> Nursing Home/LTC <input type="checkbox"/> Decedent's Home <input type="checkbox"/> Other | | | |
| PLACE OF DEATH | 104. COUNTY | | 105. FACILITY ADDRESS OR LOCATION WHERE FOUND (Street and number, or location) | | | 106. CITY | | |
| | 107. CAUSE OF DEATH Enter the chain of events --- diseases, injuries, or complications --- that directly caused death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. | | | | | | Time Interval Between Death and Death (AT) <input type="checkbox"/> YES <input type="checkbox"/> NO (BT) <input type="checkbox"/> YES <input type="checkbox"/> NO (CT) <input type="checkbox"/> YES <input type="checkbox"/> NO (DT) <input type="checkbox"/> YES <input type="checkbox"/> NO | |
| | IMMEDIATE CAUSE (A) (Final disease or condition resulting in death) | | | | | | 108. DEATH REPORTED TO CORONER? <input type="checkbox"/> YES <input type="checkbox"/> NO | |
| | Sequentially list conditions, if any, leading to cause on Line A. Enter UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST | | | | | | 109. BIOPSY PERFORMED? <input type="checkbox"/> YES <input type="checkbox"/> NO | |
| | 110. AUTOPSY PERFORMED? <input type="checkbox"/> YES <input type="checkbox"/> NO | | | | | | 111. USED IN DETERMINING CAUSE? <input type="checkbox"/> YES <input type="checkbox"/> NO | |
| 112. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RESULTING IN THE UNDERLYING CAUSE GIVEN IN 107 | | | | | | | | |
| 113. WAS OPERATION PERFORMED FOR ANY CONDITION IN ITEM 107 OR 112? (if yes, list type of operation and date) | | | | | | 113A. IF FEMALE, PREGNANT IN LAST YEAR? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK | | |
| PHYSICIAN'S CERTIFICATION | 114. I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE DEATH OCCURRED AT THE HOUR, DATE, AND PLACE STATED FROM THE CAUSES STATED. Decedent Attended Since: (A) mm/dd/yyyy (B) mm/dd/yyyy | | 115. SIGNATURE AND TITLE OF CERTIFIER | | 116. LICENSE NUMBER | | | |
| | | | 117. TYPE ATTENDING PHYSICIAN'S NAME, MAILING ADDRESS, ZIP CODE | | 117. DATE mm/dd/yyyy | | | |
| | 118. I CERTIFY THAT IN MY OPINION DEATH OCCURRED AT THE HOUR, DATE, AND PLACE STATED FROM THE CAUSES STATED. MANNER OF DEATH: <input type="checkbox"/> Natural <input type="checkbox"/> Accident <input type="checkbox"/> Homicide <input type="checkbox"/> Suicide <input type="checkbox"/> Pending Investigation <input type="checkbox"/> Could not be determined | | 120. INJURED AT WORK? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK | | 121. INJURY DATE mm/dd/yyyy | | 122. HOUR (24 Hour) | |
| CORONER'S USE ONLY | 123. PLACE OF INJURY (e.g., home, construction site, wooded area, etc.) | | | | | | | |
| | 124. DESCRIBE HOW INJURY OCCURRED (Events which resulted in injury) | | | | | | | |
| | 125. LOCATION OF INJURY (Street and number, or location, and city, and zip) | | | | | | | |
| | 126. SIGNATURE OF CORONER / DEPUTY CORONER | | 127. DATE mm/dd/yyyy | | 128. TYPE NAME, TITLE OF CORONER / DEPUTY CORONER | | | |

PREMATURE DEATH: WHAT IS IT?

For this report, we defined premature death as death that occurred before 75 years of age, a standard cut-off used in public health. In 2017, 44% 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 (YPLL; before age 75) for the leading causes of death and premature death for 2017 and the ten-year period of 2008 through 2017 for Los Angeles County residents. The variables included in the analysis are age at death, gender, race/ethnicity, Service Planning Area 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 YPLL for each cause of death, we identified those causes of death responsible for the greatest amount of premature death.

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 A full list of the causes of death in this report is provided in Tables A-1a and A-1b. 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 YPLL was ranked first. To identify the leading causes of premature death, the groups were ranked by the YPLL in each group. If two causes of death resulted in the same number of YPLL, then the group that resulted in the greatest number of deaths was ranked first.

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

² International statistical classification of diseases and related health problems, tenth revision. Geneva: World Health Organization, 1996.

³ National Center for Health Statistics, National Vital Statistics System. ICD-10 cause-of-death lists for tabulating mortality statistics (updated September 2018 to include WHO updates to ICD-10 for data year 2017). NCHS Instruction Manual, part 9. Hyattsville, MD. 2018.

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.

Table A-1a: ICD Codes for Leading Causes of Death

| No. | Cause of death | ICD10 codes |
|-----|--|---|
| 1 | Accidental discharge of firearms | W32, W33, W34. |
| 2 | Accidental drowning and submersion | W65, W66, W67, W68, W69, W70, W73, W74. |
| 3 | Accidental exposure to smoke, fire and flames | X00, X01, X02, X03, X04, X05, X06, X08, X09. |
| 4 | Accidental poisoning and exposure to noxious substances excluding drug overdose | X46, X47, X48, X49. |
| 5 | Acute and rapidly progressive nephritic and nephrotic syndrome | N00, N01, N04. |
| 6 | Acute bronchitis and bronchiolitis | J20, J21. |
| 7 | Acute poliomyelitis | A80. |
| 8 | Acute rheumatic fever and chronic rheumatic heart diseases | I00, I01, I02, I05, I06, I07, I08, I09. |
| 9 | All other and unspecified malignant neoplasms | C17, C23, C24, C26, C30, C31, C37, C38, C39, C40, C41, C44, C45, C46, C47, C48, C49, C51, C52, C57, C58, C60, C62, C63, C66, C68, C69, C73, C74, C75, C76, C77, C78, C79, C80, C97. |
| 10 | Alzheimer's disease | G30. |
| 11 | Anemias | D50, D51, D52, D53, D55, D56, D57, D58, D59, D60, D61, D62, D63, D64. |
| 12 | Aortic aneurysm and dissection | I71. |
| 13 | Arthropod-borne viral encephalitis | A83, A84, A85.2. |
| 14 | Asthma | J45, J46. |
| 15 | Atherosclerosis | I70. |
| 16 | Breast cancer | C50. |
| 17 | Certain conditions originating in the perinatal period | P00.0, P00.1, P00.2, P00.3, P00.4, P00.5, P00.6, P00.7, P00.8, P00.9, P01.0, P01.1, P01.2, P01.3, P01.4, P01.5, P01.6, P01.7, P01.8, P01.9, P02.0, P02.1, P02.2, P02.3, P02.4, P02.5, P02.6, P02.7, P02.8, P02.9, P03, P04, P05, P07.0, P07.1, P07.2, P07.3, P08, P10, P11, P12, P13, P14, P15, P20, P21, P22, P23, P24, P25, P26, P27, P28.0, P28.1, P28.2, P28.3, P28.4, P28.5, P28.8, P28.9, P29, P35, P36, P37, P38, P39, P50, P51, P52, P53, P54, P55, P56, P57, P58, P59, P60, P61, P70.0, P70.1, P70.2, P70.3, P70.4, P70.8, P70.9, P71, P72, P74, P75, P76, P77, P78, P80, P81, P83.0, P83.1, P83.2, P83.3, P83.4, P83.5, P83.6, P83.8, P83.9, P90, P91, P92, P93, P94, P95, P96. |
| 18 | Certain other intestinal infections | A04, A07, A08, A09. |
| 19 | CHD (Coronary heart disease) | I20, I21, I22, I23, I24, I25.0, I25.1, I25.2, I25.3, I25.4, I25.5, I25.6, I25.8, I25.9. |
| 20 | Cholelithiasis and other disorders of gallbladder | K80, K81, K82. |
| 21 | Chronic glomerulonephritis, nephritis and nephritis not specified as acute or chronic, and renal sclerosis unspecified | N02, N03, N05, N06, N07, N26. |
| 22 | Colorectal Cancer | C18, C19, C20, C21. |

| No. | Cause of death | ICD10 codes |
|-----|--|---|
| 23 | Complications of medical and surgical care | Y40, Y41, Y42, Y43, Y44, Y45, Y46, Y47, Y48, Y49, Y50, Y51, Y52, Y53, Y54, Y55, Y56, Y57, Y58, Y59, Y60, Y61, Y62, Y63, Y64, Y65, Y66, Y69, Y70, Y71, Y72, Y73, Y74, Y75, Y76, Y77, Y78, Y79, Y80, Y81, Y82, Y83, Y84, Y88. |
| 24 | Congenital malformations, deformations and chromosomal abnormalities | Q00, Q01, Q02, Q03, Q04, Q05, Q06, Q07, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q30, Q31, Q32, Q33, Q34, Q35, Q36, Q37, Q38, Q39, Q40, Q41, Q42, Q43, Q44, Q45, Q50, Q51, Q52, Q53, Q54, Q55, Q56, Q60, Q61, Q62, Q63, Q64, Q65, Q66, Q67, Q68, Q69, Q70, Q71, Q72, Q73, Q74, Q75, Q76, Q77, Q78, Q79, Q80, Q81, Q82, Q83, Q84, Q85, Q86, Q87, Q89, Q90, Q91.0, Q91.1, Q91.2, Q91.3, Q91.4, Q91.5, Q91.6, Q91.7, Q92, Q93, Q95, Q96, Q97, Q98, Q99. |
| 25 | COPD (Chronic obstructive pulmonary disease) | J40, J41, J42, J43, J44. |
| 26 | Diabetes mellitus | E10, E11, E12, E13, E14. |
| 27 | Discharge of firearms, undetermined intent | Y22, Y23, Y24. |
| 28 | Diseases of appendix | K35, K36, K37, K38. |
| 29 | Drug overdose (Unintentional) | X40, X41, X42, X43, X44, X45. |
| 30 | Falls | W00, W01, W02, W03, W04, W05, W06, W07, W08, W09, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19. |
| 31 | Hernia | K40, K41, K42, K43, K44, K45, K46. |
| 32 | HIV (Human immunodeficiency virus) | B20, B21, B22, B23, B24. |
| 33 | Hodgkin's disease | C81. |
| 34 | Homicide | U01.0, U01.1, U01.2, U01.3, U01.4, U01.5, U01.6, U01.7, U01.8, U01.9, U02, X85, X86, X87, X88, X89, X90, X91, X92, X93, X94, X95, X96, X97, X98, X99, Y00, Y01, Y02, Y03, Y04, Y05, Y06, Y07, Y08, Y09, Y87.1. |
| 35 | Hyperplasia of prostate | N40. |
| 36 | Hypertension | I10, I12, I15. |
| 37 | Hypertensive heart and renal disease | I13. |
| 38 | Hypertensive heart disease | I11. |
| 39 | In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior | D00, D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48. |
| 40 | Infections of kidney | N10, N11, N12, N13.6, N15.1. |
| 41 | Inflammatory diseases of female pelvic organs | N70, N71, N72, N73, N74, N75, N76. |
| 42 | Legal intervention | Y35, Y89.0. |
| 43 | Leukemia | C91, C92, C93, C94, C95. |
| 44 | Liver disease/cirrhosis | K70, K73, K74. |

| No. | Cause of death | ICD10 codes |
|-----|--|--|
| 45 | Lung Cancer | C33, C34. |
| 46 | Malaria | B50, B51, B52, B53, B54. |
| 47 | Malignant melanoma of skin | C43. |
| 48 | Malignant neoplasm of bladder | C67. |
| 49 | Malignant neoplasm of cervix uteri | C53. |
| 50 | Malignant neoplasm of esophagus | C15. |
| 51 | Malignant neoplasm of larynx | C32. |
| 52 | Malignant neoplasm of ovary | C56. |
| 53 | Malignant neoplasm of pancreas | C25. |
| 54 | Malignant neoplasm of stomach | C16. |
| 55 | Malignant neoplasms of corpus uteri and uterus, part unspecified | C54, C55. |
| 56 | Malignant neoplasms of kidney and renal pelvis | C64, C65. |
| 57 | Malignant neoplasms of lip, oral cavity and pharynx | C00, C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14. |
| 58 | Malignant neoplasms of liver and intrahepatic bile ducts | C22. |
| 59 | Malignant neoplasms of meninges, brain and other parts of central nervous system | C70, C71, C72. |
| 60 | Malnutrition | E40, E41, E42, E43, E44, E45, E46. |
| 61 | Measles | B05. |
| 62 | Meningitis | G00, G03. |
| 63 | Meningococcal infection | A39. |
| 64 | Motor vehicle crash | V02, V03, V04, V09.0, V09.2, V12, V13, V14, V19.0, V19.1, V19.2, V19.4, V19.5, V19.6, V20, V21, V22, V23, V24, V25, V26, V27, V28, V29, V30, V31, V32, V33, V34, V35, V36, V37, V38, V39, V40, V41, V42, V43, V44, V45, V46, V47, V48, V49, V50, V51, V52, V53, V54, V55, V56, V57, V58, V59, V60, V61, V62, V63, V64, V65, V66, V67, V68, V69, V70, V71, V72, V73, V74, V75, V76, V77, V78, V79, V80.3, V80.4, V80.5, V81.0, V81.1, V82.0, V82.1, V83, V84, V85, V86, V87.0, V87.1, V87.2, V87.3, V87.4, V87.5, V87.6, V87.7, V87.8, V88.0, V88.1, V88.2, V88.3, V88.4, V88.5, V88.6, V88.7, V88.8, V89.0, V89.2. |
| 65 | Multiple myeloma and immunoproliferative neoplasms | C88, C90. |
| 66 | Non-Hodgkin's lymphoma | C82, C83, C84, C85. |
| 67 | Operations of war and their sequelae | Y36, Y89.1. |
| 68 | Other and unspecified events of undetermined intent and their sequelae | Y10, Y11, Y12, Y13, Y14, Y15, Y16, Y17, Y18, Y19, Y20, Y21, Y25, Y26, Y27, Y28, Y29, Y30, Y31, Y32, Y33, Y34, Y87.2, Y89.9. |
| 69 | Other and unspecified infectious and parasitic diseases and their sequelae | A00, A05, A20, A21, A22, A23, A24, A25, A26, A27, A28, A30, A31, A32, A33, A34, A35, A36, A42, A43, A44, A48, A49, A54, A55, A56, A57, A58, A59, A60, A63, A64, A65, A66, A67, A68, A69, A70, A71, A74, |

| No. | Cause of death | ICD10 codes |
|-----|---|---|
| | | A75, A77, A78, A79, A81, A82, A85.0, A85.1, A85.8, A86, A87, A88, A89, A92, A93, A94, A95, A96, A97, A98, A99, B00, B01, B02, B03, B04, B06, B07, B08, B09, B25, B26, B27, B30, B33, B34, B35, B36, B37, B38, B39, B40, B41, B42, B43, B44, B45, B46, B47, B48, B49, B55, B56, B57, B58, B59, B60, B64, B65, B66, B67, B68, B69, B70, B71, B72, B73, B74, B75, B76, B77, B78, B79, B80, B81, B82, B83, B85, B86, B87, B88, B89, B90, B91, B92, B93, B94, B95, B96, B97, B98, B99. |
| 70 | Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue | C96. |
| 71 | Other and unspecified non-transport accidents and their sequelae | W20, W21, W22, W23, W24, W25, W26, W27, W28, W29, W30, W31, W35, W36, W37, W38, W39, W40, W41, W42, W43, W44, W45, W46, W49, W50, W51, W52, W53, W54, W55, W56, W57, W58, W59, W60, W64, W75, W76, W77, W78, W79, W80, W81, W83, W84, W85, W86, W87, W88, W89, W90, W91, W92, W93, W94, W99, X10, X11, X12, X13, X14, X15, X16, X17, X18, X19, X20, X21, X22, X23, X24, X25, X26, X27, X28, X29, X30, X31, X32, X33, X34, X35, X36, X37, X38, X39, X50, X51, X52, X53, X54, X57, X58, X59, Y86. |
| 72 | Bronchiectasis | J47. |
| 73 | Other complications of pregnancy, childbirth and the puerperium | O10, O11, O12, O13, O14, O15, O16, O20, O21, O22, O23, O24, O25, O26, O28, O29, O30, O31, O32, O33, O34, O35, O36, O40, O41, O42, O43, O44, O45, O46, O47, O48, O60, O61, O62, O63, O64, O65, O66, O67, O68, O69, O70, O71, O72, O73, O74, O75, O80, O81, O82, O83, O84, O85, O86, O87, O88, O89, O90, O91, O92, O94, O95, O96, O97, O98, O99. |
| 74 | Other diseases of arteries, arterioles and capillaries | I72, I73, I74, I75, I76, I77, I78. |
| 75 | Other diseases of respiratory system | J00, J01, J02, J03, J04, J05, J06, J30, J31, J32, J33, J34, J35, J36, J37, J38, J39, J67, J70, J80, J81, J82, J84, J85, J86, J90, J91, J92, J93, J94, J95, J96, J98. |
| 76 | Other disorders of circulatory system | I80, I81, I82, I83, I85, I86, I87, I88, I89, I95, I97, I98, I99. |
| 77 | Other disorders of kidney | N25, N27. |
| 78 | Other heart diseases | I26, I27, I28, I30, I31, I32, I33, I34, I35, I36, I37, I38, I39, I40, I42, I43, I44, I45, I46, I47, I48, I49, I50, I51. |
| 79 | Other nutritional deficiencies | E50, E51, E52, E53, E54, E55, E56, E58, E59, E60, E61, E63, E64. |
| 80 | Other tuberculosis | A17, A18, A19. |
| 81 | Parkinson's disease | G20, G21. |
| 82 | Peptic ulcer | K25, K26, K27, K28. |
| 83 | Pneumoconioses and chemical effects | J60, J61, J62, J63, J64, J65, J66, J68. |
| 84 | Pneumonia/Influenza | J09, J10, J11, J12, J13, J14, J15, J16, J17, J18. |
| 85 | Pneumonitis due to solids and liquids | J69. |
| 86 | Pregnancy with abortive outcome | O00, O01, O02, O03, O04, O05, O06, O07. |
| 87 | Prostate cancer | C61. |
| 88 | Renal failure | N17, N18, N19. |
| 89 | Residual | D65, D66, D67, D68, D69, D70, D71, D72, D73, D74, D75, D76, D77, D80, D81, D82, D83, D84, D85, D86, D89, E00, E01, E02, E03, E04, E05, E06, E07, E15, E16, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E34.0, E34.1, E34.2, E34.3, E34.4, E34.5, E34.8, E34.9, E65, E66, E67, E68, |

| No. | Cause of death | ICD10 codes |
|-----|---|---|
| | | E70, E71, E72, E73, E74, E75, E76, E77, E78, E79, E80, E83, E84, E85, E86, E87, E88, E89, E90, F00, F01, F02, F03, F04, F05, F06, F07, F09, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23, F24, F25, F28, F29, F30, F31, F32, F33, F34, F38, F39, F40, F41, F42, F43, F44, F45, F48, F50, F51, F52, F53, F54, F55, F59, F60, F61, F62, F63, F64, F65, F66, F68, F69, F70, F71, F72, F73, F79, F80, F81, F82, F83, F84, F88, F89, F90, F91, F92, F93, F94, F95, F98, F99, G04, G05, G06, G07, G08, G09, G10, G11, G12.0, G12.1, G12.2, G12.8, G12.9, G13, G14, G23, G24, G25, G31, G32, G35, G36, G37, G40, G41, G43, G44, G45, G46, G47, G50, G51, G52, G53, G54, G55, G56, G57, G58, G59, G60, G61, G62, G63, G64, G70, G71, G72, G73, G80, G81, G82, G83, G90, G91, G92, G93.0, G93.1, G93.2, G93.3, G93.4, G93.5, G93.6, G93.7, G93.8, G93.9, G94, G95, G96, G97, G98, G99, H00, H01, H02, H03, H04, H05, H06, H10, H11, H13, H15, H16, H17, H18, H19, H20, H21, H22, H25, H26, H27, H28, H30, H31, H32, H33, H34, H35, H36, H40, H42, H43, H44, H45, H46, H47, H48, H49, H50, H51, H52, H53, H54, H55, H56, H57, H58, H59, H60, H61, H62, H65, H66, H67, H68, H69, H70, H71, H72, H73, H74, H75, H80, H81, H82, H83, H90, H91, H92, H93, K00, K01, K02, K03, K04, K05, K06, K07, K08, K09, K10, K11, K12, K13, K14, K20, K21, K22, K29, K30, K31, K50, K51, K52, K55, K56, K57, K58, K59, K60, K61, K62, K63, K64, K65, K66, K71, K72, K75, K76, K83, K85, K86, K87, K90, K91, K92, K93, L00, L01, L02, L03, L04, L05, L08, L10, L11, L12, L13, L14, L20, L21, L22, L23, L24, L25, L26, L27, L28, L29, L30, L40, L41, L42, L43, L44, L45, L50, L51, L52, L53, L54, L55, L56, L57, L58, L59, L60, L62, L63, L64, L65, L66, L67, L68, L70, L71, L72, L73, L74, L75, L80, L81, L82, L83, L84, L85, L86, L87, L88, L89, L90, L91, L92, L93, L94, L95, L97, L98, L99, M00, M01, M02, M03, M05, M06, M07, M08, M09, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M30, M31, M32, M33, M34, M35, M36, M40, M41, M42, M43, M45, M46, M47, M48, M49, M50, M51, M53, M54, M60, M61, M62, M63, M65, M66, M67, M68, M70, M71, M72, M73, M75, M76, M77, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M99, N13.0, N13.1, N13.2, N13.3, N13.4, N13.5, N13.7, N13.8, N13.9, N14.0, N14.1, N14.2, N14.3, N14.4, N15.0, N15.8, N15.9, N20, N21, N22, N23, N28, N29, N30, N31, N32, N33, N34, N35, N36, N37, N39, N41, N42, N43, N44, N45, N46, N47, N48, N49, N50, N51, N60, N61, N62, N63, N64, N80, N81, N82, N83, N84, N85, N86, N87, N88, N89, N90, N91, N92, N93, N94, N95, N96, N97, N98. |
| 90 | Respiratory tuberculosis | A16. |
| 91 | Salmonella infections | A01, A02. |
| 92 | Scarlet fever and erysipelas | A38, A46. |
| 93 | Septicemia | A40, A41. |
| 94 | Shigellosis and amebiasis | A03, A06. |
| 95 | Stroke | I60, I61, I62, I63, I64, I65, I66, I67, I68, I69. |
| 96 | Suicide | U03, X60, X61, X62, X63, X64, X65, X66, X67, X68, X69, X70, X71, X72, X73, X74, X75, X76, X77, X78, X79, X80, X81, X82, X83, X84, Y87.0. |
| 97 | Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified | R00, R01, R02, R03, R04, R05, R06, R07, R09, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R25, R26, R27, R29, R30, R31, R32, R33, R34, R35, R36, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R98, R99. |
| 98 | Syphilis | A50, A51, A52, A53. |
| 99 | Unintentional injury: Other land transport | V01, V05, V06, V09.1, V09.3, V09.9, V10, V11, V15, V16, V17, V18, V19.3, V19.8, V19.9, V80.0, V80.1, V80.2, V80.6, V80.7, V80.8, V80.9, V81.2, V81.3, V81.4, V81.5, V81.6, V81.7, V81.8, V81.9, V82.2, V82.3, V82.4, V82.5, V82.6, V82.7, V82.8, V82.9, V87.9, V88.9, V89.1, V89.3, V89.9. |
| 100 | Unintentional injury: Water, air and space, and other transport | V90, V91, V92, V93, V94, V95, V96, V97, V98, V99, Y85. |
| 101 | Unspecified acute lower respiratory infection | J22, U04. |

| No. | Cause of death | ICD10 codes |
|-----|-----------------|--------------------------|
| 102 | Viral hepatitis | B15, B16, B17, B18, B19. |
| 103 | Whooping cough | A37. |

*Derived with modification from TABLE B. LIST OF 113 SELECTED CAUSES OF DEATH and ENTEROCOLITIS DUE TO CLOSTRIDIUM DIFFICILE.

Reference: *Instruction Manual, Part 9, ICD-10 Cause-of-Death Lists for Tabulating Mortality Statistics (Updated September 2018 to include WHO updates to ICD-10 for data year 2017)*. Vital Statistics Data Preparation, U.S. DEPARTMENT of HEALTH AND HUMAN SERVICES, Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville, Maryland, September 2018.

