

Deaths: Final Data for 2008

By Arialdi M. Miniño, MPH; Sherry L. Murphy, B.S.; Jiaquan Xu, M.D., and Kenneth D. Kochanek, M.A.;
Division of Vital Statistics

This document will be replaced by a reformatted, typeset report in the near future.

Table of Contents

| | |
|---|------|
| Abstract | 1 - |
| Highlights | 2 - |
| Mortality experience in 2008..... | 2 - |
| Trends | 3 - |
| Introduction | 4 - |
| Methods | 4 - |
| Results and Discussion | 6 - |
| Deaths and death rates..... | 6 - |
| Death rates by age and sex | 10 - |
| Expectation of life at birth and at specified ages..... | 13 - |
| Leading causes of death..... | 16 - |
| Injury mortality by mechanism and intent | 22 - |
| Drug-induced mortality..... | 23 - |
| Alcohol-induced mortality | 24 - |
| State of residence | 24 - |
| Infant mortality | 24 - |
| Additional mortality tables based on 2008 final data..... | 27 - |
| References | 27 - |
| List of Detailed Tables..... | 36 - |
| Acknowledgments..... | 38 - |
| Suggested citation..... | 38 - |
| Technical Notes..... | 39 - |
| Changes in the report | 39 - |
| Nature and sources of data..... | 39 - |
| Cause-of-death classification | 41 - |
| Tabulation lists and cause-of-death ranking..... | 42 - |
| Codes added and deleted in 2008 | 43 - |
| Codes for terrorism..... | 43 - |
| Enterocolitis due to Clostridium difficile | 43 - |
| Quality of reporting and processing cause of death..... | 43 - |
| Rare causes of death..... | 45 - |

| | |
|--|-------|
| Injury mortality by mechanism and intent | 45 - |
| Codes for firearm deaths | 45 - |
| Codes for drug-induced deaths..... | 45 - |
| Codes for alcohol-induced deaths | 46 - |
| Race and Hispanic origin..... | 47 - |
| Life tables..... | 51 - |
| Causes of death contributing to changes in life expectancy | 52 - |
| Infant mortality..... | 52 - |
| Other variables not shown in the printed version of this report..... | 53 - |
| Marital status..... | 53 - |
| Educational attainment | 53 - |
| Injury at work..... | 54 - |
| Maternal mortality..... | 54 - |
| Population bases for computing rates..... | 55 - |
| Computing rates..... | 56 - |
| Random variation..... | 57 - |
| Availability of mortality data..... | 63 - |
| Definition of terms..... | 65 - |
| Detailed Tables..... | 66 - |
| Technical Notes Tables | 144 - |

Abstract

Objectives—This report presents final 2008 data on U.S. deaths, death rates, life expectancy, infant mortality, and trends by selected characteristics such as age, sex, Hispanic origin, race, state of residence, and cause of death.

Methods—Information reported on death certificates, which are completed by funeral directors, attending physicians, medical examiners, and coroners, is presented in descriptive tabulations. The original records are filed in state registration offices. Statistical information is compiled in a national database through the Vital Statistics Cooperative Program of the Centers for Disease Control and Prevention's National Center for Health Statistics. Causes of death are processed in accordance with the International Classification of Diseases, Tenth Revision (ICD- 10).

Results—In 2008, a total of 2,471,984 deaths were reported in the United States. The age-adjusted death rate was 758.3 deaths per 100,000 standard population, a decrease of 0.2 percent from the 2007 rate and a record low figure. Life expectancy at birth rose 0.2 years, from 77.9 years in 2007 to a record-high 78.1 years in 2008. The age-specific death rate increased for age group 85 years and over. Age-specific death rates decreased for age groups: less than 1 year, 5–14, 15–24, 25–34, 35–44 and 65–74. The age-specific death rates remained unchanged for age groups: 1–4, 45–54, 55–64 and 75–84. The 15 leading causes of death in 2008 remained the same as in 2007, but Chronic lower respiratory diseases and suicide increased in the ranking while stroke and septicemia decreased in the ranking. Stroke is the fourth leading cause of death in 2008 after more than five decades at number three in the ranking. Chronic lower respiratory diseases is the third leading cause of death for 2008. The infant mortality rate decreased 2.1 percent to a historically low value of 6.61 deaths per 1,000 live births in 2008.

Conclusions—The decline of the age-adjusted death rate to a record low value for the United States and the increase in life expectancy to a record high value of 78.1 years are consistent with long-term trends in mortality.

Keywords: mortality · cause of death · life expectancy · vital statistics

Highlights

Mortality experience in 2008

- + In 2008, a total of 2,471,984 resident deaths were registered in the United States.
- + The age-adjusted death rate, which takes the aging of the population into account, was 758.3 deaths per 100,000 U.S. standard population.
- + Life expectancy at birth was 78.1 years.
- + The 15 leading causes of death in 2008 were:
 1. Diseases of heart (heart disease)
 2. Malignant neoplasms (cancer)
 3. Chronic lower respiratory diseases
 4. Cerebrovascular diseases (stroke)
 5. Accidents (unintentional injuries)
 6. Alzheimer's disease
 7. Diabetes mellitus (diabetes)
 8. Influenza and pneumonia
 9. Nephritis, nephrotic syndrome and nephrosis (kidney disease)
 10. Intentional self-harm (suicide)
 11. Septicemia
 12. Chronic liver disease and cirrhosis
 13. Essential hypertension and hypertensive renal disease (hypertension)
 14. Parkinson's disease
 15. Assault (homicide)

+ In 2008, the infant mortality rate was 6.61 infant deaths per 1,000 live births.

+ The 10 leading causes of infant death were:

1. Congenital malformations, deformations and chromosomal abnormalities (congenital malformations)
2. Disorders related to short gestation and low birth weight, not elsewhere classified (low birthweight)
3. Sudden infant death syndrome (SIDS)
4. Newborn affected by maternal complications of pregnancy (maternal complications)
5. Accidents (unintentional injuries)
6. Newborn affected by complications of placenta, cord and membranes (cord and placental complications)
7. Bacterial sepsis of newborn
8. Respiratory distress of newborn
9. Diseases of the circulatory system
10. Neonatal hemorrhage

Trends

+ The age-adjusted death rate declined to a record low in 2008.

+ Life expectancy was 78.1 years, continuing a long-term rising trend. Life expectancy increased for the total population, as well as for the black and white populations. Both white and black male and female populations experienced an increase in life expectancy in 2008 compared with 2007.

+ Life expectancy for the Hispanic U.S. population increased 0.1 year from 2007 to 81.0 years in 2008.

+ Age-adjusted death rates decreased significantly in 2008 from 2007 for 6 of the 15 leading causes of death, and increased for 6 of the 15 leading causes. Stroke is no longer the third leading cause of death, and has been replaced by Chronic lower respiratory diseases in this position. Because of a continued decreasing trend, stroke is now the fourth leading cause of death.

+ Rates for the two leading causes— heart disease and cancer— also continued their long-term decreasing trend. Significant increases occurred for Chronic lower respiratory diseases, Alzheimer's disease, Influenza and pneumonia, kidney disease, suicide, and hypertension.

+ Within external causes of injury death, poisoning has replaced motor vehicle traffic accidents as the leading mechanism of injury mortality.

+ Differences in mortality between the black and white populations persisted. The age-adjusted death rate was 1.2 times greater, and infant mortality rate 2.3 times greater for the black population than for

the white population. The difference in life expectancy between the black and white populations narrowed by 0.3 year, from 4.8 years in 2007 to 4.5 years in 2008.

+ The infant mortality rate decreased 2.1 percent in 2008 from 2007. The infant mortality rate stands at 6.61 infant deaths per 1,000 live births -- a record low figure.

+ The neonatal mortality rate decreased by 2.9 percent in 2008 from 2007.

Introduction

This report presents detailed 2008 data on deaths and death rates according to a number of social, demographic, and medical characteristics. These data provide information on mortality patterns among residents of the United States by such variables as age, sex, Hispanic origin, race, state of residence, and cause of death. Information on these mortality patterns is key to understanding changes in the health and wellbeing of the U.S. population (1).

Preliminary data for 2008 were presented in the report "Deaths: Preliminary Data for 2008" using a 99 percent (demographic file) sample of U.S. deaths weighted to independent control totals (2). The findings of this report, based on the final mortality file, are generally consistent with those based on preliminary data; the final mortality file incorporates some modifications to the preliminary file as described in "Technical Notes." A report describing preliminary mortality data for 2009 is also available from NCHS (3). Separate companion reports will present additional details on leading causes of death and life expectancy in the United States (4,5).

Mortality data in this report can be used to monitor and evaluate the health status of the United States in terms of current mortality levels and long-term mortality trends, as well as to identify segments of the U.S. population at greater risk of death from specific diseases and injuries. Differences in death rates among various demographic subpopulations, including race and ethnic groups, may reflect subpopulation differences in factors such as socioeconomic status, access to medical care, and the prevalence of specific risk factors in a particular subpopulation.

Methods

Data in this report are based on information from all resident death certificates filed in the 50 states and the District of Columbia. More than 99 percent of deaths occurring in this country are believed to be registered (6). Tables showing data by state also provide information for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (Northern Marianas). Cause-of-death statistics presented in this report are classified in accordance with the International Classification of Diseases, Tenth Revision (ICD-10) (7). A discussion of the cause-of-death classification is provided in "Technical Notes."

Mortality data on specific demographic and medical characteristics cover all 50 states and the District of Columbia. Measures of mortality in this report include the number of deaths; crude, age-specific, and age-adjusted death rates; infant, neonatal, postneonatal mortality rates; life expectancy; and rate ratios. Changes in death rates in 2008 compared with 2007, and differences in death rates across demographic groups in 2008, are tested for statistical significance. Unless otherwise specified, reported differences

are statistically significant. Additional information on these statistical methods, random variation and relative standard error, the computation of derived statistics and rates, population denominators, and the definition of terms is presented in “Technical Notes.”

The populations used to calculate death rates for 2000–2008 and the intercensal period 1991–1999 shown in this report were produced under a collaborative arrangement with the U.S. Census Bureau and are consistent with the 2000 census. Reflecting the new guidelines issued in 1997 by the Office of Management and Budget (OMB), the 2000 census included an option for persons to report more than one race as appropriate for themselves and household members (8); see “Technical Notes.” The 1997 OMB guidelines also provided for the reporting of Asian persons separately from Native Hawaiian or Other Pacific Islander persons. Under the prior OMB standards issued in 1977, data for Asian or Pacific Islander persons were collected as a single group (9). Most death certificates currently collect only one race for the decedent in the same categories as specified in the 1977 OMB guidelines; that is, death certificate data do not report Asian persons separately from Native Hawaiian or Other Pacific Islander persons. Death certificate data by race—the source of the numerators for death rates—are thus currently incompatible with the population data collected in the 2000 census and postcensal estimates—the denominators for the rates. To produce death rates by race for 2000–2008, and revised intercensal rates for the 1991–1999 period, the reported population data for multiple-race persons had to be “bridged” to single-race categories. In addition, the 2000 census counts were modified to be consistent with the 1977 OMB race categories; that is, to report the data for Asian persons and Native Hawaiian or Other Pacific Islander persons as a combined category, Asian or Pacific Islander, and to reflect age as of the census reference date (10). The procedures used to produce the bridged populations are described in separate publications (11,12). The bridged population data are anticipated to be used over the next few years for computing population-based rates by race. Beginning with deaths occurring in 2003, some states allowed for multiple-race reporting on the death certificate. Multiple-race data for these states are bridged to single-race categories; see “Technical Notes.” Once all states are collecting data on race according to the 1997 OMB guidelines, use of the bridged race algorithm is expected to be discontinued.

Note that the population data used to compile death rates by race in this report are based on special estimation procedures—they are not true counts. This is the case even for the 2000 populations. The estimation procedures used to develop these populations contain some error. Smaller population groups are affected much more than larger population groups (11). Over the next several years, additional information will be incorporated in the estimation procedures, possibly resulting in further revisions of the population estimates; see “Technical Notes.” Data presented in this report and other mortality tabulations are available at the National Center for Health Statistics (NCHS) website, <http://www.cdc.gov/nchs/deaths.htm>. Availability of mortality microdata is described in “Technical Notes.”

Results and Discussion

Deaths and death rates

In 2008, a total of 2,471,984 resident deaths were registered in the United States, 48,272 more deaths than in 2007. The crude death rate for 2008, 813.0 deaths per 100,000 population, was 1.2 percent higher than the 2007 rate (803.6) (Tables A, 1, and 3).

The age-adjusted death rate in 2008 was 758.3 deaths per 100,000 U.S. standard population, a record low value that was 0.2 percent lower than the 2007 rate of 760.2 (Tables 1 and A). Age-adjusted death rates are constructs that show what the level of mortality would be if no changes occurred in the age composition of the population from year to year. (For a discussion of age-adjusted death rates, see “Technical Notes.”) Thus, age-adjusted death rates are better indicators than unadjusted (crude) death rates for examining changes in the risk of death over a period of time when the age distribution of the population is changing. Age-adjusted death rates also are better indicators of relative risk when comparing mortality across geographic areas or between sex or race subgroups of the population that have different age distributions; see “Technical Notes.” Since 1980, the age-adjusted death rate has decreased every year except 1983, 1985, 1988, 1993, and 1999. Those years coincided with influenza outbreaks (13–16). The pace of decline for age-adjusted death rates during the last 7 years has been faster than for previous decades. From 1980 through 1989, the decline was 8.5 percent; from 1990 through 1999, 6.7 percent; and from 2000 through 2008, 12.7 percent (Figure 1 and Table 1).

Race—In 2008, age-adjusted death rates for the major race groups (Table 1) were:

- + White population, 750.3 deaths per 100,000 U.S. standard population
- + Black population, 934.9
- + American Indian or Alaska Native (AIAN) population, 610.1
- + API population, 413.7

Rates for the AIAN and API populations should be interpreted with caution because of reporting problems regarding correct identification of race on both the death certificate and in population censuses and surveys. The net effect of the reporting problems is for the AIAN rate to be approximately 30 percent understated and the API rate to be approximately 7 percent understated (17).

In 2008, the age-adjusted death rate for the black population was 1.2 times that for the white population (Table B); that is, the average risk of death for the black population was 24.6 percent higher than for the white population. From 1960 through 1982, rates for the black and white populations declined by similar percentages—22.6 and 26.5 percent, respectively. From 1983 through 1988, rates diverged (18), increasing 5.2 percent for the black population and decreasing 1.7 percent for the white population. The disparity in age-adjusted death rates between the black and white populations reached its widest point in 1989 (1.4 times greater). Since 1989, the disparity between the two populations has narrowed as the age-adjusted rate for the black population declined by 27.2 percent and the rate for the white population declined by 18.5 percent (Table 1 and Figure 2).

In 2008, decreases in age-adjusted death rates were observed for black males (2.9 percent) and females (1.9 percent) compared with 2007. An increase of 0.3 percent in the age-adjusted death rate was observed for white females (Tables A and 1).

In general, age-adjusted death rates have declined from 1980 through 2008 for white males and females and black males and females. The rate decreased an average of 1.4 percent per year for white males, 0.8 percent for white females, 1.4 percent for black males, and 1.0 percent for black females during 1980–2008. However, increases were observed for both white males and white females in 1983, 1985, 1988, and 1993. In addition, the age-adjusted death rate for white females increased in 1995, 1999 and 2008. For black males, age-adjusted death rates tended to decrease, except for a period of increase from 1983 through 1988 and, separately, in 1993. Rates for black females decreased from 1980 through 2008, although with considerable variability in direction of change from year to year ([Table 1](#)).

Counts of deaths for the AIAN population are substantially underreported in the death certificate relative to self-reporting while alive ([17](#)). Thus, the age-adjusted death rates that are shown for the AIAN population (e.g. [Table B](#)) do not lend themselves for making valid comparisons against other races.

Year-to-year trends for the AIAN population do present valid insight into changes in mortality affecting this group if it is reasonable to assume that the level of underreporting of AIAN deaths has remained more or less constant over the past years. From 1980 through 1988, the age-adjusted rate for the AIAN population declined by 17.1 percent ([Figure 2](#) and [Table 1](#)). However, the rate fluctuated from 1989 through 1999, peaking at 796.4 deaths per 100,000 U.S. standard population in 1993. Overall, the age-adjusted rate increased by 2.5 percent from 1989 through 1999, and has since trended downward. From 1999 through 2008, it declined by 21.9 percent. In 2008, the AIAN age-adjusted rate decreased by 2.7 percent from 2007 ([Table A](#)).

The level of underreport of deaths for the API population is not as high as it is for the AIAN population ([17](#)), but this underreporting still creates enough of a challenge so that any comparisons of this population against that of other races need to be interpreted with caution. From 1981 through 1985, the age-adjusted rate for the API population increased by 7.7 percent to reach a peak of 586.5 deaths per 100,000 U.S. standard population. The rate fluctuated from 1985 through 1993 before starting a persistent downward trend. From 1993 through 2008, the age-adjusted rate for the API population decreased by 26.9 percent. However, the observed decrease of 0.3 percent for the rate for the total API population between 2007 and 2008 is not statistically significant ([Table A](#)).

Table A. Percentage change in death rates and age-adjusted death rates in 2008 from 2007, by age, race, and sex: United States

[Based on death rates on an annual basis per 100,000 population, and age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards]

| Age | All races | | | White ¹ | | | Black ¹ | | | American Indian or Alaska Native ^{1,2,3} | | | Asian or Pacific Islander ^{1,4} | | |
|---------------------------|----------------|------|--------|--------------------|------|--------|--------------------|------|--------|---|-------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| | Percent change | | | | | | | | | | | | | | |
| All ages | | | | | | | | | | | | | | | |
| Crude | 1.2 | 1.0 | 1.4 | 1.5 | 1.4 | 1.6 | -1.0 | -1.7 | -0.3 | -2.7 | -2.2 | -3.5 | 3.2 | 1.9 | 4.7 |
| Age-adjusted | -0.2 | -0.6 | 0.0 | 0.1 | -0.1 | 0.3 | -2.4 | -2.9 | -1.9 | -2.7 | -2.6 | -3.4 | -0.3 | -1.3 | 0.7 |
| Under 1 year ⁵ | -5.0 | -5.1 | -4.8 | -4.2 | -4.4 | -3.9 | -4.4 | -4.7 | -4.1 | -37.2 | -34.7 | -40.3 | -4.5 | -4.0 | -5.1 |
| 1-4 years | -1.0 | 0.6 | -2.7 | 0.8 | 2.8 | -1.3 | -1.4 | 4.4 | -8.5 | -29.1 | -39.6 | -14.1 | -14.3 | -32.4 | 12.3 |
| 5-14 years | -7.8 | -8.0 | -7.6 | -9.7 | -9.9 | -8.9 | -4.3 | -4.1 | -3.5 | -3.8 | -20.3 | 26.9 | -3.6 | 1.6 | -12.2 |
| 15-24 years | -5.4 | -5.2 | -6.0 | -5.9 | -5.1 | -8.3 | -3.4 | -5.4 | 3.3 | 2.0 | 4.9 | -4.7 | -14.1 | -18.0 | -4.1 |
| 25-34 years | -1.5 | -1.5 | -1.7 | -1.1 | -0.7 | -2.3 | -5.6 | -6.4 | -4.6 | 2.7 | -0.1 | 9.4 | 15.4 | 10.0 | 24.9 |
| 35-44 years | -2.5 | -3.5 | -1.1 | -1.4 | -2.2 | -0.3 | -6.2 | -8.3 | -3.3 | 0.9 | -5.0 | 11.0 | -5.2 | -1.9 | -10.0 |
| 45-54 years | -0.1 | -0.7 | 0.7 | 0.9 | 0.4 | 1.6 | -4.2 | -5.6 | -2.3 | 4.4 | 7.8 | -1.2 | -1.6 | -2.7 | 0.0 |
| 55-64 years | 0.2 | 0.4 | -0.2 | 0.6 | 0.9 | 0.2 | -2.1 | -2.4 | -1.8 | -1.5 | 0.1 | -3.7 | 0.5 | 1.2 | -0.4 |
| 65-74 years | -0.8 | -1.0 | -0.6 | -0.6 | -0.8 | -0.4 | -2.1 | -1.9 | -2.5 | -0.5 | 1.8 | -3.1 | 2.2 | 0.6 | 4.1 |
| 75-84 years | 0.1 | -0.1 | 0.2 | 0.4 | 0.0 | 0.6 | -1.3 | -0.9 | -1.8 | -3.1 | -1.0 | -5.1 | -1.3 | -1.2 | -1.4 |
| 85 years and over | 0.5 | 0.1 | 0.7 | 0.8 | 0.5 | 0.9 | -1.8 | -3.4 | -1.1 | -8.0 | -14.7 | -4.0 | 0.2 | -2.2 | 2.0 |

¹Multiple-race data were reported by 34 states and the District of Columbia in 2008 and by 27 states and the District of Columbia in 2007. The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

²Death rates for 2008, especially for the younger age groups, may not be comparable to rates for previous years because American Indian or Alaska Native population estimates used as the denominators for computing rates in 2008 may not be comparable to population estimates used in earlier years; see "Technical Notes."

³Includes Aleuts and Eskimos.

⁴Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

⁵Death rates for "Under 1 year" (based on population estimates) differ from infant mortality rates (based on live births).

Hispanic origin—Problems of race and Hispanic-origin reporting affect Hispanic death rates and the comparison of rates for the Hispanic and non-Hispanic populations; see "Technical Notes." Mortality for Hispanics is somewhat understated because of net underreporting of Hispanic origin on the death certificate. Hispanic origin on the death certificate is underreported by an estimated 5 percent (17,19); see "Technical Notes." The age-adjusted death rate for the Hispanic population in 2008 was 532.2, a decrease of 2.5 percent from the rate of 546.1 observed in 2007 (Tables C and 2). In 2008, the age-adjusted rate for the non-Hispanic white population increased by 0.4 percent from 2007, and that for the non-Hispanic black population declined by 2.4 percent.

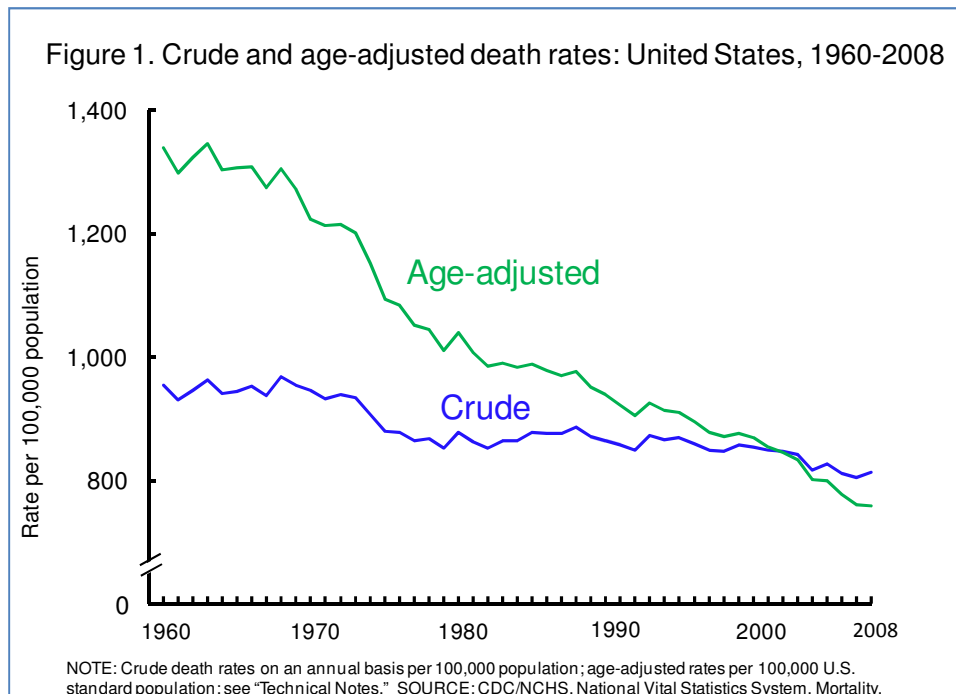
Among Hispanic males, the age-adjusted death rate decreased by 3.6 percent in 2008 from 2007. The age-adjusted death rate for non-Hispanic black males decreased 2.8 percent. Among Hispanic females, the age-adjusted death rate decreased by 1.5 percent. Rates increased for non-Hispanic white females by 0.5 percent and decreased for non-Hispanic black females by 1.9 percent (Tables C and 2).

The large differences in mortality between the Hispanic and non-Hispanic populations are partly a function of underreporting of Hispanic origin on death certificates (17,19). Death rates for the population of Hispanic origin are not adjusted for misclassification. (This contrasts with the methods used to produce life expectancies for the Hispanic population. See "Technical Notes.") The underreporting of Hispanic origin on the death certificate (relative to self-report while living) amounts to 5 percent (17). In addition to the apparent advantage in mortality brought about by this statistical artifact, various hypotheses have been proposed to explain Hispanics' favorable mortality outcomes. The most prevalent include the healthy migrant effect, which argues that Hispanic immigrants are selected for their good health and robustness, and the "salmon bias" effect, which posits that U.S. residents of Hispanic origin may return to their country of origin to die or when ill (20,21).

Within the Hispanic population, the age-adjusted death rate for males was 1.4 times the rate for females (Table 2). The corresponding male-to-female ratios were 1.4 for the non-Hispanic white population and 1.5 for the non-Hispanic black population. The male-to-female ratio (shown to one decimal place) of the age-adjusted death rate within the Hispanic population has remained constant at 1.4 since 2006. Age-adjusted death rates in 2008 for selected Hispanic subgroups (Table 5), in order of relative magnitude, were:

- + Puerto Rican population, 639.3 deaths per 100,000 U.S. standard population
- + Cuban population, 565.3
- + Mexican population, 553.5
- + Central and South American population, 259.9

The age-adjusted death rate significantly decreased from 2007 to 2008 for the Mexican (2.7 percent), and Cuban (5.3 percent) populations. A significant decrease is also observed for the Central and South American population, but this decrease should be interpreted with caution as it is probably an artifact caused by a change in the way that the Central and South American category is defined. (See "Technical Notes.") The observed increase of 0.4 percent in the Puerto Rican population is not statistically significant. The differences in age-adjusted death rates among the Mexican, Puerto Rican, and Cuban populations were not statistically significant. Tests of significant differences among the Hispanic subgroups are affected by the large variation in age-specific death rates for some of the subgroups, which reflects their relatively small population sizes.

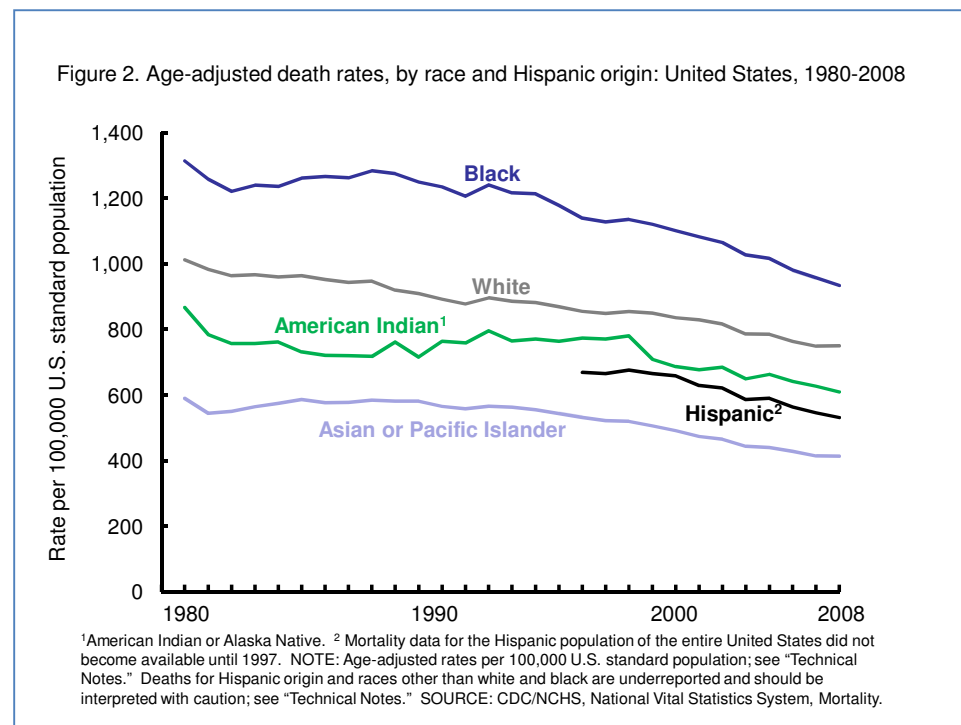


Death rates by age and sex

A statistically significant increase in age-specific death rate was observed from 2007 to 2008 in the age group 85 years and over. On the other hand, age-specific rates decreased for age groups less than 1 year, 5–14, 15–24, 25–34, 35–44 and 65–74 (Tables A, 11, 14 and 15; Figure 3).

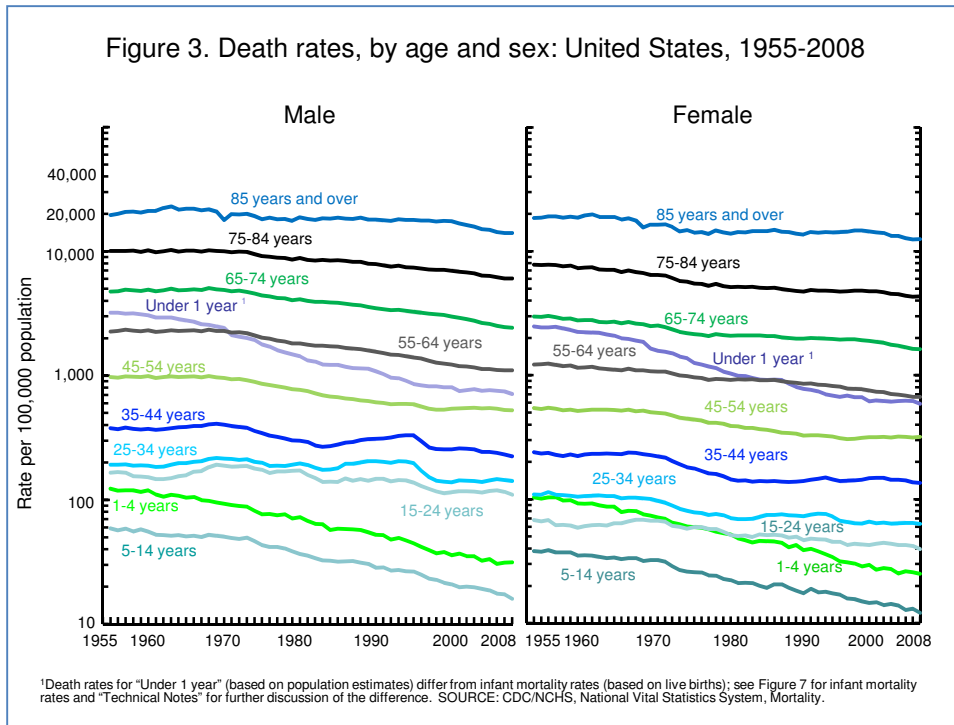
The death rates for males declined in 2008 from 2007 for age groups less than 1 year, 5–14, 15–24, 35–44 and 65–74. For females, the death rate increased for age group 85 years and over. Death rates among females declined for the age groups less than 1 year, 5–14 and 15–24. Other observed changes were not statistically significant.