Table A-1b: ICD Codes for Leading Causes of Infant Death

| No. | Cause of infant death | ICD10 codes |
|-----|---|---|
| 1 | Accidental discharge of firearms | W32, W33, W34. |
| 2 | Accidental drowning and submersion | W65, W66, W67, W68, W69, W70, W73, W74. |
| 3 | Accidental inhalation and ingestion of food or other objects causing obstruction of respiratory tract | W78, W79, W80. |
| 4 | Accidental poisoning and exposure to noxious substances | X40, X41, X42, X43, X44, X45, X46, X47, X48, X49. |
| 5 | Accidental suffocation and strangulation in bed | W75. |
| 6 | Accidents caused by exposure to smoke, fire and flames | X00, X01, X02, X03, X04, X05, X06, X08, X09. |
| 7 | Acute bronchitis and acute bronchiolitis | J20, J21. |
| 8 | Acute poliomyelitis | A80. |
| 9 | Acute upper respiratory infections | J00, J01, J02, J03, J04, J05, J06. |
| 10 | All other and unspecified diseases of digestive system | K00, K01, K02, K03, K04, K05, K06, K07, K08, K09, K10, K11, K12, K13, K14, K20, K21, K22, K23, K25, K26, K27, K28, K30, K31, K35, K36, K37, K38, K57, K58, K59, K60, K61, K62, K63, K64, K65, K66, K67, K70, K71, K72, K73, K74, K75, K76, K77, K80, K81, K82, K83, K85, K86, K87, K90, K91, K92. |
| 11 | All other and unspecified infectious and parasitic diseases | A20, A21, A22, A23, A24, A25, A26, A27, A28, A30, A31, A32, A38, A42, A43, A44, A46, A48, A49, A51, A52, A53, A55, A56, A57, A58, A59, A60, A63, A64, A65, A66, A67, A68, A69, A70, A71, A74, A75, A77, A78, A79, B35, B36, B38, B39, B40, B41, B42, B43, B44, B45, B46, B47, B48, B49, B55, B56, B57, B58, B60, B64, B65, B66, B67, B68, B69, B70, B71, B72, B73, B74, B75, B76, B77, B78, B79, B80, B81, B82, B83, B85, B86, B87, B88, B89, B90, B91, B92, B94, B95, B96, B97, B98, B99. |
| 12 | All other diseases (Residual) | F01, F02, F03, F04, F05, F06, F07, F08, F09, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23, F24, F25, F28, F29, F30, F31, F32, F33, F34, F38, F39, F40, F41, F42, F43, F44, F45, F48, F50, F51, F52, F53, F54, F55, F59, F60, F61, F62, F63, F64, F65, F66, F68, F69, F70, F71, F72, F73, F78, F79, F80, F81, F82, F83, F84, F88, F89, F90, F91, F92, F93, F94, F95, F98, F99, G99, H00, H01, H02, H03, H04, H05, H06, H10, H11, H13, H15, H16, H17, H18, H19, H20, H21, H22, H25, H26, H27, H28, H30, H31, H32, H33, H34, H35, H36, H40, H42, H43, H44, H45, H46, H47, H48, H49, H50, H51, H52, H53, H54, H55, H56, H57, L00, L01, L02, L03, L04, L05, L06, L08, L10, L11, L12, L13, L14, L20, L21, L22, L23, L24, L25, L26, L27, L28, L29, L30, L40, L41, L42, L43, L44, L45, L50, L51, L52, L53, L54, L55, L56, L57, L58, L59, L60, L62, L63, L64, L65, L66, L67, L68, L69, L70, L71, L72, L73, L74, L75, L80, L81, L82, L83, L84, L85, L86, L87, L88, L89, L90, L91, L92, L93, L94, L95, L97, L98, L99, M00, M01, M02, M03, M05, M06, M07, M08, M09, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M45, M46, M47, M48, M49, M50, M51, M53, M54, M60, M61, M62, M63, M65, M66, M67, M68, M70, M71, M72, M73, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M99, Y85, R54. |
| 13 | All other diseases of circulatory system | I00, I01, I02, I05, I06, I07, I08, I09, I10, I11, I12, I13, I15, I20, I21, I22, I23, I24, I25.0, I25.1, I25.2, I25.3, I25.4, I25.5, I25.6, I25.8, I25.9, I31, I34, I35, I36, I37, I38, I44, I45, I47, I48, I49, I50, I51, I70, I71, I72, I73, I74, I77, I78, I79, I80, I81, I82, I83, I85, I86, I87, I88, I89, I95, I96, I97, I98, I99. |
| 14 | All other endocrine, nutritional and metabolic diseases | E00, E01, E02, E03, E04, E05, E06, E07, E10, E11, E12, E13, E14, E15, E16, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E34.0, E34.1, E34.2, E34.4, E34.5, E34.8, E34.9, E65, E66, E67, E68, E70, E71, E72, E73, E74, E75, E76, E77, E78, E79, E80, E83, E85, E88. |
| 15 | All other infections specific to the perinatal period | P35, P37, P39. |
| 16 | All other respiratory conditions originating in the perinatal period | P28.2, P28.3, P28.4, P28.5, P28.8, P28.9. |
| 17 | Anemias | D50, D51, D52, D53, D55, D56, D57, D58, D59, D60, D61, D62, D63, D64. |
| 18 | Anencephaly and similar malformations | Q00. |
| 19 | Anoxic brain damage, not elsewhere classified | G93.1. |
| 20 | Assault (homicide) by discharge of firearms | U01.4, X93, X94, X95. |

| No. | Cause of infant death | ICD10 codes |
|-----|---|--|
| 21 | Assault (homicide) by hanging, strangulation and suffocation | X91. |
| 22 | Assault (homicide) by other and unspecified means | U01.0, U01.1, U01.2, U01.3, U01.5, U01.6, U01.7, U01.8, U01.9, X85, X86, X87, X88, X89, X90, X92, X96, X97, X98, X99, Y00, Y01, Y02, Y03, Y04, Y05, Y08, Y09. |
| 23 | Asthma | J45, J46. |
| 24 | Atelectasis | P28.0, P28.1. |
| 25 | Bacterial sepsis of newborn | P36. |
| 26 | Birth asphyxia | P21. |
| 27 | Birth trauma | P10, P11, P12, P13, P14, P15. |
| 28 | Bronchitis, chronic and unspecified | J40, J41, J42. |
| 29 | Candidiasis | B37. |
| 30 | Cardiac arrest | I46. |
| 31 | Cardiomyopathy | I42. |
| 32 | Cerebrovascular diseases | I60, I61, I62, I63, I64, I65, I66, I67, I68, I69. |
| 33 | Certain disorders involving the immune mechanism | D80, D81, D82, D83, D84, D86, D89. |
| 34 | Certain intestinal infectious diseases | A00, A01, A02, A03, A04, A05, A06, A07, A08. |
| 35 | Chronic respiratory disease originating in the perinatal period | P27. |
| 36 | Complications of medical and surgical care | Y40, Y41, Y42, Y43, Y44, Y45, Y46, Y47, Y48, Y49, Y50, Y51, Y52, Y53, Y54, Y55, Y56, Y57, Y58, Y59, Y60, Y61, Y62, Y63, Y64, Y65, Y66, Y69, Y70, Y71, Y72, Y73, Y74, Y75, Y76, Y77, Y78, Y79, Y80, Y81, Y82, Y83, Y84. |
| 37 | Congenital hydrocephalus | Q03. |
| 38 | Congenital malformations and deformations of musculoskeletal system, limbs and integument | Q65, Q66, Q67, Q68, Q69, Q70, Q71, Q72, Q73, Q74, Q75, Q76, Q77, Q78, Q79, Q80, Q81, Q82, Q83, Q84, Q85. |
| 39 | Congenital malformations of digestive system | Q35, Q36, Q37, Q38, Q39, Q40, Q41, Q42, Q43, Q44, Q45. |
| 40 | Congenital malformations of genitourinary system | Q50, Q51, Q52, Q53, Q54, Q55, Q56, Q60, Q61, Q62, Q63, Q64. |
| 41 | Congenital malformations of heart | Q20, Q21, Q22, Q23, Q24. |
| 42 | Congenital malformations of respiratory system | Q30, Q31, Q32, Q33, Q34. |
| 43 | Congenital pneumonia | P23. |
| 44 | Congenital syphilis | A50. |
| 45 | Cystic fibrosis | E84. |
| 46 | Diarrhea and gastroenteritis of infectious origin | A09. |
| 47 | Diphtheria | A36. |
| 48 | Diseases of the ear and mastoid process | H60, H61, H62, H65, H66, H67, H68, H69, H70, H71, H72, H73, H74, H75, H80, H81, H82, H83, H90, H91, H92, H93. |
| 49 | Disorders related to long gestation and high birth weight | P08. |
| 50 | Down syndrome | Q90. |
| 51 | Edward syndrome | Q91.0, Q91.1, Q91.2, Q91.3. |
| 52 | Extremely low birth weight or extreme immaturity | P07.0, P07.2. |

| No. | Cause of infant death | ICD10 codes |
|-----|--|--|
| 53 | Falls | W00, W01, W02, W03, W04, W05, W06, W07, W08, W09, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19. |
| 54 | Gastritis, duodenitis, and noninfective enteritis and colitis | K29, K50, K51, K52, K55. |
| 55 | Gonococcal infection | A54. |
| 56 | Hematological disorders | P60, P61. |
| 57 | Hemolytic disease of newborn due to isoimmunization and other perinatal jaundice | P55, P56, P57, P58, P59. |
| 58 | Hemorrhagic conditions and other diseases of blood and blood-forming organs | D65, D66, D67, D68, D69, D70, D71, D72, D73, D74, D75, D76. |
| 59 | Hemorrhagic disease of newborn | P53. |
| 60 | Hernia of abdominal cavity and intestinal obstruction without hernia | K40, K41, K42, K43, K44, K45, K46, K56. |
| 61 | Hodgkin disease and non-Hodgkin lymphomas | C81, C82, C83, C84, C85. |
| 62 | Human immunodeficiency virus (HIV) disease | B20, B21, B22, B23, B24. |
| 63 | Hydrops fetalis not due to hemolytic disease | P83.2. |
| 64 | In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior | D00, D01, D02, D03, D04, D05, D06, D07, D09, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48. |
| 65 | Infantile cerebral palsy | G80. |
| 66 | Infantile spinal muscular atrophy, type I (Werdnig-Hoffman) | G12.0. |
| 67 | Influenza | J09, J10, J11. |
| 68 | Interstitial emphysema and related conditions originating in the perinatal period | P25. |
| 69 | Intrauterine hypoxia | P20. |
| 70 | Leukemia | C91, C92, C93, C94, C95. |
| 71 | Malaria | B50, B51, B52, B53, B54. |
| 72 | Measles | B05. |
| 73 | Meningitis | G00, G03. |
| 74 | Meningococcal infection | A39. |
| 75 | Motor vehicle accidents | V02, V03, V04, V09.0, V09.2, V12, V13, V14, V19.0, V19.1, V19.2, V19.4, V19.5, V19.6, V20, V21, V22, V23, V24, V25, V26, V27, V28, V29, V30, V31, V32, V33, V34, V35, V36, V37, V38, V39, V40, V41, V42, V43, V44, V45, V46, V47, V48, V49, V50, V51, V52, V53, V54, V55, V56, V57, V58, V59, V60, V61, V62, V63, V64, V65, V66, V67, V68, V69, V70, V71, V72, V73, V74, V75, V76, V77, V78, V79, V80.3, V80.4, V80.5, V81.0, V81.1, V82.0, V82.1, V83, V84, V85, V86, V87.0, V87.1, V87.2, V87.3, V87.4, V87.5, V87.6, V87.7, V87.8, V88.0, V88.1, V88.2, V88.3, V88.4, V88.5, V88.6, V88.7, V88.8, V89.0, V89.2. |
| 76 | Mumps | B26. |
| 77 | Necrotizing enterocolitis of newborn | P77. |
| 78 | Neglect, abandonment and other maltreatment syndromes | Y06, Y07. |
| 79 | Neonatal aspiration syndromes | P24. |
| 80 | Neonatal hemorrhage | P50, P51, P52, P54. |
| 81 | Newborn affected by chorioamnionitis | P02.7. |

| No. | Cause of infant death | ICD10 codes |
|-----|---|---|
| 82 | Newborn affected by complications involving cord | P02.4, P02.5, P02.6. |
| 83 | Newborn affected by complications involving placenta | P02.0, P02.1, P02.2, P02.3. |
| 84 | Newborn affected by incompetent cervix | P01.0. |
| 85 | Newborn affected by maternal hypertensive disorders | P00.0. |
| 86 | Newborn affected by multiple pregnancy | P01.5. |
| 87 | Newborn affected by noxious influences transmitted via placenta or breast milk | P04. |
| 88 | Newborn affected by other and unspecified abnormalities of membranes | P02.8, P02.9. |
| 89 | Newborn affected by other complications of labor and delivery | P03. |
| 90 | Newborn affected by other maternal complications of pregnancy | P01.2, P01.3, P01.4, P01.6, P01.7, P01.8, P01.9. |
| 91 | Newborn affected by other maternal conditions which may be unrelated to present pregnancy | P00.1, P00.2, P00.3, P00.4, P00.5, P00.6, P00.7, P00.8, P00.9. |
| 92 | Newborn affected by premature rupture of membranes | P01.1. |
| 93 | Nutritional deficiencies | E40, E41, E42, E43, E44, E45, E46, E50, E51, E52, E53, E54, E55, E56, E58, E59, E60, E61, E63, E64. |
| 94 | Omphalitis of newborn with or without mild hemorrhage | P38. |
| 95 | Other accidental suffocation and strangulation. | W76, W77, W81, W84. |
| 96 | Other and unspecified accidents | W20, W21, W22, W23, W24, W25, W26, W27, W28, W29, W30, W31, W35, W36, W37, W38, W39, W40, W41, W42, W43, W44, W45, W46, W49, W50, W51, W52, W53, W54, W55, W56, W57, W58, W59, W60, W64, W85, W86, W87, W88, W89, W90, W91, W92, W93, W94, W99, X10, X11, X12, X13, X14, X15, X16, X17, X18, X19, X20, X21, X22, X23, X24, X25, X26, X27, X28, X29, X30, X31, X32, X33, X34, X35, X36, X37, X38, X39, X50, X51, X52, X53, X54, X57, X58, X59. |
| 97 | Other and unspecified diseases of genitourinary system | N00, N01, N02, N03, N04, N05, N06, N07, N08, N10, N11, N12, N13.0, N13.1, N13.2, N13.3, N13.4, N13.5, N13.6, N13.7, N13.8, N13.9, N14.0, N14.1, N14.2, N14.3, N14.4, N15.0, N15.1, N15.8, N15.9, N20, N21, N22, N23, N26, N28, N29, N30, N31, N32, N33, N34, N35, N36, N37, N39, N40, N41, N42, N43, N44, N45, N46, N47, N48, N49, N50, N51, N60, N61, N62, N63, N64, N70, N71, N72, N73, N74, N75, N76, N77, N80, N81, N82, N83, N84, N85, N86, N87, N88, N89, N90, N91, N92, N93, N94, N95. |
| 98 | Other and unspecified diseases of respiratory system | J22, J30, J31, J32, J33, J34, J35, J36, J37, J38, J39, J43, J44, J47, J60, J61, J62, J63, J64, J65, J66, J67, J68, J70, J80, J81, J82, J84, J85, J86, J90, J91, J92, J93, J94, J95, J96, J98, U04. |
| 99 | Other and unspecified malignant neoplasms | C00, C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C30, C31, C32, C33, C34, C37, C38, C39, C40, C41, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C88, C90, C96, C97. |
| 100 | Other and unspecified transport accidents | V01, V05, V06, V09.1, V09.3, V09.9, V10, V11, V15, V16, V17, V18, V19.3, V19.8, V19.9, V80.0, V80.1, V80.2, V80.6, V80.7, V80.8, V80.9, V81.2, V81.3, V81.4, V81.5, V81.6, V81.7, V81.8, V81.9, V82.2, V82.3, V82.4, V82.5, V82.6, V82.7, V82.8, V82.9, V87.9, V88.9, V89.1, V89.3, V89.9, V90, V91, V92, V93, V94, V95, V96, V97, V98, V99. |
| 101 | Other and unspecified viral diseases | A81, A82, A83, A84, A85.0, A85.1, A85.2, A85.8, A86, A87, A88, A89, A92, A93, A94, A95, A96, A97, A98, A99, B00, B02, B03, B04, B06, B07, B08, B09, B15, B16, B17, B18, B19, B25, B27, B30, B33, B34. |
| 102 | Other chromosomal abnormalities, not elsewhere classified | Q92, Q93, Q95, Q96, Q97, Q98, Q99. |
| 103 | Other congenital malformations and deformations | Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q86, Q87, Q88, Q89. |
| 104 | Other congenital malformations of circulatory system | Q25, Q26, Q27, Q28. |

| No. | Cause of infant death | ICD10 codes |
|-----|---|---|
| 105 | Other congenital malformations of nervous system | Q01, Q02, Q04, Q06, Q07. |
| 106 | Other diseases of nervous system | G04, G06, G07, G08, G09, G10, G11, G12.1, G12.2, G12.8, G12.9, G20, G21, G23, G24, G25, G26, G30, G31, G32, G35, G36, G37, G40, G41, G43, G44, G45, G46, G47, G50, G51, G52, G53, G54, G55, G56, G57, G58, G59, G60, G61, G62, G63, G64, G70, G71, G72, G81, G82, G83, G90, G91, G92, G93.0, G93.2, G93.3, G93.4, G93.5, G93.6, G93.7, G93.8, G93.9, G95, G96, G97, G98. |
| 107 | Other external causes | Y10, Y11, Y12, Y13, Y14, Y15, Y16, Y17, Y18, Y19, Y20, Y21, Y22, Y23, Y24, Y25, Y26, Y27, Y28, Y29, Y30, Y31, Y32, Y33, Y34, Y35, Y36. |
| 108 | Other low birth weight or preterm | P07.1, P07.3. |
| 109 | Other perinatal conditions | P29, P70.3, P70.4, P70.8, P70.9, P71, P72, P74, P75, P76, P78, P80, P81, P83.0, P83.1, P83.3, P83.4, P83.5, P83.6, P83.8, P83.9, P90, P91, P92, P93, P94, P95, P96. |
| 110 | Other symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified | R00, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R25, R26, R27, R29, R30, R31, R32, R33, R34, R35, R36, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R89, R90, R91, R92, R93, R94, R96, R98, R99. |
| 111 | Patau syndrome | Q91.4, Q91.5, Q91.6, Q91.7. |
| 112 | Pericarditis, endocarditis and myocarditis | I30, I33, I40. |
| 113 | Pneumocystosis | B59. |
| 114 | Pneumonia | J12, J13, J14, J15, J16, J17, J18. |
| 115 | Pneumonitis due to solids and liquids | J69. |
| 116 | Pulmonary heart disease and diseases of pulmonary circulation | I26, I27, I28. |
| 117 | Pulmonary hemorrhage originating in the perinatal period | P26. |
| 118 | Renal failure and other disorders of kidney | N17, N18, N19, N25, N27. |
| 119 | Respiratory distress of newborn | P22. |
| 120 | Septicemia | A40, A41. |
| 121 | Short stature, not elsewhere classified | E34.3. |
| 122 | Slow fetal growth and fetal malnutrition | P05. |
| 123 | Spina bifida | Q05. |
| 124 | Sudden infant death syndrome | R95. |
| 125 | Syndrome of infant of a diabetic mother and neonatal diabetes mellitus | P70.0, P70.1, P70.2. |
| 126 | Tetanus | A33, A35. |
| 127 | Tuberculosis | A16, A17, A18, A19. |
| 128 | Varicella (chickenpox) | B01. |
| 129 | Volume depletion, disorders of fluid, electrolyte and acid-base balance | E86, E87. |
| 130 | Whooping cough | A37. |

*Derived with modification from TABLE C. LIST OF 130 SELECTED CAUSES OF INFANT DEATH.

Reference: *Instruction Manual, Part 9, ICD-10 Cause-of-Death Lists for Tabulating Mortality Statistics (Updated September 2018 to include WHO updates to ICD-10 for data year 2017)*. Vital Statistics Data Preparation, U.S. DEPARTMENT of HEALTH AND HUMAN SERVICES, Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville, Maryland, September 2018

DEFINITIONS

- **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.⁵ All rates were rounded to the nearest tenth of a number. Suppression rules have been implemented to minimize random variation and instability. Both count and rate are suppressed for any cell with fewer than 5 deaths regardless of county population size.
- **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):** The county is divided into eight SPAs and are used for planning, coordination and service delivery (Figure A-2 and Table A-2). SPAs are aggregated from census tracts and are updated every ten years to incorporate changes in Census geography. Current boundaries are distributed by the Los Angeles County Internal Services Department and are available on the GIS Data Portal website:
<https://egis3.lacounty.gov/dataportal/2012/03/01/service-planning-areas-spa-2012>

⁵ 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.

Figure A-2: Map of Los Angeles County Service Planning Areas

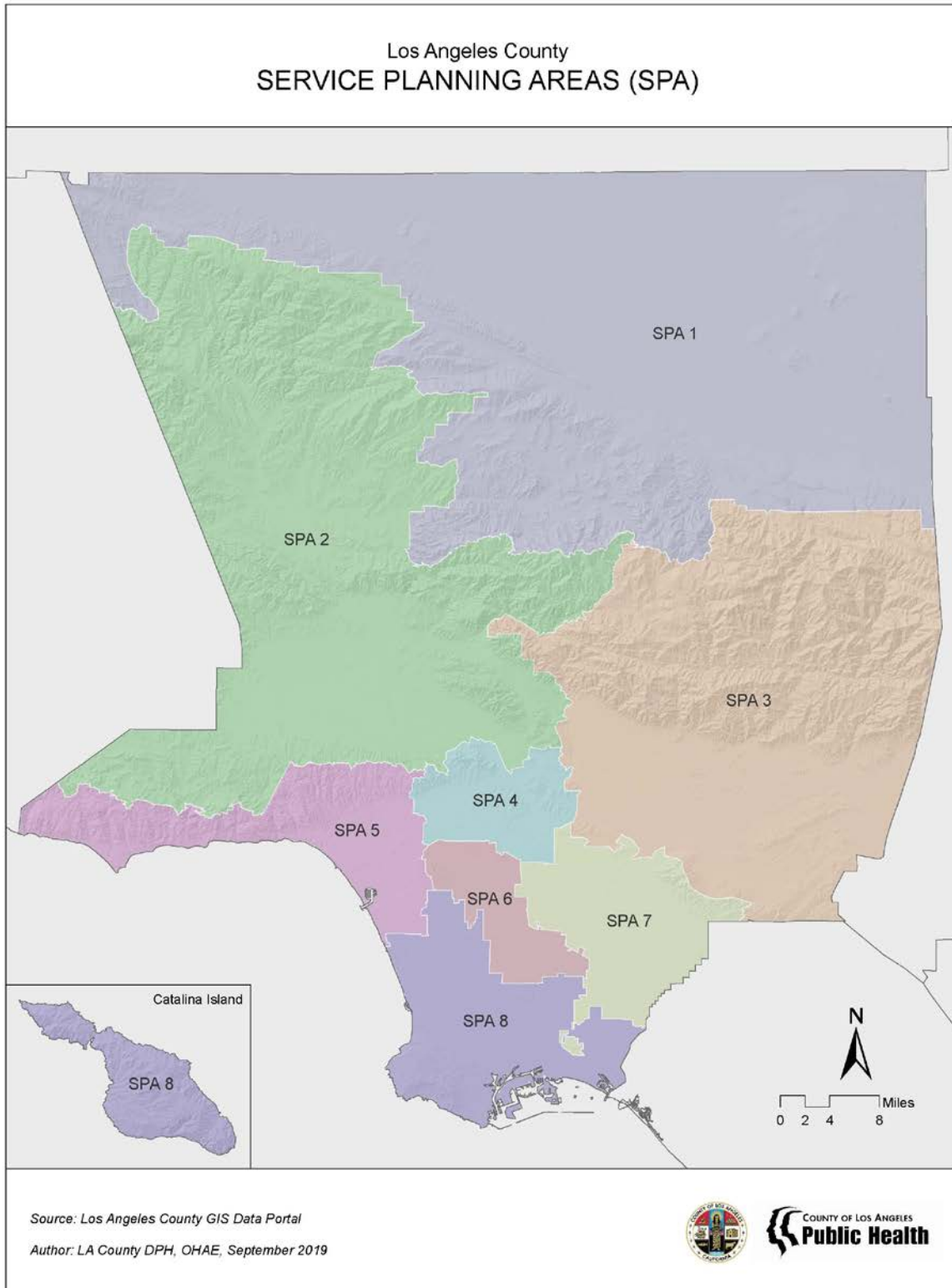


Table A-2: City or Community and Corresponding Service Planning Area (SPA)

| NAME | SPA | NAME | SPA |
|-----------------------|------------|-----------------------|---------------|
| Acton | 1 | East Whittier | 7 |
| Agoura Hills | 2 | El Monte | 3 |
| Agua Dulce | 1 | El Segundo | 8 |
| Alhambra | 3 | Elizabeth Lake | 1 |
| Alondra Park | 8 | Florence-Graham | 6 |
| Altadena | 3 | Gardena | 8 |
| Arcadia | 3 | Glendale | 2 |
| Artesia | 7 | Glendora | 3 |
| Avalon | 8 | Green Valley | 1 |
| Avocado Heights | 3 | Hacienda Heights | 3 |
| Azusa | 3 | Hasley Canyon | 2 |
| Baldwin Park | 3 | Hawaiian Gardens | 7 |
| Bell | 7 | Hawthorne | 8 |
| Bell Gardens | 7 | Hermosa Beach | 8 |
| Bellflower | 7 | Hidden Hills | 2 |
| Beverly Hills | 5 | Huntington Park | 7 |
| Bradbury | 3 | Industry | 3 |
| Burbank | 2 | Inglewood | 8 |
| Calabasas | 2 | Irwindale | 3 |
| Carson | 8 | La Canada Flintridge | 2 |
| Castaic | 2 | La Crescenta-Montrose | 2 |
| Cerritos | 7 | La Habra Heights | 7 |
| Charter Oak | 3 | La Mirada | 7 |
| Citrus | 3 | La Puente | 3 |
| Claremont | 3 | La Verne | 3 |
| Commerce | 7 | Ladera Heights | 5 |
| Compton | 6 | Lake Hughes | 2 |
| Covina | 3 | Lake Los Angeles | 1 |
| Cudahy | 7 | Lakewood | 7 |
| Culver City | 5 | Lancaster | 1 |
| Del Aire | 8 | Lawndale | 8 |
| Desert View Highlands | 1 | Lennox | 8 |
| Diamond Bar | 3 | Leona Valley | 1 |
| Downey | 7 | Littlerock | 1 |
| Duarte | 3 | Lomita | 8 |
| East Los Angeles | 7 | Long Beach | 8 |
| East Pasadena | 3 | Los Angeles | 2, 4, 5, 6, 8 |
| East Rancho Dominguez | 6 | Lynwood | 6 |
| East San Gabriel | 3 | Malibu | 5 |

Table A-2: City or Community and Corresponding Service Planning Area (SPA) (continued)

| NAME | SPA | NAME | SPA |
|-----------------------|------------|--------------------------|------------|
| Manhattan Beach | 8 | Signal Hill | 7 |
| Marina del Rey | 5 | South El Monte | 3 |
| Mayflower Village | 3 | South Gate | 7 |
| Maywood | 7 | South Monrovia Island | 3 |
| Monrovia | 3 | South Pasadena | 3 |
| Montebello | 7 | South San Gabriel | 3 |
| Monterey Park | 3 | South San Jose Hills | 3 |
| North El Monte | 3 | South Whittier | 7 |
| Norwalk | 7 | Stevenson Ranch | 2 |
| Palmdale | 1 | Sun Village | 1 |
| Palos Verdes Estates | 8 | Temple City | 3 |
| Paramount | 6 | Topanga | 2 |
| Pasadena | 3 | Torrance | 8 |
| Pico Rivera | 7 | Val Verde | 2 |
| Pomona | 3 | Valinda | 3 |
| Quartz Hill | 1 | Vernon | 7 |
| Rancho Palos Verdes | 8 | View Park-Windsor Hills | 6 |
| Redondo Beach | 8 | Vincent | 3 |
| Rolling Hills | 8 | Walnut | 3 |
| Rolling Hills Estates | 8 | Walnut Park | 7 |
| Rose Hills | 7 | West Athens | 8 |
| Rosemead | 3 | West Carson | 8 |
| Rowland Heights | 3 | West Covina | 3 |
| San Dimas | 3 | West Hollywood | 4 |
| San Fernando | 2 | West Puente Valley | 3 |
| San Gabriel | 3 | West Rancho Dominguez | 6 |
| San Marino | 3 | West Whittier-Los Nietos | 7 |
| San Pasqual | 3 | Westlake Village | 2 |
| Santa Clarita | 2 | Westmont | 8 |
| Santa Fe Springs | 7 | Whittier | 7 |
| Santa Monica | 5 | Willowbrook | 6 |
| Sierra Madre | 3 | | |

NOTES ABOUT THE POPULATION

July 1, 2010 - 2017 population estimates were used as the denominators in the rate calculations. Hedderson Demographic Services produces population estimates on an annual basis for the Los Angeles County Internal Services Department and Information Technology Service Division. Their population estimation methods include applying mortality and migration rates to the 2010 Census estimates and adhering closely to the state's official city and county estimates from the California Department of Finance, Demographic Research Unit. Annual population estimate datasets are available from the Los Angeles County Internal Services Department on the GIS Data Portal website at: <https://egis3.lacounty.gov/dataportal/2014/09/09/population-and-poverty-estimates/>

Smoothed population estimates were used as the denominators in the 2008-2009 rate calculations. The Office of Health Assessment and Epidemiology updated the trend line by adjusting the original annual estimates produced by Hedderson Demographic Services to the Census 2010 population counts.

2017 American Community Survey (ACS) 5-Year Estimates were used to estimate the median household income. ACS is a nationwide continuous survey conducted by the US Census Bureau. Data tables can be accessed at:

<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

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 death certificate has a check box for indicating whether the decedent was Hispanic, Latino/a, or of Spanish origin regardless of race. In 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.

TABULATIONS BY RACE/ETHNICITY

For this report, race is tabulated and presented for six race/ethnic groups: white, Latino, black, Asian, Native Hawaiians and other Pacific Islander (NHOPI), and American Indian and Alaska Native (AIAN). Beginning with 2012 data, this report has 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 was 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 combined data for 2014-2017 to show the leading causes of death and premature death overall and by gender (Tables A-3a to A-6b):

Table A-3a: Leading Causes of Death for Native Hawaiians and Other Pacific Islanders (NHOPI), 2014-2017*

NHOPIs
739 total deaths

| Rank | Leading Causes of Death | # of Deaths |
|------|-------------------------|-------------|
| 1 | CHD | 152 |
| 2 | Diabetes mellitus | 52 |
| 3 | Lung Cancer | 41 |
| 4 | Stroke | 37 |
| 5 | Breast cancer | 25 |
| 5 | Colorectal Cancer | 25 |
| 7 | Alzheimer's disease | 23 |
| 8 | COPD | 21 |
| 9 | Homicide | 16 |
| 10 | Hypertension | 14 |

* Because of the small number of annual deaths among NHOPI, 2014 to 2017 numbers were combined.