Race—In 2008, the age-specific death rate increased by 0.9 percent for white males for age group 55–64 years. The rate declined for white males for age groups less than 1 year, 5–14, 15–24, 35–44 and 65–74 (Table A). The largest decrease was 10.0 percent for those aged 5–14. Other observed changes among white males by age group were not statistically significant. For the black male population in 2008, the rates decreased for most age groups: less than 1 year, 15–24, 25–34, 35–44, 45–54, 55–64 and 65–74. The largest statistically significant decrease for black males was for those aged 35–44, at 8.3 percent. For AIAN males in 2008, age-specific death rates decreased from 2007 for age groups less than 1 year, 1–4, and 85 years and over. Rates for API males decreased for those aged 1–4 and 15–24.



For white females, the death rate increased in 2008 for those aged 45–54, 75–84, and 85 and over. The rates decreased for age groups less than 1 year, 5–14 and 15–24. The largest decrease, 8.9 percent, was observed for age group 5–14. Age-specific rates for black females decreased for age groups 45–54, 65–74 and 75–84. For AIAN females, age-specific death rates only decreased significantly for those under 1

year. In 2008, age-specific death rates for API females increased by 24.9 percent for age group 25–34. On the other hand, the rate for API females decreased for age group 35–44. Other observed changes were not statistically significant.



Hispanic origin—For the Hispanic origin population in 2008 compared with 2007 (Table C), the age-specific death rate decreased for age groups under 1 year, 5–14, 15–24, 35–44, 45–54, 75–84, and 85 and over. The largest decrease was for the age group 5–14, at 14.2 percent. (No significant increases in age-specific death rates for Hispanics occurred from 2007 to 2008.) Rates for Hispanic males decreased for age groups under 1 year, 5–14, 15–24, 35–44, 45–54, 75–84, and 85 and over (same as for both sexes combined). The largest decrease was for those aged 5–14, at 19.6 percent. For Hispanic females, age-specific rates decreased by a statistically significant amount in 2008 from 2007 for those aged under 1 year, and 75–84. The largest decrease occurred for those under 1 year at 10.7 percent.

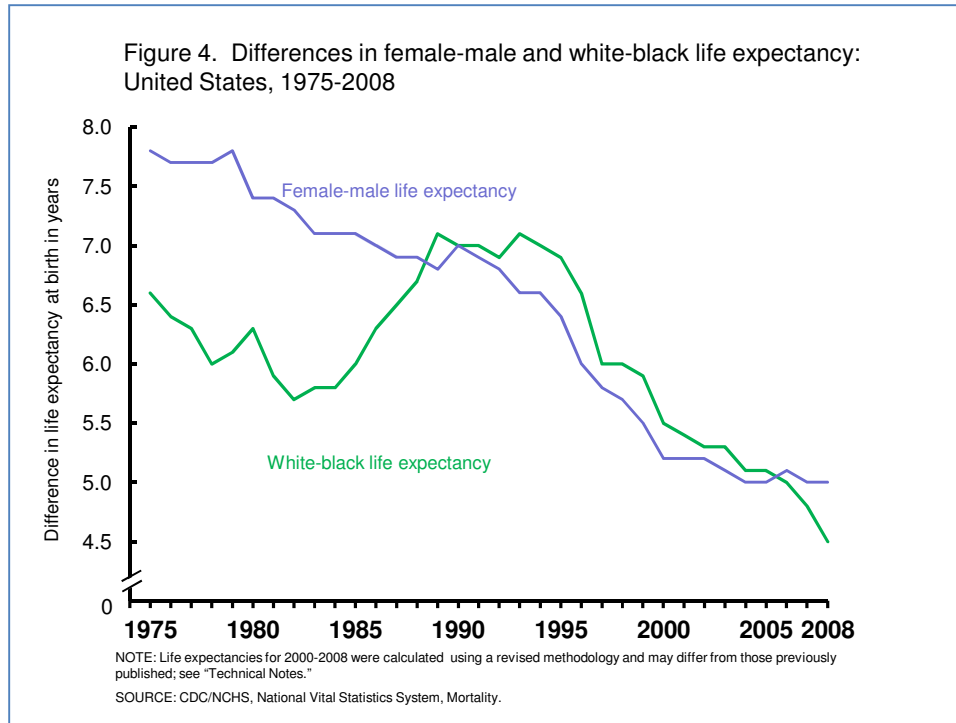
Expectation of life at birth and at specified ages

Life expectancy at birth represents the average number of years that a group of infants would live if the group was to experience throughout life the age-specific death rates present in the year of birth.

Life table data shown in this report for data years 2000–2007 are based on a methodology similar to that of the 1999 – 2001 decennial life tables. Beginning with final data reported for 2008, the life table methodology was revised by changing the smoothing technique used to estimate the life table functions at the oldest ages. This revision improves upon the methodologies used previously; see "Technical Notes." Life tables were generated for both sexes and by each sex for the following populations:

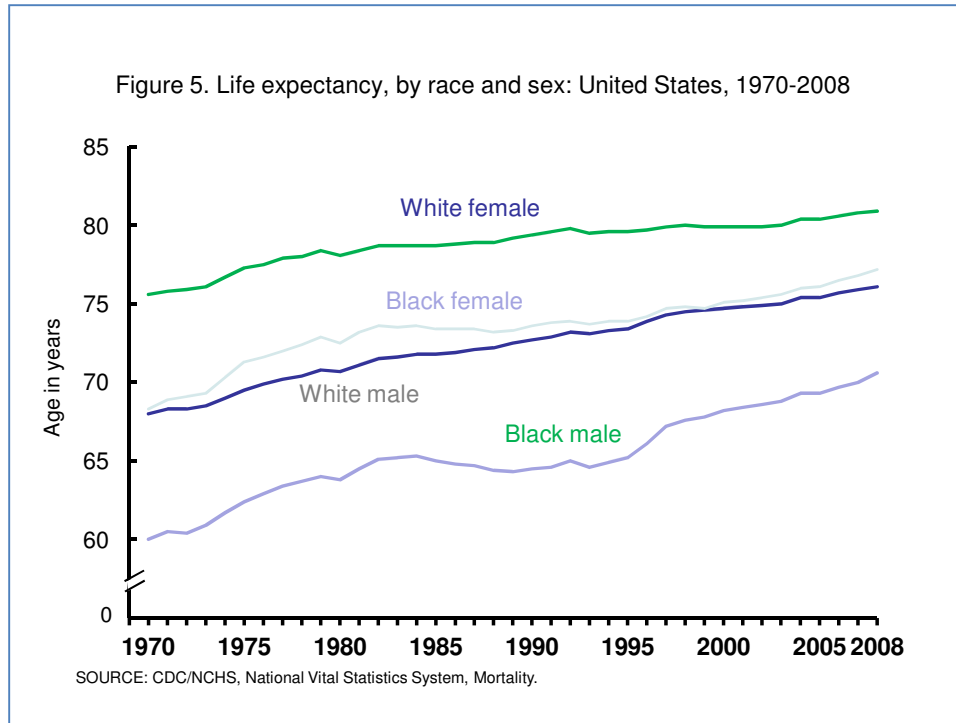
- + The total U.S. population
- + Black population
- + White population
- + Hispanic population
- + Non-Hispanic white population
- + Non-Hispanic black population.

In 2008, life expectancy at birth for the U.S. population was 78.1 years, an increase of 0.2 year from 77.9 in 2007 (Tables 6–8). This figure revises upward the life expectancy shown on an earlier, preliminary report on mortality for 2008 (2). The trend in U.S. life expectancy since 1900 has been one of gradual improvement with single-year decreases found occasionally. In 2008, the life expectancy for females was 80.6 years, a 0.2-year increase from 2007, and the life expectancy for males was 75.6 years, a 0.3-year increase from the previous year. From 1900 through the late 1970s, the sex gap in life expectancy widened (Figure 4; data prior to 1975 not shown), from 2.0 years to 7.8 years. Since its peak in the 1970s, the sex gap has been narrowing. In 2008 the difference in life expectancy between the sexes was 5.0 years, the same as it was in 2007.



Life expectancy increased 0.4 year for the black population in 2008 to 74.0 years compared with 2007 (73.6 years). Life expectancy for the white population increased 0.1 year to 78.5 years. The difference in life expectancy between the white and black populations in 2008 was 4.5 years, a 0.3-year decrease from the 2007 gap between the two races, and the smallest gap recorded since at least 1975 (Table 8). The white-black gap has been narrowing gradually from a peak of 7.1 years in 1989 to the current record low (Figure 4). This continues a long-term decline in the white-black difference in life expectancy that was interrupted from 1982 through 1989 when the gap widened.

With very few exceptions such as for 1980 and 1993, life expectancy has tended to increase every year since 1975 for white males. In contrast, life expectancy for black males declined every year from 1984 through 1989, then resumed the long-term trend of increase from 1990 through 1992, 1994 through 2004, and 2005 through 2008 (Table 8). For white females, life expectancy increased most years from 1970 through 1998. In 1999, life expectancy for white females fell below 1998's then record high, and it did not increase again until 2003. From 1989 through 1992, during 1994, and from 1996 through 1998, life expectancy for black females increased. In 1999, life expectancy for black females declined as it did for white females, only to begin climbing again in 2000.



Life expectancy for the Hispanic population increased 0.1 year in 2008 to 81.0 years compared with 2007 (Tables 7-8). Life expectancy figures for the Hispanic population have been available starting with data for 2006 (22). Since that year, life expectancy for the Hispanic population has increased by 0.4 year. In 2008, the life expectancy for the Hispanic female population was 83.3 years. The life expectancy for the Hispanic male population in 2008 was 78.4. The difference in life expectancy between the sexes for the Hispanic population was 4.9 years.

Among the six Hispanic origin-race-sex groups (Tables 7-8), Hispanic females have the highest life expectancy at birth (83.3 years), followed by non-Hispanic white females (80.8 years), Hispanic males (78.4 years), non-Hispanic black females (76.9 years), non-Hispanic white males (75.9 years), and non-Hispanic black males (70.2 years). Differences in life expectancy measured across these six groups ranged from 2.5 years (the difference in life expectancy between Hispanic females and non-Hispanic white females) to 13.1 years (the difference in life expectancy between Hispanic females and non-Hispanic black males).

Life tables shown in this report may be used to compare life expectancies at selected ages from birth to 100 years. For example, a person who has reached 65 years will live to an older age, on average, than one who has reached 50 years. On the basis of mortality experienced in 2008, a person aged 50 could expect to live an average of 31.0 more years for a total of 81.0 years. A person aged 65 could expect to live an average of 18.8 more years for a total of 83.8 years, and a person aged 85 could expect to live an average of 6.4 more years for a total of 91.4 years (Tables 6 and 7).

Leading causes of death

The 15 leading causes of death in 2008 accounted for 81.0 percent of all deaths in the United States (Tables B and 9). Causes of death are ranked according to the number of deaths; for ranking procedures, see “Technical Notes.” By rank, the 15 leading causes in 2008 were:

1. Diseases of heart (heart disease)
2. Malignant neoplasms (cancer)
3. Chronic lower respiratory diseases
4. Cerebrovascular diseases (stroke)
5. Accidents (unintentional injuries)
6. Alzheimer’s disease
7. Diabetes mellitus (diabetes)
8. Influenza and pneumonia
9. Nephritis, nephrotic syndrome and nephrosis (kidney disease)
10. Intentional self-harm (suicide)
11. Septicemia
12. Chronic liver disease and cirrhosis
13. Essential hypertension and hypertensive renal disease (hypertension)
14. Parkinson’s disease
15. Assault (homicide)

Table B. Percentage of total deaths, death rates, age-adjusted death rates for 2008, percentage change in age-adjusted death rates from 2007 to 2008, and ratio of age-adjusted death rates by race and sex for the 15 leading causes of death for the total population in 2008: United States

[Crude death rates on an annual basis per 100,000 population: age-adjusted rates per 100,000 U.S. standard population. The asterisks preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Cause-of-death coding changes in 2007 and 2008 may affect comparability of data between 2008 and previous years for various causes of death; see "Technical Notes"]

| Rank ¹ | Cause of death (based on the ICD-10, 2004) | Number | Percent of total deaths | 2008 crude death rate | Age-adjusted death rate | | | |
|-------------------|---|-----------|-------------------------|-----------------------|-------------------------|------------------------|----------------|-----------------------------|
| | | | | | 2008 | Percent change to 2007 | Ratio | |
| | | | | | | | Male to female | Black ² to white |
| ... | All causes | 2,471,984 | 100.0 | 813.0 | 758.3 | -0.2 | 1.4 | 1.2 |
| 1 | Diseases of heart (I00-I09,I11,I13,I20-I51) | 616,828 | 25.0 | 202.9 | 186.5 | -2.3 | 1.5 | 1.3 |
| 2 | Malignant neoplasms (C00-C97) | 565,469 | 22.9 | 186.0 | 175.3 | -1.7 | 1.4 | 1.2 |
| 3 | Chronic lower respiratory diseases (J40-J47) | 141,090 | 5.7 | 46.4 | 44.0 | 7.8 | 1.3 | 0.7 |
| 4 | Cerebrovascular diseases (I60-I69) | 134,148 | 5.4 | 44.1 | 40.7 | -3.6 | 1.0 | 1.5 |
| 5 | Accidents (unintentional injuries) (V01-X59, Y85-Y86) | 121,902 | 4.9 | 40.1 | 38.8 | -3.0 | 2.1 | 0.8 |
| 6 | Alzheimer's disease (G30) | 82,435 | 3.3 | 27.1 | 24.4 | 7.5 | 0.8 | 0.8 |
| 7 | Diabetes mellitus (E10-E14) | 70,553 | 2.9 | 23.2 | 21.8 | -3.1 | 1.4 | 2.0 |
| 8 | Influenza and pneumonia (J09-J18) ³ | 56,284 | 2.3 | 18.5 | 16.9 | 4.3 | 1.3 | 1.1 |
| 9 | Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 48,237 | 2.0 | 15.9 | 14.8 | 2.1 | 1.4 | 2.2 |
| 10 | Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | 36,035 | 1.5 | 11.9 | 11.6 | 2.7 | 3.9 | 0.4 |
| 11 | Septicemia (A40-A41) | 35,927 | 1.5 | 11.8 | 11.1 | 0.9 | 1.2 | 2.1 |
| 12 | Chronic liver disease and cirrhosis (K70, K73-K74) | 29,963 | 1.2 | 9.9 | 9.2 | 1.1 | 2.1 | 0.7 |
| 13 | Essential hypertension and hypertensive renal disease (I10,I12,I15) | 25,742 | 1.0 | 8.5 | 7.7 | 4.1 | 1.0 | 2.5 |
| 14 | Parkinson's disease (G20-G21) | 20,483 | 0.8 | 6.7 | 6.4 | 0.0 | 2.3 | 0.4 |
| 15 | Assault (homicide) (*U01-*U02, X85-Y09, Y87.1) | 17,826 | 0.7 | 5.9 | 5.9 | -3.3 | 3.9 | 5.3 |
| ... | All other causes (residual) | 469,062 | 19.0 | 154.3 | ... | ... | ... | ... |
| ... | Category not applicable. | | | | | | | |
| | ¹ Rank based on number of deaths; see "Technical Notes." | | | | | | | |
| | ² Multiple-race data were reported by 27 states and the District of Columbia in 2008. The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes." | | | | | | | |
| | ³ New ICD-10 code J09 (Influenza due to identified avian influenza virus) was added to the category in 2007. | | | | | | | |

The 15 leading causes of death in 2008 remained the same as in 2007, but with notable changes in the ranking order of conditions. Stroke had been the third leading cause of death in the United States for over five decades, continually trailing heart disease and cancer. In 2008, however, Chronic lower respiratory diseases replaced stroke as the third leading cause of death. Stroke is now the fourth leading cause of death. The change in the ranks of these two causes of death is mostly driven by a decreasing trend in the numbers of deaths from stroke (from 167,661 deaths in 2000 to 134,148 in 2008). A corresponding increase in the number of deaths from Chronic lower respiratory diseases during this period, particularly from 2007 to 2008, also helped to bring about this transposition in ranks. The increase in deaths from Chronic lower respiratory diseases from 2007 to 2008 needs to be interpreted with caution, however. Changes were made in 2008 to the way that Chronic lower respiratory diseases are coded and classified, but it is unclear at this point to what extent these changes contributed to the single-year increase shown for this cause of death (7.8 percent). NCHS periodically revises its cause-of-death coding practices to reflect and follow changes to coding rules made by the World Health Organization (WHO). Starting with 2008, death certificates that independently mention pneumonia in conjunction with a chronic lower respiratory problem are now classified as "Chronic obstructive pulmonary disease with acute lower respiratory infection," which is one of the conditions that makes up the larger category known as Chronic lower respiratory diseases. Chronic obstructive pulmonary disease

with acute lower respiratory infection has been underused in the past, and the recent change aims to address this underuse (see “Technical Notes”). Preliminary analysis of death certificates classified to Chronic lower respiratory diseases suggest that, had the coding rule change favoring classification to Chronic obstructive pulmonary disease with acute lower respiratory infection not been implemented, a substantial number of these deaths would have been counted as deaths from pneumonia. A separate analysis focusing on this issue will include a more detailed description of the effects that this change in coding and classification had on counts of deaths from Chronic lower respiratory diseases.

Also in contrast with final data for 2007, septicemia and suicide traded rank numbers among the leading causes of death in 2008. Suicide had consistently been the 11th cause of death at least since 1999. In 2008 suicide is the 10th leading cause of death followed by septicemia in the 11th position. (This change also contrasts with results from the preliminary mortality report for 2008 (2) which shows suicide in the 11th position among the leading causes of death.) The surge in numbers of suicides in the final file compared to the preliminary file is likely the result of delays in finalizing investigations into these types of deaths with medico-legal implications.

The pattern of mortality varies greatly with age. As a result, the shifting age distribution of a population can significantly influence changes in crude death rates over time. Age-adjusted death rates, in contrast, eliminate the influence of such differences in the population age structure. Therefore, we use age-adjusted death rates to depict trends for leading causes of death in this report as they are better than crude rates for showing changes in mortality over time and among causes of death (Figure 6).

In 2008, the number of deaths increased from 2007 by 2.0 percent, or 48,272 more deaths (Table 1). The age-adjusted death rate for all causes decreased by 0.2 percent.

From 2007 to 2008, the age-adjusted death rate declined significantly for 6 of the 15 leading causes of death. The age-adjusted death rate for the leading cause of death, heart disease, decreased by 2.3 percent. The age-adjusted death rate for cancer decreased by 1.7 percent (Tables B and 9). Deaths from these two diseases combined accounted for 47.8 percent of deaths in the United States in 2008. Although heart disease mortality has exhibited a downward trend since 1950, cancer mortality began to decline only in the early 1990s (23). The age-adjusted death rate also decreased significantly for stroke (3.6 percent).

Other leading causes of death that showed significant decreases in 2008 relative to 2007 were: Accidents (unintentional injuries), 3.0 percent; diabetes, 3.1 percent; and homicide, 3.3 percent.

The age-adjusted death rates for Chronic lower respiratory diseases increased significantly (by 7.8 percent) between 2007 and 2008. As explained above, this single-year increase must be interpreted with caution until the coding changes that affected this condition can be fully evaluated. The age-adjusted death rate also increased for Alzheimer’s disease (7.5 percent), Influenza and pneumonia (4.3 percent), kidney disease (2.1 percent), suicide (2.7 percent), and hypertension (4.1 percent).

Observed increases for the age-adjusted death rates for septicemia and for Chronic liver disease and cirrhosis were not significant. The age-adjusted death rate for Parkinson’s disease (14th leading cause of death) remained unchanged from 2007 to 2008.

Human immunodeficiency virus (HIV) disease was not among the 15 leading causes of death in 2008. The age-adjusted death rate for HIV disease declined by 10.8 percent from 2007 to 2008 (Table 16). This is the largest single-year drop in the age-adjusted death rate for HIV disease since 1998, when the rate

decreased by 18.3 percent relative to the previous year. Historically, HIV disease mortality reached its highest level in 1995 after a period of increase from 1987 through 1994. Subsequently, the rate for this disease decreased an average of 33.0 percent per year from 1995 through 1998, and 5.1 percent per year from 1999 through 2008 (24). For all races combined in the age group 15–24, HIV disease was the 11th leading cause of death in 2008—unchanged in rank from 2007 in this age group. HIV disease remained the sixth leading cause of death for the age group 25–44. Among decedents aged 45–64, HIV disease dropped from 11th leading cause in 2007 to 12th leading cause in 2008.

Enterocolitis due to *Clostridium difficile* (*C. difficile*)—a predominantly antibiotic-associated inflammation of the intestines caused by *C. difficile*, a gram-positive, anaerobic, spore-forming bacillus—is of growing concern. The disease is often acquired in hospitals or other health-care facilities with long-term patients or residents and accounts for an increasing number of deaths (25,26). In 1999, 793 deaths were due to *C. difficile*, compared with 6,372 *C. difficile* deaths in 2007 (23) and 7,476 deaths in 2008. The age-adjusted death rate for this cause increased from 2.0 deaths per 100,000 standard population in 2007 to 2.3 deaths per 100,000 standard population in 2008 (15.0 percent). In 2008, *C. difficile* ranked as the 18th leading cause of death for the population aged 65 and over. Approximately 92 percent of deaths from *C. difficile* occurred to people aged 65 and older (Table 10).

Changes in mortality levels by age and cause of death have a major effect on changes in life expectancy. Life expectancy at birth increased in 2008 over 2007 by 0.2 year because of decreases in mortality from heart disease, cancer, unintentional injury, stroke, and diabetes. Decreases in mortality from these same causes of death also generated increases in life expectancy among the male population. Although increases in life expectancy for the female population were brought about by decreases in mortality for these same conditions, cancer was the leading contributor to this net effect among women rather than heart disease. Increases in life expectancy in 2008 from 2007 for the population as a whole were slightly offset by increases in mortality from Chronic lower respiratory diseases, Alzheimer's disease, Influenza and pneumonia, suicide, and hypertension. (In other words, if mortality for these causes of death had not increased as much as they did in 2008, the increase in life expectancy for the whole population would have been more than 0.2 year. For discussion of contributions to the change in life expectancy, see “Technical Notes.”)

The relative risk of death in one population group compared with another can be expressed as a ratio. Ratios based on age-adjusted death rates show that males have higher rates than females for 12 of the 15 leading causes of death (Table B), with rates for males being at least two times those for females for five of these leading causes. The largest ratios were for suicide and homicide, each nearly four times higher (3.9) for males than for females. Other large ratios were evident for Parkinson's disease (2.3), unintentional injuries, and Chronic liver disease and cirrhosis (2.1 each); heart disease (1.5); and cancer, diabetes, and kidney disease (1.4 each).

Age-adjusted death rates for the black population were higher than those for the white population for 9 of the 15 leading causes of death (Table B). The largest ratio was for homicide, at 5.3. Other causes for which the ratio was high include hypertension (2.5), kidney disease (2.2), septicemia (2.1), diabetes (2.0), stroke (1.5), heart disease (1.3), and cancer (1.2). For six of the leading causes, age-adjusted rates were lower for the black population than for the white population. The smallest black-to-white ratios were for suicide and Parkinson's disease (0.4 each); that is, the risk of dying from suicide is more than double for the white population than for the black population. Other conditions with a low black-to-white ratio were Chronic lower respiratory diseases and Chronic liver disease and cirrhosis (0.7 each); Alzheimer's disease, and unintentional injuries (0.8 each).

The difference in life expectancy between the black and white populations narrowed from 4.8 years in 2007 to 4.5 years in 2008 (Table 8). The narrowing in the black-white life expectancy gap was due primarily to greater improvements in mortality for the black population than for the white population. In particular, the black population gained ground due to decreases in death rates for unintentional injuries, HIV disease, homicide, heart disease and diabetes (data not shown).

Death rates for the AIAN population are not adjusted for misclassification. Given that the rates for the AIAN population are underestimated by about 30 percent (17), disparities in the age-adjusted death rates should be interpreted with caution whenever making comparisons across races. For example, even though rates were lower for the AIAN population than the white population for 8 of the 15 leading causes (Table B), the actual ratios are likely higher than those shown. Age-adjusted rates were higher for the AIAN population than the white population for five leading causes. The largest ratio was for Chronic liver disease and cirrhosis (2.7). Other causes for which the ratio was high include homicide (1.9), diabetes (1.7), unintentional injuries (1.3) and kidney disease (1.2). The actual risk ratios for the AIAN and white populations for these conditions are most likely higher than the values shown.

For the API population, death rates are not adjusted for misclassification and are underestimated by about 7 percent due to underreporting on death certificates (17). Therefore, even though the level of underestimation for this population is not as dramatic as that for the AIAN population, similar caution should be exercised when interpreting rate disparities involving the API population and other races. Age-adjusted death rates were lower than those for the white population for 14 of the 15 leading causes (Table B). The largest ratios were for hypertension (1.0), Influenza and pneumonia (0.9), stroke, and diabetes (0.8 each).

Age-adjusted death rates were lower for the Hispanic population for 11 of the 15 leading causes of death compared with the non-Hispanic white population (Tables B and 17). Because rates for the Hispanic population are not adjusted for misclassification and are underestimated by about 5.0 percent (17), the disparities shown in this report (as measured by rate ratios) should be interpreted with caution because the actual ratios are likely to be larger than the reported values. Age-adjusted death rates for the Hispanic population were greater than for the non-Hispanic white population for 3 of the 15 leading causes of death. The largest ratio was for homicide (2.4), followed by Chronic liver disease, cirrhosis, and diabetes (1.5 each). It is reasonable to assume that the actual risk ratios for the Hispanic and non-Hispanic white populations for these conditions are actually higher than the values shown.

Table C. Percentage change in death rates and age-adjusted death rates in 2008 from 2007, by age, Hispanic origin, race for non-Hispanic population, and sex: United States

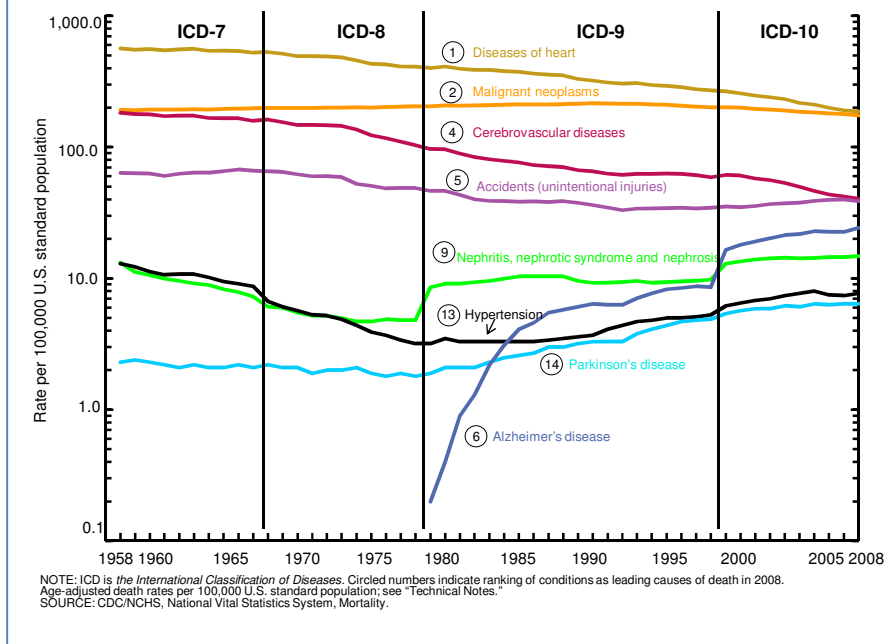
[Based on death rates on an annual basis per 100,000 population, and age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race. Data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes."]

| Age | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | | Non-Hispanic white | | | Non-Hispanic black | | |
|--|--------------------------|------|--------|------------|-------|--------|---------------------------|------|--------|--------------------|------|--------|--------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Percent change | | | | | | | | | | | | | | | |
| All ages | | | | | | | | | | | | | | | |
| Crude | 1.2 | 1.0 | 1.4 | -0.4 | -1.5 | 1.0 | 1.5 | 1.4 | 1.6 | 1.9 | 1.9 | 1.8 | -0.7 | -1.3 | -0.1 |
| Age-adjusted | -0.2 | -0.6 | 0.0 | -2.5 | -3.6 | -1.5 | -0.1 | -0.3 | 0.1 | 0.4 | 0.2 | 0.5 | -2.4 | -2.8 | -1.9 |
| Under 1 year ³ | -5.0 | -5.1 | -4.8 | -9.5 | -8.6 | -10.7 | -3.6 | -3.9 | -3.1 | -3.0 | -3.6 | -2.2 | -2.9 | -3.2 | -2.6 |
| 1-4 years | -1.0 | 0.6 | -2.7 | -5.4 | -1.8 | -9.2 | 0.7 | 1.9 | -0.8 | 2.4 | 4.3 | 0.0 | 1.1 | 5.3 | -4.0 |
| 5-14 years | -7.8 | -8.0 | -7.6 | -14.2 | -19.6 | -7.3 | -6.4 | -5.6 | -6.8 | -7.7 | -6.8 | -9.8 | -3.2 | -3.9 | -2.8 |
| 15-24 years | -5.4 | -5.2 | -6.0 | -9.4 | -9.9 | -6.6 | -4.6 | -4.2 | -6.2 | -5.1 | -3.6 | -8.7 | -3.2 | -4.9 | 3.0 |
| 25-34 years | -1.5 | -1.5 | -1.7 | -2.4 | -2.6 | -2.3 | -1.4 | -1.4 | -1.6 | -0.8 | -0.3 | -2.2 | -5.8 | -6.6 | -4.8 |
| 35-44 years | -2.5 | -3.5 | -1.1 | -3.2 | -4.4 | -0.6 | -2.3 | -3.0 | -1.0 | -0.8 | -1.4 | 0.0 | -6.2 | -8.2 | -3.4 |
| 45-54 years | -0.1 | -0.7 | 0.7 | -4.9 | -6.7 | -1.6 | 0.3 | 0.0 | 0.9 | 1.6 | 1.4 | 2.0 | -4.4 | -5.8 | -2.4 |
| 55-64 years | 0.2 | 0.4 | -0.2 | 0.1 | 0.0 | 0.1 | 0.2 | 0.4 | -0.2 | 0.6 | 0.9 | 0.2 | -2.0 | -2.3 | -1.6 |
| 65-74 years | -0.8 | -1.0 | -0.6 | -1.3 | -1.9 | -0.8 | -0.8 | -1.0 | -0.6 | -0.6 | -0.8 | -0.4 | -2.1 | -1.8 | -2.5 |
| 75-84 years | 0.1 | -0.1 | 0.2 | -2.3 | -2.3 | -2.4 | 0.3 | 0.1 | 0.4 | 0.6 | 0.2 | 0.8 | -1.3 | -0.8 | -1.8 |
| 85 years and over | 0.5 | 0.1 | 0.7 | -2.8 | -6.4 | -0.8 | 0.7 | 0.5 | 0.8 | 1.1 | 0.9 | 1.1 | -1.8 | -3.4 | -1.2 |
| ¹ Figures for origin not stated are included in "all origins" but not distributed among specified origins. ² Includes races other than white and black. ³ Death rates for "Under 1 year" (based on population estimates) differ from infant mortality rates (based on live births). | | | | | | | | | | | | | | | |

Life table partitioning analysis indicates that the difference of 2.6 years in life expectancy between the Hispanic population and non-Hispanic white is mostly explained by lower death rates from cancer, heart disease, Chronic lower respiratory diseases, unintentional injuries and suicide experienced by the Hispanic population. (For discussion of contributions to the difference in life expectancy, see "Technical Notes.")