Table A-3b: Leading Causes of Death for Native Hawaiians and Other Pacific Islanders (NHOPI) by Gender, 2014-2017*

NHOPI Male
391 total deaths

NHOPI Female
348 total deaths

| Rank | Leading Causes of Death | # of Deaths | Rank | Leading Causes of Death | # of Deaths |
|------|--------------------------------|-------------|------|-------------------------|-------------|
| 1 | CHD | 92 | 1 | CHD | 60 |
| 2 | Diabetes mellitus | 22 | 2 | Diabetes mellitus | 30 |
| 3 | Lung Cancer | 21 | 3 | Breast cancer | 25 |
| 4 | Stroke | 20 | 4 | Lung Cancer | 20 |
| 5 | Colorectal Cancer | 15 | 5 | Stroke | 17 |
| 6 | Homicide | 14 | 6 | Alzheimer's disease | 14 |
| 7 | COPD | 12 | 7 | Colorectal Cancer | 10 |
| 8 | Suicide | 11 | 8 | COPD | 9 |
| 9 | Alzheimer's disease | 9 | 9 | Renal failure | 8 |
| 10 | Malignant neoplasm of pancreas | 8 | 10 | Hypertension | 7 |

*Because of the small number of annual deaths among NHOPI, 2014 to 2017 numbers were combined

Table A-4a: Leading Causes of Death for American Indians/Alaska Natives (AIAN),
2014-2017*

AIANs
694 total deaths

| Rank | Leading Causes of Death | # of Deaths |
|------|-------------------------------|-------------|
| 1 | CHD | 116 |
| 2 | Stroke | 40 |
| 3 | Diabetes mellitus | 38 |
| 4 | Alzheimer's disease | 34 |
| 5 | Lung Cancer | 33 |
| 6 | COPD | 31 |
| 7 | Liver disease/cirrhosis | 29 |
| 8 | Pneumonia/Influenza | 25 |
| 9 | Drug overdose (Unintentional) | 18 |
| 10 | Hypertension | 17 |

* Because of the small number of annual deaths among AIAN, 2014 to 2017 numbers were combined.

Table A-4b: Leading Causes of Death for American Indians/Alaska Natives (AIAN) by Gender,
2014-2017*

AIAN Male
313 total deaths

AIAN Female
381 total deaths

| Rank | Leading Causes of Death | # of Deaths | Rank | Leading Causes of Death | # of Deaths |
|------|----------------------------|-------------|------|-------------------------------|-------------|
| 1 | CHD | 59 | 1 | CHD | 57 |
| 2 | Liver disease/cirrhosis | 16 | 2 | Stroke | 28 |
| 3 | Diabetes mellitus | 15 | 3 | Diabetes mellitus | 23 |
| 3 | Lung Cancer | 15 | 3 | Alzheimer's disease | 23 |
| 3 | COPD | 15 | 5 | Lung Cancer | 18 |
| 3 | Hypertension | 15 | 6 | Pneumonia/Influenza | 17 |
| 7 | Stroke | 12 | 7 | COPD | 16 |
| 8 | Alzheimer's disease | 11 | 8 | Breast cancer | 14 |
| 9 | Hypertensive heart disease | 9 | 9 | Liver disease/cirrhosis | 13 |
| 9 | Prostate cancer | 9 | 9 | Drug overdose (Unintentional) | 13 |

*Because of the small number of annual deaths among AIAN, 2014 to 2017 numbers were combined

Table A-5a: Leading Causes of Premature Death for Native Hawaiians and Other Pacific Islanders (NHOPI), 2014-2017*

NHOPIs
9,816 years of potential life lost

| Rank | Leading Causes of Premature Death | YPLLs |
|------|--|-------|
| 1 | CHD | 1,424 |
| 2 | Certain conditions originating in the perinatal period | 750 |
| 3 | Homicide | 667 |
| 4 | Diabetes mellitus | 480 |
| 5 | Breast cancer | 370 |
| 6 | Lung Cancer | 346 |
| 7 | Colorectal Cancer | 317 |
| 8 | Motor vehicle crash | 302 |
| 9 | Stroke | 266 |
| 10 | Suicide | 264 |

* Because of the small number of annual deaths among NHOPI, 2014 to 2017 numbers were combined.

Table A-5b: Leading Causes of Premature Death for Native Hawaiians and Other Pacific Islanders (NHOPI) by Gender, 2014-2017*

NHOPI Male
5,637 years of life lost

NHOPI Female
4,179 years of life lost

| Rank | Leading Causes of Premature Death | YPLLs | Rank | Caused of Premature Death | YPLLs |
|------|--|-------|------|--|-------|
| 1 | CHD | 1,028 | 1 | Certain conditions originating in the perinatal period | 450 |
| 2 | Homicide | 624 | 2 | CHD | 396 |
| 3 | Certain conditions originating in the perinatal period | 300 | 3 | Breast cancer | 370 |
| 4 | Suicide | 264 | 4 | Diabetes mellitus | 276 |
| 5 | Motor vehicle crash | 244 | 5 | Malignant neoplasm of cervix uteri | 169 |
| 6 | Diabetes mellitus | 204 | 6 | Lung Cancer | 166 |
| 7 | Colorectal Cancer | 198 | 7 | Stroke | 144 |
| 8 | Lung Cancer | 180 | 8 | Colorectal Cancer | 119 |
| 9 | Stroke | 122 | 9 | Leukemia | 112 |
| 10 | COPD | 117 | 10 | Malignant neoplasms of corpus uteri and uterus, part unspecified | 94 |

*Because of the small number of annual deaths among NHOPI, 2014 to 2017 numbers were combined

Table A-6a: Leading Causes of Premature Death for American Indians/Alaska Natives (AIAN), 2014-2017*

AIANs
6,703 years of potential life lost

| Rank | Leading Causes of Premature Death | YPLLs |
|------|-----------------------------------|-------|
| 1 | CHD | 693 |
| 2 | Drug overdose (Unintentional) | 499 |
| 3 | Liver disease/cirrhosis | 431 |
| 4 | Diabetes mellitus | 409 |
| 5 | Suicide | 355 |
| 6 | Hypertension | 248 |
| 7 | Lung Cancer | 245 |
| 8 | Homicide | 237 |
| 9 | Breast cancer | 185 |
| 10 | Stroke | 182 |

* Because of the small number of annual deaths among AIAN, 2014 to 2017 numbers were combined.

Table A-6b: Leading Causes of Premature Death for American Indians/Alaska Natives (AIAN) by Gender, 2014-2017*

AIAN Male
3,446 years of life lost

AIAN Female
3,257 years of life lost

| Rank | Leading Causes of Premature Death | YPLLs | Rank | Leading Causes of Premature Death | YPLLs |
|------|-----------------------------------|-------|------|-----------------------------------|-------|
| 1 | CHD | 377 | 1 | Drug overdose (Unintentional) | 364 |
| 2 | Liver disease/cirrhosis | 300 | 2 | CHD | 316 |
| 3 | Hypertension | 224 | 3 | Diabetes mellitus | 297 |
| 4 | Homicide | 188 | 4 | Breast cancer | 184 |
| 5 | Suicide | 172 | 5 | Suicide | 183 |
| 6 | Motor vehicle crash | 141 | 6 | Lung Cancer | 140 |
| 7 | Hypertensive heart disease | 137 | 7 | Liver disease/cirrhosis | 131 |
| 8 | Drug overdose (Unintentional) | 135 | 8 | Pneumonia/Influenza | 122 |
| 9 | HIV | 119 | 9 | Asthma | 95 |
| 10 | Diabetes mellitus | 112 | 10 | Stroke | 86 |

*Because of the small number of annual deaths among AIAN, 2014 to 2017 numbers were combined

Calculating stable mortality rates for American Indian and Alaska Native (AIAN) and Native Hawaiians and other Pacific Islander (NHOPI) has proven to be challenging. The death rate is derived from two sources: the death certificate and the population estimates. Death certificates provide causes of death as well as demographic information on the deceased (gender, race/ethnicity, age). Population estimates provide 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 death certificate, they are completed by the funeral director or coroner. 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 might have reported two or more races and/or 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. According to the findings from 2011-2015 American Community Survey conducted by U.S. Census Bureau, as shown in (Table A-7) 16.0% of NHOPI reported Hispanic ethnicity, but only 5.0% of NHOPI decedents were reported as Hispanic on the death certificate. Similarly, Hispanic ethnicity was reported in 54.3% AIAN in Census data, but in only 30.0% of AIAN deaths (Table A-8). Again, while 48.4% of NHOPI reported multiple races in the Census, only 18.0% of NHOPI decedents were reported with multiple races. In contrast, 62.1% of AIAN reported being multiracial, similar figure of 61.6% of AIAN decedents were reported with multiple races. Hence caution is advised when interpreting death rates for these two racial groups.

Table A-7: Deaths (2017) and Population (2011-2015) of Native Hawaiians and Other Pacific Islanders (NHOPI) by Ethnicity and Multiple Race Status

| Race and ethnicity | No. of Deaths | (%) | Population | (%) |
|---------------------------|----------------------|-------------|-------------------|-------------|
| Ethnicity | | | | |
| <i>Hispanic</i> | 11 | 5.0% | 8,419 | 16.0% |
| <i>Non-Hispanic</i> | 211 | 95.0% | 44,087 | 84.0% |
| Race | | | | |
| <i>Single race</i> | 182 | 82.0% | 27,076 | 51.6% |
| <i>Two or more races</i> | 40 | 18.0% | 25,430 | 48.4% |
| Total | 222 | 100% | 52,506 | 100% |

Data sources:

1. Los Angeles County Department of Public Health, Los Angeles County Linked Death Data, 2017
2. U.S. Census Bureau, 2011-2015 American Community Survey Selected Population Tables: B01001, B01001C, B01001E.

Table A-8: Deaths (2017) and Population (2011-2015) of American Indians/Alaska Natives (AIAN) by Ethnicity and Multiple Race Status

| Race and ethnicity | No. of Deaths | (%) | Population | (%) |
|---------------------------|----------------------|-------------|-------------------|-------------|
| Ethnicity | | | | |
| <i>Hispanic</i> | 131 | 30.0% | 85,009 | 54.3% |
| <i>Non-Hispanic</i> | 306 | 70.0% | 71,637 | 45.7% |
| Race | | | | |
| <i>Single race</i> | 168 | 38.4% | 59,340 | 37.9% |
| <i>Two or more races</i> | 269 | 61.6% | 97,306 | 62.1% |
| Total | 437 | 100% | 156,646 | 100% |

Data sources:

1. Los Angeles County Department of Public Health, Los Angeles County Linked Death Data, 2017
2. U.S. Census Bureau, 2011-2015 American Community Survey Selected Population Tables: B01001, B01001C, B01001E.

APPENDIX B

10 Leading Causes of Death

| | |
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Notes:

1. Statistics are of Los Angeles County residents only.
2. Cause of Death are categorized based on Table B. List of 113 Selected Causes of Death; and Table C. List of 130 Selected Causes of Infant Death.
Reference: *National Center for Health Statistics, National Vital Statistics System. ICD–10 cause-of-death lists for tabulating mortality statistics (updated September 2018 to include WHO updates to ICD–10 for data year 2017). NCHS Instruction Manual, part 9.* Hyattsville, MD. 2018.
3. Age adjustment is made to US Standard Population 2000.
Reference: Klein RJ, Schoenborn CA. *Age adjustment using the 2000 projected U.S. population.* Healthy People Statistical Notes, no. 20. Hyattsville, Maryland: National Center for Health Statistics, January 2001.

Data Sources:

1. Los Angeles County Department of Public Health, Los Angeles County Linked Death Data, 2017.
2. July 1, 2017 Population Estimates, Los Angeles County Internal Services Department, 2018/05/07.

Abbreviations:

1. CHD = Coronary Heart Disease
2. COPD = Chronic Obstructive Pulmonary Disease

**TABLE B-1:
10 LEADING CAUSES OF DEATH, LOS ANGELES COUNTY, 2017**

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 11,211 | 103 |
| 2 | Alzheimer's disease | 4,179 | 39 |
| 3 | Stroke | 3,749 | 35 |
| 4 | COPD | 2,927 | 28 |
| 5 | Diabetes mellitus | 2,658 | 25 |
| 6 | Lung Cancer | 2,556 | 24 |
| 7 | Pneumonia/Influenza | 1,957 | 18 |
| 8 | Colorectal Cancer | 1,449 | 13 |
| 9 | Liver disease/cirrhosis | 1,412 | 12 |
| 10 | Hypertension | 1,402 | 13 |

* Age-adjusted mortality rate per 100,000 using 2000 U.S. Standard Population

**TABLE B-2:
10 LEADING CAUSES OF DEATH BY GENDER, LOS ANGELES COUNTY, 2017**

Males

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 6,260 | 135 |
| 2 | Stroke | 1,650 | 37 |
| 3 | Diabetes mellitus | 1,491 | 32 |
| 4 | Lung Cancer | 1,421 | 31 |
| 5 | COPD | 1,405 | 32 |
| 6 | Alzheimer's disease | 1,289 | 31 |
| 7 | Pneumonia/Influenza | 1,000 | 23 |
| 8 | Liver disease/cirrhosis | 953 | 18 |
| 9 | Prostate cancer | 872 | 20 |
| 10 | Colorectal Cancer | 762 | 16 |

Females

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|---------------------|---------------|-------|
| 1 | CHD | 4,951 | 78 |
| 2 | Alzheimer's disease | 2,890 | 43 |
| 3 | Stroke | 2,099 | 33 |
| 4 | COPD | 1,522 | 24 |
| 5 | Breast cancer | 1,172 | 19 |
| 6 | Diabetes mellitus | 1,167 | 19 |
| 7 | Lung Cancer | 1,135 | 19 |
| 8 | Pneumonia/Influenza | 957 | 15 |
| 9 | Hypertension | 732 | 12 |
| 10 | Colorectal Cancer | 687 | 11 |

* Age-adjusted mortality rate per 100,000 using 2000 U.S. Standard Population

**TABLE B-3:
10 LEADING CAUSES OF DEATH BY AGE GROUP, LOS ANGELES COUNTY, 2017**

< 1 Year

| Rank | Cause of Death | No. of Deaths | CMR* |
|------|---|---------------|------|
| 1 | Extremely low birth weight or extreme immaturity | 69 | 62.8 |
| 2 | Sudden infant death syndrome | 32 | 29.1 |
| 3 | Congenital malformations of heart | 30 | 27.3 |
| 4 | Newborn affected by premature rupture of membranes | 19 | 17.3 |
| 5 | Bacterial sepsis of newborn | 17 | 15.5 |
| 6 | Neonatal hemorrhage | 15 | 13.7 |
| 7 | Edward syndrome | 13 | 11.8 |
| 8 | Respiratory distress of newborn | 11 | 10.0 |
| 9 | Congenital malformations and deformations of musculoskeletal system, limbs and integument | 9 | 8.2 |
| 9 | Newborn affected by chorioamnionitis | 9 | 8.2 |

1-4 Years

| Rank | Cause of Death | No. of Deaths | CMR* |
|------|--|---------------|------|
| 1 | Congenital malformations, deformations and chromosomal abnormalities | 12 | 2.5 |
| 2 | Leukemia | 8 | 1.7 |
| 3 | Accidental drowning and submersion | 6 | 1.2 |
| 4 | Malignant neoplasms of meninges, brain and other parts of central nervous system | 5 | 1.0 |
| 5 | Motor vehicle crash | 4 | 0.8 |
| 6 | Pneumonia/Influenza | 3 | 0.6 |
| 7 | Septicemia | 1 | 0.2 |
| 7 | Anemias | 1 | 0.2 |
| 7 | Complications of medical and surgical care | 1 | 0.2 |
| 7 | Homicide | 1 | 0.2 |

* Crude Mortality Rate / 100,000 population

**TABLE B-3 (continued):
10 LEADING CAUSES OF DEATH BY AGE GROUP, LOS ANGELES COUNTY, 2017**

5-14 Years

| Rank | Cause of Death | No. of Deaths | CMR* |
|------|--|---------------|------|
| 1 | Motor vehicle crash | 20 | 1.5 |
| 2 | Congenital malformations, deformations and chromosomal abnormalities | 13 | 1.0 |
| 3 | Suicide | 11 | 0.9 |
| 4 | Leukemia | 8 | 0.6 |
| 5 | Malignant neoplasms of meninges, brain and other parts of central nervous system | 6 | 0.5 |
| 5 | Asthma | 6 | 0.5 |
| 7 | Accidental drowning and submersion | 3 | 0.2 |
| 8 | Septicemia | 2 | 0.2 |
| 8 | Homicide | 2 | 0.2 |
| 8 | Certain conditions originating in the perinatal period | 2 | 0.2 |

15-24 Years

| Rank | Cause of Death | No. of Deaths | CMR* |
|------|--|---------------|------|
| 1 | Homicide | 161 | 11.1 |
| 2 | Motor vehicle crash | 154 | 10.6 |
| 3 | Suicide | 124 | 8.5 |
| 4 | Drug overdose (Unintentional) | 74 | 5.1 |
| 5 | Leukemia | 18 | 1.2 |
| 6 | Congenital malformations, deformations and chromosomal abnormalities | 13 | 0.9 |
| 7 | Falls | 9 | 0.6 |
| 8 | Malignant neoplasms of meninges, brain and other parts of central nervous system | 6 | 0.4 |
| 8 | Diabetes mellitus | 6 | 0.4 |
| 10 | Accidental drowning and submersion | 5 | 0.3 |

* Crude Mortality Rate / 100,000 population

**TABLE B-3 (continued):
10 LEADING CAUSES OF DEATH BY AGE GROUP, LOS ANGELES COUNTY, 2017**

25-44 Years

| Rank | Cause of Death | No. of Deaths | CMR* |
|------|-------------------------------|---------------|------|
| 1 | Drug overdose (Unintentional) | 391 | 13.2 |
| 2 | Homicide | 303 | 10.3 |
| 3 | Suicide | 291 | 9.9 |
| 4 | Motor vehicle crash | 234 | 7.9 |
| 5 | Liver disease/cirrhosis | 134 | 4.5 |
| 6 | CHD | 114 | 3.9 |
| 7 | Stroke | 94 | 3.2 |
| 8 | Diabetes mellitus | 79 | 2.7 |
| 9 | Breast cancer | 71 | 2.4 |
| 10 | Colorectal Cancer | 56 | 1.9 |

45-64 Years

| Rank | Cause of Death | No. of Deaths | CMR* |
|------|-------------------------------|---------------|------|
| 1 | CHD | 2,092 | 78.4 |
| 2 | Liver disease/cirrhosis | 759 | 28.5 |
| 3 | Diabetes mellitus | 689 | 25.8 |
| 4 | Lung Cancer | 531 | 19.9 |
| 5 | Stroke | 515 | 19.3 |
| 6 | Breast cancer | 435 | 16.3 |
| 7 | Colorectal Cancer | 382 | 14.3 |
| 8 | Drug overdose (Unintentional) | 349 | 13.1 |
| 9 | Hypertensive heart disease | 291 | 10.9 |
| 10 | Suicide | 287 | 10.8 |

* CMR Crude Mortality Rate / 100,000 population

**TABLE B-3 (continued):
10 LEADING CAUSES OF DEATH BY AGE GROUP, LOS ANGELES COUNTY, 2017**

65-74 Years

| Rank | Cause of Death | No. of Deaths | CMR* |
|------|--|---------------|-------|
| 1 | CHD | 2,002 | 266.6 |
| 2 | Lung Cancer | 739 | 98.4 |
| 3 | Diabetes mellitus | 594 | 79.1 |
| 4 | COPD | 566 | 75.4 |
| 5 | Stroke | 560 | 74.6 |
| 6 | Colorectal Cancer | 347 | 46.2 |
| 7 | Malignant neoplasm of pancreas | 343 | 45.7 |
| 8 | Liver disease/cirrhosis | 313 | 41.7 |
| 9 | Malignant neoplasms of liver and intrahepatic bile ducts | 291 | 38.8 |
| 10 | Pneumonia/Influenza | 280 | 37.3 |

≥ 75+ Years

| Rank | Cause of Death | No. of Deaths | CMR* |
|------|----------------------------|---------------|---------|
| 1 | CHD | 6,997 | 1,238.0 |
| 2 | Alzheimer's disease | 3,963 | 701.2 |
| 3 | Stroke | 2,571 | 454.9 |
| 4 | COPD | 2,090 | 369.8 |
| 5 | Pneumonia/Influenza | 1,474 | 260.8 |
| 6 | Diabetes mellitus | 1,289 | 228.1 |
| 7 | Lung Cancer | 1,267 | 224.2 |
| 8 | Hypertension | 916 | 162.1 |
| 9 | Renal failure | 782 | 138.4 |
| 10 | Hypertensive heart disease | 709 | 125.5 |

* CMR Crude Mortality Rate / 100,000 population

TABLE B-4:**10 LEADING CAUSES OF DEATH BY RACE/ETHNICITY, LOS ANGELES COUNTY, 2017****White**

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|----------------------------|---------------|-------|
| 1 | CHD | 5,497 | 117 |
| 2 | Alzheimer's disease | 2,458 | 48 |
| 3 | COPD | 1,781 | 38 |
| 4 | Stroke | 1,560 | 33 |
| 5 | Lung Cancer | 1,292 | 29 |
| 6 | Pneumonia/Influenza | 874 | 18 |
| 7 | Diabetes mellitus | 766 | 17 |
| 8 | Colorectal Cancer | 622 | 14 |
| 9 | Hypertension | 568 | 12 |
| 10 | Hypertensive heart disease | 529 | 11 |

Black

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|----------------------------|---------------|-------|
| 1 | CHD | 1,556 | 158 |
| 2 | Stroke | 497 | 53 |
| 3 | Diabetes mellitus | 405 | 42 |
| 4 | Alzheimer's disease | 399 | 46 |
| 5 | COPD | 384 | 40 |
| 6 | Lung Cancer | 372 | 37 |
| 7 | Hypertensive heart disease | 233 | 24 |
| 8 | Hypertension | 223 | 23 |
| 9 | Renal failure | 218 | 23 |
| 10 | Pneumonia/Influenza | 211 | 22 |

Latino

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 2,597 | 81 |
| 2 | Diabetes mellitus | 1,055 | 31 |
| 3 | Stroke | 1,043 | 33 |
| 4 | Alzheimer's disease | 875 | 31 |
| 5 | Liver disease/cirrhosis | 793 | 19 |
| 6 | Pneumonia/Influenza | 485 | 16 |
| 7 | COPD | 471 | 16 |
| 8 | Renal failure | 433 | 13 |
| 9 | Lung Cancer | 424 | 14 |
| 10 | Motor vehicle crash | 412 | 9 |

Asian

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|---------------------|---------------|-------|
| 1 | CHD | 1,491 | 75 |
| 2 | Stroke | 625 | 32 |
| 3 | Lung Cancer | 447 | 23 |
| 4 | Alzheimer's disease | 431 | 21 |
| 5 | Diabetes mellitus | 411 | 21 |
| 6 | Pneumonia/Influenza | 382 | 19 |
| 7 | COPD | 277 | 14 |
| 8 | Colorectal Cancer | 223 | 11 |
| 9 | Renal failure | 217 | 11 |
| 10 | Hypertension | 216 | 11 |

* Age-adjusted mortality rate per 100,000 using 2000 U.S. Standard Population

TABLE B-5:**10 LEADING CAUSES OF DEATH BY GENDER AND RACE/ETHNICITY, LOS ANGELES COUNTY, 2017****White Male**

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|---------------------|---------------|-------|
| 1 | CHD | 3,062 | 151 |
| 2 | COPD | 790 | 40 |
| 3 | Alzheimer's disease | 759 | 38 |
| 4 | Lung Cancer | 692 | 34 |
| 5 | Stroke | 666 | 34 |
| 6 | Diabetes mellitus | 478 | 24 |
| 7 | Pneumonia/Influenza | 444 | 22 |
| 8 | Prostate cancer | 393 | 20 |
| 9 | Suicide | 346 | 20 |
| 10 | Colorectal Cancer | 311 | 16 |

White Female

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|---------------------|---------------|-------|
| 1 | CHD | 2,435 | 87 |
| 2 | Alzheimer's disease | 1,699 | 55 |
| 3 | COPD | 991 | 37 |
| 4 | Stroke | 894 | 31 |
| 5 | Lung Cancer | 600 | 25 |
| 6 | Breast cancer | 493 | 21 |
| 7 | Pneumonia/Influenza | 430 | 15 |
| 8 | Colorectal Cancer | 311 | 12 |
| 9 | Hypertension | 293 | 11 |
| 10 | Diabetes mellitus | 288 | 11 |

Latino Male

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------------|---------------|-------|
| 1 | CHD | 1,490 | 108 |
| 2 | Diabetes mellitus | 588 | 40 |
| 3 | Liver disease/cirrhosis | 565 | 29 |
| 4 | Stroke | 493 | 36 |
| 5 | Motor vehicle crash | 311 | 13 |
| 6 | Homicide | 291 | 11 |
| 7 | Alzheimer's disease | 276 | 26 |
| 8 | Pneumonia/Influenza | 256 | 21 |
| 9 | Lung Cancer | 246 | 19 |
| 10 | Drug overdose (Unintentional) | 245 | 10 |

Latina Female

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 1,107 | 61 |
| 2 | Alzheimer's disease | 599 | 34 |
| 3 | Stroke | 550 | 30 |
| 4 | Diabetes mellitus | 467 | 25 |
| 5 | Breast cancer | 320 | 15 |
| 6 | COPD | 235 | 13 |
| 7 | Pneumonia/Influenza | 229 | 13 |
| 8 | Liver disease/cirrhosis | 228 | 11 |
| 9 | Hypertension | 204 | 11 |
| 10 | Renal failure | 195 | 10 |

* Age-adjusted mortality rate per 100,000 using 2000 U.S. Standard Population

TABLE B-5 (continued):

10 LEADING CAUSES OF DEATH BY GENDER AND RACE/ETHNICITY, LOS ANGELES COUNTY, 2017

Black Male

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|----------------------------|---------------|-------|
| 1 | CHD | 845 | 202 |
| 2 | Diabetes mellitus | 223 | 55 |
| 3 | COPD | 199 | 51 |
| 4 | Lung Cancer | 198 | 48 |
| 5 | Stroke | 197 | 50 |
| 6 | Prostate cancer | 187 | 52 |
| 7 | Homicide | 158 | 38 |
| 8 | Hypertensive heart disease | 129 | 31 |
| 9 | Alzheimer's disease | 110 | 35 |
| 10 | Renal failure | 109 | 28 |

Black Female

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|---------------------|---------------|-------|
| 1 | CHD | 711 | 123 |
| 2 | Stroke | 300 | 53 |
| 3 | Alzheimer's disease | 289 | 51 |
| 4 | COPD | 185 | 32 |
| 5 | Diabetes mellitus | 182 | 32 |
| 6 | Lung Cancer | 174 | 30 |
| 7 | Breast cancer | 158 | 28 |
| 8 | Hypertension | 120 | 21 |
| 9 | Pneumonia/Influenza | 110 | 19 |
| 10 | Renal failure | 109 | 19 |

Asian Male

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------------------|---------------|-------|
| 1 | CHD | 819 | 101 |
| 2 | Stroke | 284 | 36 |
| 3 | Lung Cancer | 275 | 34 |
| 4 | Pneumonia/Influenza | 196 | 25 |
| 5 | Diabetes mellitus | 193 | 24 |
| 6 | COPD | 172 | 21 |
| 7 | Alzheimer's disease | 139 | 18 |
| 8 | Malignant neoplasms of liver and in | 129 | 15 |
| 9 | Renal failure | 118 | 14 |
| 10 | Colorectal Cancer | 118 | 14 |