Leading causes of death for the total population in 2008 and for specific subpopulations are examined in more detail in a separate National Vital Statistics Report on leading causes by age, race, Hispanic origin, and sex (4).

Figure 6. Age-adjusted death rates for selected leading causes of death: United States, 1958-2008



Injury mortality by mechanism and intent

In 2008, a total of 181,226 deaths were classified as injury related (Table 18). Injury data are presented using the external cause-of-injury mortality matrix for ICD-10 as jointly conceived by the International Collaborative Effort (ICE) on Injury Statistics and the Injury Control and Emergency Health Services section, known as ICEHS, of the American Public Health Association (27,28). The ICD codes for injuries have two essential dimensions: the mechanism of the injury and its manner or intent. The mechanism involves the circumstances of the injury (e.g., fall, motor vehicle accident, or poisoning). The manner or intent involves whether the injury was purposefully inflicted (where it can be determined) and, when intentional, whether the injury was self-inflicted (suicide) or inflicted upon another person (assault). In the List of 113 Selected Causes of Death, the focus is on manner or intent, with subcategories showing selected mechanisms. The matrix has two distinct advantages for the analysis of injury mortality data: it contains a comprehensive list of mechanisms, and data can be displayed by mechanism with subcategories of intent or vice versa. Four major mechanisms of injury in 2008— poisoning, motor-vehicle traffic, firearm, and fall— accounted for 74.8 percent of all injury deaths. This represents the first year that poisoning injury deaths surpass motor-vehicle traffic fatalities.

Poisoning—In 2008, 41,080 deaths occurred as the result of poisonings, 22.7 percent of all injury deaths (Table 18). The majority of poisoning deaths were either unintentional (75.7 percent) or suicides (15.7 percent). However, 8.3 percent of poisoning deaths were of undetermined intent. The age-adjusted death rate for poisoning increased by 2.3 percent from 13.1 deaths per 100,000 U.S. standard population in 2007 to 13.4 in 2008. The age-adjusted death rate for unintentional poisoning increased by 4.1 percent from 9.8 in 2007 to 10.2 in 2008. Unintentional poisoning death rates in the United States have increased each year from 1999 through 2008 (data prior to 2008 are not shown).

Motor-vehicle traffic—In 2008, motor-vehicle traffic-related injuries resulted in 37,985 deaths, accounting for 21.0 percent of all injury deaths (Table 18). The age-adjusted death rate for motor-vehicle traffic-related injuries decreased by 10.9 percent from 13.8 per 100,000 standard population in 2007 to 12.3 in 2008.

Firearm—In 2008, 31,593 persons died from firearm injuries in the United States (Tables 18 and 19), accounting for 17.4 percent of all injury deaths that year. The two major component causes of all firearm injury deaths in 2008 were suicide at 57.7 percent and homicide at 38.5 percent. Even though the year-to-year observed difference in age-adjusted death rate for firearm injury (all intents) was not statistically significant, notable changes took place in firearm mortality according to intent: The age-adjusted death rate for firearm suicide increased by 3.6 percent from 2007, while the death rate for firearm homicide decreased by 4.8 percent in 2008 from 2007.

Fall—In 2008, 24,820 persons died as the result of falls, 13.7 percent of all injury deaths (Table 18). The overwhelming majority of fall-related deaths (96.7 percent) were unintentional. In 2008, the age-adjusted death rate for falls increased significantly by 4.1 percent, from 7.3 deaths per 100,000 U.S. standard population in 2007 to 7.6.

Drug-induced mortality

In 2008, a total of 38,649 persons died of drug-induced causes in the United States (Tables 10, 12 and 13). This category includes not only deaths from poisoning and medical conditions caused by dependent and nondependent use of legal or illegal drugs, but also poisoning from medically prescribed and other drugs. It excludes unintentional injuries, homicides, and other causes indirectly related to drug use, as well as newborn deaths due to the mother's drug use. (For a list of drug-induced causes, see "Technical Notes." See also the discussion of poisoning mortality that uses the more narrow definition of poisoning as an injury in the section titled "Injury mortality by mechanism and intent.")

For males in 2008, the age-adjusted death rate for drug-induced causes was 1.7 times the rate for females. The age-adjusted death rate for black females was 41.0 percent lower than the rate for white females, and the rate for black males was 21.6 percent lower than the rate for white males. The age-adjusted death rate for drug-induced causes for the API population was 86.2 percent lower than that for the white population (Table 16).

The age-adjusted death rate for drug-induced causes for the Hispanic population remained the same in 2008 as it was in 2007. The rate for the non-Hispanic white population was 2.4 times the rate of the Hispanic population. The rate for the non-Hispanic black population was 1.5 times higher than that for the Hispanic population (Table 17).

In 2008, the age-adjusted death rate for drug-induced causes for the U.S. population remained unchanged statistically from 2007. Among the major race-sex and race-ethnic-sex groups during the same period, the age-adjusted death rate for drug-induced causes decreased by 13.6 percent for the black population (down by 15.1 percent for black females, and by 13.0 percent for black males). The age-adjusted death rate for drug-induced causes increased by 2.9 percent for white females, and by 31.0 percent for AIAN males.

Alcohol-induced mortality

In 2008, a total of 24,189 persons died of alcohol-induced causes in the United States (Tables 10, 12 and 13). This category includes not only deaths from dependent and nondependent use of alcohol, but also accidental poisoning by alcohol. It excludes unintentional injuries, homicides, and other causes indirectly related to alcohol use, as well as deaths due to fetal alcohol syndrome (for a list of alcohol-induced causes, see "Technical Notes").

In 2008, the age-adjusted death rate for alcohol-induced causes for males was 3.2 times the rate for females. Compared with the rate for the white population, the rate for the black population was 19.5 percent lower. The age-adjusted death rate for alcohol-induced causes is also lower (by 76.6 percent) for the API population when compared against the white population.

In 2008, the age-adjusted death rate for alcohol-induced causes for the Hispanic population decreased by 5.4 percent from 2007. The alcohol-induced death rate for non-Hispanic white was 14.8 percent lower than the rate for Hispanic. The rate for the non-Hispanic black population was 27.3 percent lower than the rate for Hispanic.

The observed difference from 2007–2008 in the age-adjusted death rate for alcohol-induced causes for the total population was not statistically significant. The age-adjusted death rate decreased by 5.4 percent for the Hispanic population (specifically for males, down by 7.9 percent). The rate increased 4.2 percent for non-Hispanic white (specifically for males, up by 4.6 percent).

State of residence

Mortality patterns vary considerably by state (Table 19). The state with the highest age-adjusted death rate in 2008 was West Virginia (958.5 per 100,000 U.S. standard population), with a rate 26.4 percent above the national average (758.3). The state with the lowest age-adjusted death rate was Hawaii (590.6 per 100,000 standard population), with a rate 22.1 percent below the national average. The age-adjusted death rate for West Virginia was 62.3 percent higher than the rate for Hawaii.

Variations in mortality by state are associated with differences in socioeconomic status, race, and ethnic composition as well as differences in risk for specific causes of death (29).

Infant mortality

In 2008, a total of 28,059 deaths occurred in children under age 1 year (Table D). This number represents 1,079 fewer infant deaths in 2008 than in 2007. The infant mortality rate was 6.61 per 1,000 live births, the neonatal mortality rate (deaths of infants aged 0–27 days per 1,000 live births) was 4.29, and the postneonatal mortality rate (deaths of infants aged 28 days–1 year per 1,000 live births) was 2.32 in 2008. (Figure 7; see "Technical Notes" for information on alternative data sources.) The year-to-year decrease of 2.1 percent in the infant mortality rate from 2007 to 2008 was statistically significant. The neonatal mortality rate also decreased by 2.9 percent. The differences observed between postneonatal mortality rates for females and males from 2007 to 2008 were not statistically significant.

Table D. Number of infant, neonatal, and postneonatal deaths and mortality rates, by sex: United States, 2007-2008

[Rates are infant (under 1 year), neonatal (under 28 days), and postneonatal (28 days–11 months) deaths per 1,000 live births in specified group]

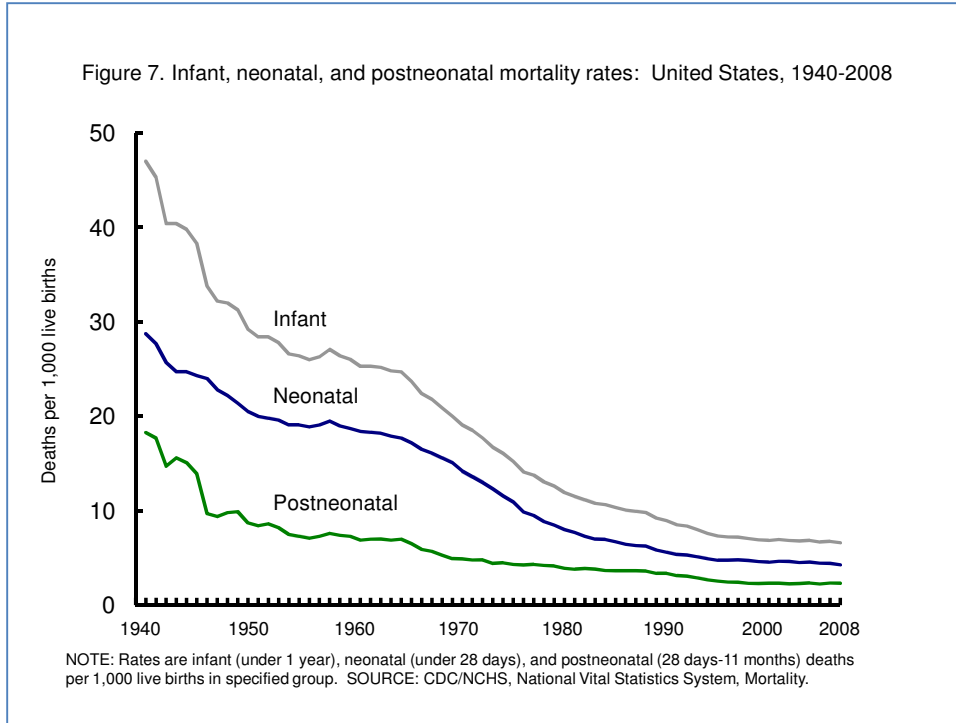
| Infant age and sex | 2008 | | 2007 | | Percent change ¹ from 2007 to 2008 |
|---------------------|--------|------|--------|------|--|
| | Number | Rate | Number | Rate | |
| Infant | | | | | |
| Total | 28,059 | 6.61 | 29,138 | 6.75 | -2.1 |
| Male | 15,669 | 7.21 | 16,293 | 7.38 | -2.3 |
| Female | 12,390 | 5.97 | 12,845 | 6.09 | -2.0 |
| Neonatal | | | | | |
| Total | 18,211 | 4.29 | 19,058 | 4.42 | -2.9 |
| Male | 10,144 | 4.67 | 10,587 | 4.79 | -2.5 |
| Female | 8,067 | 3.89 | 8,471 | 4.02 | -3.2 |
| Postneonatal | | | | | |
| Total | 9,848 | 2.32 | 10,080 | 2.34 | -0.9 |
| Male | 5,525 | 2.54 | 5,706 | 2.58 | -1.6 |
| Female | 4,323 | 2.08 | 4,374 | 2.07 | 0.5 |

¹Based on a comparison of the 2008 and 2007 mortality rates.

The 10 leading causes of infant death in 2008 accounted for 69.0 percent of all infant deaths in the United States (Table 5). By rank, the 10 leading causes were:

- 1 Congenital malformations, deformations and chromosomal abnormalities
- 2 Disorders related to short gestation and low birth weight, not elsewhere classified
- 3 Sudden infant death syndrome
- 4 Newborn affected by maternal complications of pregnancy
- 5 Accidents (unintentional injuries)
- 6 Newborn affected by complications of placenta, cord and membranes
- 7 Bacterial sepsis of newborn
- 8 Respiratory distress of newborn
- 9 Diseases of the circulatory system
- 10 Neonatal hemorrhage

The 10 leading causes of infant death were the same in 2008 as in 2007 (23). The ranks of these leading causes also remained the same for 2008 as in 2007.



Changes in rates by cause of death among the 10 leading causes were statistically significant for only two conditions: In 2008, Bacterial sepsis of newborn (seventh leading cause of infant death) decreased by 13.2 percent and Respiratory distress of newborn (eighth leading cause of infant death) decreased by 19.1 percent from 2007 (Table E).

Table E. Number of infant deaths, percentage of total infant deaths, and infant mortality rates for 2008, and percentage change in infant mortality rates in 2008 from 2007 for the 10 leading causes of infant death in 2008: United States

[Rates are infant deaths per 100,000 live births]

| Rank ¹ | Cause of death (based on ICD-10, 2004) | Number | Percent of total deaths | Rate | Percent change ² from 2007 to 2008 |
|-------------------|---|--------|-------------------------|-------|---|
| ... | All causes | 28,059 | 100.0 | 660.6 | -2.1 |
| 1 | Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 5,638 | 20.1 | 132.7 | -1.0 |
| 2 | Disorders related to short gestation and low birth weight, not elsewhere classified (P07) | 4,754 | 16.9 | 111.9 | -0.5 |
| 3 | Sudden infant death syndrome (R95) | 2,353 | 8.4 | 55.4 | -2.5 |
| 4 | Newborn affected by maternal complications of pregnancy (P01) | 1,765 | 6.3 | 41.6 | 1.5 |
| 5 | Accidents (unintentional injuries) (V01-X59) | 1,315 | 4.7 | 31.0 | 4.0 |
| 6 | Newborn affected by complications of placenta, cord and membranes (P02) | 1,080 | 3.8 | 25.4 | -3.4 |
| 7 | Bacterial sepsis of newborn (P36) | 700 | 2.5 | 16.5 | -13.2 |
| 8 | Respiratory distress of newborn (P22) | 630 | 2.2 | 14.8 | -19.1 |
| 9 | Diseases of the circulatory system (I00-I99) | 594 | 2.1 | 14.0 | -3.4 |
| 10 | Neonatal hemorrhage (P50-P52,P54) | 556 | 2.0 | 13.1 | -5.1 |
| ... | All other causes (residual) | 8,674 | 30.9 | 204.2 | ... |

... Category not applicable.
¹Based on number of deaths; see "Technical Notes."
²Based on a comparison of the 2007 infant mortality rate with the 2008 infant mortality rate.

The ratio of male-to-female infant mortality rates was 1.2 in 2008—the same as in 2007. The ratio of black-to-white infant mortality rates was 2.3 in 2008—the same as in 2007. The infant mortality rate did not change significantly in 2008 from 2007 for white infants, but it decreased by 3.8 percent for black infants (Table 20). Race cited on the death certificate is considered to be relatively accurate for white and black infants (17). For other race groups, however, race may be misreported on the death certificate (30). Generally, the National Vital Statistics report that uses data from the linked file of live births and infant deaths provides better measures of infant mortality by race (30); see “Technical Notes.”

Hispanic infant mortality—In 2008, the infant mortality rate for Hispanic infants was 5.66 deaths per 1,000 live births. For non-Hispanic white infants, the infant mortality rate was 5.63; and for non-Hispanic black, the infant mortality rate was 13.14 (data not shown). Among Hispanic subgroups, the infant mortality rate was 7.88 per 1,000 live births for Puerto Rican, 5.99 for Mexican, 4.73 for Cuban, and 3.13 for Central and South American populations. When analyzed by Hispanic origin, specified Hispanic origin, and race for non-Hispanic, only the infant mortality rate for non-Hispanic black showed any statistically significant change for 2008 relative to 2007. The infant mortality rate for non-Hispanic black in 2008 decreased by 4.5 percent from 2007.

Infant mortality rates by specified Hispanic origin and race for non-Hispanic origin are somewhat understated and better measured using data from the linked file of live births and infant deaths (31); see “Technical Notes.”

Additional mortality tables based on 2008 final data

Beginning with data year 2008, trend data on drug-induced causes, alcohol-induced causes, and injury by firearms are available as supplemental tables located in the NCHS website <http://www.cdc.gov/nchs/>. Likewise, mortality data by educational attainment, marital status, and injury at work are also available as supplemental tables.

References

1. - Hoyert D, Singh G, Rosenberg H. Sources of data on socioeconomic differential mortality in the United States. *Journal of Official Statistics* 11(3):233–60. 1995.
2. - Miniño AM, Xu JQ, Kochanek KD. Deaths: Preliminary data for 2008. *National Vital Statistics Reports*; vol 59 no 2. Hyattsville, MD: National Center for Health Statistics. 2010. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_19.pdf.
3. - Kochanek KD, Xu JQ, Murphy SL, et al. Deaths: Preliminary data for 2009. *National vital statistics reports*; vol 59 no 4. Hyattsville, MD: National Center for Health Statistics. 2011. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59_04.pdf.

4. - Heron M. Deaths: Leading causes for 2008. National vital statistics reports. Hyattsville, MD: National Center for Health Statistics. Forthcoming.
5. - Arias E. United States life tables, 2008. National vital statistics reports. Hyattsville, MD: National Center for Health Statistics. Forthcoming.
6. - National Center for Health Statistics. Technical appendix. Vital statistics of the United States: Mortality. Washington, DC. Published annually. Available from: <http://www.cdc.gov/nchs/products/vsus.htm#appendices>.
7. - World Health Organization. International statistical classification of diseases and related health problems, tenth revision. 2nd edition. Geneva, Switzerland. 2004.
8. - Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. Federal Register 62FR58782 (58790). Washington, DC. October 30, 1997. Available from: <http://federalregister.gov/a/97-28653>.
9. - Office of Management and Budget. Race and ethnic standards for federal statistics and administrative reporting. Statistical Policy Directive 15. Washington, DC. 1977.
10. U.S. Census Bureau. Age, sex, race, and Hispanic origin information from the 1990 census: A comparison of census results with results where age and race have been modified, 1990. CPH-L-74. Washington, DC: U.S. Department of Commerce. 1991.
11. Ingram D, Weed J, Parker J, Hamilton B, Schenker N, et al. U.S. census 2000 population with bridged race categories. National Center for Health Statistics. Vital Health Stat 2(135). 2003.
12. Schenker N, Parker J. From single-race reporting to multiple-race reporting: Using imputation methods to bridge the transition. Stat Med 22:1571–87. 2003.
13. Centers for Disease Control and Prevention. Update: Influenza activity—United States, 1998–99 season. MMWR; 48(9):177–81. Washington, DC: Public Health Service. 1999.
14. Centers for Disease Control and Prevention. Update: Influenza activity—United States, 1999–2000 season. MMWR; 49(9):173–7. Washington, DC: Public Health Service. 2000.
15. Centers for Disease Control and Prevention. Update: Influenza Activity—United States and worldwide, 2006–07 season, and composition of the 2007–08 influenza vaccine. MMWR; 56 (31):789–94. Washington, DC: Public Health Service. 2007.
16. Centers for Disease Control and Prevention. Influenza activity—United States and worldwide, 2007–08 season. MMWR; 57 (25):692–7. Washington, DC: Public Health Service. 2008.
17. Arias E, Schauman WS, Eschbach K, Sorlie PD, Backlund E. The validity of race and Hispanic origin reporting on death certificates in the United States. National Center for Health Statistics. Vital Health Stat 2(148). 2008.
18. Kochanek K, Maurer J, Rosenberg H. Causes of death contributing to changes in life expectancy: United States, 1984–89. National Center for Health Statistics. Vital Health Stat 20(23). 1994. Available from: http://www.cdc.gov/nchs/data/series/sr_20/sr20_023.pdf.

19. Arias E, Eschbach K, Schauman WS, Backlund EL, Sorlie PD. The Hispanic mortality advantage and ethnic misclassification on US death certificates. *Am J Public Health* 100(S1):S171–7. 2010. Available from: <http://ajph.aphapublications.org/cgi/content/abstract/100/S1/S171>.
20. Abraida-Lanza A, Dohrenwend B, Ng-Mak D, Turner J. The Latino mortality paradox: A test of the “salmon bias” and healthy migrant hypotheses. *Am J Public Health* 89(10):1543–8. 1999. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1508801/pdf/amjph00010-0085.pdf>.
21. Palloni A, Arias E. Paradox lost: Explaining the Hispanic adult mortality advantage. *Demography* 41(3):385–415. 2004.
22. Arias E. United States life tables by Hispanic origin. National Center for Health Statistics. *Vital Health Stat* 2(152). 2010. Available from: http://www.cdc.gov/nchs/data/series/sr_02/sr02_152.pdf.
23. Xu JQ, Kochanek KD, Murphy SL, Tejada-Vera B. Deaths: Final data for 2007. National vital statistics reports; vol 58 no 19. Hyattsville, MD: National Center for Health Statistics. 2010. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_19.pdf.
24. Centers for Disease Control and Prevention. Wide-ranging OnLine Data for Epidemiologic Research (WONDER) -- Underlying cause of death output based on the Compressed Mortality File. Available from: <http://wonder.cdc.gov>.
25. Suneshine RH, McDonald LC. Clostridium difficile-associated disease: New challenges from an established pathogen. *Cleve Clin J Med* 73(2):187–97. 2006.
26. Redelings MD, Sorvillo F, Mascola L. Increase in Clostridium difficile related mortality rates, United States, 1999–2004. *Emerging infectious diseases* [online series] 13(9):1417–9. 2007. Available from: <http://www.cdc.gov/EID/content/13/9/1417.htm>.
27. National Center for Health Statistics. Proceedings of the international collaborative effort on injury statistics; vol 1. Hyattsville, MD. 1995.
28. Fingerhut L, Cox C, Warner M. International comparative analysis of injury mortality: Findings from the ICE on injury statistics. Advance data from vital and health statistics; no 303. Hyattsville, MD: National Center for Health Statistics. 1998.
29. Pamuk E, Makuc D, Heck K, Reuben C, Lochner K. Socioeconomic status and health chartbook. Health, United States, 1998. Hyattsville, MD: National Center for Health Statistics. 1998. Available from: <http://www.cdc.gov/nchs/data/hus/hus98cht.pdf>.
30. Mathews T, MacDorman M. Infant mortality statistics from the 2007 period linked birth/infant death data set. National vital statistics reports; vol 59 no 6. Hyattsville, MD: National Center for Health Statistics. 2011. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59_06.pdf.
31. National Center for Health Statistics. 2003 revision of the U.S. Standard Certificate of Death [online]. 2003. Available from: <http://www.cdc.gov/nchs/data/dvs/DEATH11-03final-acc.pdf>.

32. National Center for Health Statistics. Report of the panel to evaluate the U.S. standard certificates [online]. 2000. Available from:
http://www.cdc.gov/nchs/data/dvs/panelreport_acc.pdf.
33. National Center for Health Statistics. Technical appendix. Vital statistics of the United States, 1989, vol II, mortality, part A. Washington, DC. 1993.
34. Tolson G, Barnes J, Gay G, Kowaleski J. The 1989 revision of the U.S. standard certificates and reports. National Center for Health Statistics. Vital Health Stat 4(28). 1991.
35. World Health Organization. International statistical classification of diseases and related health problems, tenth revision. Geneva, Switzerland. 1992.
36. National Center for Health Statistics, Data Warehouse. Comparability of cause-of-death between ICD revisions [online]. 2008. Available from:
http://www.cdc.gov/nchs/nvss/mortality/comparability_icd.htm.
37. National Center for Health Statistics, Data Warehouse. Updated comparability ratios (ICD–10 and ICD–9) [online]. 2004. Available from:
ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/Comparability/icd9_icd10/Comparability_Ratio_tables.xls.
38. Anderson R, Miniño A, Hoyert D, Rosenberg H. Comparability of cause of death between ICD–9 and ICD–10: Preliminary estimates. National vital statistics reports; vol 49 no 2. Hyattsville, MD: National Center for Health Statistics. 2001. Available from:
http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_02.pdf.
39. Comparability of mortality statistics for the sixth and seventh revisions, United States, 1958. Vital statistics—Special reports 51(4). Washington, DC: National Center for Health Statistics. 1965.
40. Klebba A, Dolman A. Comparability of mortality statistics for the seventh and eighth revisions of the international classification of diseases, United States. National Center for Health Statistics. Vital Health Stat 2(66). 1975.
41. Klebba A, Scott J. Estimates of selected comparability ratios based on dual coding of 1976 death certificates by the eighth and ninth revisions of the international classification of diseases. Monthly vital statistics report; vol 28 no 11. Hyattsville, MD: National Center for Health Statistics. 1980.
42. National Center for Health Statistics, Vital statistics. Instructions for classifying multiple causes of death. NCHS instruction manual; part 2b. Hyattsville, MD. Published annually.
43. National Center for Health Statistics, Vital statistics. Instructions for classifying the underlying cause of death. NCHS instruction manual; part 2a. Hyattsville, MD. Published annually.
44. National Center for Health Statistics, Vital statistics. ICD–10 ACME decision tables for classifying underlying causes of death. NCHS instruction manual; part 2c. Hyattsville, MD. Published annually.

45. National Center for Health Statistics, Vital statistics. Data entry instructions for the mortality medical indexing, classification, and retrieval system (MICAR). NCHS instruction manual; part 2g. Hyattsville, MD. Published annually.
46. National Center for Health Statistics, Vital statistics. Dictionary of valid terms for the mortality medical indexing, classification, and retrieval system (MICAR). NCHS instruction manual; part 2h. Hyattsville, MD. Published annually.
47. National Center for Health Statistics. Public-use data set documentation; control total Table 1: Mortality data set for ICD–10, 2008. Hyattsville, MD. Forthcoming.
48. Chamblee R, Evans M. TRANSAX, the NCHS system for producing multiple cause-of-death statistics, 1968–78. National Center for Health Statistics. Vital Health Stat 1(20). 1986.
49. Israel R, Rosenberg H, Curtin L. Analytical potential for multiple cause-of-death data. Am J Epidemiol 124(2):161–79. 1986.
50. National Center for Health Statistics. ICD–10 cause-of-death lists for tabulating mortality statistics (updated October 2007 to include WHO updates to ICD–10 for data year 2007). NCHS instruction manual, part 9. Hyattsville, MD. 2007.
51. Hoyert D, Arias E, Smith B, Murphy S, Kochanek K. Deaths: Final data for 1999. National vital statistics reports; vol 49 no 8. Hyattsville, MD: National Center for Health Statistics. 2001. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_08.pdf.
52. National Center for Health Statistics. Vital statistics, data preparation. Computer edits for mortality data, including separate section for fetal deaths. NCHS instruction manual; part 11. Hyattsville, MD. Published annually.
53. National Center for Health Statistics. ICD–10 cause-of-death querying. NCHS instruction manual; part 20. Hyattsville, MD. Published annually.
54. Miniño A, Anderson R, Fingerhut L, Boudreault M, Warner M. Deaths: Injuries, 2002. National vital statistics reports; vol 54 no 10. Hyattsville, MD: National Center for Health Statistics. 2006. Available from: <http://www.cdc.gov/nchs/products/nvsr.htm#vol54>.
55. Office of Management and Budget. Race and ethnic standards for federal statistics and administrative reporting. Statistical Policy Directive 15. Washington, DC. 1977.
56. Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. Federal Register 62FR58782 (58790). Washington, DC. October 30, 1997. Available from: <http://www.whitehouse.gov/omb/fedreg/ombdir15.html>.
57. Ingram D, Weed J, Parker J, Hamilton B, Schenker N, et al. U.S. census 2000 population with bridged race categories. National Center for Health Statistics. Vital Health Stat 2(135). 2003.
58. Schenker N, Parker J. From single-race reporting to multiple-race reporting: Using imputation methods to bridge the transition. Stat Med 22:1571–87. 2003.