Asian Female

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|---------------------|---------------|-------|
| 1 | CHD | 672 | 57 |
| 2 | Stroke | 341 | 29 |
| 3 | Alzheimer's disease | 292 | 23 |
| 4 | Diabetes mellitus | 218 | 19 |
| 5 | Breast cancer | 189 | 18 |
| 6 | Pneumonia/Influenza | 186 | 16 |
| 7 | Lung Cancer | 172 | 15 |
| 8 | Hypertension | 111 | 9 |
| 9 | Colorectal Cancer | 105 | 9 |
| 10 | COPD | 105 | 9 |

* Age-adjusted mortality rate per 100,000 using 2000 U.S. Standard Population

TABLE B-6:**10 LEADING CAUSES OF DEATH BY SERVICE PLANNING AREA (SPA), LOS ANGELES COUNTY, 2017****Antelope Valley (SPA 1)**

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 415 | 124 |
| 2 | COPD | 216 | 67 |
| 3 | Alzheimer's disease | 200 | 70 |
| 4 | Stroke | 164 | 51 |
| 5 | Diabetes mellitus | 133 | 38 |
| 6 | Lung Cancer | 129 | 38 |
| 7 | Motor vehicle crash | 86 | 23 |
| 8 | Liver disease/cirrhosis | 72 | 19 |
| 9 | Pneumonia/Influenza | 61 | 19 |
| 10 | Hypertension | 58 | 17 |

San Gabriel (SPA 3)

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 2,133 | 97 |
| 2 | Alzheimer's disease | 782 | 35 |
| 3 | Stroke | 679 | 31 |
| 4 | COPD | 604 | 28 |
| 5 | Diabetes mellitus | 542 | 25 |
| 6 | Lung Cancer | 502 | 24 |
| 7 | Pneumonia/Influenza | 403 | 18 |
| 8 | Colorectal Cancer | 286 | 13 |
| 9 | Hypertension | 274 | 13 |
| 10 | Liver disease/cirrhosis | 249 | 12 |

San Fernando (SPA 2)

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|---------------------|---------------|-------|
| 1 | CHD | 2,671 | 108 |
| 2 | Alzheimer's disease | 1,147 | 47 |
| 3 | Stroke | 766 | 32 |
| 4 | COPD | 645 | 27 |
| 5 | Lung Cancer | 560 | 23 |
| 6 | Diabetes mellitus | 453 | 19 |
| 7 | Pneumonia/Influenza | 419 | 18 |
| 8 | Colorectal Cancer | 296 | 12 |
| 9 | Breast cancer | 286 | 11 |
| 10 | Hypertension | 284 | 12 |

Metro (SPA 4)

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 1,189 | 97 |
| 2 | Stroke | 399 | 33 |
| 3 | Alzheimer's disease | 342 | 27 |
| 4 | Diabetes mellitus | 295 | 24 |
| 5 | Pneumonia/Influenza | 242 | 20 |
| 6 | Lung Cancer | 233 | 19 |
| 7 | COPD | 207 | 17 |
| 8 | Hypertension | 184 | 15 |
| 9 | Liver disease/cirrhosis | 170 | 13 |
| 10 | Colorectal Cancer | 150 | 12 |

* Age-adjusted mortality rate per 100,000 using 2000 U.S. Standard Population

TABLE B-6 (continued):

10 LEADING CAUSES OF DEATH BY SERVICE PLANNING AREA (SPA), LOS ANGELES COUNTY, 2017

West (SPA 5)

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 682 | 77 |
| 2 | Alzheimer's disease | 383 | 41 |
| 3 | Stroke | 249 | 28 |
| 4 | Lung Cancer | 187 | 22 |
| 5 | COPD | 160 | 18 |
| 6 | Pneumonia/Influenza | 123 | 14 |
| 7 | Malignant neoplasm of p | 122 | 15 |
| 8 | Colorectal Cancer | 94 | 11 |
| 9 | Renal failure | 93 | 11 |
| 10 | Parkinson's disease | 91 | 11 |

East (SPA 7)

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 1,223 | 93 |
| 2 | Stroke | 474 | 37 |
| 3 | Alzheimer's disease | 467 | 36 |
| 4 | Diabetes mellitus | 403 | 31 |
| 5 | COPD | 331 | 26 |
| 6 | Lung Cancer | 269 | 21 |
| 7 | Liver disease/cirrhosis | 231 | 17 |
| 8 | Pneumonia/Influenza | 225 | 17 |
| 9 | Renal failure | 211 | 16 |
| 10 | Colorectal Cancer | 183 | 15 |

South (SPA 6)

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 1,001 | 127 |
| 2 | Stroke | 365 | 48 |
| 3 | Diabetes mellitus | 350 | 44 |
| 4 | COPD | 243 | 32 |
| 5 | Alzheimer's disease | 223 | 32 |
| 6 | Lung Cancer | 204 | 26 |
| 7 | Hypertension | 181 | 23 |
| 8 | Homicide | 173 | 15 |
| 9 | Liver disease/cirrhosis | 168 | 18 |
| 10 | Pneumonia/Influenza | 164 | 22 |

South Bay (SPA 8)

| Rank | Cause of Death | No. of Deaths | AAMR* |
|------|-------------------------|---------------|-------|
| 1 | CHD | 1,897 | 111 |
| 2 | Stroke | 653 | 39 |
| 3 | Alzheimer's disease | 635 | 39 |
| 4 | COPD | 521 | 31 |
| 5 | Lung Cancer | 472 | 29 |
| 6 | Diabetes mellitus | 396 | 23 |
| 7 | Pneumonia/Influenza | 320 | 19 |
| 8 | Colorectal Cancer | 256 | 15 |
| 9 | Liver disease/cirrhosis | 235 | 13 |
| 10 | Renal failure | 225 | 14 |

* Age-adjusted mortality rate per 100,000 using 2000 U.S. Standard Population

APPENDIX C

10 Leading Causes of Premature Death

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Notes:

1. Statistics are of Los Angeles County residents only.
2. Cause of Death are categorized based on Table B. List of 113 Selected Causes of Death; and Table C. List of 130 Selected Causes of Infant Death.
Reference: *National Center for Health Statistics, National Vital Statistics System. ICD–10 cause-of-death lists for tabulating mortality statistics (updated September 2018 to include WHO updates to ICD–10 for data year 2017). NCHS Instruction Manual, part 9.* Hyattsville, MD. 2018.
3. Age adjustment is made to US Standard Population 2000.
Reference: Klein RJ, Schoenborn CA. *Age adjustment using the 2000 projected U.S. population.* Healthy People Statistical Notes, no. 20. Hyattsville, Maryland: National Center for Health Statistics, January 2001.

Data Sources:

1. Los Angeles County Department of Public Health, Los Angeles County Linked Death Data, 2017.
2. July 1, 2017 Population Estimates, Los Angeles County Internal Services Department, 2018/05/07.

Abbreviations:

1. CHD = Coronary Heart Disease
2. COPD = Chronic Obstructive Pulmonary Disease

**TABLE C-1:
10 LEADING CAUSES OF PREMATURE DEATH, LOS ANGELES COUNTY, 2017**

| Rank | Cause of Death | YPLL-75 | YPLL AAR* |
|------|-------------------------------|---------|-----------|
| 1 | CHD | 51,515 | 431 |
| 2 | Drug overdose (Unintentional) | 27,743 | 263 |
| 3 | Suicide | 26,016 | 247 |
| 4 | Motor vehicle crash | 25,915 | 246 |
| 5 | Homicide | 24,769 | 238 |
| 6 | Liver disease/cirrhosis | 21,604 | 192 |
| 7 | Diabetes mellitus | 19,102 | 165 |
| 8 | Stroke | 16,085 | 142 |
| 9 | Lung Cancer | 13,427 | 110 |
| 10 | Breast cancer | 12,224 | 109 |

* Age-adjusted rate per 100,000 using 2000 U.S. Standard Population

TABLE C-2:**10 LEADING CAUSES OF PREMATURE DEATH BY GENDER, LOS ANGELES COUNTY, 2017****Males**

| Rank | Cause of Death | YPLL-75 | YPLL AAR* |
|------|-------------------------------|---------|-----------|
| 1 | CHD | 38,524 | 669 |
| 2 | Homicide | 21,021 | 398 |
| 3 | Drug overdose (Unintentional) | 20,576 | 390 |
| 4 | Suicide | 20,138 | 379 |
| 5 | Motor vehicle crash | 19,962 | 374 |
| 6 | Liver disease/cirrhosis | 15,230 | 276 |
| 7 | Diabetes mellitus | 12,232 | 218 |
| 8 | Stroke | 9,643 | 175 |
| 9 | Lung Cancer | 7,707 | 132 |
| 10 | Colorectal Cancer | 6,585 | 119 |

Females

| Rank | Cause of Death | YPLL-75 | YPLL AAR* |
|------|-------------------------------|---------|-----------|
| 1 | CHD | 12,991 | 208 |
| 2 | Breast cancer | 12,162 | 212 |
| 3 | Drug overdose (Unintentional) | 7,167 | 135 |
| 4 | Diabetes mellitus | 6,870 | 115 |
| 5 | Stroke | 6,442 | 111 |
| 6 | Liver disease/cirrhosis | 6,374 | 113 |
| 7 | Motor vehicle crash | 5,953 | 116 |
| 8 | Suicide | 5,878 | 113 |
| 9 | Lung Cancer | 5,720 | 90 |
| 10 | Colorectal Cancer | 4,566 | 79 |

* Age-adjusted rate per 100,000 using 2000 U.S. Standard Population

TABLE C-3:**10 LEADING CAUSES OF PREMATURE DEATH BY RACE/ETHNICITY, LOS ANGELES COUNTY, 2017****White**

| Rank | Cause of Death | YPLL-75 | YPLL AAR* |
|------|-------------------------------|---------|-----------|
| 1 | CHD | 19,804 | 474 |
| 2 | Drug overdose (Unintentional) | 12,692 | 454 |
| 3 | Suicide | 10,429 | 366 |
| 4 | Liver disease/cirrhosis | 5,903 | 166 |
| 5 | Lung Cancer | 5,889 | 133 |
| 6 | Motor vehicle crash | 5,708 | 216 |
| 7 | Diabetes mellitus | 4,554 | 122 |
| 8 | Stroke | 3,716 | 101 |
| 9 | COPD | 3,667 | 81 |
| 10 | Breast cancer | 3,622 | 98 |

Black

| Rank | Cause of Death | YPLL-75 | YPLL AAR* |
|------|-------------------------------|---------|-----------|
| 1 | CHD | 10,825 | 987 |
| 2 | Homicide | 7,032 | 829 |
| 3 | Motor vehicle crash | 4,204 | 479 |
| 4 | Diabetes mellitus | 3,410 | 342 |
| 5 | Stroke | 3,099 | 316 |
| 6 | Drug overdose (Unintentional) | 2,973 | 319 |
| 7 | Lung Cancer | 2,571 | 226 |
| 8 | Hypertensive heart disease | 2,245 | 221 |
| 9 | Suicide | 2,109 | 251 |
| 10 | Breast cancer | 1,896 | 189 |

Latino

| Rank | Cause of Death | YPLL-75 | YPLL AAR* |
|------|-------------------------------|---------|-----------|
| 1 | CHD | 15,941 | 341 |
| 2 | Homicide | 14,765 | 266 |
| 3 | Motor vehicle crash | 14,618 | 266 |
| 4 | Liver disease/cirrhosis | 12,992 | 272 |
| 5 | Drug overdose (Unintentional) | 10,230 | 197 |
| 6 | Suicide | 10,159 | 185 |
| 7 | Diabetes mellitus | 8,970 | 190 |
| 8 | Stroke | 6,930 | 147 |
| 9 | Colorectal Cancer | 4,428 | 95 |
| 10 | Breast cancer | 4,284 | 90 |

Asian

| Rank | Cause of Death | YPLL-75 | YPLL AAR* |
|------|--|---------|-----------|
| 1 | CHD | 4,450 | 232 |
| 2 | Suicide | 3,208 | 221 |
| 3 | Lung Cancer | 2,457 | 123 |
| 4 | Breast cancer | 2,270 | 129 |
| 5 | Stroke | 2,171 | 115 |
| 6 | Diabetes mellitus | 1,920 | 105 |
| 7 | Colorectal Cancer | 1,683 | 88 |
| 8 | Drug overdose (Unintentional) | 1,554 | 105 |
| 9 | Malignant neoplasms of liver and intrahepatic bile ducts | 1,406 | 70 |
| 10 | Motor vehicle crash | 1,285 | 81 |

* Age-adjusted rate per 100,000 using 2000 U.S. Standard Population

TABLE C-4:**10 LEADING CAUSES OF PREMATURE DEATH BY GENDER AND RACE/ETHNICITY, LOS ANGELES COUNTY, 2017****White Male**

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | CHD | 15,041 | | 709 |
| 2 | Drug overdose (Unintentional) | 8,567 | | 593 |
| 3 | Suicide | 7,931 | | 539 |
| 4 | Motor vehicle crash | 4,520 | | 332 |
| 5 | Liver disease/cirrhosis | 3,732 | | 198 |
| 6 | Lung Cancer | 3,330 | | 148 |
| 7 | Diabetes mellitus | 3,209 | | 171 |
| 8 | Stroke | 2,313 | | 125 |
| 9 | Colorectal Cancer | 2,094 | | 105 |
| 10 | COPD | 1,973 | | 88 |

White Female

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | CHD | 4,763 | | 231 |
| 2 | Drug overdose (Unintentional) | 4,125 | | 305 |
| 3 | Breast cancer | 3,616 | | 202 |
| 4 | Lung Cancer | 2,559 | | 118 |
| 5 | Suicide | 2,498 | | 183 |
| 6 | Liver disease/cirrhosis | 2,171 | | 133 |
| 7 | COPD | 1,694 | | 74 |
| 8 | Stroke | 1,403 | | 76 |
| 9 | Colorectal Cancer | 1,388 | | 74 |
| 10 | Diabetes mellitus | 1,345 | | 72 |

Latino Male

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | Homicide | 12,812 | | 452 |
| 2 | CHD | 11,972 | | 531 |
| 3 | Motor vehicle crash | 11,354 | | 405 |
| 4 | Liver disease/cirrhosis | 9,800 | | 418 |
| 5 | Drug overdose (Unintentional) | 8,534 | | 324 |
| 6 | Suicide | 8,242 | | 294 |
| 7 | Diabetes mellitus | 5,752 | | 253 |
| 8 | Stroke | 4,286 | | 184 |
| 9 | Colorectal Cancer | 2,732 | | 119 |
| 10 | Leukemia | 2,569 | | 96 |

Latina Female

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | Breast cancer | 4,284 | | 178 |
| 2 | CHD | 3,969 | | 165 |
| 3 | Motor vehicle crash | 3,264 | | 122 |
| 4 | Diabetes mellitus | 3,218 | | 132 |
| 5 | Liver disease/cirrhosis | 3,192 | | 132 |
| 6 | Stroke | 2,644 | | 110 |
| 7 | Homicide | 1,953 | | 72 |
| 8 | Suicide | 1,917 | | 71 |
| 9 | Drug overdose (Unintentional) | 1,696 | | 66 |
| 10 | Colorectal Cancer | 1,696 | | 72 |

* Age-adjusted rate per 100,000 using 2000 U.S. Standard Population

TABLE C-4 (continued):

10 LEADING CAUSES OF PREMATURE DEATH BY GENDER AND RACE/ETHNICITY, LOS ANGELES COUNTY, 2017

Black Male

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|-------|------|
| 1 | CHD | 7,548 | 1,513 | |
| 2 | Homicide | 6,224 | 1,518 | |
| 3 | Motor vehicle crash | 3,227 | 759 | |
| 4 | Diabetes mellitus | 2,150 | 470 | |
| 5 | Drug overdose (Unintentional) | 2,128 | 496 | |
| 6 | Suicide | 1,711 | 425 | |
| 7 | Stroke | 1,565 | 348 | |
| 8 | Lung Cancer | 1,445 | 292 | |
| 9 | Hypertensive heart disease | 1,382 | 297 | |
| 10 | HIV | 1,254 | 284 | |

Black Female

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | CHD | 3,277 | 552 | |
| 2 | Breast cancer | 1,881 | 346 | |
| 3 | Stroke | 1,534 | 291 | |
| 4 | Diabetes mellitus | 1,260 | 237 | |
| 5 | Lung Cancer | 1,126 | 172 | |
| 6 | Motor vehicle crash | 977 | 217 | |
| 7 | Hypertensive heart disease | 863 | 159 | |
| 8 | Drug overdose (Unintentional) | 845 | 162 | |
| 9 | Homicide | 808 | 196 | |
| 10 | Hypertension | 795 | 139 | |

Asian Male

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|--|---------|------|------|
| 1 | CHD | 3,563 | 416 | |
| 2 | Suicide | 2,206 | 311 | |
| 3 | Lung Cancer | 1,460 | 162 | |
| 4 | Stroke | 1,356 | 161 | |
| 5 | Drug overdose (Unintentional) | 1,239 | 174 | |
| 6 | Malignant neoplasms of liver and intrahepatic bile ducts | 1,076 | 118 | |
| 7 | Diabetes mellitus | 1,038 | 116 | |
| 8 | Colorectal Cancer | 891 | 104 | |
| 9 | Motor vehicle crash | 762 | 101 | |
| 10 | Malignant neoplasm of pancreas | 585 | 67 | |

Asian Female

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | Breast cancer | 2,229 | 231 | |
| 2 | Suicide | 1,002 | 136 | |
| 3 | Lung Cancer | 997 | 91 | |
| 4 | CHD | 887 | 80 | |
| 5 | Diabetes mellitus | 882 | 96 | |
| 6 | Malignant neoplasm of ovary | 843 | 82 | |
| 7 | Stroke | 815 | 77 | |
| 8 | Colorectal Cancer | 792 | 75 | |
| 9 | Motor vehicle crash | 523 | 64 | |
| 10 | Malignant neoplasm of stomach | 444 | 45 | |

* Age-adjusted rate per 100,000 using 2000 U.S. Standard Population

TABLE C-5:

10 LEADING CAUSES OF PREMATURE DEATH BY SERVICE PLANNING AREA (SPA), LOS ANGELES COUNTY, 2017

Antelope Valley (SPA 1)

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | Motor vehicle crash | 3,038 | 764 | |
| 2 | CHD | 2,644 | 603 | |
| 3 | Suicide | 1,476 | 382 | |
| 4 | Drug overdose (Unintentional) | 1,463 | 381 | |
| 5 | Diabetes mellitus | 1,403 | 333 | |
| 6 | Liver disease/cirrhosis | 1,112 | 284 | |
| 7 | Homicide | 1,108 | 298 | |
| 8 | Stroke | 1,097 | 286 | |
| 9 | COPD | 1,016 | 236 | |
| 10 | Lung Cancer | 785 | 172 | |

San Gabriel (SPA 3)

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | CHD | 8,166 | 368 | |
| 2 | Suicide | 4,426 | 248 | |
| 3 | Motor vehicle crash | 4,395 | 247 | |
| 4 | Liver disease/cirrhosis | 3,758 | 189 | |
| 5 | Diabetes mellitus | 3,457 | 165 | |
| 6 | Drug overdose (Unintentional) | 3,318 | 188 | |
| 7 | Homicide | 3,226 | 185 | |
| 8 | Lung Cancer | 2,776 | 122 | |
| 9 | Colorectal Cancer | 2,299 | 110 | |
| 10 | Stroke | 2,250 | 110 | |

San Fernando (SPA 2)

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | CHD | 11,039 | 401 | |
| 2 | Drug overdose (Unintentional) | 6,705 | 293 | |
| 3 | Suicide | 5,616 | 242 | |
| 4 | Motor vehicle crash | 4,158 | 178 | |
| 5 | Liver disease/cirrhosis | 3,655 | 141 | |
| 6 | Homicide | 2,854 | 125 | |
| 7 | Stroke | 2,776 | 105 | |
| 8 | Lung Cancer | 2,775 | 96 | |
| 9 | Breast cancer | 2,751 | 105 | |
| 10 | Diabetes mellitus | 2,606 | 96 | |

Metro (SPA 4)

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | CHD | 5,767 | 429 | |
| 2 | Suicide | 3,884 | 303 | |
| 3 | Drug overdose (Unintentional) | 3,251 | 243 | |
| 4 | Liver disease/cirrhosis | 2,866 | 214 | |
| 5 | Homicide | 2,548 | 215 | |
| 6 | Diabetes mellitus | 2,178 | 161 | |
| 7 | Motor vehicle crash | 2,177 | 172 | |
| 8 | Stroke | 1,982 | 149 | |
| 9 | Lung Cancer | 1,365 | 104 | |
| 10 | Colorectal Cancer | 1,230 | 91 | |

* Age-adjusted rate per 100,000 using 2000 U.S. Standard Population

TABLE C-5 (continued):

10 LEADING CAUSES OF PREMATURE DEATH BY SERVICE PLANNING AREA (SPA), LOS ANGELES COUNTY, 2017

West (SPA 5)

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|--------------------------------|---------|------|------|
| 1 | Drug overdose (Unintentional) | 2,291 | | 326 |
| 2 | CHD | 2,236 | | 261 |
| 3 | Suicide | 1,655 | | 239 |
| 4 | Lung Cancer | 890 | | 105 |
| 5 | Breast cancer | 676 | | 84 |
| 6 | Stroke | 674 | | 101 |
| 7 | Motor vehicle crash | 651 | | 93 |
| 8 | Homicide | 531 | | 73 |
| 9 | Malignant neoplasm of pancreas | 526 | | 58 |
| 10 | Colorectal Cancer | 511 | | 63 |

East (SPA 7)

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | CHD | 5,872 | | 416 |
| 2 | Motor vehicle crash | 3,416 | | 249 |
| 3 | Liver disease/cirrhosis | 3,383 | | 249 |
| 4 | Suicide | 3,207 | | 236 |
| 5 | Diabetes mellitus | 3,149 | | 227 |
| 6 | Drug overdose (Unintentional) | 2,972 | | 228 |
| 7 | Homicide | 2,324 | | 180 |
| 8 | Stroke | 2,134 | | 158 |
| 9 | Breast cancer | 1,467 | | 113 |
| 10 | Colorectal Cancer | 1,297 | | 98 |

South (SPA 6)

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | Homicide | 7,595 | | 647 |
| 2 | CHD | 6,627 | | 660 |
| 3 | Motor vehicle crash | 4,183 | | 366 |
| 4 | Drug overdose (Unintentional) | 3,237 | | 306 |
| 5 | Liver disease/cirrhosis | 2,866 | | 286 |
| 6 | Diabetes mellitus | 2,814 | | 282 |
| 7 | Stroke | 2,327 | | 234 |
| 8 | Suicide | 2,264 | | 198 |
| 9 | Breast cancer | 1,371 | | 140 |
| 10 | Lung Cancer | 1,339 | | 132 |

South Bay (SPA 8)

| Rank | Cause of Death | YPLL-75 | YPLL | AAR* |
|------|-------------------------------|---------|------|------|
| 1 | CHD | 9,164 | | 482 |
| 2 | Homicide | 4,583 | | 291 |
| 3 | Drug overdose (Unintentional) | 4,506 | | 281 |
| 4 | Motor vehicle crash | 3,897 | | 240 |
| 5 | Liver disease/cirrhosis | 3,524 | | 199 |
| 6 | Suicide | 3,488 | | 218 |
| 7 | Diabetes mellitus | 3,070 | | 172 |
| 8 | Stroke | 2,845 | | 158 |
| 9 | Breast cancer | 2,345 | | 139 |
| 10 | Lung Cancer | 2,273 | | 119 |

* Age-adjusted rate per 100,000 using 2000 U.S. Standard Population

APPENDIX D

Trends in Mortality

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**TABLE D-1:
Alzheimer's Disease**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|--------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 2,121 | 22.6 | 2,125 | 22.0 | 2,242 | 24.7 | 2,346 | 23.6 | 2,476 | 24.0 | 2,577 | 25.1 | 2,884 | 28.4 | 3,800 | 35.6 | 4,002 | 36.9 | 4,179 | 38.7 | 71.5% | 4.8% |
| Male | 676 | 19.6 | 694 | 19.7 | 751 | 22.3 | 732 | 19.9 | 824 | 21.1 | 838 | 21.7 | 928 | 24.5 | 1,160 | 29.2 | 1,238 | 30.6 | 1,289 | 31.2 | 59.5% | 2.0% |
| Female | 1,445 | 24.2 | 1,431 | 23.3 | 1,491 | 26.0 | 1,614 | 25.7 | 1,652 | 25.7 | 1,739 | 27.0 | 1,956 | 30.6 | 2,640 | 39.3 | 2,764 | 40.5 | 2,890 | 43.2 | 78.9% | 6.7% |
| White | 1,487 | 28.6 | 1,480 | 27.7 | 1,509 | 30.7 | 1,525 | 29.1 | 1,606 | 30.6 | 1,592 | 31.0 | 1,852 | 36.1 | 2,273 | 43.1 | 2,418 | 46.3 | 2,458 | 48.5 | 69.3% | 4.7% |
| Latino/a | 310 | 15.4 | 349 | 16.9 | 376 | 19.6 | 412 | 18.8 | 423 | 17.7 | 513 | 21.4 | 527 | 22.3 | 769 | 29.8 | 809 | 29.8 | 875 | 31.2 | 102.3% | 4.8% |
| Black | 204 | 26.2 | 184 | 23.4 | 186 | 24.8 | 226 | 27.6 | 221 | 25.7 | 265 | 30.7 | 253 | 30.3 | 396 | 47.5 | 362 | 42.1 | 399 | 45.5 | 73.8% | 8.2% |
| Asian[†] | 116 | 8.3 | 108 | 7.6 | 167 | 11.6 | 176 | 10.9 | 216 | 12.3 | 197 | 10.9 | 237 | 13.3 | 341 | 17.4 | 380 | 18.8 | 431 | 21.4 | 156.1% | 13.6% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 478 | 25.1 | 497 | 25.5 | 510 | 27.8 | 465 | 23.8 | 539 | 26.6 | 534 | 27.3 | 580 | 29.9 | 715 | 35.7 | 766 | 38.9 | 759 | 38.5 | 53.1% | -1.2% |
| Latino | 91 | 12.2 | 108 | 14.5 | 133 | 18.9 | 135 | 16.7 | 154 | 17.3 | 172 | 19.1 | 180 | 20.8 | 243 | 26.1 | 241 | 24.1 | 276 | 26.3 | 115.9% | 9.1% |
| Black | 58 | 21.8 | 51 | 19.3 | 55 | 22.2 | 67 | 23.7 | 64 | 21.3 | 63 | 20.8 | 83 | 28.3 | 87 | 29.7 | 110 | 36.2 | 110 | 34.6 | 58.5% | -4.5% |
| Asian[†] | 47 | 8.6 | 36 | 6.5 | 52 | 9.3 | 62 | 10.0 | 62 | 9.0 | 68 | 9.7 | 77 | 11.2 | 107 | 14.4 | 109 | 14.3 | 139 | 17.8 | 107.2% | 24.5% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 1,009 | 30.5 | 983 | 28.9 | 999 | 32.3 | 1,060 | 32.1 | 1,067 | 33.2 | 1,058 | 33.2 | 1,272 | 39.8 | 1,558 | 47.6 | 1,652 | 50.8 | 1,699 | 54.9 | 79.7% | 8.0% |
| Latina | 219 | 17.2 | 241 | 18.3 | 243 | 20.0 | 277 | 19.9 | 269 | 17.9 | 341 | 22.4 | 347 | 23.0 | 526 | 31.8 | 568 | 32.8 | 599 | 34.1 | 98.5% | 4.1% |
| Black | 146 | 27.8 | 133 | 25.6 | 131 | 25.7 | 159 | 29.3 | 157 | 27.5 | 202 | 35.8 | 170 | 31.0 | 309 | 56.5 | 252 | 44.9 | 289 | 51.1 | 84.0% | 13.8% |
| Asian[†] | 69 | 8.2 | 72 | 8.2 | 115 | 13.0 | 114 | 11.3 | 154 | 14.4 | 129 | 11.6 | 160 | 14.4 | 234 | 19.2 | 271 | 21.5 | 292 | 23.4 | 186.2% | 8.9% |
| SPA 1: Antelope Valley | 74 | 31.7 | 72 | 30.2 | 86 | 38.7 | 75 | 30.2 | 95 | 36.6 | 110 | 40.8 | 135 | 52.0 | 168 | 61.4 | 177 | 63.7 | 200 | 70.3 | 122.0% | 10.4% |
| SPA 2: San Fernando | 595 | 29.1 | 568 | 26.6 | 606 | 29.0 | 618 | 27.3 | 657 | 27.5 | 703 | 30.0 | 804 | 34.5 | 993 | 40.5 | 1,082 | 44.8 | 1,147 | 47.1 | 61.7% | 5.1% |
| SPA 3: San Gabriel | 381 | 20.7 | 399 | 21.0 | 422 | 23.0 | 473 | 23.5 | 516 | 24.9 | 504 | 24.2 | 531 | 25.7 | 713 | 32.3 | 720 | 31.9 | 782 | 34.6 | 67.1% | 8.3% |
| SPA 4: Metro | 189 | 16.3 | 169 | 14.5 | 190 | 18.5 | 222 | 19.6 | 219 | 18.5 | 222 | 19.1 | 264 | 22.7 | 335 | 27.2 | 339 | 27.1 | 342 | 27.5 | 68.8% | 1.3% |
| SPA 5: West | 198 | 23.2 | 216 | 24.5 | 210 | 24.2 | 188 | 20.4 | 225 | 23.8 | 212 | 23.3 | 255 | 26.9 | 328 | 34.9 | 373 | 39.2 | 383 | 40.6 | 74.6% | 3.5% |
| SPA 6: South | 128 | 19.2 | 128 | 19.1 | 96 | 16.7 | 139 | 21.6 | 135 | 19.8 | 148 | 22.0 | 161 | 25.1 | 241 | 36.4 | 237 | 34.3 | 223 | 32.2 | 67.6% | -6.1% |
| SPA 7: East | 240 | 20.3 | 262 | 21.9 | 293 | 27.3 | 263 | 22.1 | 269 | 21.6 | 283 | 23.1 | 327 | 26.8 | 416 | 31.8 | 455 | 34.0 | 467 | 35.5 | 74.9% | 4.4% |
| SPA 8: South Bay | 309 | 21.5 | 311 | 21.0 | 339 | 24.4 | 367 | 24.2 | 359 | 23.2 | 395 | 24.9 | 407 | 26.2 | 606 | 37.3 | 618 | 37.0 | 635 | 38.7 | 79.7% | 4.5% |