59. Mathews T, MacDorman M. Infant mortality statistics from the 2008 period linked birth/infant death data set. National vital statistics reports. Hyattsville, MD: National Center for Health Statistics. Forthcoming.
60. Arias E, Schauman WS, Eschbach K, Sorlie PD, Backlund E. The validity of race and Hispanic origin reporting on death certificates in the United States. National Center for Health Statistics. Vital Health Stat 2(148). 2008.
61. Arias E, Eschbach K, Schauman WS, Backlund EL, Sorlie PD. The Hispanic mortality advantage and ethnic misclassification on US death certificates. Am J Public Health 100(S1):S171-7. 2010. Available from: <http://ajph.aphapublications.org/cgi/content/abstract/100/S1/S171>.
62. Rosenberg H, Maurer J, Sorlie P, Johnson N. Quality of death rates by race and Hispanic origin: A summary of current research, 1999. National Center for Health Statistics. Vital Health Stat 2(128). 1999.
63. Sorlie P, Rogot E, Johnson N. Validity of demographic characteristics on the death certificate. Epidemiology 3(2):181-4. 1992.
64. Mulry M. Summary of accuracy and coverage evaluation for census 2000. Research Report Series Statistics #2006-3. Washington, DC: Statistical Research Division, U.S. Census Bureau. 2006. Available from: <http://www.census.gov/srd/papers/pdf/rrs2006-03.pdf>.
65. Poe G, Powell-Griner E, McLaughlin J. Comparability of the death certificate and the 1986 national mortality followback survey. National Center for Health Statistics. Vital Health Stat 2(118). 1993. Available from: http://www.cdc.gov/nchs/data/series/sr_02/sr02_118.pdf.
66. U.S. Census Bureau. Facts for Features. American Indian and Alaska Native Heritage. Month: November 2009. CB09-FF.20. U.S. Department of Commerce. Washington, DC. 2009. Available from: <http://www.census.gov/newsroom/releases/pdf/cb09-ff20.pdf>.
67. National Center for Health Statistics. Technical appendix. Vital statistics of the United States, 1989, vol I, natality. Hyattsville, MD. 1993.
68. National Center for Health Statistics. Technical appendix. Vital statistics of the United States: Mortality, 1999. Hyattsville, MD. 2004. Available from: <http://www.cdc.gov/nchs/data/statab/techap99.pdf>.
69. Hoyert D. Effect on mortality rates of the 1989 changes in tabulating race. National Center for Health Statistics. Vital Health Stat 20(25). 1994. Available from: http://www.cdc.gov/nchs/data/series/sr_20/sr20_025.pdf.
70. Martin JA, Hamilton BE, Sutton PD, et al. Births: Final data for 2008. National vital statistics reports; vol 59 no 1. Hyattsville, MD: National Center for Health Statistics. 2010. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59_01.pdf.
71. Sirken MG. Comparison of two methods of constructing abridged life tables by reference to a "standard" table. National Center for Health Statistics. Vital Health Stat 2(4). 1966. http://www.cdc.gov/nchs/data/series/sr_02/sr02_004.pdf.

72. Anderson R. Method for constructing complete annual U.S. life tables. National Center for Health Statistics. *Vital Health Stat* 2(129). 1999. Available from: http://www.cdc.gov/nchs/data/series/sr_02/sr02_129.pdf.
73. National Center for Health Statistics. U.S. decennial life tables for 1989–91, vol 1 no 2, Methodology of the national and state life tables. Hyattsville, MD. 1998. Available from: http://www.cdc.gov/nchs/data/lifetables/life89_1_2.pdf.
74. Arias, E. United States Life Tables by Hispanic Origin. National Center for Health Statistics. *Vital Health Stat* 2(152). 2010.
75. Wei R, Curtin LR, Arias E, Anderson RN. U.S. decennial life tables for 1999–2001, Methodology of the United States life tables. National vital statistics reports; vol 57, no 4. Hyattsville, MD: National Center for Health Statistics. 2008. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_04.pdf.
76. Kochanek K, Maurer J, Rosenberg H. Causes of death contributing to changes in life expectancy: United States, 1984–89. National Center for Health Statistics. *Vital Health Stat* 20(23). 1994. Available from: http://www.cdc.gov/nchs/data/series/sr_20/sr20_023.pdf.
77. Arriaga E. Changing trends in mortality decline during the last decades. In: Ruzicka L, Wunsch G, Kane P, editors. *Differential mortality: Methodological issues and biosocial factors*. Oxford: Clarendon Press. 1989.
78. Arriaga E. Measuring and explaining the change in life expectancies. *Demography* 21(1):83–96. 1984.
79. Kominski R, Adams A. Educational attainment in the United States, March 1993 and 1992. Current population reports, Population characteristics P20–476. Washington, DC: U.S. Bureau of the Census. 1994. Available from: <http://www.census.gov/population/www/socdemo/education/p20-476.html>.
80. Sorlie PD, Johnson N. Validity of education information on the death certificate. *Epidemiology* 7(4):437–9. 1996.
81. Rostron BL, Boies JL, Arias E. Education reporting and classification on death certificates in the United States. *Vital Health Stat* 2(151). Hyattsville, MD: National Center for Health Statistics. 2010. Available from: http://www.cdc.gov/nchs/data/series/sr_02/sr02_151.pdf.
82. Hoyert D. Maternal mortality and related concepts. National Center for Health Statistics. *Vital Health Stat* 3(33). Hyattsville, MD. 2007. Available from: http://www.cdc.gov/nchs/data/series/sr_03/sr03_033.pdf.
83. MacKay AP, Berg CJ, Liu X, Duran C, Hoyert DL. Changes in pregnancy mortality ascertainment: United States, 1999–2005. *Obstetrics and Gynecology*. Volume 118 (1): 104–110. 2011.
84. MacKay A, Berg C, Duran C, Chang J, Rosenberg H. An assessment of pregnancy-related mortality in the United States. *Paediatr Perinat Epidemiol* 19(3):206–14. 2005.

85. Horon IL and D Cheng. Effectiveness of pregnancy check boxes on death certificates in identifying pregnancy-associated mortality. Public Health Reports. Volume 126 (2): 195-200. 2011.
86. National Center for Health Statistics. Vintage 2008 bridged-race postcensal population estimates of the resident population of the United States for July 1, 2000–July 1, 2008, by year, county, single-year of age, bridged-race, Hispanic origin, and sex (pcen_v2008.txt). Prepared under a collaborative agreement with the U.S. Census Bureau. 2009. Available from: http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2008.
87. U.S. Census Bureau, Housing and Household Economic Statistics Division. Population estimates for 2008 based on unpublished tabulations. 2010.
88. U.S. Census Bureau. International data base. 2009. Available from: <http://www.census.gov/ipc/www/idb>.
89. National Center for Health Statistics. Vintage 2007 bridged-race postcensal population estimates of the resident population of the United States for July 1, 2000–July 1, 2007, by year, county, single-year of age, bridged-race, Hispanic origin, and sex (pcen_v2007.txt). Prepared under a collaborative agreement with the U.S. Census Bureau. 2008. Available from: http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2007.
90. National Center for Health Statistics. -Vintage 2006 bridged-race postcensal population estimates of the resident population of the United States as of July 1, 2006, by year, county, single year of age, bridged race, Hispanic origin (and sex [pcen_v2006_y06.txt (ASCII)]) 2007. Available from: http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2006.
91. National Center for Health Statistics. -Vintage 2005 bridged-race postcensal population estimates of the resident population of the United States as of July 1, 2005, by year, county, single-year of age, bridged race, Hispanic origin, and sex [pcen_v2005_y05.txt (ASCII)]. 2006. Available from: http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2005.
92. National Center for Health Statistics. Vintage 2004 bridged-race postcensal population estimates of the resident population of the United States for July 1, 2000–July 1, 2004, by year, county, single-year of age, bridged-race, Hispanic origin, and sex (pcen_v2004.txt). Prepared under a collaborative agreement with the U.S. Census Bureau. 2005. Available from: http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2004.
93. National Center for Health Statistics. Bridged-race vintage 2003 postcensal estimates of the resident population of the United States as of July 1, 2003, by age, sex, race, and Hispanic origin (pcen_v2003.txt), prepared under a collaborative arrangement with the Census Bureau. 2004. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm.
94. National Center for Health Statistics. Bridged-race vintage 2002 postcensal estimates of the resident population of the United States as of July 1, 2002, by age, sex, race, and Hispanic origin (pcen_v2002.txt), prepared under a collaborative arrangement with the U.S. Census Bureau. 2003. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm.

95. National Center for Health Statistics. Bridged-race vintage 2001 postcensal estimates of the resident population of the United States as of July 1, 2001, by age, sex, race, and Hispanic origin (pcen_v2001.txt), prepared under a collaborative arrangement with the U.S. Census Bureau. 2003. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm.
96. National Center for Health Statistics. Bridged-race population estimates for April 1, 2000, by county, single-year of age, bridged-race, Hispanic origin, and sex (br040100.txt), prepared under a collaborative arrangement with the U.S. Census Bureau. 2003. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm.
97. National Center for Health Statistics. Bridged-race intercensal population estimates for July 1, 1990–July 1, 1999, by year, county, 5-year group, bridged-race, Hispanic origin, and sex (one ASCII file each per separate year). Prepared under a collaborative agreement with the U.S. Census Bureau. 2003. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm.
98. Anderson R, Rosenberg H. Age standardization of death rates: Implementation of the year 2000 standard. National vital statistics reports; vol 47 no 3. Hyattsville, MD: National Center for Health Statistics. 1998. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr47/nvs47_03.pdf.
99. Brillinger D. The natural variability of vital rates and associated statistics. *Biometrics* 42(4):693–734. 1986.
100. Chiang C. Introduction to stochastic processes in biostatistics. New York: Wiley. 1968.
101. - DeNavas-Walt C, Proctor B, Smith J. Income, poverty, and health insurance coverage in the United States: 2008. Current population reports, P60-236. Washington, DC: U.S. Census Bureau. 2009. Available from: <http://www.census.gov/prod/2009pubs/p60-236.pdf>.
102. - DeNavas-Walt C, Proctor B, Smith J. Income, poverty, and health insurance coverage in the United States: 2007. Current population reports, P60–235. Washington, DC: U.S. Census Bureau. 2008. Available from: <http://www.census.gov/prod/2008pubs/p60-235.pdf>.
103. - Fay M, Feuer E. Confidence intervals for directly standardized rates: A method based on the gamma distribution. *Stat Med* 16(17):791–801. 1997.
104. - Schenker N, Gentleman J. On judging the significance of differences by examining the overlap between confidence intervals. *The American Statistician* 55(3):182–6. 2001.
105. Arnold S. Mathematical statistics. Englewood Cliffs, NJ: Prentice Hall. 1990.

List of Detailed Tables

1. Number of deaths, death rates, and age-adjusted death rates, by race and sex: United States, 1940, 1950, 1960, 1970, and 1980–2008
2. Number of deaths, death rates, and age-adjusted death rates, by Hispanic origin, race for non-Hispanic population, and sex: United States, 1997–2008
3. Number of deaths and death rates, by age, race, and sex: United States, 2008
4. Number of deaths and death rates by Hispanic origin, race for non-Hispanic population, age, and sex: United States, 2008
5. Number of deaths and death rates by age, and age-adjusted death rates, by specified Hispanic origin, race for non-Hispanic population, and sex: United States, 2008
6. Abridged life table for the total population, 2008
7. Life expectancy at selected ages by race, Hispanic origin, race for non-Hispanic population, and sex: United States, 2008
8. Life expectancy at birth by race, Hispanic origin, race for non-Hispanic population, and sex: United States, 1940, 1950, 1960, 1970 and 1975-2008
9. Death rates by age and age-adjusted death rates for the 15 leading causes of death in 2008: United States, 1999–2008
10. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2008
11. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2008
12. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008
13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008
14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008
15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008
16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008
18. Number of deaths, death rates, and age-adjusted death rates for injury deaths, by mechanism and intent of death: United States, 2008
19. Number of deaths, death rates, and age-adjusted death rates for major causes of death: United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, 2008
20. Infant, neonatal, and postneonatal mortality rates by race and sex: United States, 1940, 1950, 1960, 1970, and 1975–2008
21. Number of infant deaths and infant mortality rates for 130 selected causes by race: United States, 2008
22. Number of infant and neonatal deaths and mortality rates, by race for the United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, and by sex for the United States, 2008

Acknowledgments

This report was prepared in the Division of Vital Statistics (DVS) under the direction of Charles J. Rothwell, Director, DVS; Robert N. Anderson, Chief, Mortality Statistics Branch (MSB); and Nicholas F. Pace, Chief, Systems, Programming, and Statistical Resources Branch (SPSRB). Elizabeth Arias of MSB provided content related to life expectancy. David W. Justice of the Data Acquisition and Evaluation Branch (DAEB) contributed to the “Technical Notes.” Jordan Sacks, Annie Liu, Candace Cosgrove, Jaleh Mousavi and John Birken of SPSRB provided computer programming support and produced statistical tables. Jaleh Mousavi of SPSRB prepared the mortality file. Staff of the Mortality Medical Classification Branch (MMCB) processed the cause-of-death data for individual records. Registration Methods staff and staff of DAEB provided consultation to state vital statistics offices regarding collection of the death certificate data on which this report is based.

Suggested citation

Miniño AM, Murphy SL, Xu JQ, Kochanek KD. Deaths: Final Data for 2008. National Vital Statistics Reports; vol 59 no 10. Hyattsville, MD: National Center for Health Statistics. 2011.

Technical Notes

Changes in the report

Presented in this report for the first time are life tables by Hispanic origin. Tables 7 and 8 now include data for Hispanic, Non-Hispanic white and Non-Hispanic black. (Table 7 shows life expectancy at various ages, and table 8 shows trends in life expectancy at birth for years 1940, 1950, 1960, 1970 and 1975 through 2008.)

Beginning with data year 2008, data on drug-induced causes, alcohol-induced causes, and injury by firearms appear at the bottom of report tables showing 113 selected causes of death, specifically, tables 10- 17.

Maternal mortality data are not included in this year's report. This variable, along with others, are discussed in the section, "Other variables not shown in the printed version of this report."

Nature and sources of data

Data in this report are based on information from all death certificates filed in the 50 states and the District of Columbia and are processed by the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS). Data for 2008 are based on records of deaths that occurred during 2008 and were received as of February 28, 2011.

The U.S. Standard Certificate of Death—which is used as a model by the states—was revised in 2003 (31). Prior to 2003, the standard certificate of death had not been revised since 1989. This report includes data for 30 states (Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Michigan, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York State (excluding New York City), North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Washington, and Wyoming), New York City, and the District of Columbia that used the 2003 revision of the U.S. Standard Certificate of Death in 2008, and for the remaining 20 states that collected and reported death data in 2008 based on the 1989 revision of the U.S. Standard Certificate of Death.

Vermont implemented the 2003 revision in July of 2008 so data for the first half of the year was based on the 1989 revision. The 1989 and 2003 revisions are described in detail elsewhere (31-34).

Because most of the items presented in this report appear largely comparable despite changes to item wording and format in the 2003 death certificate revision, data from both groups of states are combined unless otherwise stated. Data for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas are included in tables showing data by state, but are not included in U.S. totals.

Mortality statistics are based on information coded by the states and provided to NCHS through the Vital Statistics Cooperative Program and from copies of original certificates received by NCHS from state registration offices. In 2008, all states and the District of Columbia participated in this program and submitted part or all of the mortality data for 2008 in electronic data files to NCHS. All areas provided precoded medical (cause-of-death) data to NCHS except Georgia, New Jersey, and West Virginia. For 2008, all states submitted precoded demographic data for all deaths.

In 2008, Georgia started implementation of the revised certificate but experienced difficulties entering the data into a new system they began using in 2007. Georgia's demographic data for 2008 were compiled from the demographic file provided by the Georgia Vital Statistics office (approximately 30 percent) and from other sources (approximately 70 percent). Because the other sources were not designed to serve as input for vital statistics data, many variables that are traditionally included are missing from a large proportion of Georgia's file for 2008. These variables include (but are not limited to):

- Birthplace of decedent
- City limits indicator for place of residence of decedent
- Marital status of decedent
- Place (type of institution or home) of death
- County of death
- Method of disposition of the body
- Time of death

As a rule, records with missing county of death (occurrence) information are automatically imputed to the county with the largest population. Generally, this number is relatively small. However, for Georgia in 2008, county of death information was missing for the majority of records, greatly inflating the number of deaths occurring in Fulton County. Data users are cautioned not to use county of occurrence data for Georgia. It is important to note, however, that data for Georgia shown in this report are by place of residence of decedent and do not appear to be adversely affected in terms of quality.

Data for the entire United States refer to events occurring within the United States. Data shown for geographic areas are by place of residence. Beginning with 1970, mortality statistics for the United States exclude deaths of nonresidents of the United States. All data exclude fetal deaths.

Mortality statistics for Puerto Rico, Virgin Islands, American Samoa, and Northern Marianas exclude deaths of nonresidents for each area. For Guam, however, mortality statistics exclude deaths that occurred to a resident of any place other than Guam or the United States.

Cause-of-death classification

The mortality statistics presented in this report were compiled in accordance with World Health Organization (WHO) regulations, which specify that member nations classify and code causes of death in accordance with the current revision of the International Classification of Diseases (ICD). ICD provides the basic guidance used in virtually all countries to code and classify causes of death. Effective with deaths occurring in 1999, the United States began using the Tenth Revision of this classification (ICD–10) (35). In 2004, the second edition of ICD–10 was adopted (7). For earlier years, causes of death were classified according to the revisions then in use— 1979–1998, Ninth Revision; 1968–1978, Eighth Revision, adapted for use in the United States; 1958–1967, Seventh Revision; and 1949–1957, Sixth Revision.

Changes in classification of causes of death due to these revisions may result in discontinuities in cause-of-death trends. Consequently, cause-of-death comparisons among revisions require consideration of comparability ratios and, where available, estimates of their standard errors. Comparability ratios between the Ninth and Tenth revisions, Eighth and Ninth revisions, Seventh and Eighth revisions, and Sixth and Seventh revisions may be found in other NCHS reports and independent tabulations (36-41).

Rules for coding a cause or causes of death may sometimes require modification when evidence suggests it will improve the quality of cause-of-death data. Prior to 1999, such modifications were made only when a new ICD revision was implemented. A process for updating the ICD was introduced with ICD–10 that allows for mid-revision changes. These changes, however, may affect comparability of data between years for selected causes of death. Minor changes may be implemented every year, whereas major changes may be implemented every three years (e.g., 2006 data year). The changes to ICD-10 that were implemented in data year 2008 are discussed in subsequent sections of this report.

ICD not only details disease classification but also provides definitions, tabulation lists, the format of the death certificate, and the rules for coding cause of death. Cause-of-death data presented in this publication were coded by procedures outlined in annual issues of the NCHS Instruction Manual (42,43). ICD includes rules for selecting the underlying cause of death and regulations on the use of ICD.

Before data year 1968, mortality medical data were based on manual coding of an underlying cause of death for each certificate in accordance with WHO rules. Effective with data year 1968, NCHS converted to computerized coding of the underlying cause and manual coding of all causes (multiple causes) on the death certificate. In this system, called “Automated Classification of Medical Entities” (ACME) (44), multiple-cause codes are inputted to computer software that uses WHO rules to select the underlying cause. All cause-of-death data in this report are coded using ACME.

The ACME system is used to select the underlying cause of death for all death certificates in the United States. In addition, NCHS has developed two computer systems as inputs to ACME. Beginning with 1990 data, the Mortality Medical Indexing, Classification, and Retrieval system (MICAR) (45,46) was introduced to automate the coding of multiple causes of death. In addition, MICAR provides more detailed information on the conditions reported on death certificates than is available through ICD code structure. Beginning with data year 1993, SuperMICAR, an enhancement of the MICAR system, was introduced, allowing for literal entry of the multiple cause-of-death text as reported by the certifier. This information is then automatically processed by the MICAR and ACME computer systems. Records that cannot be automatically processed by MICAR or SuperMICAR are manually multiple-cause coded and then further processed through ACME. In 2008, SuperMICAR was used to process all of the nation’s death records.

In this report, tabulations of cause-of-death statistics are based solely on the underlying cause of death. The underlying cause is defined by WHO as “the disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury” (7). The underlying cause is selected from the conditions entered by the physician in the cause of-death section of the death certificate. When more than one cause or condition is entered by the physician, the underlying cause is determined by the sequence of conditions on the certificate, provisions of ICD, and associated selection rules and modifications. Generally, more medical information is reported on death certificates than is directly reflected in the underlying cause of death. This is captured in NCHS multiple cause-of-death statistics (47-49).

Tabulation lists and cause-of-death ranking

Tabulation lists for ICD–10 are published in the NCHS Instruction Manual, Part 9, “ICD–10 Cause-of-Death Lists for Tabulating Mortality Statistics” (updated October 2007 to include WHO updates to ICD–10 for data year 2007) (50). For this report, two tabulation lists are used: the List of 113 Selected Causes of Death, used for deaths of all ages, and the List of 130 Selected Causes of Infant Death, used for infants. These lists are also used to rank leading causes of death for the two population groups. For the List of 113 Selected Causes of Death, the group titles of Major cardiovascular diseases (ICD–10 codes I00–I78), and Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (ICD–10 codes R00–R99), are not ranked. In addition, category titles that begin with the words “other” and “all other” are not ranked to determine the leading causes of death. When one of the titles that represents a subtotal is ranked—for example, Tuberculosis (ICD–10 codes A16–A19)—its component parts are not ranked—in this case, Respiratory tuberculosis (ICD–10 code A16) and Other tuberculosis (ICD–10 codes A17–A19). For the List of 130 Selected Causes of Infant Death, the same ranking procedures are used except that the category of major cardiovascular diseases is not on the list. More detail regarding ranking procedures can be found in “Deaths: Leading Causes for 2008” (4).

Leading cause-of-death trends discussed in this report are based on cause-of-death data according to ICD–10 for 1999–2008 and ICD–9 for the most comparable cause-of-death titles for 1979–1998. Tables showing ICD–9 categories that are comparable to ICD–10 titles in the List of 113 Selected Causes of Death may be found in “Comparability of Cause of Death between ICD–9 and ICD–10: Preliminary Estimates” (38) and “Deaths: Final Data for 1999” (51). Although in some cases categories from the List of 113 Selected Causes of Death are identical to those in the earlier List of 72 Selected Causes of Death used with ICD–9, caution must be used because many of these categories are not comparable even though the cause-of-death titles may be the same.

Trend data for 1979–1998 that are classified by ICD–9 but sorted into the List of 113 Selected Causes of Death developed for ICD–10 can be found on the mortality website at <http://www.cdc.gov/nchs/data/statab/hist001r.pdf>.

Revision of ICD and resulting changes in classification and rules for selecting the underlying cause of death have important implications for the analysis of mortality trends by cause of death. For some causes of death, the discontinuity in trend can be substantial (37,38). Therefore, considerable caution should be used in analyzing cause-of-death trends for periods of time that extend across more than one revision of ICD.

Codes added and deleted in 2008

No codes were added or deleted in 2008.

Codes for terrorism

Beginning with data for 2001, NCHS introduced categories *U01–*U03 for classifying and coding deaths due to acts of terrorism. The asterisks before the category codes indicate that they are not part of ICD–10. Deaths classified to the terrorism categories are included in the 113 causes of death list in the categories for Assault (homicide) and Intentional self-harm (suicide), and in the 130 causes of death list for infants in the category for Assault (homicide). Additional information on these new categories is available from http://www.cdc.gov/nchs/icd/terrorism_code.htm. No deaths were assigned to the terrorism categories in 2008.

Enterocolitis due to *Clostridium difficile*

The number of deaths from Enterocolitis due to *Clostridium difficile* (*C. difficile*) (ICD–10 code A04.7) has increased dramatically in recent years, from 793 deaths in 1999 to 7,476 deaths in 2008. Data for *C. difficile* are included in tables showing data for 113 selected causes of death in “Certain other intestinal infections (A04, A07–A09),” but were not identified separately until 2006. Because of the increasing importance of this cause of death, beginning with data year 2006, data for *C. difficile* are shown separately at the bottom of tables showing 113 selected causes, and *C. difficile* has been added to the list of rankable causes.

Quality of reporting and processing cause of death

One index of the quality of reporting causes of death is the proportion of death certificates coded to Chapter XVIII—Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (ICD–10 codes R00–R99). Although deaths occur for which underlying causes are impossible to determine, the proportion coded to R00–R99 indicates the consideration given to the cause-of-death statement by the medical certifier. This proportion also may be used as a rough measure of specificity of medical diagnoses made by the certifier in various areas. The percentage of all reported deaths in the United States assigned to Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified, increased from 1.38 percent in 2007 to 1.56 in 2008.

In 2008, in addition to difficulties in transmitting data to NCHS in the revised format, Georgia also experienced difficulties in resolving the cause of death on some death certificates. As a result, from 2007 through 2008, the number of deaths in Georgia that were classified to Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (ICD-10 code R99) increased from 280 to 2,443. More than half of the Georgia deaths coded to R99 in 2008 were classified as “pending investigation” with no other cause of death information provided. This has important implications when interpreting trends in mortality because a disproportionate number of deaths classified as “pending investigation” tend to be deaths caused by external causes of injury that require referrals to coroners or medical examiners. It is unknown to what extent the technical difficulties Georgia experienced in transitioning to their new system contributed to the increase in deaths classified to R99. Because a

higher percentage of Georgia's deaths were coded to R99 in 2008 than in previous years, data for Georgia should be interpreted with caution, particularly for external causes of death.

Rules for coding a cause or causes of death may sometimes require modification when evidence suggests it will improve the quality of cause-of-death data. These changes, however, may affect comparability of data between years for selected causes of death. The implementation of changes in coding rules in 2008 had an impact on several mortality causes—and the comparison of 2008 and 2007 data for these causes—in the following ways:

- The increase in deaths from Chronic obstructive pulmonary disease with acute lower respiratory infection (ICD-10 code J44.0) is a component condition of the larger category Chronic lower respiratory diseases (ICD-10 codes J40-J47). This component condition (ICD-10 code J44.0) increased as a proportion of all deaths from Chronic lower respiratory diseases between 2007 and 2008 (from 0.2 percent of Chronic lower respiratory disease deaths in 2007 to 17.3 percent in 2008). A portion of this increase is due to a change to the rules that govern coding and classifying to this component condition. Specifically, many deaths which would have previously been assigned to Chronic obstructive pulmonary disease, unspecified (ICD-10 code J44.9); pneumonia (J12-J16, J18); and Other acute lower respiratory infections (ICD-10 codes J20-J22) are now being classified to J44.0. The Mortality Statistics Branch plans to conduct a thorough analysis on this change and its effect on the larger category Chronic lower respiratory diseases. The actual change to the coding and classification rules can be seen on page E-240 of the instruction manual “ICD-10 ACME Decision Tables for Classifying Underlying Causes of Death, 2008” (<http://www.cdc.gov/nchs/data/dvs/2008Final2C.pdf>) (44). (Modifications relative to earlier rules can be identified by asterisks placed to the right of table entries.) Changes in mortality statistics for Chronic lower respiratory diseases (ICD-10 codes J40-J47) must be interpreted with caution because the impact of changes in coding rules on the coding of this condition has not yet been fully determined.
- The decrease in deaths from Cerebrovascular diseases (stroke) (ICD-10 codes I60-I69) and from Atherosclerosis (I70) is due, in part, to coding changes in 2008 that resulted in some of the deaths that would have previously been coded to Subarachnoid hemorrhage (I60) and Atherosclerosis (I70) instead being assigned to Vascular dementia (F01). Changes in mortality statistics for stroke, atherosclerosis and vascular dementia should be interpreted with caution.
- Coding rule changes in 2008 contributed to the increase in deaths from Alzheimer's disease (G30) in 2008. Specifically, many deaths which would have previously been assigned to other causes were instead coded to Alzheimer's disease. Changes in mortality statistics for Alzheimer's disease should be interpreted with caution.
- The increase in deaths from Essential hypertension and hypertensive renal disease (I10,I12,I15) may be due, in part, to coding changes in 2008 that resulted in some deaths that would have previously been coded to Aortic aneurysm and dissection (I71) instead being assigned to Essential (primary) hypertension (I10). Changes in mortality statistics for Aortic aneurysm and dissection (I71) and for Essential hypertension and hypertensive renal disease (I10,I12,I15) should be interpreted with caution.

Detail on coding and classification rule changes can be found in instruction manual “ICD-10 ACME Decision Tables for Classifying Underlying Causes of Death, 2008” at <http://www.cdc.gov/nchs/data/dvs/2008Final2C.pdf> (44).

Rare causes of death

Selected causes of death considered to be of public health concern are routinely confirmed by states according to agreed-upon procedures between state vital statistics programs and NCHS. These causes, termed infrequent and rare causes of death, are listed in the NCHS Instruction Manual, Parts 2a, 11, and 20 (43,52,53).

For data year 2008, confirmation of deaths from infrequent and rare causes was not provided by Massachusetts, North Carolina, and West Virginia.

Injury mortality by mechanism and intent

Injury mortality data are presented using the external cause of injury mortality matrix for ICD–10 (Table 18). In this framework, cause-of-injury deaths are organized principally by mechanism (e.g., firearm or poisoning), and secondarily by manner or intent of death (e.g., unintentional, suicide, or homicide).

The number of deaths for selected causes in this framework may differ from those shown in tables that use the standard mortality tabulation lists. Following WHO conventions, standard mortality tabulations (Table 10) present external causes of death (ICD–10 codes *U01–*U03 and V01–Y89); in contrast, the matrix (Table 18) excludes deaths classified to Complications of medical and surgical care (Y40–Y84 and Y88). For additional information on injury data presented in this framework, see “Deaths: Injuries, 2002” (54), available from <http://www.cdc.gov/nchs/products/nvsr.htm#vol54>. Data for later years are available through CDC’s Wonder system at <http://wonder.cdc.gov/> or through CDC’s Web-based Injury Statistics Query and Reporting System (WISQARS) at <http://www.cdc.gov/injury/wisqars/index.html>. Implementation of changes to ICD-10 may affect the matrix, requiring modification of codes in selected categories. In 2008, Table 18 was slightly modified to include ICD-10 code W46 (Contact with hypodermic needle). One death was assigned to W46 in 2008. For more information on the latest ICD–10 external cause-of-injury codes included in the matrix, see http://www.cdc.gov/nchs/injury/injury_tools.htm.

Codes for firearm deaths

Causes of death attributable to firearm mortality include ICD–10 codes *U01.4, Terrorism involving firearms (homicide); W32–W34, Accidental discharge of firearms; X72–X74, Intentional self-harm (suicide) by discharge of firearms; X93–X95, Assault (homicide) by discharge of firearms; Y22–Y24, Discharge of firearms, undetermined intent; and Y35.0, Legal intervention involving firearm discharge. Deaths from injury by firearms exclude deaths due to explosives and other causes indirectly related to firearms.

Codes for drug-induced deaths

Causes of death attributable to drug-induced mortality include ICD–10 codes: D52.1, Drug-induced folate deficiency anemia; D59.0, Drug-induced hemolytic anemia; D59.2, Drug-induced nonautoimmune hemolytic anemia; D61.1, Drug-induced aplastic anemia; D64.2, Secondary sideroblastic anemia due to drugs and toxins; E06.4, Drug-induced thyroiditis; E16.0, Drug-induced hypoglycemia without coma; E23.1, Drug-induced hypopituitarism; E24.2, Drug-induced Cushing’s syndrome; E27.3, Drug-induced

adrenocortical insufficiency; E66.1, Drug-induced obesity; selected codes from the ICD–10 title of mental and behavioral disorders due to psychoactive substance use, specifically, F11.0–F11.5, F11.7–F11.9, F12.0–F12.5, F12.7–F12.9, F13.0–F13.5, F13.7–F13.9, F14.0–F14.5, F14.7–F14.9, F15.0–F15.5, F15.7–F15.9, F16.0–F16.5, F16.7–F16.9, F17.0, F17.3–F17.5, F17.7–F17.9, F18.0–F18.5, F18.7–F18.9, F19.0–F19.5, and F19.7–F19.9; G21.1, Other drug-induced secondary parkinsonism; G24.0, Drug-induced dystonia; G25.1, Drug-induced tremor; G25.4, Drug-induced chorea; G25.6, Drug-induced tics and other tics of organic origin; G44.4, Drug-induced headache, not elsewhere classified; G62.0, Drug-induced polyneuropathy; G72.0, Drug-induced myopathy; I95.2, Hypotension due to drugs; J70.2, Acute drug-induced interstitial lung disorders; J70.3, Chronic drug-induced interstitial lung disorders; J70.4, Drug-induced interstitial lung disorder, unspecified; K85.3, Drug-induced acute pancreatitis; L10.5, Drug-induced pemphigus; L27.0, Generalized skin eruption due to drugs and medicaments; L27.1, Localized skin eruption due to drugs and medicaments; M10.2, Drug-induced gout; M32.0, Drug-induced systemic lupus erythematosus; M80.4, Drug-induced osteoporosis with pathological fracture; M81.4, Drug-induced osteoporosis; M83.5, Other drug-induced osteomalacia in adults; M87.1, Osteonecrosis due to drugs; R50.2, Drug-induced fever; R78.1, Finding of opiate drug in blood; R78.2, Finding of cocaine in blood; R78.3, Finding of hallucinogen in blood; R78.4, Finding of other drugs of addictive potential in blood; R78.5, Finding of psychotropic drug in blood; X40–X44, Accidental poisoning by and exposure to drugs, medicaments and biological substances; X60–X64, Intentional self-poisoning (suicide) by and exposure to drugs, medicaments and biological substances; X85, Assault (homicide) by drugs, medicaments and biological substances; and Y10–Y14, Poisoning by and exposure to drugs, medicaments and biological substances, undetermined intent. Drug-induced causes exclude accidents, homicides, and other causes indirectly related to drug use, as well as newborn deaths associated with the mother’s drug use.

Codes for alcohol-induced deaths

Causes of death attributable to alcohol-induced mortality include ICD–10 codes: E24.4, Alcohol-induced pseudo-Cushing’s syndrome; F10, Mental and behavioral disorders due to alcohol use; G31.2, Degeneration of nervous system due to alcohol; G62.1, Alcoholic polyneuropathy; G72.1, Alcoholic myopathy; I42.6, Alcoholic cardiomyopathy; K29.2, Alcoholic gastritis; K70, Alcoholic liver disease; K85.2, Alcohol-induced acute pancreatitis; K86.0, Alcohol-induced chronic pancreatitis; R78.0, Finding of alcohol in blood; X45, Accidental poisoning by and exposure to alcohol; X65, Intentional self-poisoning by and exposure to alcohol; and Y15, Poisoning by and exposure to alcohol, undetermined intent. Alcohol-induced causes exclude accidents, homicides, and other causes indirectly related to alcohol use, as well as newborn deaths associated with maternal alcohol use.

Race and Hispanic origin

The 2003 revision of the U.S. Standard Certificate of Death allows the reporting of more than one race (multiple races) (31). This change was implemented to reflect the increasing diversity of the population of the United States and to be consistent with the decennial census. The race and ethnicity items on the revised certificate are compliant with the 1997 “Revision of the Race and Ethnic Standards for Federal Statistics and Administrative Reporting,” issued by the Office of Management and Budget (OMB). This revision replaced standards that were issued in 1977 (55). The new standards mandate the collection of more than one race where applicable for federal data (56). In addition, the new certificate is compliant with the OMB-mandated minimum set of five races to be reported for federal data. Multiple race includes any combination of white, black or African American, American Indian or Alaska Native (AIAN), Asian, and Native Hawaiian or Other Pacific Islander (NHOPI). If two or more specific subgroups such as Korean and Chinese are reported, these count as a single race of Asian rather than as multiple races.

The number of states reporting multiple race has increased, from 7 states in 2003 to 34 states and the District of Columbia in 2008 (Table I). In 2008, more than one race was reported for 0.4 percent of the records in the 33 states and the District of Columbia that reported multiple-race for the entire year (Table II). Because Vermont did not report multiple race for the entire data year, Table I and the following computations exclude data for Vermont. Although still uncommon, multiple races were reported more often for younger decedents than for older decedents (2.1 percent of decedents under age 25 years compared with 0.6 percent of decedents aged 25–64 years and 0.2 percent of decedents aged 65 and over). No decedent was reported as having more than four races. Of those records where more than one race was reported, the NHOPI category was reported in combination with another race more often (45.2 percent) than the other categories (white, 0.4 percent; black, 0.7 percent; Asian, 5.5 percent; and AIAN, 21.5 percent).

Data from vital records based on the 1989 revision of the U.S. Standard Certificate of Death follow the 1977 OMB standard, allowing only a single race to be reported (34,55). The 1977 standard also stipulates that these states must report a minimum set of four races: white, black or African American, AIAN, and Asian or Pacific Islander (API).

To provide uniformity and comparability of data during the transition period, before all or most of the data becomes available in the multiple-race format, the responses of those for whom more than one race was reported (multiple race) must be “bridged” to a single race. The bridging procedure is similar to that used to bridge multiracial population estimates (57,58). Multiracial decedents are imputed to a single race (white, black, AIAN, or API) according to their combination of races, Hispanic origin, sex, and age indicated on the death certificate. The imputation procedure is described in detail at http://www.cdc.gov/nchs/data/dvs/Multiple_race_documentation_5-10-04.pdf. Similarly, when calculating infant mortality rates, multiracial infants are bridged to a single race. The bridging procedure for multiple-race mothers and fathers is based on the procedure used to bridge the multiple-race population estimates (59); see the following subsection on “Infant mortality rates.”

Race and Hispanic origin are reported separately on the death certificate. Therefore, data shown by race include persons of Hispanic and non-Hispanic origin, and data for Hispanic origin include persons of any race. In this report, unless otherwise specified, deaths of persons of Hispanic origin are included in the totals for each race group—white, black, AIAN, and API—according to the decedent’s race as reported on the death certificate. Data shown for Hispanic persons include all persons of Hispanic origin of any race.

Mortality data for the Hispanic-origin population are based on deaths of residents of all 50 states and the District of Columbia.

Quality of race and Hispanic origin data— Death rates for Hispanic, AIAN, and API persons should be interpreted with caution because of inconsistencies in reporting Hispanic origin or race on the death certificate as compared with censuses, surveys, and birth certificates. Studies have shown underreporting on death certificates of AIAN, API, and Hispanic decedents, as well as undercounts of these groups in censuses (60-63).

A number of studies have been conducted on the reliability of race reported on the death certificate by comparing it with race reported on another data collection instrument, such as the census or a survey (60-63). Inconsistencies may arise because of differences in who provides race information on the compared records. Race information on the death certificate is reported by a funeral director as provided by an informant or, in the absence of an informant, on the basis of observation. In contrast, race on the census or the Current Population Survey (CPS) is obtained while the person is alive; in these cases, race is self-reported or reported by another member of the household familiar with the person and, therefore, may be considered more valid. A high level of agreement between the death certificate and the census or survey report is essential to assure unbiased death rates by race.

Studies (60-63) show that a person self-reported as AIAN or API on census or survey records was sometimes reported as white on the death certificate. The net effect of misclassification is an underestimation of deaths and death rates for races other than white and black. In addition, undercoverage of minority groups in the census and resultant population estimates introduces biases into death rates by race (60-65). Unlike the 1990 census, coverage error in the 2000 census was found to be statistically significant only for the non-Hispanic white population (overcounted by approximately 1.13 percent) and non-Hispanic black population (undercounted by approximately 1.84 percent) (64).

Death rates for the AIAN population in 2008 may not be comparable to rates for previous years. Population estimates for AIAN increased significantly from 2007 to 2008, especially for the younger age groups (66). Death rates for AIAN should be interpreted with caution when comparing data for 2008 to previous years. Population estimates available from the U.S. Bureau of the Census for 2009 indicate that AIAN population estimates are not dramatically different from those for 2008. We will continue to monitor changes in the population estimates for the AIAN population as these become available.

Using the National Longitudinal Mortality Study, Arias et al. examined the reliability of race and Hispanic origin reported on about 250,000 death certificates compared with that reported on a total of 26 CPSs conducted by the U.S. Bureau of the Census for 1979–1998 (60,61). Agreement between the two sources was found to be excellent for the white and black populations, both exhibiting CPS to death certificate ratios of 1.00. On the other hand, substantial differences were found for other race groups. The ratio of CPS to death certificates was found to be 1.30 for the AIAN population and 1.07 for the API population, indicating net underreporting on death certificates of 30 percent for AIAN and 7 percent for API. The ratio of deaths for CPS to death certificates for Hispanics was found to be 1.05, indicating a net underreporting on death certificates for the Hispanic population of 5 percent.

Data on the Central and South American and Other Hispanic origin populations are affected by whether a state submits literal text to NCHS, thereby making it possible to identify decedents as being of Central and South American origin. Before 2008, decedents identified as “Dominican” were classified as Central and South American. Starting in 2008, Dominican decedents are included among “Other and unknown

Hispanic” and are no longer counted among Central and South American decedents. Data year 1997 was the first year in which mortality data for the Hispanic population were available for the entire United States.

Other races and race not stated—Beginning in 1992, all records coded as “other races” (0.40 percent of total deaths in 2008) were assigned to the specified race of the previous record. Records for which race was unknown, not stated, or not classifiable (0.22 percent) were assigned the racial designation of the previous record.

Infant mortality rates— For 1989–2008, as in previous years, infant deaths continue to be tabulated by the race of the decedent. However, beginning with the 1989 data year, the method of tabulating live births by race was changed from race of parents to race of mother, as stated on the birth certificate. This change affects infant mortality rates because live births are the denominators of these rates (33,67). To improve continuity and ease of interpretation, trend data by race in this report have been retabulated by race of mother for all years beginning with the 1980 data year.

Quantitatively, the change in the basis for tabulating live births by race of mother results in more white births and fewer black births and births of other races. Consequently, infant mortality rates under the new tabulating procedure tend to be about 2 percent lower for white infants and about 5 percent higher for black infants than when they are computed by the previous method of tabulating live births by race of parents. Rates for most other minority races also are higher when computed by race of mother (68,69).

In 2008, multiple race was reported on the revised birth certificates of California, Colorado, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Montana, Nebraska, New Hampshire, New Mexico, New York state (excluding New York City), North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Washington, and Wyoming, and on the unrevised birth certificates of Hawaii, Minnesota, and Utah (70).

Infant mortality rates for the Hispanic-origin population are based on numbers of resident infant deaths reported to be of Hispanic origin and numbers of resident live births by Hispanic origin of mother for the United States. In computing infant mortality rates, deaths and live births of unknown origin are not distributed among the specified Hispanic and non-Hispanic groups. In the United States in 2008, the percentage of infant deaths of unknown origin was 0.8 percent and the percentage of live births to mothers of unknown origin was 0.8 percent.

Small numbers of infant deaths for specific Hispanic-origin groups result in infant mortality rates subject to relatively large random variation (see following section on “Random variation”). Infant mortality rates by Hispanic origin are less subject to reporting error when based on linked files of infant deaths and live births (59).

Infant mortality rates calculated from the general mortality file for specified race and Hispanic origin contain errors because of reporting problems that affect the classification of race and Hispanic origin on the birth and death certificates for the same infant. Infant mortality rates by specified race and Hispanic origin are more accurate when based on the linked file of infant deaths and live births (59). The linked file computes infant mortality rates using the race and Hispanic origin of the mother from the birth certificate in both the numerator and denominator of the rate. In addition, the mother’s race and Hispanic origin from the birth certificate is considered to be more accurately reported than the infant’s

race and Hispanic origin from the death certificate—on the birth certificate, race is generally reported by the mother at the time of delivery, whereas on the death certificate, the infant's race and Hispanic origin is reported by an informant, usually the mother but sometimes the funeral director. Estimates of reporting errors have been made by comparing rates based on the linked files with those in which the infant's race is based on information from the death certificate (59,62).

Life tables

The life table provides a comprehensive measure of the effect of mortality on life expectancy. It is composed of sets of values showing the mortality experience of a hypothetical group of infants born at the same time and subject throughout their lifetime to the age-specific death rates of a particular time period, usually a given year. Prior to data year 1997, U.S. life tables were abridged and constructed by reference to a standard table (71). In addition, the age range for these life tables was limited to 5-year age groups ending with the age group 85 and over. Beginning with final data reported for 1997 complete life tables were constructed by single years of age extending to age 100 years (72) using a methodology similar to that of the 1989–1991 decennial life tables (73). The methodology was again revised for data years 2000 – 2007 using a methodology similar to that of the 1999 – 2001 decennial life tables (74). Beginning with final data reported for 2008, the life table methodology was refined by changing the smoothing technique used to estimate the life table functions at the oldest ages. This revision improves upon the methodologies used previously.

Although the life table methodology used produces complete life tables (by single years of age), the life table data shown in this report are summarized in 5-year age groupings. Complete life tables by single years of age extending to age 100 for data years 2000 – 2007 were constructed using a methodology similar to that developed for the 1999–2001 decennial life tables (74). To calculate the probability of dying at each age, this methodology used vital statistics death rates for ages under 66 years, and modeled probabilities of death for ages 66 to 100 years based on blended vital statistics and Medicare probabilities of dying (74). A more comprehensive description of this methodology was published in *United States Life Tables, 2005 NVSR Volume 58, Number 10*. See http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_10.pdf for additional information.

The methodology employed to construct the 2008 life tables is different from methods used in earlier reports with respect to the technique used to estimate the probabilities of death for ages over 65. The methodology used to produce the life tables for 2008 does not model the probabilities of death beginning at ages 66 but rather at ages above 85 or so. (The exact ages at which smoothing techniques are used depend on the population.) Research into the methodology used for the 1999 – 2001 decennial life tables and then applied to the annual life tables has revealed that it is not necessary to model (or “smooth”) the probabilities of death beginning at ages 66. The observed blended vital statistics and Medicare data for ages 66 years through 85 years are robust enough and do not require additional smoothing. A full description of this methodology is forthcoming.

For the first time in this report, life tables are presented by Hispanic origin. Historically, NCHS has produced annual life tables by race including the white and black populations but did not produce life tables for other racial or ethnic groups. Beginning with data year 2006 (originally published elsewhere) (22), NCHS began producing life tables by Hispanic origin after conducting research into the quality of race and ethnicity reporting on death certificates and developing methodologies to correct for misclassification of these population on death certificates (60,75). These methods that adjust for misclassification are applied to the production of the life tables, but not to the death rates shown throughout this report.

Causes of death contributing to changes in life expectancy

A life table partitioning technique was used to estimate causes of death contributing to changes in life expectancy in this report. The method partitions changes into component additive parts and identifies the causes of death having the greatest influence, positive or negative, on changes in life expectancy (76-78).

Infant mortality

Infant mortality rates are the most commonly used index for measuring the risk of dying during the first year of life. The rates presented in this report are calculated by dividing the number of infant deaths in a calendar year by the number of live births registered for the same period, and are presented as rates per 1,000 or per 100,000 live births. For final birth figures used in the denominator for infant mortality rates, see “Births: Final Data for 2008” (70). In contrast to infant mortality rates based on live births, infant death rates are based on the estimated population under age 1. Infant death rates that appear in tabulations of age-specific death rates in this report are calculated by dividing the number of infant deaths by the July 1, 2008, population estimate of persons under age 1, based on 2000 census populations. These rates are presented per 100,000 population in this age group. Because of differences in the denominators, infant death rates may differ from infant mortality rates.

Another data source is available for infant mortality—the linked file of live births and infant deaths. Data from this source differs from the infant mortality data presented in this report because the linked file includes only events in which both the birth and the death occur in the United States, and late-filed births. Processing of the linked file allows for further exclusion of infant records due to duplicates and records with additional information that raise questions about an infant’s age. Although the differences are usually minuscule, infant mortality rates based on the linked file tend to be somewhat smaller than those based on data from the general mortality file as presented in this report. The linked file is the preferred source for infant mortality by race because it uses the mother’s self-reported race from the child’s birth certificate (59), which is more reliable than the infant’s race listed on the death certificate, and because the numerator and denominator are referring to the same person’s race.

Other variables not shown in the printed version of this report

Marital status

Mortality data by marital status no longer appear in the printed version of this report but are available in Table I-7 from the NCHS website. Mortality data by marital status are generally of high quality. A study of death certificate data using the 1986 National Mortality Followback Survey showed a high level of consistency in reporting marital status (65). In 2008, however, mortality data by specified marital status were not available for more than half of Georgia's records (see section on "Nature and sources of data"). Therefore, data for specified marital groups in Table 1-7 should be interpreted with caution.

Age-adjusted death rates in Table I-7 were computed based on age-specific rates and the standard population for those aged 25 and over. Although Table I-7 shows age-specific death rates by marital status for the age group 15–24, they are not included in the computation of the age-adjusted rate because of their high variability, particularly for the widowed population. Furthermore, the age groups 75–84 and 85 and over are combined because of high variability in death rates among those aged 85 and over, particularly for the never-married population.

Educational attainment

Mortality data by educational attainment no longer appear in the printed version of this report but are available in Table I-8 from the NCHS website. Beginning in 2003, some registration areas adopted the new U.S. Standard Certificate of Death, which includes a revised educational attainment item. The revised item is consistent with efforts of the U.S. Census Bureau to improve the ability to identify specific degrees and persons who had completed 12 years of education but did not hold either a high school diploma or General Educational Development (GED) high school equivalency diploma. Based on testing by the Census Bureau, the new item identifies about 2 percent more persons with less than a high school diploma or equivalent, 13 percent fewer persons with a high school diploma, and 8 percent more persons with at least some college (79). In 2008, the District of Columbia and 27 states used the revised item: Arkansas, California, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Kansas, Michigan, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Texas, Utah, Washington, and Wyoming. The unrevised education item continued to be used by 20 states: Alabama, Alaska, Arizona, Colorado, Hawaii, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, North Carolina, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin. Vermont implemented the revised certificate in July of 2008 so the old education item was used for part of the year and the revised item was used for part of the year.

Because some states do not yet use the new educational attainment item and because the revised and unrevised versions are not fully comparable, data by educational attainment are shown separately according to the revision status of the decedent's state of occurrence. Table I-8 shows mortality data by educational attainment for states using the 2003 version of the standard death certificate and, separately, for states using the 1989 version. Data were approximately 80 percent or more complete on a state-of-occurrence basis. Data for Vermont were not included in Table I-8 because some of Vermont's data were reported using the unrevised item and some using the revised item. Data for Georgia were not included because data for this variable were unavailable for 2008 (see "Nature and sources of

data”). Data for Rhode Island were not included because the educational attainment item was not on their certificates. Age-adjusted death rates by educational attainment were computed based on the age-specific rates and the standard population for those aged 25–64. Data for those aged 65 and over are not shown because reporting quality is poorer at older ages (80).

Rates by educational attainment for states using the unrevised certificate are affected by differences between measurement of education for the numerator, which is based on the number of years of education completed as reported on the 1989 revision of the death certificate, and the denominator, which is based on highest degree completed as reported on the 2000 census and the CPSs (79,81).

Table II shows a 2002-to-2008 comparison of the percent distribution of deaths by measures of educational attainment for areas using the revised certificate in 2008. Vermont is excluded from the table because they did not use the new item for the entire year. Georgia is excluded since data for educational attainment was not available (see “Nature and sources of data”). South Dakota is excluded because that state first began reporting education in 2004 and has no comparison data for 2002.

Injury at work

Mortality data by injury at work no longer appear in the printed version of this report but are available in Tables I-9 and I-10 at the NCHS website. Information on deaths attributed to injuries at work is derived from a separate item on the death certificate that asks the medical certifier whether the death resulted from an injury sustained at work. This item is on the death certificate of all states. Number of deaths, age-specific death rates, and age-adjusted death rates for injury at work are shown in Tables I-9 and I-10. Deaths, crude death rates, and age-adjusted death rates for injury at work are shown for those aged 15 and over. Age-adjusted death rates for injury at work were computed using age-specific death rates and the 2000 U.S. standard population for those aged 15 and over; see “Computing rates.”

Maternal mortality

Maternal mortality data are not included in this year’s report. The reader should note that the 2003 revision of the U.S. Standard Certificate of Death introduced a checkbox question format with categories to take advantage of additional codes available in ICD–10 for deaths with a connection to pregnancy, childbirth, and the puerperium. As states revise their certificates, most are adopting the checkbox format, resulting in wider adoption of a pregnancy status question nationwide and greater standardization of the particular question used. As of 2008, 39 states and the District of Columbia (one state added the question midyear) have a separate question related to pregnancy status of female decedents around the time of their death, and 1 state has a prompt encouraging certifiers to report recent pregnancies on the death certificate. However, at least five different questions were used in the 39 states, reflecting the mix of 30 states using the 2003 standard format and 9 states with pre-existing questions.

Adopting a pregnancy status question consistent with the standard death certificate increases the identification of maternal deaths (82,83). Maternal mortality rates are consistently greater for those states with the additional information from the separate question than for the states without it. In addition, maternal mortality rates tend to be greater after adopting the standard question than before. Research (83-85) done on this issue indicates that this increase represents an improvement in

identifying maternal deaths. For example, a study in Maryland that used multiple data sources as the standard showed an improvement (from 62 percent to 98 percent) in identifying maternal deaths after adoption of a pregnancy checkbox item consistent with the 2003 standard certificate (85).

Population bases for computing rates

Populations used for computing death rates and life tables shown in this report represent the population residing in the United States, enumerated as of April 1 for census years and estimated as of July 1 for all other years. Population estimates used to compute death rates for the United States for 2008 are shown by race for 5-year age groups in Table IV and are available by single years of age at http://www.cdc.gov/nchs/nvss/mortality_tables.htm (86).

Population estimates in Table V for Mexican, Puerto Rican, Cuban, Central and South America, and Other Hispanic populations, and population estimates by marital status in Table VI, are based on the Current Population Survey adjusted to resident population control totals for the United States (87) and, as such, are subject to sampling variation; see “Random variation.” The control totals used are 2000-based population estimates for the United States for July 1, 2008 (86).

Population estimates by educational attainment, shown in Table VII, are also based on the CPS adjusted to resident population control totals (87), and similarly subject to sampling variation (see “Random variation”). The control totals used are 2000 based population estimates for July 1, 2008, for the 27 states and District of Columbia that reported mortality data by educational attainment using the 2003 version of the U.S. Standard Certificate of Death, and for the 20 states that reported using the 1989 version (86).

Population estimates for each state, shown in Table VIII, were estimated from state-level postcensal population estimates based on the 2000 census, estimated as of July 1, 2008 (86). Population estimates for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, also shown in Table VIII, are based on the 2000 census, estimated as of July 1, 2008 (88). Population estimates for each state and territory are not subject to sampling variation because the sources used in demographic analysis are complete counts.

Death rates shown in this report for 1991–2008 are based on populations consistent with the 2000 census levels (86-97). These estimates were produced under a collaborative arrangement with the U.S. Census Bureau and are based on the 2000 census counts by age, race, and sex, modified for consistency with U.S. OMB race categories as of 1977 and historical categories for death data (9). The modification procedures are described in detail elsewhere (11,12).

Population estimates for AIAN increased significantly from 2007 to 2008, especially for the younger age groups (66). A footnote in Table A further indicates that death rates for the AIAN population in 2008 may not be comparable to rates for previous years. Population estimates available from the U.S. Bureau of the Census for 2009 indicate that AIAN population estimates are not dramatically different from those for 2008. We will continue to monitor changes in the population estimates for the AIAN population as these become available.

Computing rates

Except for infant mortality rates, rates are on an annual basis per 100,000 estimated population residing in the specified area. Infant mortality rates are per 1,000 or per 100,000 live births. Comparisons made in the text among rates, unless otherwise specified, are statistically significant at the 0.05 level of significance. Lack of comment in this report about any two rates does not mean that the difference was tested and found not to be significant at this level.

Age-adjusted rates (R') are used to compare relative mortality risks among groups and over time. However, they should be viewed as relative indexes rather than as actual measures of mortality risk. They were computed by the direct method—that is, by applying age-specific death rates (R_i) to the U.S. standard population age distribution (Table IX):

$$R' = \sum_i \frac{P_{si}}{P_s} R_i$$

where P_{si} is the standard population for age group i and P_s is the total U.S. standard population (all ages combined).

Beginning with the 1999 data year, a new population standard was adopted by NCHS for use in age-adjusting death rates. Based on the projected year 2000 population of the United States, the new standard replaces the 1940 standard population that had been used for over 50 years. The new population standard affects levels of mortality and, to some extent, trends and group comparisons. Of particular note are the effects on race mortality comparisons. For detailed discussion, see *Age Standardization of Death Rates: Implementation of the Year 2000 Standard* (98). Beginning with 2003 data, the traditional standard million population along with corresponding standard weights to six decimal places were replaced by the projected year 2000 population age distribution (see Table IX). The effect of the change is negligible and does not significantly affect comparability with age-adjusted rates calculated using the previous method.

All age-adjusted rates shown in this report are based on the 2000 U.S. standard population. The 2000 standard population used for computing age-adjusted rates and standard errors, except for the U.S. territories, is shown in Table IX.

Age-adjusted rates by marital status were computed by applying the age-specific death rates to the U.S. standard population for those aged 25 and over. Although age-specific death rates by marital status are shown for the age group 15–24, they are not included in the calculation of age-adjusted rates because of their high variability, particularly for the widowed population. Age groups 75–84 and age 85 and over are combined because of high variability in death rates in the 85 and over age group, particularly for the never-married population. The 2000 standard population used for computing age-adjusted rates and standard errors by marital status is shown in Table X.

Age-adjusted rates by educational attainment were computed by applying the age-specific death rates to the U.S. standard population for those aged 25–64. Data for those aged 65 and over are not shown because reporting quality is poorer for older ages (80). The year 2000 standard population used for computing age-adjusted rates and standard errors by education is shown in Table XI.

Age-adjusted rates for injury at work were computed by applying the age-specific death rates to the U.S. standard population for those aged 15 and over. The 2000 standard population used for computing age-adjusted rates and standard errors for injury at work is shown in Table XII.

Age-adjusted rates for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas were computed by applying the age-specific death rates to the U.S. standard population. Age groups for age 75 and over were combined because population counts were unavailable by age group over 75 years. The 2000 standard population used for computing age-adjusted rates and standard errors for the territories is shown in Table XIII.

Using the same standard population, death rates for the total population and for each race-sex group were adjusted separately. The age-adjusted rates were based on 10-year age groups. Age-adjusted death rates are not comparable with crude rates.

Death rates for the Hispanic population are based only on events to persons reported as Hispanic. Rates for non-Hispanic white persons are based on the sum of all events to white decedents reported as non-Hispanic and white decedents with origin not stated. Hispanic origin is not imputed if it is not reported.

Random variation

The mortality data presented in this report, with the exception of data for 1972, are not subject to sampling error. In 1972, mortality data were based on a 50 percent sample of deaths because of resource constraints. Mortality data, even based on complete counts, may be affected by random variation—that is, the number of deaths that actually occurred may be considered as one of a large series of possible results that could have arisen under the same circumstances (99,100). When the number of deaths is small, perhaps fewer than 100, random variation tends to be relatively large. Therefore, considerable caution must be observed in interpreting statistics based on small numbers of deaths.

Measuring random variability—To quantify the random variation associated with mortality statistics, an assumption must be made regarding the appropriate underlying distribution. Deaths, as infrequent events, can be viewed as deriving from a Poisson probability distribution. The Poisson distribution is simple conceptually and computationally, and provides reasonable, conservative variance estimates for mortality statistics when the probability of dying is relatively low (99). Using the properties of the Poisson distribution, the standard error (SE) associated with the number of deaths (D) is:

$$1. \quad SE(D) = \sqrt{\text{var}(D)} = \sqrt{D}$$

where $\text{var}(D)$ denotes the variance of D.

The standard error associated with crude and age-specific death rates (R) assumes that the population denominator (P) is a constant and is:

$$2. \quad SE(R) = \sqrt{\text{var}\left(\frac{D}{P}\right)} = \sqrt{\frac{1}{P^2} \text{var}(D)} = \sqrt{\frac{D}{P^2}} = \frac{R}{\sqrt{D}}$$

The coefficient of variation or relative standard error (RSE) is a useful measure of relative variation. The RSE is calculated by dividing the statistic (e.g., number of deaths, death rate) into its standard error and multiplying by 100. For the number of deaths:

$$RSE(D) = 100 \frac{SE(D)}{D} = 100 \frac{\sqrt{D}}{D} = 100 \sqrt{\frac{1}{D}}$$

For crude and age-specific death rates: -

$$RSE(R) = 100 \frac{SE(R)}{R} = 100 \frac{R/\sqrt{D}}{R} = 100 \sqrt{\frac{1}{D}}$$

Thus: -

$$3. \quad RSE(D) = RSE(R) = 100 \sqrt{\frac{1}{D}}$$

The standard error of the age-adjusted death rate (R') is: -

$$4. \quad SE(R') = \sqrt{\sum_i \left(\frac{P_{si}}{P_s} \right)^2 \text{var}(R_i)} = \sqrt{\sum_i \left\{ \left(\frac{P_{si}}{P_s} \right)^2 \left(\frac{R_i^2}{D_i} \right) \right\}}$$

where:

- R_i is the age-specific rate for the i th age group
- P_{si} is the age-specific standard population for the i th age group from the U.S. standard population age distribution (see Table VIII and age-adjusted death rate under "Definition of terms")
- P_s is the total U.S. standard population (all ages combined)
- D_i is the number of deaths for the i th age group

The RSE for the age-adjusted rate, $RSE(R')$, is calculated by dividing $SE(R')$ from Formula 4 by the age-adjusted death rate, R' , and multiplying by 100:

$$RSE(R') = 100 \frac{SE(R')}{R'}$$

For tables showing infant mortality rates based on live births (B) in the denominator, calculation of the standard error assumes random variability in both the numerator and denominator. The standard error for the infant mortality rate (IMR) is:

$$5. \quad SE(IMR) = \sqrt{\frac{\text{var}(D) + IMR * \text{var}(B)}{E(B)^2}} = \sqrt{\frac{D}{B^2} + \frac{D^2}{B^3}}$$

where the number of births, B, is also assumed to be distributed according to a Poisson distribution and E(B) is the expectation of B.