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

**TABLE D-2:
Breast Cancer
(female)**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 1,071 | 20.8 | 1,166 | 22.5 | 1,109 | 21.1 | 1,143 | 21.2 | 1,170 | 21.1 | 1,138 | 20.5 | 1,212 | 21.4 | 1,072 | 18.4 | 1,119 | 18.8 | 1,172 | 19.4 | -6.9% | 3.1% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 560 | 24.4 | 593 | 26.4 | 532 | 24.4 | 552 | 24.5 | 594 | 26.5 | 542 | 24.6 | 572 | 25.7 | 484 | 20.9 | 508 | 22.0 | 493 | 21.2 | -13.3% | -3.7% |
| Latina | 221 | 14.3 | 262 | 17.1 | 247 | 14.9 | 267 | 15.5 | 268 | 14.3 | 288 | 15.9 | 299 | 15.5 | 244 | 12.3 | 279 | 13.6 | 320 | 15.3 | 7.3% | 12.5% |
| Black | 180 | 35.7 | 187 | 36.5 | 187 | 36.4 | 196 | 38.0 | 163 | 31.0 | 155 | 29.8 | 179 | 33.1 | 190 | 35.0 | 177 | 31.7 | 158 | 27.6 | -22.8% | -12.9% |
| Asian[†] | 108 | 13.1 | 120 | 14.5 | 137 | 15.0 | 123 | 13.1 | 142 | 14.7 | 147 | 14.9 | 147 | 14.5 | 144 | 14.0 | 146 | 13.6 | 189 | 17.6 | 34.7% | 29.3% |
| SPA 1: Antelope Valley | 38 | 24.5 | 34 | 21.7 | 42 | 26.1 | 53 | 29.7 | 52 | 28.7 | 45 | 24.1 | 53 | 28.2 | 34 | 18.0 | 52 | 27.4 | 39 | 19.1 | -22.0% | -30.3% |
| SPA 2: San Fernando | 240 | 20.9 | 235 | 19.9 | 251 | 21.2 | 240 | 19.5 | 271 | 21.6 | 280 | 22.3 | 287 | 22.6 | 238 | 17.9 | 277 | 20.5 | 284 | 20.3 | -2.9% | -0.9% |
| SPA 3: San Gabriel | 187 | 18.9 | 233 | 23.4 | 230 | 22.1 | 213 | 19.6 | 228 | 20.9 | 211 | 19.4 | 218 | 19.8 | 214 | 18.8 | 217 | 18.9 | 220 | 18.5 | -1.8% | -2.1% |
| SPA 4: Metro | 108 | 19.0 | 92 | 16.2 | 86 | 15.0 | 115 | 19.5 | 105 | 17.6 | 96 | 15.9 | 97 | 16.1 | 110 | 17.3 | 84 | 12.9 | 104 | 15.5 | -18.4% | 20.2% |
| SPA 5: West | 98 | 23.2 | 96 | 22.9 | 83 | 19.7 | 83 | 20.7 | 78 | 18.9 | 85 | 20.2 | 101 | 23.3 | 65 | 15.2 | 82 | 18.1 | 80 | 17.3 | -25.5% | -4.3% |
| SPA 6: South | 104 | 26.1 | 121 | 30.1 | 120 | 29.2 | 115 | 27.4 | 94 | 21.7 | 100 | 22.8 | 113 | 25.4 | 106 | 22.7 | 108 | 22.6 | 110 | 22.5 | -14.0% | -0.5% |
| SPA 7: East | 117 | 18.1 | 153 | 24.2 | 118 | 18.3 | 129 | 19.5 | 148 | 21.5 | 143 | 21.3 | 151 | 21.3 | 108 | 15.0 | 133 | 18.4 | 129 | 18.1 | -0.2% | -1.6% |
| SPA 8: South Bay | 176 | 21.7 | 202 | 24.6 | 178 | 21.3 | 194 | 23.0 | 194 | 22.3 | 177 | 20.4 | 192 | 21.2 | 197 | 21.6 | 166 | 17.8 | 206 | 22.2 | 2.5% | 24.9% |

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

*Age-adjusted rate per 100,000 females. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian

**TABLE D-3:
Chronic Obstructive
Pulmonary Disease
(COPD)**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|-----------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 2,889 | 32.3 | 2,904 | 31.9 | 2,622 | 29.6 | 2,874 | 30.5 | 2,646 | 26.8 | 2,874 | 29.2 | 2,673 | 27.2 | 2,857 | 27.7 | 2,996 | 28.5 | 2,927 | 27.6 | -14.5% | -3.1% |
| Male | 1,398 | 38.7 | 1,420 | 38.9 | 1,246 | 34.7 | 1,342 | 35.1 | 1,266 | 31.4 | 1,406 | 35.1 | 1,335 | 33.7 | 1,390 | 33.0 | 1,444 | 33.5 | 1,405 | 32.2 | -16.8% | -3.9% |
| Female | 1,491 | 27.8 | 1,484 | 27.2 | 1,376 | 25.9 | 1,532 | 27.2 | 1,380 | 23.6 | 1,468 | 25.0 | 1,338 | 22.9 | 1,467 | 24.0 | 1,552 | 24.9 | 1,522 | 24.3 | -12.6% | -2.3% |
| White | 1,955 | 43.3 | 1,895 | 41.2 | 1,743 | 40.0 | 1,843 | 40.4 | 1,709 | 37.0 | 1,866 | 41.2 | 1,685 | 37.1 | 1,747 | 37.2 | 1,876 | 40.3 | 1,781 | 38.2 | -11.6% | -5.1% |
| Latino/a | 343 | 16.0 | 392 | 18.5 | 345 | 16.7 | 383 | 16.6 | 368 | 14.7 | 400 | 16.0 | 417 | 16.8 | 434 | 16.1 | 461 | 15.9 | 471 | 16.1 | 0.1% | 1.0% |
| Black | 318 | 39.1 | 337 | 40.7 | 289 | 35.2 | 349 | 40.7 | 304 | 33.9 | 329 | 36.3 | 305 | 34.2 | 362 | 39.4 | 354 | 37.4 | 384 | 39.6 | 1.4% | 5.9% |
| Asian [†] | 258 | 18.9 | 267 | 19.0 | 229 | 16.0 | 287 | 18.2 | 241 | 14.0 | 260 | 14.7 | 251 | 14.3 | 281 | 15.0 | 273 | 14.0 | 277 | 14.0 | -26.2% | -0.3% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 894 | 48.1 | 887 | 46.8 | 762 | 42.1 | 799 | 41.9 | 763 | 38.9 | 864 | 45.3 | 790 | 41.4 | 819 | 41.4 | 817 | 41.5 | 790 | 40.3 | -16.2% | -2.9% |
| Latino | 175 | 20.7 | 194 | 23.7 | 172 | 21.1 | 186 | 20.3 | 176 | 18.1 | 200 | 20.3 | 223 | 23.1 | 201 | 19.5 | 237 | 20.8 | 236 | 20.1 | -3.0% | -3.5% |
| Black | 157 | 49.8 | 176 | 56.6 | 161 | 50.1 | 181 | 54.3 | 163 | 46.8 | 169 | 47.7 | 159 | 46.4 | 184 | 51.2 | 194 | 52.9 | 199 | 50.6 | 1.5% | -4.4% |
| Asian [†] | 162 | 29.4 | 158 | 27.9 | 138 | 24.3 | 167 | 26.7 | 152 | 22.2 | 158 | 22.4 | 155 | 22.3 | 169 | 22.3 | 177 | 22.8 | 172 | 21.5 | -26.8% | -5.7% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 1,061 | 39.6 | 1,008 | 37.2 | 981 | 38.1 | 1,044 | 39.3 | 946 | 35.6 | 1,002 | 38.0 | 895 | 34.2 | 928 | 34.0 | 1,059 | 39.1 | 991 | 36.6 | -7.5% | -6.3% |
| Latina | 168 | 13.1 | 198 | 15.3 | 173 | 13.8 | 197 | 14.1 | 192 | 12.5 | 200 | 13.1 | 194 | 12.8 | 233 | 14.0 | 224 | 12.8 | 235 | 13.3 | 2.3% | 4.3% |
| Black | 161 | 32.1 | 161 | 31.4 | 128 | 25.6 | 168 | 32.3 | 141 | 26.0 | 160 | 28.9 | 146 | 27.0 | 178 | 32.3 | 160 | 27.7 | 185 | 32.1 | 0.1% | 16.0% |
| Asian [†] | 96 | 11.7 | 109 | 12.7 | 91 | 10.4 | 120 | 12.5 | 89 | 8.4 | 102 | 9.4 | 96 | 9.2 | 112 | 10.1 | 96 | 8.0 | 105 | 8.8 | -24.5% | 10.1% |
| SPA 1: Antelope Valley | 184 | 73.9 | 202 | 77.6 | 172 | 69.7 | 204 | 75.6 | 176 | 61.9 | 170 | 58.9 | 180 | 62.4 | 203 | 65.6 | 196 | 62.5 | 216 | 67.2 | -9.2% | 7.4% |
| SPA 2: San Fernando | 527 | 26.9 | 572 | 28.4 | 539 | 26.8 | 596 | 27.8 | 563 | 25.0 | 592 | 26.7 | 554 | 24.9 | 654 | 27.7 | 719 | 30.3 | 645 | 27.0 | 0.7% | -10.7% |
| SPA 3: San Gabriel | 614 | 34.8 | 631 | 35.5 | 534 | 30.0 | 625 | 32.7 | 542 | 27.1 | 601 | 30.2 | 551 | 27.6 | 587 | 28.0 | 613 | 28.2 | 604 | 28.0 | -19.4% | -0.5% |
| SPA 4: Metro | 260 | 24.3 | 251 | 23.4 | 189 | 18.9 | 206 | 19.8 | 235 | 21.0 | 248 | 21.9 | 215 | 19.6 | 232 | 20.0 | 233 | 19.6 | 207 | 17.2 | -29.1% | -12.3% |
| SPA 5: West | 195 | 24.9 | 182 | 22.8 | 146 | 18.6 | 180 | 21.2 | 156 | 18.4 | 154 | 18.4 | 184 | 21.9 | 148 | 17.3 | 142 | 16.6 | 160 | 18.1 | -27.4% | 9.0% |
| SPA 6: South | 214 | 32.8 | 216 | 33.0 | 202 | 32.6 | 217 | 32.7 | 206 | 29.5 | 224 | 32.0 | 187 | 27.3 | 220 | 30.8 | 235 | 31.3 | 243 | 32.0 | -2.2% | 2.4% |
| SPA 7: East | 381 | 34.2 | 359 | 32.2 | 339 | 31.7 | 325 | 28.3 | 309 | 25.6 | 351 | 29.9 | 355 | 30.0 | 340 | 27.1 | 364 | 29.0 | 331 | 26.0 | -24.2% | -10.5% |
| SPA 8: South Bay | 501 | 36.0 | 488 | 34.0 | 496 | 36.2 | 521 | 35.4 | 458 | 30.1 | 532 | 34.4 | 446 | 28.8 | 472 | 29.4 | 492 | 29.8 | 521 | 31.4 | -12.6% | 5.5% |

Because of changes to the ICD-10 codes for this cause of death, 2008-2010 may not be comparable to 2011-2016.
 Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

**TABLE D-4:
Colorectal Cancer**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|--------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 1,365 | 15.0 | 1,388 | 15.0 | 1,285 | 14.0 | 1,400 | 14.5 | 1,397 | 13.9 | 1,376 | 13.8 | 1,372 | 13.6 | 1,482 | 14.0 | 1,358 | 12.7 | 1,449 | 13.4 | -10.3% | 5.8% |
| Male | 703 | 18.2 | 710 | 18.0 | 663 | 16.8 | 715 | 17.0 | 737 | 16.8 | 709 | 16.3 | 710 | 16.2 | 771 | 16.4 | 698 | 14.9 | 762 | 16.1 | -11.3% | 8.1% |
| Female | 662 | 12.6 | 678 | 12.7 | 622 | 11.9 | 685 | 12.6 | 660 | 11.6 | 667 | 11.8 | 662 | 11.6 | 711 | 12.0 | 660 | 10.9 | 687 | 11.3 | -10.6% | 3.5% |
| White | 660 | 15.0 | 696 | 15.6 | 619 | 14.8 | 613 | 14.1 | 606 | 14.0 | 632 | 15.0 | 611 | 14.3 | 611 | 13.8 | 597 | 13.4 | 622 | 14.0 | -6.8% | 4.3% |
| Latino/a | 306 | 12.1 | 286 | 11.4 | 296 | 11.3 | 359 | 12.7 | 345 | 11.2 | 347 | 11.5 | 320 | 10.7 | 400 | 12.0 | 366 | 10.6 | 404 | 11.5 | -4.9% | 8.8% |
| Black | 196 | 23.1 | 209 | 24.8 | 195 | 23.4 | 194 | 22.0 | 221 | 24.0 | 181 | 19.7 | 191 | 20.8 | 195 | 20.6 | 166 | 17.7 | 188 | 19.5 | -15.7% | 10.1% |
| Asian[†] | 197 | 13.9 | 195 | 13.5 | 173 | 11.4 | 228 | 13.9 | 216 | 12.5 | 204 | 11.6 | 234 | 13.0 | 263 | 14.1 | 214 | 11.3 | 223 | 11.4 | -17.8% | 1.0% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 325 | 17.3 | 345 | 18.0 | 317 | 17.3 | 312 | 16.1 | 313 | 16.2 | 306 | 16.2 | 315 | 16.4 | 309 | 15.2 | 296 | 14.8 | 311 | 15.6 | -9.6% | 5.7% |
| Latino | 167 | 15.5 | 169 | 16.5 | 157 | 13.9 | 192 | 15.7 | 191 | 14.3 | 194 | 14.8 | 168 | 13.6 | 217 | 15.3 | 188 | 11.8 | 225 | 14.5 | -6.5% | 22.6% |
| Black | 96 | 27.9 | 95 | 27.0 | 97 | 27.7 | 94 | 26.6 | 114 | 30.6 | 88 | 23.4 | 94 | 24.5 | 95 | 23.3 | 84 | 21.3 | 101 | 26.2 | -6.0% | 23.0% |
| Asian[†] | 111 | 18.2 | 101 | 16.1 | 91 | 13.9 | 113 | 16.2 | 116 | 15.9 | 114 | 15.1 | 124 | 16.0 | 142 | 17.8 | 121 | 15.2 | 118 | 14.1 | -22.5% | -7.0% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 335 | 13.3 | 351 | 13.7 | 302 | 12.7 | 301 | 12.5 | 293 | 12.0 | 326 | 13.7 | 296 | 12.6 | 302 | 12.5 | 301 | 12.3 | 311 | 12.4 | -6.7% | 0.8% |
| Latina | 139 | 9.6 | 117 | 8.0 | 139 | 9.4 | 167 | 10.6 | 154 | 9.0 | 153 | 9.1 | 152 | 8.8 | 183 | 9.7 | 178 | 9.5 | 179 | 9.2 | -4.3% | -2.9% |
| Black | 100 | 19.8 | 114 | 22.9 | 98 | 19.8 | 100 | 18.9 | 107 | 19.6 | 93 | 17.3 | 97 | 18.1 | 100 | 18.6 | 82 | 14.9 | 87 | 15.2 | -23.1% | 2.0% |
| Asian[†] | 86 | 10.7 | 94 | 11.5 | 82 | 9.4 | 115 | 12.3 | 100 | 10.0 | 90 | 9.1 | 110 | 10.6 | 121 | 11.1 | 93 | 8.3 | 105 | 9.4 | -12.1% | 12.9% |
| SPA 1: Antelope Valley | 36 | 13.7 | 52 | 19.3 | 49 | 16.6 | 39 | 12.4 | 52 | 16.0 | 52 | 16.8 | 46 | 14.8 | 57 | 16.6 | 53 | 15.4 | 55 | 17.3 | 25.9% | 12.2% |
| SPA 2: San Fernando | 301 | 14.9 | 294 | 14.0 | 281 | 13.5 | 312 | 14.3 | 288 | 12.6 | 308 | 13.6 | 295 | 12.9 | 323 | 13.3 | 306 | 12.5 | 296 | 12.1 | -18.9% | -3.3% |
| SPA 3: San Gabriel | 251 | 14.2 | 263 | 14.7 | 250 | 13.8 | 267 | 13.9 | 268 | 13.5 | 307 | 15.5 | 283 | 14.1 | 306 | 14.7 | 286 | 13.7 | 286 | 13.1 | -7.5% | -4.3% |
| SPA 4: Metro | 154 | 14.6 | 149 | 14.1 | 133 | 13.4 | 152 | 14.0 | 173 | 15.8 | 142 | 12.9 | 142 | 12.7 | 166 | 14.4 | 155 | 12.8 | 150 | 12.1 | -16.7% | -5.3% |
| SPA 5: West | 98 | 13.2 | 102 | 13.3 | 92 | 12.0 | 99 | 12.7 | 83 | 10.1 | 75 | 9.4 | 92 | 11.8 | 102 | 12.1 | 81 | 9.4 | 94 | 10.8 | -18.0% | 15.3% |
| SPA 6: South | 128 | 19.0 | 140 | 20.9 | 117 | 17.3 | 119 | 16.8 | 135 | 18.5 | 116 | 16.0 | 140 | 18.7 | 131 | 16.3 | 115 | 15.0 | 129 | 16.3 | -14.5% | 8.4% |
| SPA 7: East | 163 | 14.6 | 152 | 13.4 | 149 | 13.4 | 176 | 14.8 | 186 | 15.3 | 168 | 14.2 | 161 | 13.2 | 167 | 12.9 | 153 | 11.7 | 183 | 14.6 | 0.0% | 25.0% |
| SPA 8: South Bay | 229 | 15.7 | 235 | 16.1 | 213 | 14.8 | 235 | 15.5 | 211 | 13.4 | 208 | 13.1 | 212 | 13.4 | 230 | 13.9 | 208 | 12.2 | 256 | 15.1 | -3.9% | 23.4% |

Because of changes to the ICD-10 codes for this cause of death, 2007-2010 may not be comparable to 2011-2016.

Before 2012, Asian included NHOP1**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOP1 = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOP1 (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOP1 were separated into different race categories. Trends for Asian population should be interpreted with caution.

**TABLE D-5:
Coronary Heart
Disease (CHD)**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|-------------------|--------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 13,428 | 145.6 | 12,725 | 135.1 | 12,635 | 137.8 | 11,913 | 121.5 | 11,677 | 114.7 | 11,827 | 116.7 | 11,062 | 109.0 | 11,385 | 107.6 | 11,115 | 103.1 | 11,211 | 102.9 | -29.3% | -0.1% |
| Male | 7,001 | 185.5 | 6,638 | 171.2 | 6,651 | 175.4 | 6,237 | 153.8 | 6,332 | 149.2 | 6,436 | 152.1 | 6,114 | 143.1 | 6,263 | 141.5 | 6,284 | 138.1 | 6,260 | 135.0 | -27.2% | -2.3% |
| Female | 6,427 | 114.2 | 6,087 | 106.3 | 5,984 | 108.4 | 5,676 | 95.7 | 5,345 | 87.1 | 5,391 | 88.6 | 4,948 | 81.8 | 5,122 | 81.3 | 4,831 | 75.7 | 4,951 | 77.5 | -32.1% | 2.4% |
| White | 7,596 | 160.3 | 6,980 | 145.1 | 6,845 | 151.3 | 6,475 | 135.4 | 6,298 | 132.1 | 6,188 | 132.3 | 5,672 | 122.0 | 5,809 | 121.1 | 5,485 | 116.1 | 5,497 | 116.7 | -27.2% | 0.5% |
| Latino/a | 2,536 | 112.7 | 2,428 | 104.7 | 2,555 | 110.9 | 2,404 | 96.2 | 2,383 | 88.1 | 2,516 | 92.5 | 2,434 | 87.7 | 2,515 | 85.4 | 2,533 | 80.9 | 2,597 | 81.0 | -28.1% | 0.2% |
| Black | 1,804 | 217.9 | 1,878 | 221.2 | 1,721 | 208.0 | 1,571 | 178.5 | 1,583 | 173.8 | 1,619 | 177.1 | 1,511 | 164.5 | 1,528 | 164.3 | 1,543 | 160.2 | 1,556 | 157.8 | -27.6% | -1.5% |
| Asian† | 1,437 | 103.3 | 1,387 | 97.2 | 1,451 | 98.5 | 1,396 | 86.7 | 1,301 | 74.3 | 1,398 | 78.4 | 1,347 | 76.2 | 1,412 | 74.8 | 1,427 | 73.4 | 1,491 | 75.5 | -26.9% | 2.8% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 3,905 | 205.1 | 3,598 | 185.5 | 3,566 | 192.0 | 3,342 | 171.1 | 3,411 | 171.9 | 3,360 | 172.2 | 3,194 | 163.7 | 3,189 | 158.2 | 3,124 | 156.2 | 3,062 | 151.3 | -26.2% | -3.1% |
| Latino | 1,349 | 141.2 | 1,333 | 134.7 | 1,372 | 138.3 | 1,323 | 124.4 | 1,271 | 109.7 | 1,418 | 121.8 | 1,325 | 110.7 | 1,421 | 112.7 | 1,436 | 106.4 | 1,490 | 107.9 | -23.6% | 1.4% |
| Black | 940 | 284.6 | 957 | 278.7 | 898 | 273.0 | 817 | 227.6 | 863 | 233.7 | 836 | 221.5 | 828 | 218.1 | 826 | 216.4 | 877 | 219.4 | 845 | 201.9 | -29.1% | -8.0% |
| Asian† | 770 | 131.8 | 718 | 119.3 | 776 | 127.9 | 706 | 105.5 | 707 | 98.1 | 765 | 104.8 | 711 | 97.2 | 759 | 98.1 | 781 | 98.2 | 819 | 100.9 | -23.4% | 2.8% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 3,691 | 123.0 | 3,382 | 111.2 | 3,279 | 116.3 | 3,133 | 104.6 | 2,887 | 97.6 | 2,828 | 98.3 | 2,478 | 86.2 | 2,620 | 90.4 | 2,361 | 83.2 | 2,435 | 87.3 | -29.1% | 4.9% |
| Latina | 1,187 | 90.8 | 1,095 | 82.0 | 1,183 | 90.1 | 1,081 | 75.2 | 1,112 | 71.4 | 1,098 | 70.3 | 1,109 | 70.1 | 1,094 | 64.8 | 1,097 | 61.5 | 1,107 | 60.7 | -33.2% | -1.4% |
| Black | 864 | 170.8 | 921 | 178.1 | 823 | 162.8 | 754 | 141.2 | 720 | 129.8 | 783 | 141.4 | 683 | 124.2 | 702 | 126.0 | 666 | 116.5 | 711 | 122.9 | -28.1% | 5.5% |
| Asian† | 667 | 81.2 | 669 | 79.3 | 675 | 77.0 | 690 | 72.1 | 594 | 56.3 | 633 | 58.8 | 636 | 60.2 | 653 | 57.3 | 646 | 54.6 | 672 | 56.7 | -30.2% | 3.8% |
| SPA 1: Antelope Valley | 459 | 175.7 | 476 | 180.0 | 499 | 188.2 | 404 | 141.8 | 423 | 142.4 | 453 | 148.4 | 466 | 148.1 | 431 | 134.7 | 424 | 129.5 | 415 | 123.8 | -29.5% | -4.4% |
| SPA 2: San Fernando | 3,081 | 151.7 | 2,828 | 134.7 | 2,852 | 136.5 | 2,702 | 121.1 | 2,657 | 113.3 | 2,717 | 118.5 | 2,511 | 108.8 | 2,630 | 109.3 | 2,515 | 104.0 | 2,671 | 108.3 | -28.6% | 4.2% |
| SPA 3: San Gabriel | 2,486 | 137.3 | 2,304 | 125.7 | 2,270 | 123.8 | 2,219 | 112.1 | 2,168 | 106.7 | 2,193 | 106.6 | 2,080 | 101.9 | 2,093 | 97.7 | 2,060 | 94.8 | 2,133 | 97.1 | -29.3% | 2.4% |
| SPA 4: Metro | 1,469 | 135.4 | 1,414 | 130.4 | 1,495 | 147.8 | 1,350 | 124.6 | 1,333 | 117.5 | 1,323 | 116.5 | 1,254 | 110.9 | 1,282 | 109.1 | 1,305 | 107.0 | 1,189 | 97.0 | -28.3% | -9.3% |
| SPA 5: West | 882 | 110.8 | 854 | 103.9 | 817 | 98.5 | 823 | 94.5 | 822 | 94.1 | 764 | 87.7 | 700 | 81.9 | 729 | 82.6 | 735 | 83.9 | 682 | 76.9 | -30.6% | -8.4% |
| SPA 6: South | 1,222 | 183.4 | 1,271 | 187.4 | 1,112 | 173.0 | 1,063 | 155.3 | 1,031 | 142.1 | 1,061 | 147.5 | 987 | 135.5 | 1,020 | 136.5 | 1,031 | 130.3 | 1,001 | 127.4 | -30.6% | -2.2% |
| SPA 7: East | 1,588 | 138.6 | 1,488 | 128.3 | 1,463 | 133.7 | 1,401 | 118.9 | 1,345 | 109.1 | 1,373 | 113.2 | 1,243 | 101.7 | 1,280 | 99.2 | 1,201 | 91.8 | 1,223 | 92.9 | -33.0% | 1.2% |
| SPA 8: South Bay | 2,143 | 148.6 | 2,029 | 137.0 | 2,064 | 144.3 | 1,936 | 126.7 | 1,896 | 120.4 | 1,933 | 122.1 | 1,811 | 113.3 | 1,911 | 115.4 | 1,834 | 107.9 | 1,897 | 111.2 | -25.2% | 3.0% |

Because of changes to the ICD-10 codes for this cause of death, 2007-2010 may not be comparable to 2011-2016.

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

**TABLE D-6:
Diabetes Mellitus**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 2,190 | 24.2 | 1,964 | 21.3 | 1,894 | 21.0 | 2,196 | 22.9 | 2,204 | 22.4 | 2,172 | 21.9 | 2,291 | 22.9 | 2,373 | 22.7 | 2,480 | 23.1 | 2,658 | 24.7 | 1.8% | 6.7% |
| Male | 1,084 | 28.0 | 1,024 | 26.1 | 993 | 25.7 | 1,170 | 28.3 | 1,151 | 26.8 | 1,126 | 26.4 | 1,234 | 28.4 | 1,281 | 28.0 | 1,330 | 28.4 | 1,491 | 31.7 | 13.1% | 11.6% |
| Female | 1,106 | 21.3 | 940 | 17.6 | 901 | 17.4 | 1,026 | 18.7 | 1,053 | 18.7 | 1,046 | 18.4 | 1,057 | 18.6 | 1,092 | 18.5 | 1,150 | 19.1 | 1,167 | 19.1 | -10.6% | -0.1% |
| White | 801 | 18.3 | 672 | 15.2 | 667 | 15.9 | 783 | 17.8 | 736 | 16.9 | 675 | 15.5 | 731 | 16.7 | 712 | 16.1 | 762 | 17.0 | 766 | 17.4 | -4.7% | 2.3% |
| Latino/a | 764 | 31.8 | 694 | 28.4 | 690 | 28.5 | 799 | 29.6 | 824 | 28.8 | 860 | 29.9 | 868 | 29.8 | 897 | 28.6 | 939 | 28.1 | 1,055 | 31.4 | -1.2% | 11.7% |
| Black | 359 | 43.2 | 340 | 39.7 | 294 | 35.5 | 316 | 36.0 | 345 | 38.9 | 286 | 31.5 | 398 | 43.2 | 400 | 42.3 | 398 | 40.5 | 405 | 41.9 | -3.1% | 3.4% |
| Asian[†] | 257 | 18.5 | 248 | 17.6 | 237 | 16.0 | 278 | 17.4 | 273 | 16.2 | 318 | 18.3 | 269 | 15.3 | 333 | 18.0 | 347 | 18.0 | 411 | 21.3 | 15.1% | 18.2% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 429 | 22.9 | 364 | 19.2 | 365 | 20.0 | 453 | 23.5 | 402 | 20.8 | 374 | 19.7 | 424 | 21.9 | 403 | 20.4 | 442 | 22.2 | 478 | 24.5 | 6.9% | 10.3% |
| Latino | 371 | 35.7 | 361 | 34.8 | 356 | 34.2 | 430 | 36.4 | 443 | 34.7 | 437 | 35.4 | 464 | 37.0 | 484 | 35.3 | 498 | 34.3 | 588 | 40.3 | 12.9% | 17.4% |
| Black | 157 | 46.3 | 161 | 46.2 | 144 | 42.9 | 150 | 42.5 | 168 | 45.9 | 150 | 40.1 | 199 | 51.4 | 209 | 53.4 | 199 | 48.1 | 223 | 54.8 | 18.3% | 13.9% |
| Asian[†] | 126 | 21.4 | 131 | 22.1 | 124 | 20.0 | 129 | 19.3 | 122 | 17.5 | 154 | 21.3 | 138 | 18.9 | 169 | 21.4 | 176 | 21.9 | 193 | 23.6 | 10.1% | 7.7% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 372 | 14.6 | 308 | 11.9 | 302 | 12.6 | 330 | 13.4 | 334 | 13.5 | 301 | 11.9 | 307 | 12.5 | 309 | 12.6 | 320 | 13.0 | 288 | 11.5 | -21.1% | -11.6% |
| Latina | 393 | 28.8 | 333 | 23.7 | 334 | 24.3 | 369 | 24.3 | 381 | 23.9 | 423 | 25.9 | 404 | 24.4 | 413 | 23.6 | 441 | 23.5 | 467 | 24.7 | -14.0% | 5.3% |
| Black | 202 | 40.9 | 179 | 34.8 | 150 | 30.4 | 166 | 32.0 | 177 | 33.2 | 136 | 25.1 | 199 | 37.1 | 191 | 34.5 | 199 | 35.1 | 182 | 32.3 | -21.1% | -8.1% |
| Asian[†] | 131 | 16.2 | 117 | 14.1 | 113 | 13.0 | 149 | 16.0 | 151 | 15.1 | 164 | 16.0 | 131 | 12.7 | 164 | 15.4 | 171 | 14.9 | 218 | 19.4 | 19.4% | 30.2% |
| SPA 1: Antelope Valley | 106 | 38.7 | 113 | 39.9 | 85 | 30.8 | 109 | 36.7 | 102 | 33.4 | 103 | 32.0 | 118 | 37.4 | 106 | 30.8 | 148 | 43.7 | 133 | 37.8 | -2.1% | -13.4% |
| SPA 2: San Fernando | 408 | 20.5 | 337 | 16.3 | 343 | 16.7 | 391 | 18.0 | 390 | 17.3 | 392 | 17.7 | 392 | 17.2 | 423 | 17.7 | 432 | 17.9 | 453 | 18.7 | -8.7% | 4.3% |
| SPA 3: San Gabriel | 405 | 23.0 | 375 | 21.2 | 330 | 18.6 | 400 | 21.1 | 475 | 24.3 | 449 | 22.8 | 429 | 21.7 | 463 | 22.6 | 479 | 22.3 | 542 | 25.5 | 10.8% | 14.2% |
| SPA 4: Metro | 241 | 23.3 | 212 | 20.0 | 230 | 23.2 | 276 | 26.1 | 273 | 25.0 | 256 | 23.5 | 258 | 23.1 | 226 | 19.3 | 253 | 21.0 | 295 | 24.1 | 3.5% | 14.6% |
| SPA 5: West | 100 | 13.5 | 75 | 9.6 | 90 | 11.9 | 83 | 10.1 | 88 | 11.1 | 63 | 7.5 | 91 | 11.3 | 84 | 9.9 | 99 | 11.8 | 86 | 10.5 | -22.4% | -11.3% |
| SPA 6: South | 262 | 39.2 | 247 | 35.9 | 218 | 32.6 | 245 | 35.2 | 265 | 36.3 | 279 | 37.6 | 317 | 42.3 | 313 | 40.6 | 317 | 38.7 | 350 | 43.7 | 11.5% | 12.8% |
| SPA 7: East | 352 | 31.4 | 323 | 28.9 | 302 | 27.6 | 350 | 29.9 | 304 | 25.4 | 312 | 25.7 | 337 | 28.1 | 376 | 29.7 | 372 | 28.9 | 403 | 30.8 | -1.7% | 6.6% |
| SPA 8: South Bay | 309 | 21.5 | 282 | 19.2 | 293 | 20.7 | 336 | 22.0 | 307 | 19.9 | 317 | 20.1 | 349 | 21.9 | 381 | 23.2 | 380 | 22.3 | 396 | 23.4 | 9.0% | 4.9% |

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPi = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPi (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPi were separated into different race categories. Trends for Asian population should be interpreted with caution.

**TABLE D-7:
Drug Overdose**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | 2008-2017 | 2016-2017 |
| Los Angeles County | 625 | 6.3 | 685 | 6.9 | 611 | 6.0 | 580 | 5.7 | 609 | 5.9 | 749 | 7.2 | 689 | 6.5 | 690 | 6.5 | 732 | 6.8 | 864 | 8.0 | 27.7% | 17.7% |
| Male | 431 | 8.7 | 471 | 9.5 | 435 | 8.7 | 407 | 8.0 | 428 | 8.4 | 524 | 10.2 | 490 | 9.4 | 500 | 9.5 | 550 | 10.3 | 631 | 11.8 | 35.8% | 14.9% |
| Female | 194 | 3.8 | 214 | 4.2 | 176 | 3.4 | 173 | 3.3 | 181 | 3.5 | 225 | 4.3 | 199 | 3.7 | 190 | 3.5 | 182 | 3.3 | 233 | 4.2 | 10.5% | 27.9% |
| White | 326 | 10.0 | 356 | 10.9 | 314 | 10.0 | 324 | 10.4 | 323 | 10.6 | 407 | 12.8 | 370 | 11.7 | 361 | 11.9 | 369 | 12.0 | 406 | 13.2 | 32.0% | 10.2% |
| Latino/a | 195 | 4.8 | 219 | 5.2 | 194 | 4.5 | 167 | 3.7 | 184 | 4.1 | 224 | 4.8 | 207 | 4.5 | 198 | 4.1 | 248 | 5.0 | 292 | 5.8 | 22.2% | 16.1% |
| Black | 87 | 9.3 | 93 | 9.9 | 90 | 9.7 | 71 | 7.6 | 77 | 8.0 | 86 | 9.1 | 91 | 9.3 | 101 | 10.5 | 95 | 9.5 | 114 | 11.4 | 23.1% | 20.5% |
| Asian† | 13 | -- | 13 | -- | 9 | -- | 15 | -- | 17 | 1.2 | 24 | 1.6 | 14 | 0.9 | 24 | 1.5 | 16 | 1.0 | 43 | 2.8 | -- | 179.6% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 204 | 12.5 | 229 | 14.1 | 209 | 13.2 | 216 | 13.6 | 217 | 13.8 | 279 | 17.3 | 253 | 15.9 | 255 | 16.5 | 268 | 17.2 | 268 | 17.1 | 36.4% | -0.6% |
| Latino | 164 | 8.0 | 181 | 8.7 | 163 | 7.6 | 133 | 6.0 | 150 | 6.8 | 174 | 7.7 | 165 | 7.2 | 163 | 6.7 | 209 | 8.5 | 245 | 9.8 | 22.9% | 14.9% |
| Black | 53 | 12.6 | 53 | 12.5 | 56 | 13.0 | 45 | 10.3 | 42 | 9.3 | 50 | 11.1 | 61 | 13.4 | 63 | 14.1 | 57 | 12.6 | 81 | 17.9 | 41.4% | 41.9% |
| Asian† | 7 | -- | 6 | -- | <5 | -- | 12 | -- | 13 | 2.0 | 17 | 2.4 | 10 | 1.4 | 15 | 1.9 | 14 | 1.9 | 34 | 4.7 | -- | 147.1% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 122 | 7.3 | 127 | 7.7 | 105 | 6.5 | 108 | 7.1 | 106 | 7.2 | 128 | 8.1 | 117 | 7.3 | 106 | 7.0 | 101 | 6.6 | 138 | 9.1 | 24.5% | 38.5% |
| Latina | 31 | 1.6 | 38 | 1.8 | 31 | 1.5 | 34 | 1.5 | 34 | 1.6 | 50 | 2.1 | 42 | 1.8 | 35 | 1.4 | 39 | 1.6 | 47 | 1.9 | 17.4% | 15.9% |
| Black | 34 | 6.5 | 40 | 8.0 | 34 | 6.9 | 26 | 5.1 | 35 | 7.1 | 36 | 7.6 | 30 | 5.8 | 38 | 7.4 | 38 | 7.0 | 33 | 6.0 | -8.4% | -14.9% |
| Asian† | 6 | -- | 7 | -- | 6 | -- | <5 | -- | <5 | -- | 7 | 0.9 | <5 | -- | 9 | 1.1 | <5 | -- | 9 | 1.1 | -- | -- |
| SPA 1: Antelope Valley | 24 | 6.6 | 27 | 7.7 | 38 | 9.7 | 32 | 8.5 | 35 | 8.8 | 47 | 12.2 | 47 | 11.7 | 33 | 8.7 | 44 | 11.3 | 46 | 11.7 | 78.2% | 3.6% |
| SPA 2: San Fernando | 133 | 6.1 | 146 | 6.5 | 122 | 5.5 | 146 | 6.4 | 133 | 5.8 | 170 | 7.3 | 174 | 7.5 | 144 | 6.2 | 145 | 6.1 | 202 | 8.5 | 39.8% | 39.5% |
| SPA 3: San Gabriel | 70 | 4.0 | 91 | 5.2 | 70 | 3.9 | 69 | 3.9 | 87 | 4.8 | 82 | 4.5 | 75 | 4.0 | 95 | 5.2 | 107 | 5.7 | 98 | 5.4 | 33.5% | -5.8% |
| SPA 4: Metro | 91 | 7.7 | 89 | 7.5 | 89 | 7.5 | 80 | 6.7 | 98 | 8.1 | 108 | 8.8 | 89 | 7.2 | 117 | 9.3 | 114 | 8.7 | 108 | 8.1 | 5.3% | -7.3% |
| SPA 5: West | 46 | 6.4 | 41 | 5.9 | 42 | 6.0 | 33 | 4.7 | 44 | 6.2 | 60 | 8.6 | 42 | 5.7 | 58 | 7.9 | 56 | 7.5 | 68 | 9.3 | 45.5% | 23.6% |
| SPA 6: South | 63 | 7.7 | 69 | 8.5 | 57 | 6.3 | 52 | 5.6 | 52 | 5.6 | 82 | 8.7 | 59 | 5.8 | 74 | 7.5 | 86 | 8.4 | 102 | 10.0 | 29.4% | 18.8% |
| SPA 7: East | 62 | 5.0 | 70 | 5.6 | 56 | 4.6 | 42 | 3.3 | 63 | 5.0 | 65 | 5.1 | 76 | 5.9 | 63 | 4.8 | 63 | 4.7 | 92 | 7.0 | 40.5% | 48.9% |
| SPA 8: South Bay | 110 | 7.1 | 108 | 6.9 | 102 | 6.4 | 121 | 7.5 | 96 | 5.9 | 129 | 8.0 | 123 | 7.4 | 102 | 6.1 | 110 | 6.7 | 148 | 8.8 | 25.4% | 32.0% |

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

‡From 2008-2011, rates based on deaths < 20 are suppressed with (--). Starting 2012, rates based on 5-19 deaths are presented, which are considered unreliable and should be interpreted with caution.

**TABLE D-8:
Homicide**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate*‡ | No. of deaths | Death rate*‡ | No. of deaths | Death rate*‡ | No. of deaths | Death rate*‡ | No. of deaths | Death rate*‡ | No. of deaths | Death rate*‡ | 2008-2017 | 2016-2017 |
| Los Angeles County | 838 | 8.2 | 723 | 7.1 | 651 | 6.3 | 609 | 5.9 | 596 | 5.8 | 584 | 5.7 | 544 | 5.2 | 612 | 5.9 | 622 | 6.0 | 611 | 5.8 | -29.2% | -2.8% |
| Male | 710 | 13.7 | 618 | 12.0 | 545 | 10.4 | 512 | 9.9 | 515 | 10.0 | 512 | 9.9 | 468 | 9.0 | 520 | 9.9 | 548 | 10.4 | 511 | 9.7 | -29.5% | -6.8% |
| Female | 128 | 2.6 | 105 | 2.1 | 106 | 2.1 | 97 | 1.9 | 81 | 1.6 | 72 | 1.4 | 76 | 1.5 | 92 | 1.8 | 74 | 1.4 | 100 | 1.9 | -25.1% | 37.0% |
| White | 83 | 2.7 | 64 | 2.1 | 76 | 2.5 | 61 | 2.0 | 69 | 2.3 | 63 | 2.1 | 67 | 2.2 | 75 | 2.6 | 54 | 1.8 | 65 | 2.1 | -22.5% | 18.0% |
| Latino/a | 458 | 8.9 | 397 | 7.9 | 328 | 6.2 | 333 | 6.3 | 305 | 5.8 | 279 | 5.4 | 258 | 5.0 | 298 | 5.6 | 310 | 5.8 | 340 | 6.4 | -28.3% | 9.7% |
| Black | 250 | 26.9 | 227 | 24.3 | 219 | 25.2 | 192 | 22.1 | 199 | 23.2 | 223 | 26.0 | 203 | 23.4 | 207 | 24.1 | 218 | 25.2 | 176 | 20.3 | -24.6% | -19.4% |
| Asian† | 43 | 3.3 | 32 | 2.3 | 24 | 1.6 | 21 | 1.3 | 19 | 1.3 | 14 | 1.0 | 12 | 0.8 | 21 | 1.2 | 34 | 2.1 | 28 | 1.8 | -45.6% | -14.5% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 62 | 4.1 | 43 | 2.8 | 51 | 3.4 | 45 | 2.9 | 44 | 2.8 | 51 | 3.4 | 50 | 3.2 | 54 | 3.7 | 42 | 2.8 | 45 | 2.8 | -30.2% | 1.7% |
| Latino | 407 | 15.2 | 344 | 13.4 | 288 | 10.7 | 285 | 10.5 | 277 | 10.2 | 246 | 9.3 | 221 | 8.4 | 259 | 9.5 | 268 | 9.8 | 291 | 10.7 | -29.9% | 8.7% |
| Black | 214 | 48.8 | 207 | 46.5 | 186 | 45.2 | 168 | 40.8 | 179 | 43.9 | 203 | 50.0 | 183 | 44.5 | 185 | 45.6 | 206 | 49.9 | 158 | 38.2 | -21.8% | -23.5% |
| Asian† | 24 | 3.9 | 23 | 3.3 | 18 | -- | 13 | -- | 11 | 1.6 | 8 | 1.2 | 10 | 1.3 | 14 | 1.7 | 26 | 3.5 | 15 | 2.0 | -48.4% | -43.3% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 21 | 1.4 | 21 | 1.4 | 25 | 1.5 | 16 | -- | 25 | 1.8 | 12 | 0.7 | 17 | 1.1 | 21 | 1.5 | 12 | 0.8 | 20 | 1.4 | -1.6% | 71.0% |
| Latina | 51 | 2.2 | 53 | 2.2 | 40 | 1.6 | 48 | 1.9 | 28 | 1.2 | 33 | 1.4 | 37 | 1.6 | 39 | 1.6 | 42 | 1.7 | 49 | 1.9 | -11.6% | 12.8% |
| Black | 36 | 7.6 | 20 | 4.2 | 33 | 7.3 | 24 | 5.3 | 20 | 4.6 | 20 | 4.3 | 20 | 4.6 | 22 | 4.9 | 12 | 2.8 | 18 | 4.2 | -45.1% | 48.7% |
| Asian† | 19 | -- | 9 | -- | 6 | -- | 8 | -- | 8 | 1.1 | 6 | 0.7 | <5 | -- | 7 | 0.7 | 8 | 0.9 | 13 | 1.6 | -- | 72.3% |
| SPA 1: Antelope Valley | 26 | 6.4 | 31 | 7.4 | 23 | 6.0 | 26 | 6.6 | 17 | 4.2 | 28 | 6.9 | 23 | 5.8 | 28 | 6.8 | 28 | 7.2 | 28 | 7.8 | 21.8% | 8.1% |
| SPA 2: San Fernando | 91 | 4.3 | 79 | 3.7 | 71 | 3.2 | 54 | 2.4 | 74 | 3.4 | 47 | 2.1 | 68 | 3.0 | 77 | 3.4 | 74 | 3.3 | 76 | 3.3 | -23.8% | -1.4% |
| SPA 3: San Gabriel | 108 | 6.0 | 69 | 3.8 | 71 | 4.0 | 66 | 3.7 | 59 | 3.3 | 80 | 4.4 | 53 | 2.9 | 83 | 4.6 | 57 | 3.3 | 81 | 4.6 | -23.1% | 38.9% |
| SPA 4: Metro | 102 | 9.2 | 82 | 7.2 | 73 | 6.2 | 62 | 5.2 | 69 | 5.7 | 46 | 3.9 | 62 | 5.1 | 58 | 4.8 | 55 | 4.3 | 66 | 5.3 | -41.6% | 24.3% |
| SPA 5: West | 18 | -- | 14 | -- | 12 | -- | 17 | -- | 10 | 1.6 | 17 | 2.4 | 5 | 0.7 | 11 | 1.5 | 7 | 0.9 | 18 | 2.4 | -- | 163.5% |
| SPA 6: South | 233 | 21.9 | 194 | 18.2 | 189 | 17.2 | 184 | 17.1 | 180 | 16.8 | 166 | 15.2 | 168 | 15.8 | 168 | 15.9 | 194 | 17.5 | 173 | 15.2 | -30.4% | -13.0% |
| SPA 7: East | 99 | 7.0 | 101 | 7.4 | 88 | 6.5 | 82 | 6.2 | 72 | 5.3 | 71 | 5.4 | 63 | 4.7 | 70 | 5.2 | 78 | 5.8 | 58 | 4.5 | -35.2% | -21.7% |
| SPA 8: South Bay | 140 | 9.1 | 144 | 9.2 | 120 | 7.6 | 117 | 7.5 | 113 | 7.2 | 127 | 8.1 | 100 | 6.3 | 115 | 7.3 | 125 | 8.0 | 111 | 7.0 | -23.3% | -13.1% |

Before 2012, Asian included NHOP1**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOP1 = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOP1 (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOP1 were separated into different race categories. Trends for Asian population should be interpreted with caution.

‡From 2008-2011, rates based on deaths < 20 are suppressed with (--). Starting 2012, rates based on 5-19 deaths are presented, which are considered unreliable and should be interpreted with caution.

**TABLE D-9:
HIV**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | 2008-2017 | 2016-2017 |
| Los Angeles County | 371 | 3.8 | 313 | 3.2 | 274 | 2.8 | 243 | 2.4 | 225 | 2.2 | 223 | 2.2 | 246 | 2.4 | 253 | 2.4 | 257 | 2.3 | 228 | 2.1 | -45.5% | -10.6% |
| Male | 310 | 6.4 | 256 | 5.3 | 232 | 4.8 | 199 | 4.0 | 196 | 3.9 | 197 | 4.0 | 209 | 4.1 | 219 | 4.2 | 229 | 4.3 | 203 | 3.8 | -41.1% | -12.1% |
| Female | 61 | 1.2 | 57 | 1.1 | 42 | 0.8 | 44 | 0.8 | 29 | 0.6 | 26 | 0.5 | 37 | 0.7 | 34 | 0.6 | 28 | 0.5 | 25 | 0.4 | -63.2% | -10.1% |
| White | 96 | 2.8 | 84 | 2.4 | 74 | 2.1 | 72 | 2.1 | 72 | 2.0 | 56 | 1.8 | 76 | 2.1 | 64 | 1.7 | 85 | 2.2 | 66 | 1.8 | -35.9% | -19.5% |
| Latino/a | 137 | 3.5 | 108 | 2.8 | 114 | 2.7 | 84 | 2.1 | 78 | 1.8 | 76 | 1.8 | 82 | 1.9 | 86 | 1.9 | 78 | 1.7 | 86 | 2.0 | -44.2% | 16.2% |
| Black | 113 | 12.4 | 109 | 11.9 | 80 | 8.6 | 77 | 8.6 | 65 | 7.2 | 79 | 8.4 | 81 | 8.8 | 87 | 9.3 | 76 | 8.2 | 66 | 6.4 | -47.9% | -21.4% |
| Asian† | 21 | 1.5 | 11 | -- | 5 | -- | 8 | -- | 7 | 0.4 | 11 | 0.7 | <5 | -- | 7 | 0.4 | 8 | 0.4 | 8 | 0.5 | -66.0% | 24.2% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 86 | 4.8 | 74 | 4.2 | 65 | 3.6 | 60 | 3.4 | 68 | 3.7 | 52 | 3.2 | 70 | 3.9 | 59 | 3.1 | 80 | 4.1 | 61 | 3.2 | -33.8% | -21.8% |
| Latino | 114 | 6.0 | 91 | 4.9 | 98 | 4.6 | 70 | 3.6 | 69 | 3.2 | 69 | 3.4 | 76 | 3.6 | 71 | 3.2 | 70 | 3.1 | 78 | 3.7 | -38.1% | 19.3% |
| Black | 90 | 21.7 | 79 | 19.0 | 64 | 15.2 | 61 | 14.7 | 51 | 12.0 | 65 | 14.9 | 57 | 13.3 | 75 | 17.2 | 63 | 14.9 | 54 | 11.7 | -46.0% | -21.6% |
| Asian† | 16 | -- | 11 | -- | <5 | -- | 7 | -- | 7 | 1.0 | 11 | 1.6 | <5 | -- | 7 | 0.9 | 7 | 0.8 | 8 | 1.1 | -- | 38.1% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 10 | -- | 10 | -- | 9 | -- | 12 | -- | <5 | -- | <5 | -- | 6 | 0.3 | 5 | 0.3 | 5 | 0.3 | 5 | 0.3 | -- | 10.4% |
| Latina | 23 | 1.2 | 17 | -- | 16 | -- | 14 | -- | 9 | 0.4 | 7 | 0.4 | 6 | 0.3 | 15 | 0.7 | 8 | 0.3 | 8 | 0.4 | -64.4% | 41.2% |
| Black | 23 | 4.7 | 30 | 6.0 | 16 | -- | 16 | -- | 14 | 3.0 | 14 | 2.9 | 24 | 4.9 | 12 | 2.5 | 13 | 2.4 | 12 | 2.0 | -57.8% | -18.0% |
| Asian† | 5 | -- | <5 | -- | <5 | -- | <5 | -- | <5 | -- | <5 | -- | <5 | -- | <5 | -- | <5 | -- | 0 | 0.0 | -- | -- |
| SPA 1: Antelope Valley | 5 | -- | 10 | -- | 10 | -- | 6 | -- | 7 | 2.0 | 9 | 2.5 | 6 | 1.6 | 9 | 2.7 | 13 | 3.3 | 8 | 1.9 | -- | -41.5% |
| SPA 2: San Fernando | 45 | 2.1 | 34 | 1.5 | 37 | 1.6 | 37 | 1.5 | 29 | 1.3 | 24 | 1.1 | 37 | 1.6 | 31 | 1.3 | 32 | 1.3 | 39 | 1.5 | -26.5% | 17.0% |
| SPA 3: San Gabriel | 30 | 1.7 | 32 | 1.9 | 30 | 1.7 | 24 | 1.3 | 26 | 1.4 | 27 | 1.5 | 21 | 1.1 | 27 | 1.4 | 19 | 1.0 | 23 | 1.2 | -24.7% | 25.0% |
| SPA 4: Metro | 93 | 7.9 | 81 | 7.0 | 71 | 6.4 | 71 | 6.2 | 48 | 4.1 | 56 | 4.8 | 74 | 6.1 | 59 | 4.7 | 65 | 4.9 | 51 | 4.0 | -49.8% | -19.3% |
| SPA 5: West | 11 | -- | 11 | -- | 7 | -- | 7 | -- | 7 | 1.0 | <5 | -- | 13 | 1.8 | 10 | 1.4 | 8 | 1.0 | 7 | 0.9 | -- | -13.6% |
| SPA 6: South | 85 | 10.1 | 63 | 7.5 | 41 | 4.5 | 34 | 3.8 | 38 | 4.1 | 40 | 4.4 | 44 | 4.8 | 50 | 5.2 | 39 | 4.0 | 40 | 4.2 | -58.9% | 4.2% |
| SPA 7: East | 27 | 2.2 | 23 | 2.0 | 34 | 2.7 | 20 | 1.6 | 24 | 1.9 | 16 | 1.3 | 18 | 1.4 | 19 | 1.5 | 22 | 1.7 | 19 | 1.4 | -36.4% | -17.6% |
| SPA 8: South Bay | 72 | 4.6 | 56 | 3.7 | 41 | 2.6 | 42 | 2.6 | 45 | 2.8 | 49 | 3.1 | 32 | 1.9 | 48 | 2.9 | 59 | 3.4 | 41 | 2.3 | -50.0% | -32.7% |

Before 2012, Asian included NHOP†, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOP† = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOP† (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOP† were separated into different race categories. Trends for Asian population should be interpreted with caution.