The RSE for the IMR is:

$$6. \quad RSE(IMR) = 100 \frac{SE(IMR)}{IMR} = 100 \sqrt{\frac{1}{D} + \frac{1}{B}}$$

Formulas 1–6 may be used for all tables presented in this report except for death rates and age-adjusted death rates shown in Tables 5, I-7, and I-8, which are calculated using population figures that are subject to sampling error.

Tables 5, I-7, and I-8—Death rates for Mexican, Puerto Rican, Cuban, and Other Hispanic populations in Table 5, by marital status in Table I-7, and by educational attainment in Table I-8 are based on population estimates derived from the CPS for 2008 and adjusted to resident population control totals. As a result, the rates are subject to sampling variability in the denominator as well as random variability in the numerator.

For crude and age-specific death rates (R), the standard error is calculated as:

$$7. \quad SE(R) = R \sqrt{\frac{1}{D} + 0.67 \left(a + \frac{b}{P} \right)}$$

For age-adjusted death rates (R'): -

$$8. \quad SE(R') = \sqrt{\sum_i \left\{ \left(\frac{P_{si}}{P_s} \right)^2 R_i^2 \left[\frac{1}{D_i} + 0.67 \left(a + \frac{b}{P_i} \right) \right] \right\}}$$

where a and b in Formulas 7 and 8 represent parameters presented in Table XIV, which are derived from the CPS data for 2008 and 2009 and vary depending on the subgroup of interest (101,102).

Suppression of unreliable rates—Beginning with 1989 data, an asterisk is shown in place of a crude or age-specific death rate based on fewer than 20 deaths, the equivalent of an RSE of 23 percent or more. The limit of 20 deaths is a convenient, if somewhat arbitrary, benchmark, below which rates are considered to be too statistically unreliable for presentation. For infant mortality rates, the same threshold of fewer than 20 deaths is used to determine whether an asterisk is presented in place of the rate. For age-adjusted death rates, the suppression criterion is based on the sum of age-specific deaths; that is if the sum of the age-specific deaths is less than 20, an asterisk replaces the rate. These procedures are used throughout this report except for death rates shown in Tables 5, I-7, and I-8.

In Tables 5, I-7 and I-8, sampling variability in the population denominator has a substantial impact on the overall variability in the death rate. Therefore, the number of deaths in the numerator is not used as the sole suppression factor. RSEs for rates shown in Tables 5, I-7, and I-8 are derived from Formulas 7 and 8 by dividing the result of Formula 7 by the crude/age-specific rate, and the result of Formula 8 by the age-adjusted rate, and then multiplying by 100. Rates are replaced by asterisks if the calculated RSE is 23 percent or more. In some cases, for smaller population subgroups, the estimated sample population from the CPS may be zero, even though deaths are presented for the subgroups. In these cases, the death rate is incalculable and automatically replaced with an asterisk.

Confidence intervals and statistical tests based on 100 deaths or more—When the number of deaths is large, a normal approximation may be used in calculating confidence intervals and statistical tests. How large, in terms of number of deaths, is to some extent subjective. In general, for crude and age-specific death rates and for infant mortality rates, the normal approximation performs well when the number of deaths is 100 or greater. For age-adjusted rates, the criterion for use of the normal approximation is somewhat more complicated (68,98,103). Formula 9 is used to calculate 95 percent confidence limits for the death rate when the normal approximation is appropriate:

$$9. \quad L(R) = R - 1.96(SE(R)) \text{ and } U(R) = R + 1.96(SE(R))$$

where L(R) and U(R) are the lower and upper limits of the confidence interval, respectively. The resulting 95 percent confidence interval can be interpreted to mean that the chances are 95 in 100 that the “true” death rate falls between L(R) and U(R). For example, suppose that the crude death rate for Malignant neoplasms is 186.0 per 100,000 population based on 565,469 deaths. Lower and upper 95 percent confidence limits using Formula 9 are calculated as:

$$L(186.0) = 186.0 - 1.96(.25) = 185.5 \text{ and}$$

$$U(186.0) = 186.0 + 1.96(.25) = 186.5$$

Thus, the chances are 95 in 100 that the true death rate for malignant neoplasms is between 185.5 and 186.5. Formula 9 can also be used to calculate 95 percent confidence intervals for the number of deaths, age-adjusted death rates, infant mortality rates, and other mortality statistics when the normal approximation is appropriate by replacing R with D, R', IMR, or others.

When testing the difference between two rates, R₁ and R₂ (each based on 100 or more deaths), the normal approximation may be used to calculate a test statistic, z, such that:

$$10. \quad z = \frac{R_1 - R_2}{\sqrt{SE(R_1)^2 + SE(R_2)^2}}$$

If $|z| \geq 1.96$, then the difference between the rates is statistically significant at the 0.05 level. If $|z| < 1.96$, then the difference is not statistically significant. Formula 10 can also be used to perform tests for other mortality statistics when the normal approximation is appropriate (when both statistics being compared meet the normal criteria) by replacing R₁ and R₂ with D₁ and D₂, R'₁ and R'₂, or others. For example, suppose that the male age-adjusted death rate for Malignant neoplasms of trachea,

bronchus, and lung (lung cancer) is 65.1 per 100,000 U.S. standard population in 2007 (R_1) and 63.6 per 100,000 U.S. standard population in 2008 (R_2). The standard error for each of these figures, $SE(R_1)$ and $SE(R_2)$, is calculated using Formula 4. A test using Formula 10 can determine if the decrease in the age-adjusted rate is statistically significant:

$$z = \frac{65.1 - 63.6}{\sqrt{(0.222)^2 + (0.217)^2}} = 4.83$$

Because $z = 4.83 > 1.96$, the decrease from 2007 to 2008 in the male age-adjusted death rate for lung cancer is statistically significant.

Confidence intervals and statistical tests based on fewer than 100 deaths—When the number of deaths is not large (fewer than 100), the Poisson distribution cannot be approximated by the normal distribution. The normal distribution is symmetrical, with a range from $-\infty$ to $+\infty$. As a result, confidence intervals based on the normal distribution also have this range. The number of deaths or the death rate, however, cannot be less than zero. When the number of deaths is very small, approximating confidence intervals for deaths and death rates using the normal distribution will sometimes produce lower confidence limits that are negative. The Poisson distribution, in contrast, is an asymmetric distribution with zero as a lower bound—confidence limits based on this distribution will never be less than zero. A simple method based on the more general family of gamma distributions, of which the Poisson is a member, can be used to approximate confidence intervals for deaths and death rates when the number of deaths is small (98,104). For more information regarding how the gamma method is derived, see Derivation of the gamma method at the end of this section.

Calculations using the gamma method can be made using commonly available spreadsheet programs or statistical software (e.g., Excel, SAS) that include an inverse gamma function. In Excel, the function “`gammainv (probability, alpha, beta)`” returns values associated with the inverse gamma function for a given probability between 0 and 1. For 95 percent confidence limits, the probability associated with the lower limit is $.05/2 = .025$ and with the upper limit, $1 - (.05/2) = .975$. Alpha and beta are parameters associated with the gamma distribution. For the number of deaths and crude and age-specific death rates, $\alpha = D$ (the number of deaths) and $\beta = 1$. In Excel, the following formulas can be used to calculate lower and upper 95 percent confidence limits for the number of deaths and crude and age-specific death rates:

$$L(D) = \text{GAMMAINV}(.025, D, 1) \text{ and } U(D) = \text{GAMMAINV}(.975, D+1, 1)$$

Confidence limits for the death rate are then calculated by dividing $L(D)$ and $U(D)$ by the population (P) at risk of dying (see Formula 17).

Alternatively, 95 percent confidence limits can be estimated using the lower and upper confidence limit factors shown in Table XV. For the number of deaths, D , and the death rate, R ,

$$11. L(D) = L \times D \text{ and } U(D) = U \times D$$

$$12. L(R) = L \times R \text{ and } U(R) = U \times R$$

where L and U in both formulas are the lower and upper confidence limit factors that correspond to the appropriate number of deaths, D , in Table XV. For example, suppose that the death rate for AIAN

females aged 1–4 is 39.5 per 100,000 and based on 50 deaths. Applying Formula 12, values for L and U from Table XV for 50 deaths are multiplied by the death rate, 39.5, such that:

$$L(R) = L(39.5) = 0.742219 \times 39.5 = 29.3 \text{ and}$$

$$U(R) = U(39.5) = 1.318375 \times 39.5 = 52.1$$

These confidence limits indicate that the chances are 95 out of 100 that the actual death rate for AIAN females aged 1–4 is between 29.3 and 52.1 per 100,000.

Although the calculations are similar, confidence intervals based on small numbers for age-adjusted death rates, infant mortality rates, and rates that are subject to sampling variability in the denominator are somewhat more complicated (68,98).

Refer to the most recent version of the Mortality Technical Appendix for more details at <http://www.cdc.gov/nchs/products/vsus.htm#appendices>.

When comparing the difference between two rates (R_1 and R_2), where one or both of the rates are based on fewer than 100 deaths, a comparison of 95 percent confidence intervals may be used as a statistical test. If the 95 percent confidence intervals do not overlap, then the difference can be said to be statistically significant at the 0.05 level. A simple rule of thumb is: If $R_1 > R_2$, then test if $L(R_1) > U(R_2)$, or if $R_2 > R_1$, then test if $L(R_2) > U(R_1)$. Positive tests denote statistical significance at the 0.05 level. For example, suppose that AIAN females aged 1–4 have a death rate (R_1) of 39.5 based on 50 deaths and API females aged 1–4 have a death rate (R_2) of 20.1 per 100,000 based on 86 deaths. The 95 percent confidence limits for R_1 and R_2 calculated using Formula 12 would be:

$$L(R) = L(39.5) = 0.742219 \times 39.5 = 29.3 \text{ and}$$

$$U(R) = U(39.5) = 1.318375 \times 39.5 = 52.1$$

$$L(R_2) = L(20.1) = 0.799871 \times 17.9 = 16.1 \text{ and}$$

$$U(R_2) = U(20.1) = 1.234992 \times 17.9 = 24.8$$

Because $R_1 > R_2$ and $L(R_1) > U(R_2)$, it can be concluded that the difference between the death rates for AIAN females aged 1–4 and API females of the same age is statistically significant at the 0.05 level. That is, taking into account random variability, API females aged 1–4 years have a death rate significantly lower than that for AIAN females of the same age.

This test may also be used to perform tests for other statistics when the normal approximation is not appropriate for one or both of the statistics being compared, by replacing R_1 and R_2 with D_1 and D_2 , R'_1 and R'_2 , or others.

Users of the method of comparing confidence intervals should be aware that this method is a conservative test for statistical significance—the difference between two rates may, in fact, be statistically significant even though confidence intervals for the two rates overlap (104). Caution should

be observed when interpreting a nonsignificant difference between two rates, especially when the lower and upper limits being compared overlap only slightly.

Derivation of the gamma method—For a random variable X that follows a gamma distribution $\Gamma(y,z)$, where y and z are the parameters that determine the shape of the distribution (105), $E(X) = yz$ and $\text{Var}(X) = yz^2$. For the number of deaths, D , $E(D) = D$ and $\text{Var}(D) = D$. It follows that $y = D$ and $z = 1$, and thus:

$$13. D \sim \Gamma(D,1)$$

From Equation 13, it is clear that the shape of the distribution of deaths depends only on the number of deaths.

For the death rate, R , $E(R) = R$ and $\text{Var}(R) = D/P^2$. It follows, in this case, that $y = D$ and $z = P^{-1}$, and thus:

$$14. R \sim \Gamma(D, P^{-1})$$

A useful property of the gamma distribution is that for $X \sim \Gamma(y,z)$, X can be divided by z such that $X/z \sim \Gamma(y,1)$. This converts the gamma distribution into a simplified, standard form, dependent only on parameter y . Expressing Equation 14 in its simplified form gives:

$$15. R/P^{-1} = D \sim \Gamma(D,1)$$

From Equation 15, it is clear that the shape of the distribution of the death rate is also dependent solely on the number of deaths.

Using the results of Equations 13 and 15, the inverse gamma distribution can be used to calculate upper and lower confidence limits. Lower and upper $100(1-\alpha)$ percent confidence limits for the number of deaths, $L(D)$ and $U(D)$, are estimated as:

$$16. L(D) = \Gamma^{-1}_{(D,1)}(\alpha/2) \text{ and } U(D) = \Gamma^{-1}_{(D+1,1)}(1-\alpha/2)$$

where Γ^{-1} represents the inverse of the gamma distribution and $D+1$ in the formula for $U(D)$ reflects a continuity correction, which is necessary because D is a discrete random variable and the gamma distribution is a continuous distribution. For a 95 percent confidence interval, $\alpha = .05$. For the death rate, it can be shown that:

$$17. L(R) = L(D)/P \text{ and } U(R) = U(D)/P$$

For more detail regarding the derivation of the gamma method and its application to age-adjusted death rates and other mortality statistics, see "References" (68,98,103).

Availability of mortality data

Mortality data are available in publications, unpublished tables, and electronic products as described on the NCHS mortality website at <http://www.cdc.gov/nchs/deaths.htm>. More detailed analysis than this report provides can be derived from the mortality public-use data set issued each data year. Since 1968,

the data set has been available through NCHS in ASCII format and can now be downloaded from http://www.cdc.gov/nchs/data_access/Vitalstatsonline.htm. Additional resources available from NCHS include Vital Statistics of the United States, Mortality; Vital and Health Statistics, Series 20 reports; and National Vital Statistics Reports.

Definition of terms

Infant deaths—Deaths of infants under age 1.

Neonatal deaths—Deaths of infants aged 0–27 days.

Postneonatal deaths—Deaths of infants aged 28 days–11 months.

Crude death rate—Total deaths per 100,000 population for a specified period. This rate represents the average chance of dying during a specified period for persons in the entire population.

Age-specific death rate—Deaths per 100,000 population in a specified age group, such as 1–4 or 5–9, for a specified period.

Age-adjusted death rate—The death rate used to make comparisons of relative mortality risks across groups and over time. This rate should be viewed as a construct or an index rather than a direct or actual measure of mortality risk. Statistically, it is a weighted average of age-specific death rates, where the weights represent the fixed population proportions by age.

Detailed Tables

Table 1. Number of deaths, death rates, and age-adjusted death rates, by race and sex: United States, 1940, 1950, 1960, 1970, and 1980-2008

[Crude rates on an annual basis per 100,000 population in specified age group; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Rates are based on populations enumerated as of April 1 for census years and estimated as of July 1 for all other years; see "Technical Notes." Beginning 1970, excludes deaths of nonresidents of the United States. Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards]

| Year | All races ¹ | | | White ² | | | Black ² | | | American Indian or Alaska Native ^{2,3} | | | Asian or Pacific Islander ^{2,4} | | |
|------|------------------------|-----------|-----------|--------------------|-----------|-----------|--------------------|---------|---------|---|-------|--------|--|--------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| | Number | | | | | | | | | | | | | | |
| 2008 | 2,471,984 | 1,226,197 | 1,245,787 | 2,120,233 | 1,046,183 | 1,074,050 | 289,072 | 147,143 | 141,929 | 14,776 | 8,163 | 6,613 | 47,903 | 24,708 | 23,195 |
| 2007 | 2,423,712 | 1,203,968 | 1,219,744 | 2,074,151 | 1,023,951 | 1,050,200 | 289,585 | 148,309 | 141,276 | 14,367 | 7,885 | 6,482 | 45,609 | 23,823 | 21,786 |
| 2006 | 2,426,264 | 1,201,942 | 1,224,322 | 2,077,549 | 1,022,328 | 1,055,221 | 289,971 | 148,602 | 141,369 | 14,037 | 7,630 | 6,407 | 44,707 | 23,382 | 21,325 |
| 2005 | 2,448,017 | 1,207,675 | 1,240,342 | 2,098,097 | 1,028,152 | 1,069,945 | 292,808 | 149,108 | 143,700 | 13,918 | 7,607 | 6,311 | 43,194 | 22,808 | 20,386 |
| 2004 | 2,397,615 | 1,181,668 | 1,215,947 | 2,056,643 | 1,007,266 | 1,049,377 | 287,315 | 145,970 | 141,345 | 13,124 | 7,134 | 5,990 | 40,533 | 21,298 | 19,235 |
| 2003 | 2,448,288 | 1,201,964 | 1,246,324 | 2,103,714 | 1,025,650 | 1,078,064 | 291,300 | 148,022 | 143,278 | 13,147 | 7,106 | 6,041 | 40,127 | 21,186 | 18,941 |
| 2002 | 2,443,387 | 1,199,264 | 1,244,123 | 2,102,589 | 1,025,196 | 1,077,393 | 290,051 | 146,835 | 143,216 | 12,415 | 6,750 | 5,665 | 38,332 | 20,483 | 17,849 |
| 2001 | 2,416,425 | 1,183,421 | 1,233,004 | 2,079,691 | 1,011,218 | 1,068,473 | 287,709 | 145,908 | 141,801 | 11,977 | 6,466 | 5,511 | 37,048 | 19,829 | 17,219 |
| 2000 | 2,403,351 | 1,177,578 | 1,225,773 | 2,071,287 | 1,007,191 | 1,064,096 | 285,826 | 145,184 | 140,642 | 11,363 | 6,185 | 5,178 | 34,875 | 19,018 | 15,857 |
| 1999 | 2,391,399 | 1,175,460 | 1,215,939 | 2,061,348 | 1,005,335 | 1,056,013 | 285,064 | 145,703 | 139,361 | 11,312 | 6,092 | 5,220 | 33,675 | 18,330 | 15,345 |
| 1998 | 2,337,256 | 1,157,260 | 1,179,996 | 2,015,984 | 990,190 | 1,025,794 | 278,440 | 143,417 | 135,023 | 10,845 | 5,994 | 4,851 | 31,987 | 17,659 | 14,328 |
| 1997 | 2,314,245 | 1,154,039 | 1,160,206 | 1,996,393 | 986,884 | 1,009,509 | 276,520 | 144,110 | 132,410 | 10,576 | 5,985 | 4,591 | 30,756 | 17,060 | 13,696 |
| 1996 | 2,314,690 | 1,163,569 | 1,151,121 | 1,992,966 | 991,984 | 1,000,982 | 282,089 | 149,472 | 132,617 | 10,127 | 5,563 | 4,564 | 29,508 | 16,550 | 12,958 |
| 1995 | 2,312,132 | 1,172,959 | 1,139,173 | 1,987,437 | 997,277 | 990,160 | 286,401 | 154,175 | 132,226 | 9,997 | 5,574 | 4,423 | 28,297 | 15,933 | 12,364 |
| 1994 | 2,278,994 | 1,162,747 | 1,116,247 | 1,959,875 | 988,823 | 971,052 | 282,379 | 153,019 | 129,360 | 9,637 | 5,497 | 4,140 | 27,103 | 15,408 | 11,695 |
| 1993 | 2,268,553 | 1,161,797 | 1,106,756 | 1,951,437 | 988,329 | 963,108 | 282,151 | 153,502 | 128,649 | 9,579 | 5,434 | 4,145 | 25,386 | 14,532 | 10,854 |
| 1992 | 2,175,613 | 1,122,336 | 1,053,277 | 1,873,781 | 956,957 | 916,824 | 269,219 | 146,630 | 122,589 | 8,953 | 5,181 | 3,772 | 23,660 | 13,568 | 10,092 |
| 1991 | 2,169,518 | 1,121,665 | 1,047,853 | 1,868,904 | 956,497 | 912,407 | 269,525 | 147,331 | 122,194 | 8,621 | 4,948 | 3,673 | 22,173 | 12,727 | 9,446 |
| 1990 | 2,148,463 | 1,113,417 | 1,035,046 | 1,853,254 | 950,812 | 902,442 | 265,498 | 145,359 | 120,139 | 8,316 | 4,877 | 3,439 | 21,127 | 12,211 | 8,916 |
| 1989 | 2,150,466 | 1,114,190 | 1,036,276 | 1,853,841 | 950,852 | 902,989 | 267,642 | 146,393 | 121,249 | 8,614 | 5,066 | 3,548 | 20,042 | 11,688 | 8,354 |
| 1988 | 2,167,999 | 1,125,540 | 1,042,459 | 1,876,906 | 965,419 | 911,487 | 264,019 | 144,228 | 119,791 | 7,917 | 4,617 | 3,300 | 18,963 | 11,155 | 7,808 |
| 1987 | 2,123,323 | 1,107,958 | 1,015,365 | 1,843,067 | 953,382 | 889,685 | 254,814 | 139,551 | 115,263 | 7,602 | 4,432 | 3,170 | 17,689 | 10,496 | 7,193 |
| 1986 | 2,105,361 | 1,104,005 | 1,001,356 | 1,831,083 | 952,554 | 878,529 | 250,326 | 137,214 | 113,112 | 7,301 | 4,365 | 2,936 | 16,514 | 9,795 | 6,719 |
| 1985 | 2,086,440 | 1,097,758 | 988,682 | 1,819,054 | 950,455 | 868,599 | 244,207 | 133,610 | 110,597 | 7,154 | 4,181 | 2,973 | 15,887 | 9,441 | 6,446 |
| 1984 | 2,039,369 | 1,076,514 | 962,855 | 1,781,897 | 934,529 | 847,368 | 235,884 | 129,147 | 106,737 | 6,949 | 4,117 | 2,832 | 14,483 | 8,627 | 5,856 |
| 1983 | 2,019,201 | 1,071,923 | 947,278 | 1,765,582 | 931,779 | 833,803 | 233,124 | 127,911 | 105,213 | 6,839 | 4,064 | 2,775 | 13,554 | 8,126 | 5,428 |
| 1982 | 1,974,797 | 1,056,440 | 918,357 | 1,729,085 | 919,239 | 809,846 | 226,513 | 125,610 | 100,903 | 6,679 | 3,974 | 2,705 | 12,430 | 7,564 | 4,866 |
| 1981 | 1,977,981 | 1,063,772 | 914,209 | 1,731,233 | 925,490 | 805,743 | 228,560 | 127,296 | 101,264 | 6,608 | 4,016 | 2,592 | 11,475 | 6,908 | 4,567 |
| 1980 | 1,989,841 | 1,075,078 | 914,763 | 1,738,607 | 933,878 | 804,729 | 233,135 | 130,138 | 102,997 | 6,923 | 4,193 | 2,730 | 11,071 | 6,809 | 4,262 |
| 1970 | 1,921,031 | 1,078,478 | 842,553 | 1,682,096 | 942,437 | 739,659 | 225,647 | 127,540 | 98,107 | 5,675 | 3,391 | 2,284 | --- | --- | --- |
| 1960 | 1,711,982 | 975,648 | 736,334 | 1,505,335 | 860,857 | 644,478 | 196,010 | 107,701 | 88,309 | 4,528 | 2,658 | 1,870 | --- | --- | --- |
| 1950 | 1,452,454 | 827,749 | 624,705 | 1,276,085 | 731,366 | 544,719 | 169,606 | 92,004 | 77,602 | 4,440 | 2,497 | 1,943 | --- | --- | --- |
| 1940 | 1,417,269 | 791,003 | 626,266 | 1,231,223 | 690,901 | 540,322 | 178,743 | 95,517 | 83,226 | 4,791 | 2,527 | 2,264 | --- | --- | --- |

Table 1. Number of deaths, death rates, and age-adjusted death rates, by race and sex: United States, 1940, 1950, 1960, 1970, and 1980-2008

[Crude rates on an annual basis per 100,000 population in specified age group; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Rates are based on populations enumerated as of April 1 for census years and estimated as of July 1 for all other years; see "Technical Notes." Beginning 1970, excludes deaths of nonresidents of the United States. Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards]

| Year | All races ¹ | | | White ² | | | Black ² | | | American Indian or Alaska Native ^{2,3} | | | Asian or Pacific Islander ^{2,4} | | |
|--------------------------------------|------------------------|---------|---------|--------------------|---------|---------|--------------------|---------|---------|---|---------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Age-adjusted death rate ⁵ | | | | | | | | | | | | | | | |
| 2008 | 758.3 | 900.6 | 643.4 | 750.3 | 889.2 | 636.9 | 934.9 | 1,150.4 | 778.4 | 610.1 | 717.3 | 515.1 | 413.7 | 492.8 | 353.1 |
| 2007 | 760.2 | 905.6 | 643.4 | 749.4 | 890.5 | 634.8 | 958.0 | 1,184.4 | 793.8 | 627.2 | 736.7 | 533.2 | 415.0 | 499.2 | 350.6 |
| 2006 | 776.5 | 924.8 | 657.8 | 764.4 | 908.2 | 648.2 | 982.0 | 1,215.6 | 813.0 | 642.1 | 739.9 | 555.7 | 428.6 | 516.0 | 362.6 |
| 2005 | 798.8 | 951.1 | 677.6 | 785.3 | 933.2 | 666.5 | 1,016.5 | 1,252.9 | 845.7 | 663.4 | 775.3 | 567.7 | 440.2 | 534.4 | 369.3 |
| 2004 | 800.8 | 955.7 | 679.2 | 786.3 | 936.9 | 666.9 | 1,027.3 | 1,269.4 | 855.3 | 650.0 | 758.1 | 557.9 | 443.9 | 534.7 | 375.5 |
| 2003 | 832.7 | 994.3 | 706.2 | 817.0 | 973.9 | 693.1 | 1,065.9 | 1,319.1 | 885.6 | 685.0 | 797.0 | 592.1 | 465.7 | 562.7 | 392.7 |
| 2002 | 845.3 | 1,013.7 | 715.2 | 829.0 | 992.9 | 701.3 | 1,083.3 | 1,341.4 | 901.8 | 677.4 | 794.2 | 581.1 | 474.4 | 578.4 | 395.9 |
| 2001 | 854.5 | 1,029.1 | 721.8 | 836.5 | 1,006.1 | 706.7 | 1,101.2 | 1,375.0 | 912.5 | 686.7 | 798.9 | 594.0 | 492.1 | 597.4 | 412.0 |
| 2000 | 869.0 | 1,053.8 | 731.4 | 849.8 | 1,029.4 | 715.3 | 1,121.4 | 1,403.5 | 927.6 | 709.3 | 841.5 | 604.5 | 506.4 | 624.2 | 416.8 |
| 1999 | 875.6 | 1,067.0 | 734.0 | 854.6 | 1,040.0 | 716.6 | 1,135.7 | 1,432.6 | 933.6 | 780.9 | 925.9 | 668.2 | 519.7 | 641.2 | 427.5 |
| 1998 | 870.6 | 1,069.4 | 724.7 | 849.3 | 1,042.0 | 707.3 | 1,127.8 | 1,430.5 | 921.6 | 770.4 | 943.9 | 640.5 | 522.4 | 646.9 | 426.7 |
| 1997 | 878.1 | 1,088.1 | 725.6 | 855.7 | 1,059.1 | 707.8 | 1,139.8 | 1,458.8 | 922.1 | 774.0 | 974.8 | 625.3 | 531.8 | 660.2 | 432.6 |
| 1996 | 894.1 | 1,115.7 | 733.0 | 869.0 | 1,082.9 | 713.6 | 1,178.4 | 1,524.2 | 940.3 | 763.6 | 924.8 | 641.7 | 543.2 | 676.1 | 439.6 |
| 1995 | 909.8 | 1,143.9 | 739.4 | 882.3 | 1,107.5 | 718.7 | 1,213.9 | 1,585.7 | 955.9 | 771.2 | 932.0 | 643.9 | 554.8 | 693.4 | 446.7 |
| 1994 | 913.5 | 1,155.5 | 738.6 | 885.6 | 1,118.7 | 717.5 | 1,216.9 | 1,592.8 | 954.6 | 764.8 | 953.3 | 618.8 | 562.7 | 702.5 | 452.1 |
| 1993 | 926.1 | 1,177.3 | 745.9 | 897.0 | 1,138.9 | 724.1 | 1,241.2 | 1,632.2 | 969.5 | 796.4 | 1,006.3 | 641.6 | 565.8 | 709.9 | 450.4 |
| 1992 | 905.6 | 1,158.3 | 725.5 | 877.7 | 1,122.4 | 704.1 | 1,206.7 | 1,587.8 | 942.5 | 759.0 | 970.4 | 599.4 | 558.5 | 697.3 | 445.8 |
| 1991 | 922.3 | 1,180.5 | 738.2 | 893.2 | 1,143.1 | 716.1 | 1,235.4 | 1,626.1 | 963.3 | 763.9 | 970.6 | 608.3 | 566.2 | 703.4 | 453.2 |
| 1990 | 938.7 | 1,202.8 | 750.9 | 909.8 | 1,165.9 | 728.8 | 1,250.3 | 1,644.5 | 975.1 | 716.3 | 916.2 | 561.8 | 582.0 | 716.4 | 469.3 |
| 1989 | 950.5 | 1,215.0 | 761.8 | 920.2 | 1,176.6 | 738.8 | 1,275.5 | 1,670.1 | 998.1 | 761.6 | 999.8 | 586.3 | 581.3 | 729.6 | 458.4 |
| 1988 | 975.7 | 1,250.7 | 781.0 | 947.6 | 1,215.9 | 759.1 | 1,284.3 | 1,677.6 | 1,006.8 | 718.6 | 917.4 | 563.6 | 584.2 | 732.0 | 451.0 |
| 1987 | 970.0 | 1,246.1 | 774.2 | 943.4 | 1,213.4 | 753.3 | 1,263.1 | 1,650.3 | 989.7 | 719.8 | 899.3 | 583.7 | 577.3 | 732.4 | 448.1 |
| 1986 | 978.6 | 1,261.7 | 778.7 | 952.8 | 1,230.5 | 758.1 | 1,266.7 | 1,650.1 | 994.4 | 720.8 | 926.7 | 549.3 | 576.4 | 730.5 | 445.4 |
| 1985 | 988.1 | 1,278.1 | 784.5 | 963.6 | 1,249.8 | 764.3 | 1,261.2 | 1,634.5 | 994.4 | 731.7 | 926.1 | 577.2 | 586.5 | 755.4 | 456.7 |
| 1984 | 982.5 | 1,271.4 | 779.8 | 959.7 | 1,245.9 | 760.7 | 1,236.7 | 1,600.8 | 976.9 | 761.7 | 946.0 | 567.9 | 574.4 | 724.7 | 443.1 |
| 1983 | 990.0 | 1,284.5 | 783.3 | 967.3 | 1,259.4 | 763.9 | 1,240.5 | 1,600.7 | 980.7 | 757.3 | 945.0 | 605.5 | 565.1 | 718.8 | 428.8 |
| 1982 | 985.0 | 1,279.9 | 776.6 | 963.6 | 1,255.9 | 758.7 | 1,221.3 | 1,580.4 | 960.1 | 757.0 | 940.1 | 604.4 | 550.4 | 738.2 | 410.3 |
| 1981 | 1,007.1 | 1,308.2 | 792.7 | 984.0 | 1,282.2 | 773.6 | 1,258.4 | 1,626.6 | 986.6 | 784.6 | 1,030.2 | 588.0 | 544.7 | 710.3 | 405.3 |
| 1980 | 1,039.1 | 1,348.1 | 817.9 | 1,012.7 | 1,317.6 | 796.1 | 1,314.8 | 1,697.8 | 1,033.3 | 867.0 | 1,111.5 | 662.4 | 589.9 | 786.5 | 425.9 |
| 1970 | 1,222.6 | 1,542.1 | 971.4 | 1,193.3 | 1,513.7 | 944.0 | 1,518.1 | 1,873.9 | 1,228.7 | --- | --- | --- | --- | --- | --- |
| 1960 | 1,339.2 | 1,609.0 | 1,105.3 | 1,311.3 | 1,586.0 | 1,074.4 | 1,577.5 | 1,811.1 | 1,369.7 | --- | --- | --- | --- | --- | --- |
| 1950 | 1,446.0 | 1,674.2 | 1,236.0 | 1,410.8 | 1,642.5 | 1,198.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1940 | 1,785.0 | 1,976.0 | 1,599.4 | 1,735.3 | 1,925.2 | 1,550.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |

--- Data not available.