‡From 2008-2011, rates based on deaths < 20 are suppressed with (--). Starting 2012, rates based on 5-19 deaths are presented, which are considered unreliable and should be interpreted with caution.

TABLE D-10:
Liver
Disease/Cirrhosis

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 1,134 | 11.9 | 1,246 | 12.9 | 1,171 | 12.0 | 1,246 | 12.5 | 1,275 | 12.4 | 1,315 | 12.8 | 1,323 | 12.5 | 1,539 | 14.2 | 1,442 | 13.2 | 1,412 | 12.5 | 4.6% | -5.6% |
| Male | 773 | 17.1 | 837 | 18.1 | 787 | 17.2 | 818 | 17.1 | 875 | 18.0 | 898 | 18.5 | 871 | 17.4 | 1,003 | 19.5 | 987 | 19.1 | 953 | 17.8 | 4.3% | -6.7% |
| Female | 361 | 7.2 | 409 | 8.0 | 384 | 7.4 | 428 | 8.1 | 400 | 7.4 | 417 | 7.7 | 452 | 8.1 | 536 | 9.4 | 455 | 7.9 | 459 | 7.7 | 7.2% | -2.4% |
| White | 398 | 9.9 | 419 | 10.5 | 416 | 10.9 | 436 | 11.4 | 422 | 10.9 | 471 | 12.3 | 430 | 10.8 | 454 | 11.3 | 443 | 10.9 | 430 | 10.6 | 6.8% | -2.6% |
| Latino/a | 594 | 19.4 | 645 | 20.9 | 587 | 18.4 | 637 | 18.6 | 672 | 19.0 | 666 | 18.8 | 699 | 18.7 | 873 | 23.0 | 793 | 20.1 | 793 | 19.2 | -0.9% | -4.3% |
| Black | 69 | 7.3 | 112 | 12.1 | 97 | 10.1 | 104 | 10.9 | 103 | 10.5 | 85 | 8.7 | 108 | 10.7 | 126 | 12.2 | 122 | 11.8 | 110 | 10.3 | 41.1% | -12.5% |
| Asian[†] | 59 | 4.1 | 58 | 3.9 | 55 | 3.5 | 56 | 3.5 | 71 | 4.4 | 77 | 4.5 | 68 | 3.8 | 67 | 3.8 | 53 | 2.9 | 72 | 3.7 | -9.6% | 27.4% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 268 | 13.8 | 272 | 14.0 | 262 | 13.9 | 269 | 14.3 | 299 | 15.8 | 311 | 16.7 | 264 | 13.5 | 292 | 14.8 | 286 | 14.4 | 272 | 13.5 | -2.1% | -6.3% |
| Latino | 413 | 28.0 | 448 | 29.6 | 423 | 28.5 | 455 | 27.5 | 467 | 27.1 | 487 | 28.8 | 493 | 27.5 | 582 | 31.9 | 577 | 31.1 | 565 | 29.0 | 3.4% | -6.9% |
| Black | 45 | 10.8 | 75 | 17.9 | 54 | 12.2 | 54 | 12.3 | 61 | 13.6 | 47 | 10.4 | 57 | 12.3 | 72 | 14.9 | 74 | 15.8 | 67 | 14.4 | 33.5% | -8.9% |
| Asian[†] | 39 | 5.9 | 37 | 5.3 | 38 | 5.4 | 34 | 4.9 | 44 | 6.2 | 44 | 5.8 | 45 | 5.8 | 43 | 5.5 | 29 | 3.5 | 46 | 5.4 | -9.6% | 53.5% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 130 | 6.2 | 147 | 7.2 | 154 | 8.0 | 167 | 8.5 | 123 | 6.2 | 160 | 8.0 | 166 | 8.2 | 162 | 7.7 | 157 | 7.5 | 158 | 7.9 | 27.2% | 5.7% |
| Latina | 181 | 11.8 | 197 | 12.9 | 164 | 10.0 | 182 | 10.7 | 205 | 11.7 | 179 | 10.1 | 206 | 10.9 | 291 | 15.1 | 216 | 10.7 | 228 | 10.8 | -8.5% | 0.9% |
| Black | 24 | 4.6 | 37 | 7.3 | 43 | 8.3 | 50 | 9.6 | 42 | 8.0 | 38 | 7.3 | 51 | 9.6 | 54 | 9.9 | 48 | 8.6 | 43 | 7.1 | 54.6% | -17.0% |
| Asian[†] | 20 | 2.6 | 21 | 2.6 | 17 | -- | 22 | 2.4 | 27 | 2.9 | 33 | 3.4 | 23 | 2.2 | 24 | 2.4 | 24 | 2.5 | 26 | 2.4 | -5.4% | -3.5% |
| SPA 1: Antelope Valley | 45 | 14.0 | 53 | 16.8 | 47 | 13.0 | 55 | 15.2 | 47 | 13.6 | 58 | 15.7 | 61 | 16.1 | 73 | 19.5 | 63 | 17.1 | 72 | 18.5 | 32.1% | 8.2% |
| SPA 2: San Fernando | 207 | 9.6 | 200 | 9.0 | 192 | 8.7 | 218 | 9.6 | 243 | 10.4 | 273 | 11.6 | 223 | 9.1 | 257 | 10.5 | 252 | 10.2 | 247 | 9.4 | -2.4% | -8.2% |
| SPA 3: San Gabriel | 194 | 10.9 | 217 | 11.9 | 191 | 10.5 | 215 | 11.2 | 240 | 12.2 | 224 | 11.6 | 235 | 11.7 | 248 | 12.4 | 234 | 11.2 | 249 | 11.8 | 8.0% | 5.5% |
| SPA 4: Metro | 147 | 13.2 | 163 | 14.8 | 151 | 13.8 | 156 | 14.1 | 147 | 13.0 | 171 | 15.0 | 165 | 14.0 | 188 | 15.4 | 170 | 13.3 | 170 | 13.0 | -2.1% | -2.6% |
| SPA 5: West | 40 | 5.3 | 55 | 7.2 | 45 | 6.2 | 61 | 8.3 | 60 | 8.2 | 56 | 7.5 | 62 | 8.1 | 50 | 6.4 | 56 | 7.1 | 40 | 4.9 | -6.4% | -30.8% |
| SPA 6: South | 112 | 15.2 | 130 | 17.5 | 141 | 17.8 | 150 | 18.3 | 152 | 17.7 | 121 | 14.5 | 144 | 16.5 | 181 | 20.4 | 176 | 18.6 | 168 | 17.8 | 17.2% | -4.4% |
| SPA 7: East | 198 | 17.2 | 226 | 19.5 | 210 | 17.8 | 193 | 15.7 | 194 | 15.7 | 214 | 17.2 | 212 | 16.7 | 289 | 22.0 | 245 | 18.5 | 231 | 17.0 | -0.9% | -7.9% |
| SPA 8: South Bay | 174 | 11.4 | 176 | 11.4 | 181 | 11.6 | 196 | 12.3 | 191 | 11.8 | 196 | 12.1 | 215 | 12.7 | 250 | 14.3 | 240 | 13.9 | 235 | 13.2 | 16.3% | -4.8% |

Before 2012, Asian included NHOP1**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOP1 = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOP1 (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOP1 were separated into different race categories. Trends for Asian population should be interpreted with caution.

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

**TABLE D-11:
Lung Cancer**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 2,910 | 32.9 | 2,958 | 33.0 | 2,941 | 32.8 | 2,908 | 31.0 | 2,809 | 28.7 | 2,687 | 27.5 | 2,617 | 26.6 | 2,851 | 27.6 | 2,657 | 25.2 | 2,556 | 24.0 | -27.0% | -4.7% |
| Male | 1,568 | 41.8 | 1,650 | 43.1 | 1,602 | 41.5 | 1,596 | 39.7 | 1,486 | 35.1 | 1,407 | 33.4 | 1,395 | 33.0 | 1,535 | 34.3 | 1,442 | 31.5 | 1,421 | 31.0 | -26.0% | -1.7% |
| Female | 1,342 | 26.4 | 1,308 | 25.5 | 1,339 | 26.3 | 1,312 | 24.5 | 1,323 | 23.9 | 1,280 | 23.2 | 1,222 | 21.9 | 1,316 | 22.6 | 1,215 | 20.5 | 1,135 | 18.9 | -28.6% | -8.0% |
| White | 1,687 | 39.4 | 1,702 | 39.6 | 1,655 | 40.2 | 1,578 | 37.3 | 1,563 | 36.2 | 1,438 | 33.9 | 1,365 | 31.8 | 1,417 | 32.1 | 1,369 | 30.9 | 1,292 | 29.1 | -26.2% | -5.9% |
| Latino/a | 433 | 19.1 | 408 | 17.3 | 441 | 18.3 | 452 | 17.7 | 393 | 14.0 | 440 | 16.5 | 428 | 15.4 | 510 | 16.9 | 413 | 13.2 | 424 | 13.5 | -29.3% | 2.4% |
| Black | 377 | 45.1 | 432 | 50.7 | 433 | 50.7 | 431 | 48.7 | 414 | 44.9 | 370 | 40.1 | 403 | 43.3 | 435 | 44.9 | 391 | 39.3 | 372 | 37.2 | -17.5% | -5.3% |
| Asian[†] | 406 | 29.2 | 412 | 29.1 | 400 | 26.5 | 428 | 26.7 | 411 | 24.5 | 419 | 24.1 | 402 | 22.8 | 457 | 24.7 | 459 | 24.3 | 447 | 22.9 | -21.6% | -5.6% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 850 | 45.5 | 892 | 47.4 | 855 | 46.5 | 846 | 44.8 | 783 | 40.1 | 732 | 38.3 | 731 | 37.8 | 717 | 35.9 | 698 | 35.0 | 692 | 34.4 | -24.4% | -1.6% |
| Latino | 253 | 27.6 | 243 | 24.7 | 260 | 26.3 | 253 | 24.2 | 217 | 18.6 | 240 | 20.3 | 233 | 20.7 | 302 | 24.6 | 236 | 17.8 | 246 | 19.1 | -30.8% | 7.3% |
| Black | 200 | 60.1 | 247 | 72.3 | 228 | 65.9 | 225 | 63.4 | 225 | 59.7 | 190 | 49.4 | 197 | 51.8 | 215 | 53.4 | 210 | 51.1 | 198 | 48.1 | -20.0% | -5.9% |
| Asian[†] | 261 | 44.2 | 266 | 43.8 | 249 | 38.7 | 258 | 37.8 | 241 | 34.0 | 232 | 31.4 | 227 | 30.7 | 282 | 36.0 | 282 | 35.1 | 275 | 33.6 | -24.0% | -4.2% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 837 | 34.8 | 810 | 33.5 | 800 | 35.1 | 732 | 31.2 | 780 | 33.2 | 706 | 30.4 | 634 | 27.2 | 700 | 29.2 | 671 | 27.6 | 600 | 24.9 | -28.5% | -9.9% |
| Latina | 180 | 13.4 | 165 | 12.0 | 181 | 12.8 | 199 | 13.3 | 176 | 10.7 | 200 | 12.3 | 195 | 11.9 | 208 | 11.7 | 177 | 9.9 | 178 | 9.7 | -27.6% | -1.8% |
| Black | 177 | 35.5 | 185 | 36.6 | 205 | 41.2 | 206 | 39.1 | 189 | 34.9 | 180 | 33.5 | 206 | 38.2 | 220 | 39.3 | 181 | 31.5 | 174 | 29.6 | -16.7% | -6.0% |
| Asian[†] | 145 | 18.1 | 146 | 17.9 | 151 | 17.5 | 170 | 18.6 | 170 | 17.6 | 187 | 18.8 | 175 | 17.0 | 175 | 16.3 | 177 | 16.3 | 172 | 15.2 | -16.3% | -7.1% |
| SPA 1: Antelope Valley | 128 | 47.6 | 118 | 42.3 | 123 | 44.2 | 110 | 38.3 | 120 | 39.1 | 130 | 42.5 | 120 | 38.1 | 127 | 38.0 | 92 | 27.2 | 129 | 37.7 | -20.7% | 38.7% |
| SPA 2: San Fernando | 620 | 31.5 | 664 | 33.3 | 625 | 30.5 | 638 | 30.1 | 658 | 29.4 | 625 | 28.4 | 576 | 25.5 | 635 | 27.0 | 603 | 25.4 | 560 | 23.1 | -26.7% | -9.2% |
| SPA 3: San Gabriel | 564 | 32.7 | 573 | 33.0 | 566 | 31.8 | 575 | 30.9 | 525 | 27.3 | 550 | 28.0 | 495 | 25.4 | 558 | 27.0 | 497 | 23.7 | 502 | 23.6 | -28.0% | -0.6% |
| SPA 4: Metro | 294 | 29.1 | 265 | 26.1 | 302 | 30.7 | 267 | 26.0 | 261 | 24.4 | 271 | 25.2 | 232 | 21.3 | 252 | 22.1 | 268 | 22.8 | 233 | 19.5 | -33.0% | -14.5% |
| SPA 5: West | 212 | 28.8 | 216 | 29.0 | 226 | 30.8 | 191 | 25.2 | 207 | 25.9 | 189 | 24.3 | 209 | 26.8 | 204 | 24.7 | 188 | 23.1 | 187 | 22.2 | -22.8% | -3.7% |
| SPA 6: South | 242 | 37.7 | 275 | 42.1 | 268 | 40.9 | 277 | 40.4 | 266 | 36.7 | 223 | 30.7 | 230 | 31.4 | 280 | 36.5 | 247 | 30.8 | 204 | 26.0 | -30.9% | -15.5% |
| SPA 7: East | 346 | 31.6 | 300 | 27.2 | 299 | 27.6 | 337 | 29.8 | 290 | 23.9 | 259 | 22.4 | 304 | 25.6 | 311 | 25.0 | 301 | 23.8 | 269 | 21.0 | -33.7% | -12.0% |
| SPA 8: South Bay | 494 | 35.0 | 541 | 37.9 | 529 | 37.6 | 511 | 34.0 | 478 | 31.3 | 440 | 28.1 | 451 | 28.9 | 482 | 29.6 | 460 | 27.6 | 472 | 28.6 | -18.4% | 3.5% |

Because of changes to the ICD-10 codes for this cause of death, 2008-2010 may not be comparable to 2011-2016.

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NH OPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NH OPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NH OPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

**TABLE D-12:
Motor Vehicle
Crash**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 822 | 8.4 | 677 | 6.9 | 625 | 6.3 | 620 | 6.2 | 692 | 6.8 | 733 | 7.1 | 730 | 7.1 | 741 | 7.0 | 938 | 8.8 | 860 | 8.0 | -4.0% | -8.8% |
| Male | 623 | 12.9 | 484 | 10.1 | 428 | 8.8 | 427 | 8.7 | 499 | 10.0 | 542 | 10.9 | 530 | 10.6 | 554 | 10.7 | 665 | 12.7 | 633 | 12.1 | -6.4% | -4.6% |
| Female | 199 | 4.0 | 193 | 3.9 | 197 | 3.8 | 193 | 3.7 | 193 | 3.7 | 191 | 3.5 | 200 | 3.8 | 187 | 3.5 | 273 | 5.0 | 227 | 4.1 | 4.4% | -17.3% |
| White | 253 | 7.9 | 220 | 6.7 | 200 | 6.1 | 189 | 6.0 | 214 | 6.7 | 210 | 6.5 | 219 | 6.7 | 231 | 7.1 | 257 | 7.9 | 226 | 7.0 | -11.5% | -11.8% |
| Latino/a | 367 | 8.6 | 312 | 7.3 | 290 | 6.8 | 291 | 6.6 | 317 | 6.8 | 356 | 7.6 | 341 | 7.4 | 357 | 7.6 | 474 | 9.7 | 412 | 8.5 | -1.3% | -12.0% |
| Black | 107 | 11.9 | 74 | 8.2 | 71 | 8.0 | 70 | 7.9 | 91 | 10.4 | 79 | 8.8 | 108 | 11.9 | 87 | 9.7 | 115 | 12.8 | 142 | 15.2 | 27.7% | 18.8% |
| Asian† | 92 | 6.9 | 69 | 5.0 | 62 | 4.2 | 63 | 4.1 | 61 | 3.8 | 83 | 5.2 | 60 | 3.8 | 62 | 3.7 | 86 | 5.0 | 74 | 4.2 | -39.2% | -15.9% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 198 | 12.5 | 169 | 10.4 | 136 | 8.2 | 132 | 8.5 | 158 | 10.0 | 166 | 10.4 | 170 | 10.6 | 172 | 10.6 | 198 | 12.3 | 170 | 10.6 | -15.7% | -14.0% |
| Latino | 290 | 13.7 | 223 | 10.5 | 213 | 10.0 | 204 | 9.2 | 228 | 9.7 | 267 | 11.6 | 244 | 10.7 | 275 | 12.0 | 330 | 13.5 | 311 | 12.9 | -5.8% | -4.6% |
| Black | 77 | 18.6 | 52 | 12.8 | 54 | 13.0 | 47 | 11.3 | 66 | 16.9 | 54 | 13.2 | 77 | 18.3 | 69 | 16.2 | 86 | 20.9 | 104 | 24.2 | 30.2% | 15.7% |
| Asian† | 56 | 9.0 | 39 | 6.2 | 25 | 3.8 | 42 | 5.9 | 41 | 5.6 | 51 | 7.2 | 37 | 5.4 | 36 | 4.7 | 46 | 6.2 | 43 | 5.5 | -38.5% | -10.6% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 55 | 3.3 | 51 | 3.1 | 64 | 3.9 | 57 | 3.4 | 56 | 3.4 | 44 | 2.6 | 49 | 2.8 | 59 | 3.5 | 59 | 3.4 | 56 | 3.3 | 1.5% | -1.5% |
| Latina | 77 | 3.8 | 89 | 4.2 | 77 | 3.8 | 87 | 4.1 | 89 | 3.9 | 89 | 3.9 | 97 | 4.3 | 82 | 3.5 | 144 | 6.0 | 101 | 4.3 | 13.4% | -27.8% |
| Black | 30 | 6.2 | 22 | 4.5 | 17 | -- | 23 | 4.8 | 25 | 5.3 | 25 | 5.3 | 31 | 6.5 | 18 | 3.9 | 29 | 6.1 | 38 | 7.4 | 20.0% | 22.0% |
| Asian† | 36 | 4.9 | 30 | 4.1 | 37 | 4.4 | 21 | 2.5 | 20 | 2.3 | 32 | 3.4 | 23 | 2.4 | 26 | 2.8 | 40 | 4.0 | 31 | 3.2 | -35.6% | -20.7% |
| SPA 1: Antelope Valley | 44 | 12.1 | 45 | 12.9 | 35 | 9.6 | 45 | 11.9 | 54 | 13.9 | 61 | 16.2 | 65 | 16.4 | 57 | 14.0 | 73 | 18.3 | 86 | 23.2 | 91.5% | 26.9% |
| SPA 2: San Fernando | 167 | 7.9 | 142 | 6.6 | 127 | 5.9 | 118 | 5.5 | 151 | 6.7 | 159 | 7.1 | 148 | 6.6 | 166 | 7.2 | 189 | 8.0 | 152 | 6.3 | -20.8% | -21.8% |
| SPA 3: San Gabriel | 124 | 6.9 | 109 | 6.1 | 100 | 5.6 | 102 | 5.7 | 90 | 5.0 | 116 | 6.2 | 105 | 5.8 | 105 | 5.5 | 153 | 8.1 | 138 | 7.3 | 5.1% | -10.4% |
| SPA 4: Metro | 76 | 6.9 | 65 | 5.8 | 75 | 6.6 | 53 | 4.6 | 57 | 4.8 | 92 | 7.8 | 65 | 5.6 | 75 | 6.3 | 95 | 7.6 | 80 | 6.4 | -7.8% | -16.4% |
| SPA 5: West | 32 | 4.8 | 31 | 4.4 | 30 | 4.7 | 32 | 4.4 | 33 | 4.7 | 27 | 3.9 | 30 | 4.1 | 32 | 4.4 | 35 | 4.7 | 30 | 3.9 | -17.1% | -16.2% |
| SPA 6: South | 112 | 12.5 | 94 | 10.1 | 70 | 7.1 | 89 | 9.2 | 96 | 10.0 | 85 | 8.5 | 115 | 11.3 | 95 | 9.6 | 132 | 13.2 | 129 | 12.6 | 1.1% | -4.2% |
| SPA 7: East | 111 | 8.8 | 85 | 6.6 | 88 | 6.9 | 87 | 6.6 | 92 | 6.9 | 93 | 7.0 | 101 | 7.7 | 94 | 6.8 | 120 | 8.9 | 109 | 8.1 | -7.2% | -8.8% |
| SPA 8: South Bay | 113 | 7.3 | 89 | 5.8 | 83 | 5.4 | 89 | 5.8 | 118 | 7.6 | 97 | 6.1 | 98 | 6.2 | 114 | 6.9 | 138 | 8.4 | 136 | 8.1 | 11.3% | -3.1% |

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

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

**TABLE D-13:
Pneumonia &
Influenza**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 2,171 | 23.6 | 2,097 | 22.4 | 1,964 | 21.9 | 2,062 | 21.3 | 2,048 | 20.3 | 2,264 | 22.5 | 2,071 | 20.7 | 2,124 | 20.3 | 2,066 | 19.4 | 1,957 | 18.4 | -22.1% | -5.3% |
| Male | 990 | 27.9 | 1,016 | 27.5 | 910 | 25.8 | 962 | 25.2 | 975 | 24.2 | 1,069 | 26.6 | 1,030 | 25.7 | 1,009 | 24.4 | 1,016 | 23.8 | 1,000 | 23.1 | -17.4% | -3.1% |
| Female | 1,181 | 20.7 | 1,081 | 19.1 | 1,054 | 19.2 | 1,100 | 18.8 | 1,073 | 17.6 | 1,195 | 19.6 | 1,041 | 17.5 | 1,115 | 17.6 | 1,050 | 16.3 | 957 | 15.0 | -27.3% | -7.8% |
| White | 1,203 | 24.4 | 1,076 | 22.1 | 1,011 | 22.0 | 982 | 20.4 | 965 | 19.7 | 1,094 | 22.8 | 986 | 21.2 | 924 | 18.7 | 916 | 19.1 | 874 | 18.4 | -24.4% | -3.6% |
| Latino/a | 430 | 20.2 | 492 | 20.9 | 399 | 18.8 | 509 | 21.4 | 419 | 16.4 | 509 | 19.7 | 484 | 17.8 | 487 | 17.6 | 496 | 16.9 | 485 | 16.1 | -20.6% | -4.9% |
| Black | 232 | 29.3 | 223 | 26.9 | 247 | 31.1 | 242 | 28.7 | 245 | 27.9 | 257 | 28.7 | 189 | 21.6 | 223 | 25.2 | 222 | 24.2 | 211 | 22.4 | -23.7% | -7.5% |
| Asian[†] | 297 | 21.8 | 290 | 20.5 | 296 | 20.6 | 319 | 19.9 | 395 | 22.8 | 393 | 22.0 | 387 | 22.0 | 468 | 24.9 | 401 | 20.1 | 382 | 19.4 | -11.1% | -3.7% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 541 | 28.8 | 528 | 27.6 | 480 | 26.3 | 475 | 24.4 | 465 | 23.4 | 519 | 26.6 | 465 | 24.3 | 455 | 23.0 | 459 | 23.5 | 444 | 22.5 | -21.9% | -4.3% |
| Latino | 192 | 23.3 | 232 | 23.9 | 179 | 21.4 | 212 | 22.5 | 196 | 19.2 | 242 | 23.3 | 257 | 23.0 | 207 | 18.6 | 235 | 19.7 | 256 | 21.0 | -9.7% | 6.7% |
| Black | 119 | 39.6 | 100 | 32.3 | 91 | 30.1 | 93 | 29.8 | 99 | 29.2 | 111 | 32.2 | 86 | 26.3 | 95 | 27.8 | 110 | 30.9 | 101 | 27.0 | -31.7% | -12.6% |
| Asian[†] | 135 | 24.7 | 148 | 26.1 | 155 | 27.0 | 174 | 27.3 | 203 | 29.5 | 187 | 26.3 | 206 | 29.4 | 240 | 32.3 | 200 | 25.5 | 196 | 24.9 | 0.7% | -2.3% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 662 | 21.3 | 548 | 18.7 | 531 | 18.9 | 507 | 17.6 | 500 | 17.1 | 575 | 20.3 | 521 | 19.1 | 469 | 15.7 | 457 | 15.8 | 430 | 15.3 | -28.2% | -3.1% |
| Latina | 238 | 18.4 | 260 | 19.0 | 220 | 17.1 | 297 | 20.6 | 223 | 14.6 | 267 | 17.2 | 227 | 14.2 | 280 | 16.8 | 261 | 14.8 | 229 | 12.7 | -30.9% | -14.2% |
| Black | 113 | 23.0 | 123 | 23.7 | 156 | 30.9 | 149 | 27.9 | 146 | 26.5 | 146 | 26.5 | 103 | 19.1 | 128 | 23.2 | 112 | 20.1 | 110 | 19.1 | -17.1% | -5.1% |
| Asian[†] | 162 | 19.7 | 142 | 16.8 | 141 | 16.4 | 145 | 14.8 | 192 | 18.3 | 206 | 19.1 | 181 | 17.1 | 228 | 19.6 | 201 | 16.5 | 186 | 15.5 | -20.9% | -5.8% |
| SPA 1: Antelope Valley | 51 | 21.1 | 59 | 22.6 | 61 | 25.3 | 56 | 21.6 | 59 | 20.8 | 84 | 29.1 | 65 | 23.0 | 69 | 23.2 | 61 | 20.8 | 61 | 19.0 | -10.1% | -8.9% |
| SPA 2: San Fernando | 415 | 20.5 | 414 | 20.0 | 415 | 20.2 | 394 | 18.1 | 355 | 15.5 | 476 | 21.0 | 450 | 19.8 | 458 | 19.3 | 436 | 18.3 | 419 | 17.6 | -13.8% | -3.6% |
| SPA 3: San Gabriel | 449 | 24.9 | 404 | 22.2 | 390 | 21.5 | 422 | 21.4 | 413 | 20.4 | 425 | 20.6 | 387 | 19.0 | 421 | 19.6 | 404 | 18.4 | 403 | 18.5 | -25.6% | 0.5% |
| SPA 4: Metro | 255 | 23.1 | 256 | 23.1 | 229 | 23.0 | 257 | 24.0 | 272 | 23.5 | 261 | 23.2 | 256 | 22.7 | 274 | 23.2 | 258 | 21.8 | 242 | 19.8 | -14.2% | -9.0% |
| SPA 5: West | 218 | 27.0 | 162 | 19.5 | 158 | 18.6 | 166 | 17.6 | 140 | 15.5 | 173 | 18.9 | 163 | 19.5 | 152 | 16.6 | 150 | 16.5 | 123 | 13.9 | -48.5% | -15.7% |
| SPA 6: South | 188 | 28.2 | 178 | 25.9 | 181 | 30.2 | 201 | 30.4 | 189 | 27.2 | 217 | 31.1 | 152 | 21.7 | 170 | 24.0 | 167 | 22.4 | 164 | 21.5 | -23.7% | -3.8% |
| SPA 7: East | 248 | 21.6 | 263 | 22.6 | 216 | 20.3 | 216 | 18.7 | 257 | 21.1 | 253 | 21.0 | 241 | 20.0 | 236 | 18.7 | 219 | 16.7 | 225 | 17.3 | -20.2% | 3.4% |
| SPA 8: South Bay | 343 | 24.1 | 360 | 24.7 | 311 | 22.4 | 350 | 23.3 | 361 | 23.3 | 374 | 23.9 | 355 | 23.0 | 340 | 21.2 | 371 | 22.3 | 320 | 19.5 | -19.3% | -12.8% |