¹For 1940-91, data includes deaths among races not shown separately; beginning in 1992, records coded as "other races" and records for which race was unknown, not stated, or not classifiable were assigned to the race of previous record; see "Technical Notes."

²Multiple-race data were reported by 34 states and the District of Columbia in 2008, by 27 states and the District of Columbia in 2007, by 25 states and the District of Columbia in 2006, by 21 states and the District of Columbia in 2005, by 15 states in 2004, and by 7 states in 2003; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

³Includes Aleuts and Eskimos.

⁴Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

⁵For method of computation, see "Technical Notes."

Table 2. Number of deaths, death rates, and age-adjusted death rates, by Hispanic origin, race for non-Hispanic population, and sex: United States, 1997-2008

[Crude rates on an annual basis per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Rates are based on populations enumerated as of April 1 for 2000 and are estimated as of July 1 for all other years; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

| Year | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|--------------------------------------|--------------------------|-----------|-----------|------------|--------|--------|---------------------------|-----------|-----------|---------------------------------|---------|-----------|---------------------------------|---------|---------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Number | | | | | | | | | | | | | | | |
| 2008 | 2,471,984 | 1,226,197 | 1,245,787 | 139,241 | 76,861 | 62,380 | 2,327,636 | 1,146,394 | 1,181,242 | 1,981,034 | 969,288 | 1,011,746 | 285,522 | 145,168 | 140,354 |
| 2007 | 2,423,712 | 1,203,968 | 1,219,744 | 135,519 | 75,708 | 59,811 | 2,284,446 | 1,125,974 | 1,158,472 | 1,939,606 | 948,662 | 990,944 | 286,366 | 146,474 | 139,892 |
| 2006 | 2,426,264 | 1,201,942 | 1,224,322 | 133,004 | 74,250 | 58,754 | 2,288,424 | 1,124,813 | 1,163,611 | 1,944,617 | 947,966 | 996,651 | 286,581 | 146,729 | 139,852 |
| 2005 | 2,448,017 | 1,207,675 | 1,240,342 | 131,161 | 73,788 | 57,373 | 2,312,028 | 1,131,013 | 1,181,015 | 1,967,142 | 954,402 | 1,012,740 | 289,163 | 147,010 | 142,153 |
| 2004 | 2,397,615 | 1,181,668 | 1,215,947 | 122,416 | 68,544 | 53,872 | 2,269,583 | 1,109,848 | 1,159,735 | 1,933,382 | 938,143 | 995,239 | 283,859 | 144,022 | 139,837 |
| 2003 | 2,448,288 | 1,201,964 | 1,246,324 | 122,026 | 68,119 | 53,907 | 2,319,476 | 1,129,927 | 1,189,549 | 1,979,465 | 956,194 | 1,023,271 | 287,968 | 146,136 | 141,832 |
| 2002 | 2,443,387 | 1,199,264 | 1,244,123 | 117,135 | 65,703 | 51,432 | 2,318,269 | 1,129,090 | 1,189,179 | 1,981,973 | 957,645 | 1,024,328 | 286,573 | 144,802 | 141,771 |
| 2001 | 2,416,425 | 1,183,421 | 1,233,004 | 113,413 | 63,317 | 50,096 | 2,295,244 | 1,115,683 | 1,179,561 | 1,962,810 | 945,967 | 1,016,843 | 284,343 | 143,971 | 140,372 |
| 2000 | 2,403,351 | 1,177,578 | 1,225,773 | 107,254 | 60,172 | 47,082 | 2,287,846 | 1,112,704 | 1,175,142 | 1,959,919 | 944,781 | 1,015,138 | 282,676 | 143,297 | 139,379 |
| 1999 | 2,391,399 | 1,175,460 | 1,215,939 | 103,740 | 57,991 | 45,749 | 2,279,325 | 1,112,718 | 1,166,607 | 1,953,197 | 944,913 | 1,008,284 | 281,979 | 143,883 | 138,096 |
| 1998 | 2,337,256 | 1,157,260 | 1,179,996 | 98,406 | 55,821 | 42,585 | 2,230,127 | 1,096,677 | 1,133,450 | 1,912,802 | 931,844 | 980,958 | 275,264 | 141,627 | 133,637 |
| 1997 | 2,314,245 | 1,154,039 | 1,160,206 | 95,460 | 54,348 | 41,112 | 2,209,450 | 1,094,541 | 1,114,909 | 1,895,461 | 929,703 | 965,758 | 273,381 | 142,241 | 131,140 |
| Death rate | | | | | | | | | | | | | | | |
| 2008 | 813.0 | 817.9 | 808.2 | 296.6 | 316.9 | 274.9 | 905.3 | 912.2 | 898.7 | 982.0 | 978.2 | 985.5 | 745.2 | 794.3 | 700.5 |
| 2007 | 803.6 | 809.9 | 797.4 | 297.8 | 321.8 | 272.1 | 892.0 | 899.8 | 884.5 | 964.1 | 960.4 | 967.6 | 750.7 | 805.1 | 701.0 |
| 2006 | 810.4 | 814.8 | 806.1 | 300.1 | 323.9 | 274.6 | 897.1 | 902.8 | 891.7 | 968.5 | 962.0 | 974.7 | 759.1 | 815.3 | 708.0 |
| 2005 | 825.9 | 827.2 | 824.6 | 307.3 | 334.4 | 278.2 | 911.2 | 912.6 | 910.0 | 981.8 | 970.6 | 992.6 | 774.4 | 825.7 | 727.6 |
| 2004 | 816.5 | 817.6 | 815.4 | 296.2 | 321.1 | 269.7 | 899.4 | 900.9 | 898.0 | 967.8 | 957.4 | 977.7 | 768.8 | 818.7 | 723.4 |
| 2003 | 841.9 | 840.3 | 843.4 | 305.8 | 330.7 | 279.3 | 924.4 | 922.9 | 925.9 | 993.6 | 979.1 | 1,007.6 | 788.8 | 840.6 | 741.6 |
| 2002 | 847.3 | 846.6 | 848.0 | 302.2 | 328.7 | 274.0 | 928.8 | 928.0 | 929.5 | 997.5 | 983.9 | 1,010.6 | 792.8 | 842.3 | 748.0 |
| 2001 | 848.5 | 846.4 | 850.4 | 306.8 | 332.9 | 279.0 | 926.2 | 923.6 | 928.6 | 991.1 | 975.6 | 1,006.1 | 798.1 | 849.7 | 751.2 |
| 2000 | 854.0 | 853.0 | 855.0 | 303.8 | 331.3 | 274.6 | 929.6 | 928.1 | 931.0 | 993.2 | 978.5 | 1,007.3 | 805.5 | 859.5 | 756.7 |
| 1999 | 857.0 | 859.2 | 854.9 | 305.7 | 332.6 | 277.2 | 929.9 | 932.2 | 927.8 | 990.7 | 979.6 | 1,001.3 | 812.1 | 872.8 | 757.3 |
| 1998 | 847.3 | 856.4 | 838.5 | 303.9 | 336.0 | 270.0 | 916.0 | 925.3 | 907.1 | 972.9 | 969.2 | 976.5 | 805.6 | 873.7 | 744.1 |
| 1997 | 848.8 | 864.6 | 833.6 | 309.0 | 343.2 | 272.9 | 913.9 | 930.4 | 898.3 | 967.4 | 970.6 | 964.3 | 813.5 | 892.9 | 741.9 |
| Age-adjusted death rate ⁴ | | | | | | | | | | | | | | | |
| 2008 | 758.3 | 900.6 | 643.4 | 532.2 | 630.7 | 445.7 | 775.8 | 922.2 | 658.5 | 766.2 | 908.5 | 650.8 | 955.2 | 1,176.6 | 794.8 |
| 2007 | 760.2 | 905.6 | 643.4 | 546.1 | 654.5 | 452.7 | 776.3 | 924.9 | 657.7 | 763.3 | 906.8 | 647.7 | 978.6 | 1,210.9 | 810.4 |
| 2006 | 776.5 | 924.8 | 657.8 | 564.0 | 675.6 | 468.6 | 791.4 | 942.6 | 671.1 | 777.0 | 922.8 | 660.0 | 1,001.4 | 1,241.0 | 828.4 |
| 2005 | 798.8 | 951.1 | 677.6 | 590.7 | 717.0 | 485.3 | 812.5 | 966.7 | 690.3 | 796.6 | 945.4 | 677.7 | 1,034.5 | 1,275.3 | 860.5 |
| 2004 | 800.8 | 955.7 | 679.2 | 586.7 | 706.8 | 485.9 | 814.1 | 971.1 | 691.4 | 797.1 | 949.0 | 677.5 | 1,044.7 | 1,291.5 | 869.4 |
| 2003 | 832.7 | 994.3 | 706.2 | 621.2 | 748.1 | 515.8 | 844.5 | 1,008.0 | 717.2 | 826.1 | 984.0 | 702.1 | 1,083.2 | 1,341.1 | 899.8 |
| 2002 | 845.3 | 1,013.7 | 715.2 | 629.3 | 766.7 | 518.3 | 856.5 | 1,026.5 | 725.8 | 837.5 | 1,002.2 | 709.9 | 1,099.2 | 1,360.6 | 915.3 |
| 2001 | 854.5 | 1,029.1 | 721.8 | 658.7 | 802.5 | 544.2 | 864.0 | 1,039.8 | 730.9 | 842.9 | 1,012.8 | 713.5 | 1,116.5 | 1,393.7 | 925.5 |
| 2000 | 869.0 | 1,053.8 | 731.4 | 665.7 | 818.1 | 546.0 | 877.9 | 1,063.8 | 740.0 | 855.5 | 1,035.4 | 721.5 | 1,137.0 | 1,422.0 | 941.2 |
| 1999 | 875.6 | 1,067.0 | 734.0 | 676.4 | 830.5 | 555.9 | 883.9 | 1,076.4 | 741.9 | 859.8 | 1,045.5 | 722.3 | 1,150.1 | 1,449.4 | 946.0 |
| 1998 | 870.6 | 1,069.4 | 724.7 | 665.4 | 833.6 | 536.9 | 878.4 | 1,078.2 | 732.4 | 854.1 | 1,046.7 | 712.8 | 1,141.8 | 1,448.2 | 932.9 |
| 1997 | 878.1 | 1,088.1 | 725.6 | 669.3 | 840.5 | 538.8 | 885.3 | 1,096.4 | 732.6 | 859.7 | 1,063.2 | 712.5 | 1,154.3 | 1,476.7 | 934.2 |

¹Figures for origin not stated are included in "All origins" but are not distributed among specified origins.

²Includes races other than white and black.

³Multiple-race data were reported by 34 states and the District of Columbia in 2008, by 27 states and the District of Columbia in 2007, by 25 states and the District of Columbia in 2006, by 21 states and the District of Columbia in 2005, by 15 states in 2004, and by 7 states in 2003; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

⁴For method of computation, see "Technical Notes."

Table 3. Number of deaths and death rates, by age, race, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes".]

| Age | All races | | | White ¹ | | | Black ¹ | | | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|---------------------------|------------|-----------|-----------|--------------------|-----------|-----------|--------------------|----------|----------|---|---------|---------|--|---------|---------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| | Number | | | | | | | | | | | | | | |
| All ages | 2,471,984 | 1,226,197 | 1,245,787 | 2,120,233 | 1,046,183 | 1,074,050 | 289,072 | 147,143 | 141,929 | 14,776 | 8,163 | 6,613 | 47,903 | 24,708 | 23,195 |
| Under 1 year | 28,059 | 15,669 | 12,390 | 18,164 | 10,151 | 8,013 | 8,543 | 4,748 | 3,795 | 403 | 234 | 169 | 949 | 536 | 413 |
| 1 - 4 years | 4,730 | 2,693 | 2,037 | 3,349 | 1,919 | 1,430 | 1,118 | 647 | 471 | 100 | 50 | 50 | 163 | 77 | 86 |
| 5 - 9 years | 2,502 | 1,396 | 1,106 | 1,787 | 979 | 808 | 576 | 347 | 229 | 40 | 21 | 19 | 99 | 49 | 50 |
| 10 - 14 years | 3,149 | 1,884 | 1,265 | 2,276 | 1,359 | 917 | 709 | 420 | 289 | 57 | 31 | 26 | 107 | 74 | 33 |
| 15 - 19 years | 12,407 | 8,958 | 3,449 | 9,014 | 6,416 | 2,598 | 2,856 | 2,175 | 681 | 264 | 174 | 90 | 273 | 193 | 80 |
| 20 - 24 years | 19,791 | 15,069 | 4,722 | 14,611 | 11,137 | 3,474 | 4,361 | 3,338 | 1,023 | 371 | 288 | 83 | 448 | 306 | 142 |
| 25 - 29 years | 20,786 | 15,000 | 5,786 | 15,302 | 11,147 | 4,155 | 4,562 | 3,268 | 1,294 | 380 | 259 | 121 | 542 | 326 | 216 |
| 30 - 34 years | 21,489 | 14,635 | 6,854 | 15,810 | 10,917 | 4,893 | 4,704 | 3,095 | 1,609 | 392 | 269 | 123 | 583 | 354 | 229 |
| 35 - 39 years | 29,864 | 19,104 | 10,760 | 22,323 | 14,536 | 7,787 | 6,251 | 3,771 | 2,480 | 524 | 314 | 210 | 766 | 483 | 283 |
| 40 - 44 years | 46,506 | 28,582 | 17,924 | 35,286 | 22,128 | 13,158 | 9,527 | 5,417 | 4,110 | 692 | 413 | 279 | 1,001 | 624 | 377 |
| 45 - 49 years | 77,417 | 47,339 | 30,078 | 59,992 | 37,399 | 22,593 | 14,944 | 8,396 | 6,548 | 963 | 617 | 346 | 1,518 | 927 | 591 |
| 50 - 54 years | 109,125 | 67,699 | 41,426 | 84,784 | 53,419 | 31,365 | 21,016 | 12,288 | 8,728 | 1,124 | 700 | 424 | 2,201 | 1,292 | 909 |
| 55 - 59 years | 134,708 | 83,423 | 51,285 | 106,166 | 66,337 | 39,829 | 24,523 | 14,728 | 9,795 | 1,185 | 715 | 470 | 2,834 | 1,643 | 1,191 |
| 60 - 64 years | 161,474 | 96,127 | 65,347 | 132,749 | 79,561 | 53,188 | 24,189 | 13,936 | 10,253 | 1,256 | 723 | 533 | 3,280 | 1,907 | 1,373 |
| 65 - 69 years | 183,450 | 105,403 | 78,047 | 153,212 | 88,436 | 64,776 | 25,229 | 14,089 | 11,140 | 1,291 | 735 | 556 | 3,718 | 2,143 | 1,575 |
| 70 - 74 years | 218,129 | 119,997 | 98,132 | 185,485 | 102,806 | 82,679 | 26,538 | 13,884 | 12,654 | 1,378 | 729 | 649 | 4,728 | 2,578 | 2,150 |
| 75 - 79 years | 287,370 | 149,204 | 138,166 | 251,323 | 131,606 | 119,717 | 28,994 | 14,054 | 14,940 | 1,318 | 681 | 637 | 5,735 | 2,863 | 2,872 |
| 80 - 84 years | 366,190 | 172,692 | 193,498 | 328,103 | 155,817 | 172,286 | 30,136 | 13,019 | 17,117 | 1,269 | 588 | 681 | 6,682 | 3,268 | 3,414 |
| 85 years and over | 744,691 | 261,221 | 483,470 | 680,379 | 240,030 | 440,349 | 50,273 | 15,506 | 34,767 | 1,766 | 622 | 1,144 | 12,273 | 5,063 | 7,210 |
| Not stated | 147 | 102 | 45 | 118 | 83 | 35 | 23 | 17 | 6 | 3 | - | 3 | 3 | 2 | 1 |
| | Rate | | | | | | | | | | | | | | |
| All ages ⁴ | 813.0 | 817.9 | 808.2 | 864.6 | 860.3 | 868.7 | 716.1 | 762.7 | 673.5 | 431.8 | 477.6 | 386.1 | 318.7 | 337.7 | 300.7 |
| Under 1 year ⁵ | 650.5 | 709.7 | 588.5 | 549.8 | 600.2 | 496.9 | 1,194.9 | 1,298.7 | 1,086.3 | 579.1 | 659.7 | 495.3 | 421.9 | 464.2 | 377.2 |
| 1 - 4 years | 28.3 | 31.5 | 25.0 | 26.0 | 29.1 | 22.8 | 41.6 | 47.3 | 35.7 | 38.9 | 38.4 | 39.5 | 18.6 | 17.1 | 20.1 |
| 5 - 9 years | 12.5 | 13.6 | 11.3 | 11.4 | 12.2 | 10.6 | 18.2 | 21.6 | 14.7 | 14.2 | 14.7 | * | 10.0 | 9.7 | 10.2 |
| 10 - 14 years | 15.7 | 18.4 | 12.9 | 14.6 | 17.0 | 12.1 | 21.8 | 25.4 | 18.1 | 20.9 | 22.4 | 19.4 | 11.2 | 15.3 | 7.0 |
| 15 - 19 years | 57.7 | 81.2 | 32.9 | 54.1 | 75.0 | 32.1 | 79.6 | 119.5 | 38.5 | 86.5 | 112.7 | 59.7 | 28.4 | 39.0 | 17.2 |
| 20 - 24 years | 94.0 | 138.9 | 46.2 | 88.4 | 130.3 | 43.5 | 134.2 | 202.9 | 63.7 | 124.8 | 189.4 | 57.1 | 45.4 | 60.7 | 29.5 |
| 25 - 29 years | 97.4 | 137.1 | 55.7 | 91.3 | 128.7 | 51.4 | 146.2 | 211.7 | 82.1 | 136.2 | 178.7 | 90.3 | 45.9 | 55.5 | 36.4 |
| 30 - 34 years | 109.6 | 147.0 | 71.1 | 103.0 | 138.1 | 65.7 | 174.9 | 240.7 | 114.6 | 167.7 | 221.6 | 109.5 | 44.1 | 54.7 | 33.9 |
| 35 - 39 years | 142.3 | 180.8 | 103.2 | 134.7 | 172.0 | 95.8 | 223.7 | 285.8 | 168.1 | 230.0 | 269.6 | 188.7 | 54.9 | 70.9 | 39.7 |
| 40 - 44 years | 216.2 | 266.0 | 166.6 | 204.6 | 253.8 | 154.3 | 337.3 | 408.9 | 274.0 | 304.8 | 363.4 | 246.1 | 82.8 | 106.1 | 60.7 |
| 45 - 49 years | 338.4 | 418.4 | 260.1 | 321.2 | 400.4 | 242.0 | 522.1 | 631.5 | 427.2 | 414.7 | 543.2 | 291.6 | 137.0 | 174.6 | 102.4 |
| 50 - 54 years | 507.7 | 642.4 | 378.2 | 477.6 | 606.8 | 350.6 | 825.0 | 1,050.0 | 633.9 | 545.9 | 702.9 | 398.8 | 222.6 | 278.1 | 173.4 |
| 55 - 59 years | 724.9 | 925.4 | 536.0 | 683.7 | 870.1 | 504.0 | 1,193.1 | 1,591.2 | 866.9 | 714.2 | 895.9 | 545.8 | 339.5 | 426.5 | 265.0 |
| 60 - 64 years | 1,069.2 | 1,328.5 | 830.7 | 1,029.1 | 1,273.5 | 799.6 | 1,653.7 | 2,164.0 | 1,252.2 | 1,022.2 | 1,230.7 | 831.2 | 530.8 | 667.9 | 413.0 |
| 65 - 69 years | 1,616.5 | 1,986.4 | 1,291.6 | 1,571.8 | 1,920.2 | 1,259.8 | 2,359.3 | 3,107.6 | 1,808.5 | 1,526.8 | 1,840.6 | 1,245.9 | 831.1 | 1,033.8 | 656.1 |
| 70 - 74 years | 2,486.0 | 3,031.2 | 2,037.8 | 2,457.9 | 2,987.3 | 2,014.1 | 3,215.1 | 4,116.2 | 2,592.4 | 2,294.0 | 2,647.2 | 1,995.1 | 1,381.5 | 1,691.7 | 1,132.5 |
| 75 - 79 years | 3,950.0 | 4,818.0 | 3,306.7 | 3,948.6 | 4,801.0 | 3,303.8 | 4,745.0 | 6,078.4 | 3,933.3 | 3,097.3 | 3,622.9 | 2,681.4 | 2,234.0 | 2,711.3 | 1,900.5 |
| 80 - 84 years | 6,368.7 | 7,711.2 | 5,512.2 | 6,421.9 | 7,759.8 | 5,555.6 | 6,915.8 | 8,679.9 | 5,989.9 | 4,462.3 | 4,991.5 | 4,088.1 | 3,785.5 | 4,687.3 | 3,196.7 |
| 85 years and over | 13,015.1 | 14,017.3 | 12,531.0 | 13,283.8 | 14,354.0 | 12,765.0 | 12,061.1 | 12,528.3 | 11,863.8 | 6,169.4 | 6,513.8 | 5,997.1 | 7,946.9 | 8,724.9 | 7,478.6 |

- Quantity zero.

* Figure does not meet standards of reliability or precision; see "Technical Notes."

¹Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. In 2008, multiple-race data were reported by 34 states and the District of Columbia; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

²Includes Aleuts and Eskimos.

³Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

⁴Figures for age not stated are included in "All ages" but not distributed among age groups.

⁵Death rates for "Under 1 year" (based on population estimates) differ from infant mortality rates (based on live births); see "Technical Notes."

Table 4. Number of deaths and death rates by Hispanic origin, race for non-Hispanic population, age, and sex: United States, 2008

[Rates per 100,000 population in specified group; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

| Age | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|---------------------------|--------------------------|-----------|-----------|------------|---------|---------|---------------------------|-----------|-----------|---------------------------------|----------|-----------|---------------------------------|----------|----------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| | | | | | | | | | | | | | | | |
| Number | | | | | | | | | | | | | | | |
| All ages | 2,471,984 | 1,226,197 | 1,245,787 | 139,241 | 76,861 | 62,380 | 2,327,636 | 1,146,394 | 1,181,242 | 1,981,034 | 969,288 | 1,011,746 | 285,522 | 145,168 | 140,354 |
| Under 1 year | 28,059 | 15,669 | 12,390 | 5,890 | 3,279 | 2,611 | 21,937 | 12,260 | 9,677 | 12,519 | 7,022 | 5,497 | 8,187 | 4,546 | 3,641 |
| 1 - 4 years | 4,730 | 2,693 | 2,037 | 1,029 | 587 | 442 | 3,685 | 2,101 | 1,584 | 2,373 | 1,365 | 1,008 | 1,076 | 619 | 457 |
| 5 - 9 years | 2,502 | 1,396 | 1,106 | 480 | 253 | 227 | 2,018 | 1,140 | 878 | 1,325 | 737 | 588 | 560 | 336 | 224 |
| 10 - 14 years | 3,149 | 1,884 | 1,265 | 540 | 295 | 245 | 2,601 | 1,584 | 1,017 | 1,745 | 1,069 | 676 | 698 | 414 | 284 |
| 15 - 19 years | 12,407 | 8,958 | 3,449 | 2,035 | 1,519 | 516 | 10,347 | 7,422 | 2,925 | 7,046 | 4,940 | 2,106 | 2,806 | 2,144 | 662 |
| 20 - 24 years | 19,791 | 15,069 | 4,722 | 3,168 | 2,560 | 608 | 16,568 | 12,469 | 4,099 | 11,514 | 8,635 | 2,879 | 4,286 | 3,279 | 1,007 |
| 25 - 29 years | 20,786 | 15,000 | 5,786 | 3,218 | 2,483 | 735 | 17,513 | 12,475 | 5,038 | 12,154 | 8,718 | 3,436 | 4,490 | 3,211 | 1,279 |
| 30 - 34 years | 21,489 | 14,635 | 6,854 | 3,178 | 2,356 | 822 | 18,260 | 12,244 | 6,016 | 12,698 | 8,612 | 4,086 | 4,626 | 3,037 | 1,589 |
| 35 - 39 years | 29,864 | 19,104 | 10,760 | 3,672 | 2,571 | 1,101 | 26,122 | 16,493 | 9,629 | 18,699 | 11,998 | 6,701 | 6,176 | 3,727 | 2,449 |
| 40 - 44 years | 46,506 | 28,582 | 17,924 | 4,949 | 3,353 | 1,596 | 41,431 | 25,151 | 16,280 | 30,392 | 18,812 | 11,580 | 9,403 | 5,343 | 4,060 |
| 45 - 49 years | 77,417 | 47,339 | 30,078 | 6,548 | 4,353 | 2,195 | 70,590 | 42,803 | 27,787 | 53,459 | 33,044 | 20,415 | 14,751 | 8,279 | 6,472 |
| 50 - 54 years | 109,125 | 67,699 | 41,426 | 7,822 | 5,116 | 2,706 | 100,954 | 62,336 | 38,618 | 76,964 | 48,287 | 28,677 | 20,776 | 12,125 | 8,651 |
| 55 - 59 years | 134,708 | 83,423 | 51,285 | 9,012 | 5,731 | 3,281 | 125,290 | 77,412 | 47,878 | 97,100 | 60,557 | 36,543 | 24,278 | 14,563 | 9,715 |
| 60 - 64 years | 161,474 | 96,127 | 65,347 | 9,490 | 5,730 | 3,760 | 151,524 | 90,071 | 61,453 | 123,155 | 73,733 | 49,422 | 23,950 | 13,781 | 10,169 |
| 65 - 69 years | 183,450 | 105,403 | 78,047 | 10,117 | 5,895 | 4,222 | 172,923 | 99,239 | 73,684 | 143,045 | 82,493 | 60,552 | 24,971 | 13,935 | 11,036 |
| 70 - 74 years | 218,129 | 119,997 | 98,132 | 11,826 | 6,526 | 5,300 | 205,858 | 113,190 | 92,668 | 173,637 | 96,237 | 77,400 | 26,249 | 13,718 | 12,531 |
| 75 - 79 years | 287,370 | 149,204 | 138,166 | 14,455 | 7,390 | 7,065 | 272,397 | 141,525 | 130,872 | 236,819 | 124,175 | 112,644 | 28,665 | 13,885 | 14,780 |
| 80 - 84 years | 366,190 | 172,692 | 193,498 | 15,807 | 7,461 | 8,346 | 349,893 | 164,976 | 184,917 | 312,267 | 148,307 | 163,960 | 29,816 | 12,876 | 16,940 |
| 85 years and over | 744,691 | 261,221 | 483,470 | 25,996 | 9,394 | 16,602 | 717,622 | 251,435 | 466,187 | 654,044 | 230,495 | 423,549 | 49,738 | 15,336 | 34,402 |
| Not stated | 147 | 102 | 45 | 9 | 9 | - | 103 | 68 | 35 | 79 | 52 | 27 | 20 | 14 | 6 |
| Rate | | | | | | | | | | | | | | | |
| All ages ⁴ | 813.0 | 817.9 | 808.2 | 296.6 | 316.9 | 274.9 | 905.3 | 912.2 | 898.7 | 982.0 | 978.2 | 985.5 | 745.2 | 794.3 | 700.5 |
| Under 1 year ⁵ | 650.5 | 709.7 | 588.5 | 531.4 | 578.5 | 482.2 | 684.5 | 747.2 | 618.8 | 542.8 | 594.4 | 488.6 | 1,270.8 | 1,380.7 | 1,155.9 |
| 1 - 4 years | 28.3 | 31.5 | 25.0 | 24.6 | 27.5 | 21.6 | 29.4 | 32.8 | 25.9 | 26.1 | 29.3 | 22.7 | 44.2 | 50.0 | 38.2 |
| 5 - 9 years | 12.5 | 13.6 | 11.3 | 10.8 | 11.1 | 10.4 | 12.9 | 14.3 | 11.5 | 11.5 | 12.5 | 10.5 | 19.0 | 22.4 | 15.4 |
| 10 - 14 years | 15.7 | 18.4 | 12.9 | 13.5 | 14.4 | 12.6 | 16.2 | 19.3 | 13.0 | 14.7 | 17.5 | 11.7 | 22.8 | 26.6 | 18.8 |
| 15 - 19 years | 57.7 | 81.2 | 32.9 | 52.9 | 76.7 | 27.6 | 58.6 | 82.0 | 33.9 | 53.7 | 73.4 | 33.0 | 82.3 | 124.1 | 39.4 |
| 20 - 24 years | 94.0 | 138.9 | 46.2 | 86.5 | 131.6 | 35.4 | 95.2 | 140.1 | 48.2 | 87.7 | 128.1 | 45.0 | 138.4 | 209.5 | 65.8 |
| 25 - 29 years | 97.4 | 137.1 | 55.7 | 77.7 | 108.1 | 39.9 | 101.9 | 144.3 | 58.9 | 94.2 | 133.8 | 53.9 | 151.8 | 220.0 | 85.4 |
| 30 - 34 years | 109.6 | 147.0 | 71.1 | 78.6 | 106.3 | 45.0 | 117.4 | 158.1 | 77.0 | 109.7 | 147.9 | 71.1 | 182.4 | 251.1 | 119.8 |
| 35 - 39 years | 142.3 | 180.8 | 103.2 | 98.4 | 128.7 | 63.5 | 151.3 | 192.4 | 110.8 | 142.8 | 182.4 | 102.9 | 233.1 | 298.1 | 175.0 |
| 40 - 44 years | 216.2 | 266.0 | 166.6 | 150.9 | 193.6 | 103.2 | 227.3 | 279.0 | 176.7 | 214.2 | 265.1 | 163.3 | 349.0 | 423.4 | 283.4 |
| 45 - 49 years | 338.4 | 418.4 | 260.1 | 234.3 | 302.0 | 162.1 | 351.5 | 433.5 | 272.1 | 332.6 | 413.5 | 252.7 | 536.1 | 648.4 | 438.9 |
| 50 - 54 years | 507.7 | 642.4 | 378.2 | 357.6 | 464.8 | 249.0 | 522.9 | 660.5 | 391.4 | 489.8 | 620.9 | 361.3 | 845.3 | 1,074.9 | 650.5 |
| 55 - 59 years | 724.9 | 925.4 | 536.0 | 546.0 | 709.9 | 389.1 | 739.9 | 943.2 | 548.7 | 694.1 | 881.4 | 513.3 | 1,221.3 | 1,629.3 | 887.9 |
| 60 - 64 years | 1,069.2 | 1,328.5 | 830.7 | 788.5 | 1,003.0 | 594.7 | 1,090.2 | 1,351.5 | 849.4 | 1,046.1 | 1,290.7 | 815.5 | 1,691.2 | 2,213.3 | 1,281.6 |
| 65 - 69 years | 1,616.5 | 1,986.4 | 1,291.6 | 1,186.0 | 1,506.5 | 914.4 | 1,647.6 | 2,019.1 | 1,320.3 | 1,599.0 | 1,946.7 | 1,286.1 | 2,408.1 | 3,174.3 | 1,845.6 |
| 70 - 74 years | 2,486.0 | 3,031.2 | 2,037.8 | 1,812.1 | 2,261.4 | 1,455.9 | 2,534.7 | 3,084.1 | 2,081.7 | 2,504.8 | 3,036.5 | 2,057.0 | 3,277.9 | 4,197.5 | 2,643.8 |
| 75 - 79 years | 3,950.0 | 4,818.0 | 3,306.7 | 2,912.1 | 3,524.8 | 2,464.2 | 4,018.4 | 4,901.9 | 3,362.9 | 4,016.9 | 4,883.7 | 3,359.6 | 4,829.1 | 6,192.9 | 4,001.3 |
| 80 - 84 years | 6,368.7 | 7,711.2 | 5,512.2 | 4,567.6 | 5,381.9 | 4,023.4 | 6,475.0 | 7,852.8 | 5,598.6 | 6,531.6 | 7,905.2 | 5,644.5 | 7,030.3 | 8,835.8 | 6,085.2 |
| 85 years and over | 13,015.1 | 14,017.3 | 12,531.0 | 8,299.3 | 8,379.0 | 8,254.9 | 13,268.3 | 14,355.8 | 12,747.5 | 13,556.7 | 14,721.8 | 12,996.9 | 12,239.0 | 12,742.6 | 12,027.1 |

- Quantity zero.