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

**TABLE D-14:
Stroke**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------------|--------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 3,280 | 35.9 | 3,301 | 35.5 | 3,278 | 36.2 | 3,256 | 33.6 | 3,360 | 33.5 | 3,300 | 32.8 | 3,205 | 32.0 | 3,668 | 35.4 | 3,666 | 34.6 | 3,749 | 35.0 | -2.5% | 1.2% |
| Male | 1,373 | 36.9 | 1,399 | 36.8 | 1,405 | 38.1 | 1,370 | 34.2 | 1,406 | 33.8 | 1,439 | 34.7 | 1,382 | 33.4 | 1,563 | 36.4 | 1,649 | 37.6 | 1,650 | 36.8 | -0.2% | -2.2% |
| Female | 1,907 | 34.6 | 1,902 | 34.1 | 1,873 | 34.3 | 1,886 | 32.6 | 1,954 | 32.6 | 1,861 | 31.0 | 1,823 | 30.4 | 2,105 | 34.0 | 2,017 | 31.8 | 2,099 | 33.2 | -4.2% | 4.3% |
| White | 1,552 | 32.2 | 1,623 | 33.7 | 1,534 | 33.6 | 1,546 | 32.1 | 1,543 | 32.1 | 1,506 | 31.6 | 1,382 | 29.3 | 1,554 | 32.4 | 1,522 | 31.7 | 1,560 | 32.8 | 1.9% | 3.6% |
| Latino/a | 749 | 32.2 | 733 | 30.7 | 780 | 33.9 | 774 | 30.3 | 854 | 31.5 | 831 | 30.2 | 865 | 31.8 | 992 | 34.4 | 1,009 | 33.2 | 1,043 | 33.0 | 2.3% | -0.7% |
| Black | 469 | 57.8 | 433 | 52.1 | 446 | 54.1 | 423 | 49.0 | 418 | 46.2 | 434 | 48.4 | 448 | 50.1 | 480 | 53.7 | 472 | 51.0 | 497 | 52.6 | -9.1% | 3.1% |
| Asian[†] | 496 | 36.0 | 504 | 35.7 | 501 | 34.1 | 498 | 31.3 | 513 | 30.1 | 511 | 29.1 | 489 | 27.6 | 606 | 32.7 | 624 | 32.4 | 625 | 31.9 | -11.4% | -1.5% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 603 | 32.1 | 668 | 34.8 | 629 | 34.5 | 596 | 30.9 | 593 | 30.3 | 625 | 32.3 | 568 | 29.5 | 612 | 31.4 | 678 | 34.7 | 666 | 33.9 | 5.4% | -2.4% |
| Latino | 343 | 33.6 | 325 | 31.0 | 346 | 35.0 | 344 | 31.1 | 386 | 33.4 | 399 | 34.2 | 391 | 34.0 | 469 | 38.0 | 467 | 36.0 | 493 | 36.2 | 7.6% | 0.6% |
| Black | 194 | 59.5 | 170 | 50.9 | 179 | 55.6 | 183 | 53.1 | 157 | 41.8 | 172 | 46.7 | 199 | 55.0 | 213 | 59.4 | 207 | 55.8 | 197 | 50.4 | -15.2% | -9.6% |
| Asian[†] | 223 | 38.9 | 235 | 40.2 | 243 | 39.9 | 237 | 35.9 | 250 | 35.4 | 233 | 32.1 | 216 | 29.8 | 255 | 33.0 | 276 | 34.6 | 284 | 35.5 | -8.8% | 2.7% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 949 | 31.7 | 955 | 32.6 | 905 | 32.5 | 950 | 32.2 | 950 | 32.6 | 881 | 30.6 | 814 | 28.5 | 942 | 32.7 | 844 | 28.7 | 894 | 31.5 | -0.8% | 9.6% |
| Latina | 406 | 30.6 | 408 | 29.7 | 434 | 32.5 | 430 | 29.2 | 468 | 29.7 | 432 | 26.9 | 474 | 29.9 | 523 | 31.1 | 542 | 30.6 | 550 | 30.2 | -1.1% | -1.2% |
| Black | 275 | 55.0 | 263 | 51.7 | 267 | 53.0 | 240 | 45.8 | 261 | 47.2 | 262 | 48.2 | 249 | 45.0 | 267 | 49.0 | 265 | 47.0 | 300 | 53.0 | -3.7% | 12.8% |
| Asian[†] | 273 | 33.9 | 269 | 32.5 | 258 | 29.7 | 261 | 27.9 | 263 | 26.2 | 278 | 26.8 | 273 | 25.8 | 351 | 32.0 | 348 | 30.3 | 341 | 29.0 | -14.3% | -4.2% |
| SPA 1: Antelope Valley | 120 | 47.8 | 94 | 36.8 | 114 | 45.2 | 99 | 36.6 | 122 | 43.3 | 113 | 38.4 | 125 | 43.9 | 127 | 40.7 | 101 | 30.4 | 164 | 51.1 | 6.9% | 68.1% |
| SPA 2: San Fernando | 628 | 31.1 | 690 | 33.4 | 661 | 32.1 | 657 | 29.7 | 700 | 30.6 | 649 | 28.5 | 628 | 27.5 | 744 | 31.4 | 782 | 32.9 | 766 | 31.5 | 1.4% | -4.2% |
| SPA 3: San Gabriel | 629 | 35.0 | 694 | 38.4 | 650 | 36.1 | 616 | 32.2 | 660 | 33.0 | 673 | 33.5 | 618 | 30.9 | 752 | 36.0 | 713 | 33.3 | 679 | 31.3 | -10.6% | -6.0% |
| SPA 4: Metro | 367 | 34.6 | 344 | 31.8 | 311 | 30.7 | 345 | 32.4 | 341 | 30.3 | 357 | 31.5 | 309 | 27.7 | 380 | 32.7 | 403 | 33.5 | 399 | 32.9 | -5.1% | -1.9% |
| SPA 5: West | 262 | 33.4 | 232 | 28.9 | 253 | 30.0 | 242 | 27.7 | 236 | 26.9 | 249 | 27.6 | 205 | 23.6 | 237 | 27.5 | 253 | 28.3 | 249 | 27.8 | -16.9% | -1.8% |
| SPA 6: South | 355 | 53.3 | 323 | 47.9 | 307 | 47.6 | 311 | 45.4 | 317 | 43.8 | 292 | 40.4 | 295 | 41.2 | 378 | 52.0 | 346 | 46.1 | 365 | 47.8 | -10.3% | 3.7% |
| SPA 7: East | 378 | 33.2 | 411 | 35.4 | 426 | 39.3 | 432 | 37.0 | 436 | 35.5 | 413 | 34.3 | 426 | 35.1 | 442 | 34.9 | 451 | 35.4 | 474 | 36.9 | 10.9% | 4.1% |
| SPA 8: South Bay | 519 | 36.1 | 510 | 35.0 | 551 | 38.8 | 551 | 36.2 | 545 | 35.1 | 553 | 35.6 | 596 | 37.9 | 607 | 37.4 | 614 | 36.8 | 653 | 39.1 | 8.3% | 6.3% |

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

**TABLE D-15:
Suicide**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------------|---------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | No. of deaths | Death rate**† | 2008-2017 | 2016-2017 |
| Los Angeles County | 802 | 8.2 | 775 | 7.9 | 792 | 8.0 | 766 | 7.6 | 757 | 7.5 | 789 | 7.7 | 804 | 7.8 | 806 | 7.6 | 813 | 7.7 | 886 | 8.3 | 1.4% | 7.7% |
| Male | 620 | 13.3 | 580 | 12.3 | 635 | 13.0 | 593 | 12.4 | 598 | 12.3 | 614 | 12.4 | 628 | 12.7 | 627 | 12.3 | 657 | 12.9 | 686 | 13.2 | -0.4% | 2.7% |
| Female | 182 | 3.6 | 195 | 3.9 | 157 | 3.0 | 173 | 3.4 | 159 | 3.1 | 175 | 3.3 | 176 | 3.3 | 179 | 3.3 | 156 | 2.9 | 200 | 3.7 | 3.2% | 27.4% |
| White | 478 | 13.6 | 449 | 12.5 | 420 | 13.0 | 412 | 12.1 | 421 | 12.5 | 437 | 12.8 | 445 | 13.0 | 421 | 12.4 | 410 | 11.7 | 450 | 13.3 | -2.1% | 14.0% |
| Latino/a | 160 | 3.7 | 173 | 4.1 | 203 | 4.0 | 206 | 4.5 | 182 | 4.0 | 196 | 4.1 | 202 | 4.2 | 218 | 4.5 | 240 | 4.9 | 262 | 5.2 | 40.0% | 5.7% |
| Black | 65 | 7.0 | 47 | 5.2 | 56 | 6.0 | 49 | 5.6 | 58 | 6.7 | 51 | 6.0 | 48 | 5.4 | 57 | 6.6 | 52 | 5.8 | 60 | 6.9 | -1.9% | 18.6% |
| Asian † | 93 | 6.5 | 101 | 6.9 | 107 | 7.0 | 97 | 6.3 | 90 | 5.6 | 97 | 6.1 | 96 | 6.1 | 106 | 6.5 | 101 | 6.1 | 110 | 6.9 | 6.4% | 13.2% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 363 | 20.9 | 329 | 18.4 | 324 | 19.0 | 315 | 18.6 | 337 | 20.0 | 332 | 19.3 | 355 | 20.8 | 321 | 18.5 | 333 | 19.2 | 346 | 20.4 | -2.6% | 6.1% |
| Latino | 132 | 6.3 | 142 | 6.9 | 181 | 8.0 | 170 | 7.8 | 149 | 6.9 | 165 | 7.2 | 154 | 6.6 | 183 | 7.9 | 202 | 8.5 | 214 | 8.7 | 37.1% | 2.1% |
| Black | 52 | 12.2 | 33 | 8.2 | 46 | 11.0 | 40 | 10.0 | 44 | 11.2 | 39 | 9.8 | 41 | 10.1 | 45 | 11.3 | 42 | 10.2 | 48 | 11.8 | -3.7% | 15.4% |
| Asian † | 70 | 10.7 | 73 | 10.9 | 81 | 12.0 | 66 | 9.2 | 64 | 8.6 | 74 | 10.1 | 67 | 9.2 | 75 | 10.3 | 72 | 9.4 | 75 | 10.0 | -6.5% | 5.9% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 115 | 6.7 | 120 | 6.9 | 96 | 6.0 | 97 | 5.9 | 84 | 5.3 | 105 | 6.4 | 90 | 5.5 | 100 | 6.4 | 77 | 4.4 | 104 | 6.4 | -4.8% | 45.8% |
| Latina | 28 | 1.2 | 31 | 1.5 | 22 | 1.0 | 36 | 1.4 | 33 | 1.4 | 31 | 1.2 | 48 | 1.9 | 35 | 1.4 | 38 | 1.5 | 48 | 1.9 | 53.1% | 24.5% |
| Black | 13 | -- | 14 | -- | 10 | -- | 9 | -- | 14 | 3.0 | 12 | 2.6 | 7 | 1.5 | 12 | 2.7 | 10 | 2.2 | 12 | 2.5 | -- | 14.5% |
| Asian † | 23 | 3.0 | 28 | 3.7 | 26 | 3.0 | 31 | 3.7 | 26 | 3.2 | 23 | 2.8 | 29 | 3.4 | 31 | 3.3 | 29 | 3.3 | 35 | 4.2 | 40.9% | 28.1% |
| SPA 1: Antelope Valley | 48 | 14.2 | 29 | 8.4 | 53 | 15.0 | 47 | 13.4 | 35 | 9.6 | 32 | 8.6 | 49 | 13.2 | 34 | 8.2 | 55 | 13.9 | 42 | 11.3 | -20.1% | -18.4% |
| SPA 2: San Fernando | 193 | 8.9 | 192 | 8.6 | 169 | 8.0 | 190 | 8.5 | 207 | 9.0 | 199 | 8.6 | 191 | 8.2 | 202 | 8.4 | 207 | 8.8 | 206 | 8.4 | -5.6% | -4.1% |
| SPA 3: San Gabriel | 101 | 5.7 | 128 | 7.1 | 132 | 7.0 | 128 | 6.9 | 132 | 7.2 | 129 | 6.9 | 118 | 6.4 | 124 | 6.4 | 127 | 6.7 | 147 | 7.9 | 38.6% | 17.9% |
| SPA 4: Metro | 99 | 8.6 | 101 | 8.6 | 113 | 10.0 | 83 | 6.9 | 77 | 6.5 | 94 | 7.8 | 97 | 7.9 | 113 | 9.3 | 100 | 7.9 | 132 | 10.3 | 19.2% | 30.1% |
| SPA 5: West | 82 | 11.8 | 79 | 10.9 | 53 | 8.0 | 75 | 10.9 | 79 | 11.2 | 55 | 7.8 | 72 | 9.9 | 60 | 8.0 | 53 | 7.0 | 67 | 9.1 | -22.4% | 30.5% |
| SPA 6: South | 48 | 5.3 | 33 | 3.7 | 45 | 4.0 | 41 | 4.4 | 35 | 3.7 | 43 | 4.1 | 53 | 5.5 | 37 | 3.8 | 51 | 4.9 | 60 | 5.7 | 7.8% | 15.5% |
| SPA 7: East | 72 | 5.9 | 93 | 7.5 | 65 | 5.0 | 81 | 6.2 | 62 | 4.8 | 91 | 7.1 | 79 | 6.1 | 84 | 6.4 | 93 | 7.1 | 102 | 7.7 | 31.4% | 8.3% |
| SPA 8: South Bay | 143 | 9.2 | 109 | 7.2 | 147 | 10.0 | 118 | 7.6 | 128 | 8.3 | 144 | 9.0 | 144 | 9.0 | 146 | 8.8 | 126 | 7.6 | 130 | 7.8 | -15.2% | 3.0% |

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

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

**NHOPI = Native Hawaiian and other Pacific Islander.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOPI (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOPI were separated into different race categories. Trends for Asian population should be interpreted with caution.

‡From 2008-2011, rates based on deaths < 20 are suppressed with (--). Starting 2012, rates based on 5-19 deaths are presented, which are considered unreliable and should be interpreted with caution.

**TABLE D-16:
All Causes**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Death Rate Change | |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------------|--------------|
| | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | 2008-2017 | 2016-2017 |
| Los Angeles County | 58,043 | 628.7 | 57,620 | 614.1 | 56,538 | 615.3 | 57,988 | 596.4 | 58,498 | 580.9 | 59,678 | 593.5 | 58,568 | 580.2 | 62,250 | 593.4 | 62,861 | 589.4 | 63,429 | 589.6 | -6.2% | 0.0% |
| Male | 29,402 | 754.2 | 29,342 | 739.2 | 28,772 | 738.8 | 29,191 | 707.2 | 29,610 | 687.7 | 30,413 | 709.8 | 30,071 | 699.3 | 31,941 | 712.5 | 32,542 | 712.8 | 32,818 | 708.7 | -6.0% | -0.6% |
| Female | 28,641 | 528.0 | 28,278 | 514.0 | 27,766 | 516.8 | 28,797 | 506.2 | 28,888 | 492.5 | 29,265 | 498.5 | 28,496 | 485.1 | 30,307 | 496.9 | 30,318 | 488.8 | 30,611 | 491.9 | -6.8% | 0.6% |
| White | 30,149 | 670.3 | 29,622 | 651.0 | 28,738 | 667.2 | 29,104 | 646.8 | 29,123 | 644.8 | 29,188 | 655.0 | 28,168 | 633.3 | 29,295 | 642.7 | 29,132 | 641.7 | 28,826 | 637.0 | -5.0% | -0.7% |
| Latino/a | 13,591 | 525.1 | 13,671 | 521.2 | 13,751 | 529.1 | 14,301 | 512.1 | 14,467 | 486.3 | 15,243 | 510.9 | 15,322 | 507.8 | 16,403 | 515.7 | 17,003 | 509.3 | 17,732 | 519.1 | -1.1% | 1.9% |
| Black | 7,697 | 918.0 | 7,825 | 918.0 | 7,438 | 891.2 | 7,623 | 874.6 | 7,644 | 847.4 | 7,721 | 853.6 | 7,714 | 850.7 | 8,234 | 898.8 | 8,322 | 887.9 | 8,294 | 866.5 | -5.6% | -2.4% |
| Asian[†] | 6,354 | 458.6 | 6,267 | 442.0 | 6,343 | 429.1 | 6,630 | 416.6 | 6,783 | 400.0 | 7,038 | 404.7 | 6,871 | 392.7 | 7,691 | 417.4 | 7,706 | 406.6 | 8,213 | 426.3 | -7.1% | 4.8% |
| Males | | | | | | | | | | | | | | | | | | | | | | |
| White | 14,768 | 796.0 | 14,553 | 770.7 | 14,184 | 783.4 | 14,232 | 750.9 | 14,378 | 745.8 | 14,533 | 767.0 | 14,294 | 754.3 | 14,711 | 755.5 | 14,814 | 763.0 | 14,624 | 750.0 | -5.8% | -1.7% |
| Latino | 7,316 | 629.6 | 7,433 | 636.5 | 7,448 | 644.3 | 7,591 | 611.7 | 7,670 | 578.5 | 8,139 | 618.0 | 8,129 | 617.4 | 8,791 | 628.9 | 9,150 | 619.5 | 9,628 | 635.4 | 0.9% | 2.6% |
| Black | 3,871 | 1131.1 | 3,961 | 1134.5 | 3,704 | 1087.2 | 3,788 | 1061.5 | 3,857 | 1037.5 | 3,901 | 1042.0 | 3,912 | 1045.7 | 4,183 | 1095.7 | 4,327 | 1113.5 | 4,247 | 1059.1 | -6.4% | -4.9% |
| Asian[†] | 3,301 | 563.2 | 3,276 | 545.7 | 3,277 | 531.6 | 3,386 | 508.8 | 3,431 | 485.0 | 3,580 | 494.0 | 3,480 | 477.7 | 3,908 | 510.2 | 3,881 | 494.4 | 4,138 | 517.5 | -8.1% | 4.7% |
| Females | | | | | | | | | | | | | | | | | | | | | | |
| White | 15,381 | 565.7 | 15,069 | 552.1 | 14,554 | 568.1 | 14,872 | 556.4 | 14,745 | 554.3 | 14,655 | 557.0 | 13,873 | 529.1 | 14,584 | 545.7 | 14,318 | 537.1 | 14,202 | 538.7 | -4.8% | 0.3% |
| Latina | 6,275 | 440.7 | 6,238 | 431.1 | 6,303 | 439.7 | 6,710 | 432.0 | 6,797 | 411.2 | 7,104 | 426.0 | 7,193 | 424.3 | 7,610 | 427.0 | 7,853 | 421.2 | 8,104 | 426.7 | -3.2% | 1.3% |
| Black | 3,826 | 763.5 | 3,864 | 759.0 | 3,734 | 748.3 | 3,835 | 737.0 | 3,787 | 702.4 | 3,820 | 707.0 | 3,802 | 707.0 | 4,051 | 746.4 | 3,994 | 719.1 | 4,047 | 716.9 | -6.1% | -0.3% |
| Asian[†] | 3,053 | 378.6 | 2,991 | 362.5 | 3,066 | 354.0 | 3,244 | 347.7 | 3,352 | 336.0 | 3,458 | 338.0 | 3,391 | 329.4 | 3,783 | 347.1 | 3,825 | 339.5 | 4,075 | 356.6 | -5.8% | 5.1% |
| SPA 1: Antelope Valley | 2,165 | 795.4 | 2,230 | 801.8 | 2,214 | 799.4 | 2,243 | 760.4 | 2,267 | 738.5 | 2,419 | 775.8 | 2,491 | 791.4 | 2,620 | 804.7 | 2,713 | 818.5 | 2,759 | 818.5 | 2.9% | 0.0% |
| SPA 2: San Fernando | 12,259 | 603.7 | 12,132 | 580.1 | 12,032 | 577.3 | 12,313 | 558.8 | 12,731 | 553.9 | 13,029 | 574.4 | 12,687 | 554.2 | 13,520 | 566.5 | 13,774 | 574.4 | 13,840 | 567.7 | -6.0% | -1.2% |
| SPA 3: San Gabriel | 10,616 | 594.8 | 10,636 | 589.9 | 10,457 | 579.8 | 10,758 | 560.0 | 11,049 | 557.8 | 11,230 | 562.2 | 10,901 | 545.5 | 11,610 | 556.5 | 11,670 | 550.6 | 11,841 | 554.5 | -6.8% | 0.7% |
| SPA 4: Metro | 6,210 | 575.7 | 6,032 | 556.6 | 5,982 | 585.4 | 6,098 | 564.9 | 6,153 | 545.6 | 6,249 | 552.3 | 6,040 | 532.7 | 6,383 | 541.2 | 6,485 | 533.3 | 6,416 | 522.8 | -9.2% | -2.0% |
| SPA 5: West | 4,112 | 533.5 | 3,967 | 499.6 | 3,943 | 496.7 | 4,040 | 485.1 | 4,050 | 480.5 | 4,053 | 483.3 | 3,973 | 479.8 | 4,085 | 480.3 | 4,115 | 480.4 | 4,105 | 475.6 | -10.8% | -1.0% |
| SPA 6: South | 5,614 | 794.7 | 5,638 | 794.3 | 5,234 | 762.4 | 5,477 | 759.4 | 5,449 | 720.4 | 5,484 | 726.6 | 5,435 | 716.2 | 5,930 | 764.9 | 6,018 | 740.3 | 6,005 | 735.0 | -7.5% | -0.7% |
| SPA 7: East | 7,130 | 619.7 | 7,184 | 619.9 | 6,914 | 621.8 | 7,161 | 604.0 | 7,107 | 577.1 | 7,337 | 604.2 | 7,253 | 592.3 | 7,627 | 595.6 | 7,608 | 584.9 | 7,817 | 600.0 | -3.2% | 2.6% |
| SPA 8: South Bay | 9,415 | 649.6 | 9,455 | 640.9 | 9,402 | 654.9 | 9,722 | 639.5 | 9,645 | 617.7 | 9,832 | 624.1 | 9,705 | 612.6 | 10,392 | 634.5 | 10,392 | 621.5 | 10,646 | 636.1 | -2.1% | 2.4% |

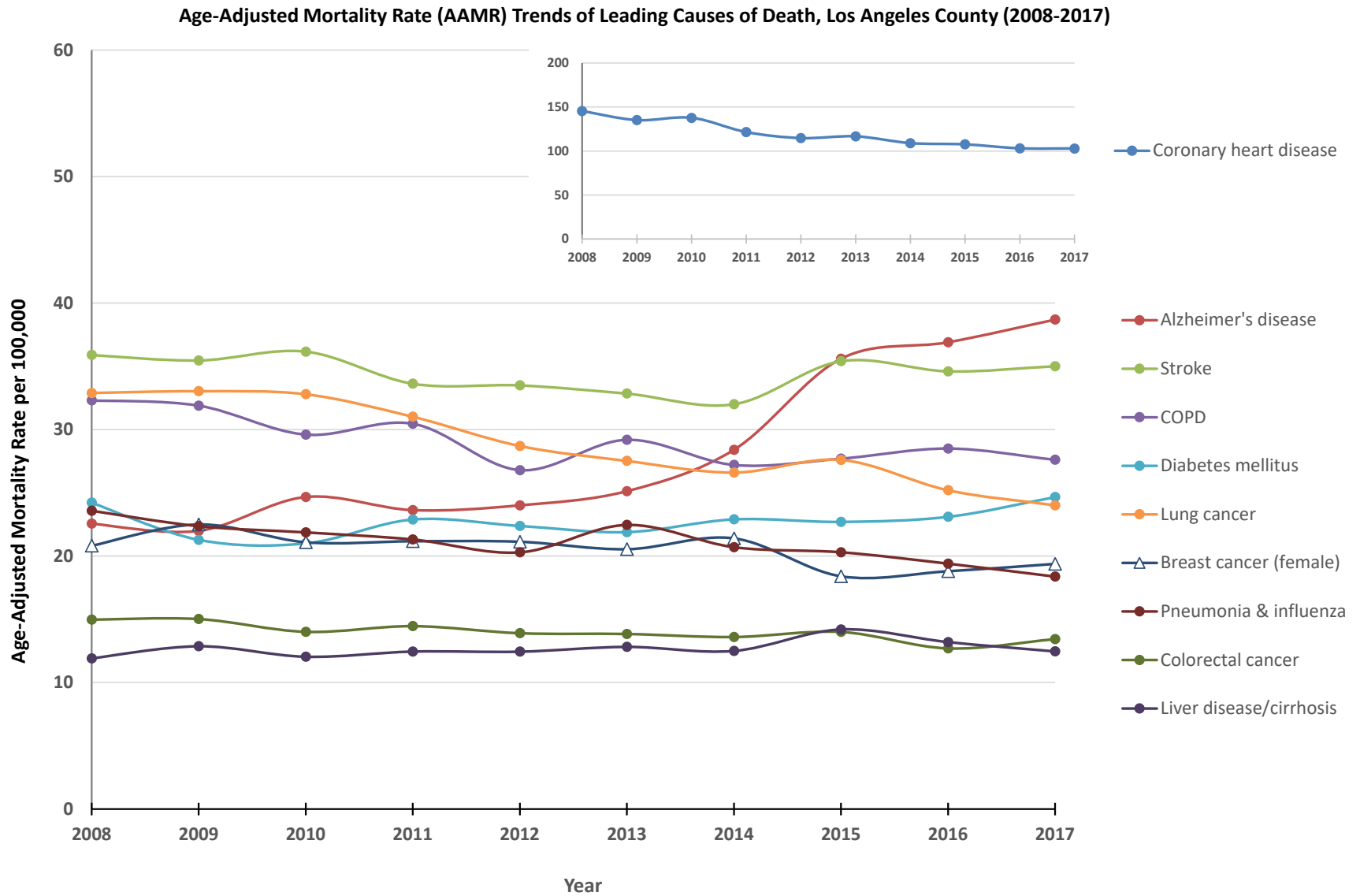
Before 2012, Asian included NHOP1**, therefore, trends should be interpreted with caution.

AIAN = American Indian and Alaska Native; NHOP1 = Native Hawaiian and other Pacific Islander.

*Age-adjusted rate per 100,000. The death rates for 2008-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published.

†From 2008-2011, the number of deaths and death rates for Asians includes NHOP1 (Native Hawaiian and other Pacific Islander). Starting 2012, Asian and NHOP1 were separated into different race categories. Trends for Asian population should be interpreted with caution.

FIGURE D-1: TRENDS IN LEADING CAUSES OF DEATH, LOS ANGELES COUNTY 2008-2017





Los Angeles County
Department of Public Health
Office of Health Assessment and Epidemiology
313 N. Figueroa, Room 127
Los Angeles, CA 90012



Los Angeles County Department of Public Health
Barbara Ferrer, PhD, MPH, MEd
Director
Muntu Davis, MD, MPH
Health Officer
Paul Simon, MD, MPH
Chief Science Officer

Los Angeles County Board of Supervisors
Hilda L. Solis, First District
Mark Ridley-Thomas, Second District
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