¹Figures for origin not stated are included in "All origins" but not distributed among specified origins.

²Includes races other than white and black.

³Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. In 2008, multiple-race data were reported by 34 states and the District of Columbia; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

⁴Figures for age not stated are included in "All ages" but not distributed among age groups.

⁵Death rates for "Under 1 year" (based on population estimates) differ from infant mortality rates (based on live births); see "Technical Notes."

Table 5. Number of deaths and death rates by age, and age-adjusted death rates, by specified Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates are per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates for "All origins," Hispanic, non-Hispanic, non-Hispanic white, and non-Hispanic black are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; populations used for computing death rates for Mexican, Puerto Rican, Cuban, Central and South American, and Other and unknown Hispanic are based on the Current Population Survey adjusted to resident population control totals. The control totals are 2000-based population estimates for the United States for July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

| Hispanic origin, race for non-Hispanic population, and sex | All ages | Under 1 year ¹ | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over | Age not stated | Age-adjusted rate ² |
|--|-----------|---------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|----------------|--------------------------------|
| | | | | | | | | | | | | | | |
| Number | | | | | | | | | | | | | | |
| All origins | 2,471,984 | 28,059 | 4,730 | 5,651 | 32,198 | 42,275 | 76,370 | 186,542 | 296,182 | 401,579 | 653,560 | 744,691 | 147 | ... |
| Male | 1,226,197 | 15,669 | 2,693 | 3,280 | 24,027 | 29,635 | 47,686 | 115,038 | 179,550 | 225,400 | 321,896 | 261,221 | 102 | ... |
| Female | 1,245,787 | 12,390 | 2,037 | 2,371 | 8,171 | 12,640 | 28,684 | 71,504 | 116,632 | 176,179 | 331,664 | 483,470 | 45 | ... |
| Hispanic | 139,241 | 5,890 | 1,029 | 1,020 | 5,203 | 6,396 | 8,621 | 14,370 | 18,502 | 21,943 | 30,262 | 25,996 | 9 | ... |
| Male | 76,861 | 3,279 | 587 | 548 | 4,079 | 4,839 | 5,924 | 9,469 | 11,461 | 12,421 | 14,851 | 9,394 | 9 | ... |
| Female | 62,380 | 2,611 | 442 | 472 | 1,124 | 1,557 | 2,697 | 4,901 | 7,041 | 9,522 | 15,411 | 16,602 | - | ... |
| Mexican | 78,495 | 4,104 | 724 | 719 | 3,549 | 4,112 | 5,270 | 8,451 | 10,643 | 12,067 | 16,237 | 12,614 | 5 | ... |
| Male | 44,689 | 2,272 | 402 | 391 | 2,828 | 3,170 | 3,661 | 5,609 | 6,610 | 6,753 | 8,076 | 4,912 | 5 | ... |
| Female | 33,806 | 1,832 | 322 | 328 | 721 | 942 | 1,609 | 2,842 | 4,033 | 5,314 | 8,161 | 7,702 | - | ... |
| Puerto Rican | 17,554 | 544 | 88 | 83 | 405 | 662 | 1,081 | 1,966 | 2,886 | 3,197 | 3,652 | 2,988 | 2 | ... |
| Male | 9,537 | 308 | 52 | 42 | 297 | 470 | 709 | 1,296 | 1,794 | 1,807 | 1,741 | 1,019 | 2 | ... |
| Female | 8,017 | 236 | 36 | 41 | 108 | 192 | 372 | 670 | 1,092 | 1,390 | 1,911 | 1,969 | - | ... |
| Cuban | 13,549 | 79 | 14 | 13 | 106 | 135 | 306 | 738 | 1,053 | 2,185 | 4,207 | 4,713 | - | ... |
| Male | 6,955 | 46 | 11 | 8 | 82 | 92 | 215 | 506 | 739 | 1,387 | 2,213 | 1,656 | - | ... |
| Female | 6,594 | 33 | 3 | 5 | 24 | 43 | 91 | 232 | 314 | 798 | 1,994 | 3,057 | - | ... |
| Central and South American | 12,398 | 487 | 80 | 82 | 597 | 851 | 978 | 1,393 | 1,618 | 1,813 | 2,332 | 2,166 | 1 | ... |
| Male | 6,512 | 270 | 45 | 39 | 475 | 651 | 692 | 884 | 924 | 925 | 991 | 615 | 1 | ... |
| Female | 5,886 | 217 | 35 | 43 | 122 | 200 | 286 | 509 | 694 | 888 | 1,341 | 1,551 | - | ... |
| Other and unknown Hispanic | 17,245 | 676 | 123 | 123 | 546 | 636 | 986 | 1,822 | 2,302 | 2,681 | 3,834 | 3,515 | 1 | ... |
| Male | 9,168 | 383 | 77 | 68 | 397 | 456 | 647 | 1,174 | 1,394 | 1,549 | 1,830 | 1,192 | 1 | ... |
| Female | 8,077 | 293 | 46 | 55 | 149 | 180 | 339 | 648 | 908 | 1,132 | 2,004 | 2,323 | - | ... |
| Non-Hispanic ³ | 2,327,636 | 21,937 | 3,685 | 4,619 | 26,915 | 35,773 | 67,553 | 171,544 | 276,814 | 378,781 | 622,290 | 717,622 | 103 | ... |
| Male | 1,146,394 | 12,260 | 2,101 | 2,724 | 19,891 | 24,719 | 41,644 | 105,139 | 167,483 | 212,429 | 306,501 | 251,435 | 68 | ... |
| Female | 1,181,242 | 9,677 | 1,584 | 1,895 | 7,024 | 11,054 | 25,909 | 66,405 | 109,331 | 166,352 | 315,789 | 466,187 | 35 | ... |
| White ⁴ | 1,981,034 | 12,519 | 2,373 | 3,070 | 18,560 | 24,852 | 49,091 | 130,423 | 220,255 | 316,682 | 549,086 | 654,044 | 79 | ... |
| Male | 969,288 | 7,022 | 1,365 | 1,806 | 13,575 | 17,330 | 30,810 | 81,331 | 134,290 | 178,730 | 272,482 | 230,495 | 52 | ... |
| Female | 1,011,746 | 5,497 | 1,008 | 1,264 | 4,985 | 7,522 | 18,281 | 49,092 | 85,965 | 137,952 | 276,604 | 423,549 | 27 | ... |
| Black ⁴ | 285,522 | 8,187 | 1,076 | 1,258 | 7,092 | 9,116 | 15,579 | 35,527 | 48,228 | 51,220 | 58,481 | 49,738 | 20 | ... |
| Male | 145,168 | 4,546 | 619 | 750 | 5,423 | 6,248 | 9,070 | 20,404 | 28,344 | 27,653 | 26,761 | 15,336 | 14 | ... |
| Female | 140,354 | 3,641 | 457 | 508 | 1,669 | 2,868 | 6,509 | 15,123 | 19,884 | 23,567 | 31,720 | 34,402 | 6 | ... |
| Origin not stated ⁵ | 5,107 | 232 | 16 | 12 | 80 | 106 | 196 | 628 | 866 | 855 | 1,008 | 1,073 | 35 | ... |
| Male | 2,942 | 130 | 5 | 8 | 57 | 77 | 118 | 430 | 606 | 550 | 544 | 392 | 25 | ... |
| Female | 2,165 | 102 | 11 | 4 | 23 | 29 | 78 | 198 | 260 | 305 | 464 | 681 | 10 | ... |

Table 5. Number of deaths and death rates by age, and age-adjusted death rates, by specified Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

| Hispanic origin, race for non-Hispanic population, and sex | All ages | Under 1 year ¹ | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over | Age not stated | Age-adjusted rate ² |
|--|----------|---------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|----------------|--------------------------------|
| | | | | | | | | | | | | | | |
| All origins ⁷ | 813.0 | 650.5 | 28.3 | 14.1 | 75.6 | 103.3 | 179.7 | 420.4 | 879.2 | 1,995.6 | 5,017.7 | 13,015.1 | ... | 758.3 |
| Male | 817.9 | 709.7 | 31.5 | 16.0 | 109.8 | 141.8 | 223.7 | 526.4 | 1,104.9 | 2,432.8 | 6,032.2 | 14,017.3 | ... | 900.6 |
| Female | 808.2 | 588.5 | 25.0 | 12.1 | 39.5 | 63.1 | 135.4 | 317.5 | 668.9 | 1,622.6 | 4,313.7 | 12,531.0 | ... | 643.4 |
| Hispanic | 296.6 | 531.4 | 24.6 | 12.1 | 69.3 | 78.2 | 123.0 | 288.4 | 648.3 | 1,457.4 | 3,592.2 | 8,299.3 | ... | 532.2 |
| Male | 316.9 | 578.5 | 27.5 | 12.7 | 103.9 | 107.2 | 158.9 | 372.5 | 831.3 | 1,826.9 | 4,264.0 | 8,379.0 | ... | 630.7 |
| Female | 274.9 | 482.2 | 21.6 | 11.4 | 31.3 | 42.4 | 82.2 | 200.8 | 477.2 | 1,153.1 | 3,118.7 | 8,254.9 | ... | 445.7 |
| Mexican | 253.4 | 512.2 | 23.7 | 12.0 | 70.2 | 74.8 | 116.3 | 280.8 | 650.1 | 1,411.1 | 3,902.8 | 9,146.0 | ... | 553.5 |
| Male | 275.7 | 547.5 | 25.7 | 12.9 | 107.1 | 104.2 | 147.8 | 352.5 | 805.6 | 1,679.0 | 4,382.4 | 10,074.0 | ... | 645.3 |
| Female | 228.9 | 474.1 | 21.5 | 11.1 | 29.8 | 38.4 | 78.3 | 200.3 | 493.9 | 1,173.3 | 3,521.4 | 8,638.5 | ... | 470.9 |
| Puerto Rican | 425.0 | 605.0 | 28.2 | 11.2 | 56.9 | 105.8 | 185.8 | 410.6 | 956.2 | 2,010.9 | 4,682.4 | 6,047.8 | ... | 639.3 |
| Male | 470.1 | * | 30.7 | 10.9 | 82.9 | 148.4 | 253.6 | 575.7 | 1,381.6 | 2,473.3 | * | * | ... | 799.2 |
| Female | 381.5 | * | 25.3 | 11.6 | 30.5 | 62.2 | 123.0 | 264.1 | 635.0 | 1,617.7 | 3,887.5 | * | ... | 517.2 |
| Cuban | 823.9 | * | * | * | 54.7 | 62.4 | 120.8 | 335.5 | 614.9 | 1,498.9 | 3,409.5 | * | ... | 565.3 |
| Male | 833.9 | * | * | * | 85.6 | 78.0 | 158.2 | 449.2 | 820.3 | 1,983.2 | * | * | ... | 641.6 |
| Female | 813.7 | * | * | * | * | 43.7 | 77.5 | 216.1 | 386.8 | 1,052.3 | 2,631.7 | * | ... | 516.3 |
| Central and South American | 155.9 | 326.9 | 14.3 | 7.0 | 49.7 | 55.2 | 73.7 | 139.3 | 292.2 | 735.3 | 1,575.6 | 4,111.5 | ... | 259.9 |
| Male | 160.1 | 344.6 | 16.5 | 6.4 | 72.8 | 73.8 | 101.8 | 180.8 | 376.6 | 1,040.6 | 1,764.4 | * | ... | 319.0 |
| Female | 151.6 | 307.3 | 12.1 | 7.7 | 22.2 | 30.3 | 44.2 | 99.6 | 225.0 | 563.2 | 1,460.2 | * | ... | 217.5 |
| Other and unknown Hispanic | 770.6 | 1,353.1 | 70.3 | 32.6 | 156.7 | 211.5 | 311.8 | 666.3 | 1,210.8 | 2,702.5 | 4,978.3 | * | ... | 904.8 |
| Male | 823.4 | * | 81.3 | 33.1 | 222.3 | 295.0 | 413.5 | 947.4 | 1,502.1 | * | * | * | ... | 1,164.5 |
| Female | 718.3 | * | * | 31.9 | 87.8 | 123.2 | 212.3 | 433.4 | 933.0 | 2,120.0 | * | * | ... | 719.2 |
| Non-Hispanic ³ | 905.3 | 684.5 | 29.4 | 14.6 | 76.8 | 109.2 | 190.3 | 435.5 | 897.8 | 2,034.6 | 5,108.0 | 13,268.3 | ... | 775.8 |
| Male | 912.2 | 747.2 | 32.8 | 16.8 | 110.8 | 150.9 | 236.8 | 544.5 | 1,126.2 | 2,474.4 | 6,144.7 | 14,355.8 | ... | 922.2 |
| Female | 898.7 | 618.8 | 25.9 | 12.3 | 41.0 | 67.6 | 144.7 | 330.7 | 685.0 | 1,658.2 | 4,389.3 | 12,747.5 | ... | 658.5 |
| White ⁴ | 982.0 | 542.8 | 26.1 | 13.1 | 70.7 | 101.6 | 180.0 | 410.3 | 855.0 | 1,994.4 | 5,143.0 | 13,556.7 | ... | 766.2 |
| Male | 978.2 | 594.4 | 29.3 | 15.0 | 100.8 | 140.4 | 225.3 | 515.8 | 1,067.2 | 2,413.0 | 6,166.5 | 14,721.8 | ... | 908.5 |
| Female | 985.5 | 488.6 | 22.7 | 11.1 | 39.0 | 62.0 | 134.4 | 306.5 | 652.3 | 1,628.5 | 4,420.2 | 12,996.9 | ... | 650.8 |
| Black ⁴ | 745.2 | 1,270.8 | 44.2 | 20.9 | 109.0 | 166.0 | 291.5 | 682.0 | 1,416.8 | 2,787.1 | 5,746.4 | 12,239.0 | ... | 955.2 |
| Male | 794.3 | 1,380.7 | 50.0 | 24.5 | 164.7 | 234.1 | 361.1 | 848.5 | 1,869.1 | 3,610.9 | 7,234.0 | 12,742.6 | ... | 1,176.6 |
| Female | 700.5 | 1,155.9 | 38.2 | 17.1 | 52.0 | 101.6 | 229.8 | 539.2 | 1,053.4 | 2,198.5 | 4,896.9 | 12,027.1 | ... | 794.8 |

... Category not applicable.

- Quantity zero.

¹ Figure does not meet standards of reliability or precision; see "Technical Notes."² Death rates for "Under 1 year" (based on population estimates) differ from infant mortality rates (based on live births); see "Technical Notes."³ For method of computation, see "Technical Notes."⁴ Includes races other than white and black.⁵ Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. In 2008, multiple-race data were reported by 34 states and the District of Columbia; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."⁶ Includes deaths for which Hispanic origin was not reported on the death certificate.⁷ Figures for age not stated are included in "All ages" but not distributed among age groups.⁸ Figures for origin not stated are included in "All origins" but not distributed among specified origins.

Table 6. Abridged life table for the total population, 2008[For explanation of the columns of the life table, see "United States Life Tables, 2005," *National Vital Statistics Reports*, Volume 58, Number 10]

| Age | Probability of dying between ages x to $x + n$ | Number surviving to age x | Number dying between ages x to $x + n$ | Person-years lived between ages x to $x + n$ | Total number of person-years lived above age x | Expectancy of life at age x |
|--------------|--|-----------------------------|--|--|--|-------------------------------|
| | nq_x | l_x | nd_x | nL_x | T_x | e_x |
| 0-1 | 0.006593 | 100,000 | 659 | 99,425 | 7,812,637 | 78.1 |
| 1-5 | 0.001132 | 99,341 | 112 | 397,092 | 7,713,212 | 77.6 |
| 5-10 | 0.000623 | 99,228 | 62 | 495,972 | 7,316,120 | 73.7 |
| 10-15 | 0.000779 | 99,167 | 77 | 495,692 | 6,820,148 | 68.8 |
| 15-20 | 0.002875 | 99,089 | 285 | 494,821 | 6,324,456 | 63.8 |
| 20-25 | 0.004689 | 98,804 | 463 | 492,902 | 5,829,635 | 59.0 |
| 25-30 | 0.004861 | 98,341 | 478 | 490,514 | 5,336,734 | 54.3 |
| 30-35 | 0.005466 | 97,863 | 535 | 488,017 | 4,846,220 | 49.5 |
| 35-40 | 0.007077 | 97,328 | 689 | 485,012 | 4,358,203 | 44.8 |
| 40-45 | 0.010733 | 96,639 | 1,037 | 480,795 | 3,873,191 | 40.1 |
| 45-50 | 0.016773 | 95,602 | 1,604 | 474,262 | 3,392,396 | 35.5 |
| 50-55 | 0.025150 | 93,999 | 2,364 | 464,410 | 2,918,134 | 31.0 |
| 55-60 | 0.035784 | 91,635 | 3,279 | 450,415 | 2,453,723 | 26.8 |
| 60-65 | 0.052463 | 88,356 | 4,635 | 430,823 | 2,003,308 | 22.7 |
| 65-70 | 0.078443 | 83,720 | 6,567 | 403,086 | 1,572,485 | 18.8 |
| 70-75 | 0.118559 | 77,153 | 9,147 | 364,140 | 1,169,400 | 15.2 |
| 75-80 | 0.182982 | 68,006 | 12,444 | 310,338 | 805,259 | 11.8 |
| 80-85 | 0.283728 | 55,562 | 15,764 | 239,561 | 494,921 | 8.9 |
| 85-90 | 0.437742 | 39,797 | 17,421 | 155,398 | 255,360 | 6.4 |
| 90-95 | 0.628312 | 22,376 | 14,059 | 74,153 | 99,961 | 4.5 |
| 95-100 | 0.797864 | 8,317 | 6,636 | 22,079 | 25,808 | 3.1 |
| 100 and over | 1.000000 | 1,681 | 1,681 | 3,729 | 3,729 | 2.2 |

Table 7. Life expectancy at selected ages by race, Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race categories are consistent with the 1977 Office of Management and Budget standards. Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race.; see "Technical Notes"]

| Exact age in years | All races and origins ¹ | | | White ² | | | Black ² | | | Hispanic | | | Non-Hispanic white ² | | | Non-Hispanic black ² | | |
|--------------------|------------------------------------|------|--------|--------------------|------|--------|--------------------|------|--------|------------|------|--------|---------------------------------|------|--------|---------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| 0 | 78.1 | 75.6 | 80.6 | 78.5 | 76.1 | 80.9 | 74.0 | 70.6 | 77.2 | 81.0 | 78.4 | 83.3 | 78.4 | 75.9 | 80.8 | 73.7 | 70.2 | 76.9 |
| 1 | 77.6 | 75.1 | 80.1 | 77.9 | 75.5 | 80.3 | 74.0 | 70.6 | 77.1 | 80.4 | 77.9 | 82.8 | 77.8 | 75.4 | 80.2 | 73.6 | 70.2 | 76.8 |
| 5 | 73.7 | 71.2 | 76.1 | 74.0 | 71.6 | 76.4 | 70.1 | 66.7 | 73.2 | 76.5 | 74.0 | 78.8 | 73.9 | 71.5 | 76.2 | 69.8 | 66.3 | 72.9 |
| 10 | 68.8 | 66.3 | 71.2 | 69.1 | 66.6 | 71.4 | 65.2 | 61.8 | 68.2 | 71.5 | 69.0 | 73.9 | 68.9 | 66.5 | 71.3 | 64.8 | 61.4 | 68.0 |
| 15 | 63.8 | 61.3 | 66.2 | 64.1 | 61.7 | 66.5 | 60.2 | 56.8 | 63.3 | 66.6 | 64.0 | 68.9 | 64.0 | 61.6 | 66.3 | 59.9 | 56.5 | 63.0 |
| 20 | 59.0 | 56.6 | 61.3 | 59.3 | 56.9 | 61.6 | 55.5 | 52.2 | 58.4 | 61.8 | 59.3 | 64.0 | 59.1 | 56.8 | 61.4 | 55.1 | 51.8 | 58.2 |
| 25 | 54.3 | 52.0 | 56.5 | 54.5 | 52.3 | 56.7 | 50.8 | 47.7 | 53.6 | 57.0 | 54.6 | 59.1 | 54.4 | 52.1 | 56.5 | 50.5 | 47.3 | 53.3 |
| 30 | 49.5 | 47.3 | 51.6 | 49.8 | 47.6 | 51.8 | 46.2 | 43.1 | 48.8 | 52.2 | 49.9 | 54.2 | 49.6 | 47.5 | 51.7 | 45.9 | 42.8 | 48.6 |
| 35 | 44.8 | 42.6 | 46.8 | 45.0 | 42.9 | 47.0 | 41.6 | 38.6 | 44.1 | 47.4 | 45.2 | 49.3 | 44.9 | 42.8 | 46.9 | 41.3 | 38.3 | 43.8 |
| 40 | 40.1 | 38.0 | 42.0 | 40.3 | 38.3 | 42.2 | 37.0 | 34.2 | 39.4 | 42.7 | 40.5 | 44.5 | 40.2 | 38.2 | 42.1 | 36.7 | 33.9 | 39.2 |
| 45 | 35.5 | 33.5 | 37.3 | 35.7 | 33.7 | 37.5 | 32.6 | 29.8 | 34.9 | 38.0 | 35.9 | 39.7 | 35.6 | 33.6 | 37.4 | 32.3 | 29.5 | 34.7 |
| 50 | 31.0 | 29.1 | 32.8 | 31.2 | 29.3 | 32.9 | 28.4 | 25.7 | 30.6 | 33.4 | 31.4 | 35.1 | 31.1 | 29.3 | 32.9 | 28.2 | 25.4 | 30.4 |
| 55 | 26.8 | 25.0 | 28.4 | 26.9 | 25.2 | 28.5 | 24.5 | 21.9 | 26.5 | 29.0 | 27.1 | 30.5 | 26.8 | 25.1 | 28.4 | 24.3 | 21.7 | 26.3 |
| 60 | 22.7 | 21.0 | 24.1 | 22.8 | 21.2 | 24.1 | 20.8 | 18.5 | 22.6 | 24.8 | 23.0 | 26.1 | 22.7 | 21.1 | 24.1 | 20.7 | 18.4 | 22.4 |
| 65 | 18.8 | 17.3 | 20.0 | 18.8 | 17.4 | 20.0 | 17.4 | 15.4 | 18.9 | 20.7 | 19.1 | 21.8 | 18.8 | 17.3 | 20.0 | 17.3 | 15.3 | 18.8 |
| 70 | 15.2 | 13.9 | 16.2 | 15.2 | 13.9 | 16.2 | 14.3 | 12.6 | 15.4 | 16.9 | 15.5 | 17.8 | 15.1 | 13.9 | 16.1 | 14.2 | 12.5 | 15.4 |
| 75 | 11.8 | 10.7 | 12.6 | 11.8 | 10.7 | 12.6 | 11.3 | 9.9 | 12.3 | 13.4 | 12.2 | 14.0 | 11.8 | 10.7 | 12.6 | 11.3 | 9.8 | 12.2 |
| 80 | 8.9 | 8.0 | 9.5 | 8.9 | 8.0 | 9.4 | 8.8 | 7.6 | 9.4 | 10.2 | 9.2 | 10.6 | 8.9 | 8.0 | 9.4 | 8.8 | 7.6 | 9.4 |
| 85 | 6.4 | 5.7 | 6.8 | 6.4 | 5.7 | 6.7 | 6.7 | 5.8 | 7.0 | 7.4 | 6.6 | 7.7 | 6.4 | 5.7 | 6.7 | 6.6 | 5.8 | 7.0 |
| 90 | 4.5 | 4.0 | 4.7 | 4.4 | 3.9 | 4.6 | 5.0 | 4.4 | 5.2 | 5.2 | 4.7 | 5.3 | 4.4 | 3.9 | 4.6 | 4.9 | 4.3 | 5.2 |
| 95 | 3.1 | 2.8 | 3.2 | 3.0 | 2.8 | 3.1 | 3.7 | 3.3 | 3.8 | 3.7 | 3.3 | 3.7 | 3.0 | 2.8 | 3.1 | 3.7 | 3.3 | 3.8 |
| 100 | 2.2 | 2.0 | 2.2 | 2.2 | 2.0 | 2.2 | 2.8 | 2.5 | 2.8 | 2.6 | 2.4 | 2.6 | 2.2 | 2.0 | 2.2 | 2.8 | 2.5 | 2.8 |

¹ Includes races other than white and black.² Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported by 34 states and the District of Columbia in 2008; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

Table 8. Life expectancy at birth by race, Hispanic origin, race for non-Hispanic population, and sex: United States, 1940, 1950, 1960, 1970 and 1975-2008

[Race categories are consistent with the 1977 Office of Management and Budget standards. Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race; see "Technical Notes"]

| Year | All races and origins ¹ | | | White | | | Black | | | Hispanic | | | Non-Hispanic white | | | Non-Hispanic black | | |
|-------------------|------------------------------------|------|--------|------------|------|--------|------------|------|--------|------------|------|--------|--------------------|------|--------|--------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| 2008 ² | 78.1 | 75.6 | 80.6 | 78.5 | 76.1 | 80.9 | 74.0 | 70.6 | 77.2 | 81.0 | 78.4 | 83.3 | 78.4 | 75.9 | 80.8 | 73.7 | 70.2 | 76.9 |
| 2007 ² | 77.9 | 75.4 | 80.4 | 78.4 | 75.9 | 80.8 | 73.6 | 70.0 | 76.8 | 80.9 | 78.2 | 83.4 | 78.2 | 75.8 | 80.6 | 73.2 | 69.6 | 76.5 |
| 2006 ² | 77.7 | 75.1 | 80.2 | 78.2 | 75.7 | 80.6 | 73.2 | 69.7 | 76.5 | 80.6 | 77.9 | 83.1 | 78.1 | 75.6 | 80.4 | 72.9 | 69.2 | 76.2 |
| 2005 ² | 77.4 | 74.9 | 79.9 | 77.9 | 75.4 | 80.4 | 72.8 | 69.3 | 76.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2004 ² | 77.5 | 74.9 | 79.9 | 77.9 | 75.4 | 80.4 | 72.8 | 69.3 | 76.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2003 ² | 77.1 | 74.5 | 79.6 | 77.6 | 75.0 | 80.0 | 72.3 | 68.8 | 75.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2002 | 76.9 | 74.3 | 79.5 | 77.4 | 74.9 | 79.9 | 72.1 | 68.6 | 75.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2001 | 76.9 | 74.2 | 79.4 | 77.4 | 74.8 | 79.9 | 72.0 | 68.4 | 75.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2000 | 76.8 | 74.1 | 79.3 | 77.3 | 74.7 | 79.9 | 71.8 | 68.2 | 75.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1999 | 76.7 | 73.9 | 79.4 | 77.3 | 74.6 | 79.9 | 71.4 | 67.8 | 74.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1998 | 76.7 | 73.8 | 79.5 | 77.3 | 74.5 | 80.0 | 71.3 | 67.6 | 74.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1997 | 76.5 | 73.6 | 79.4 | 77.1 | 74.3 | 79.9 | 71.1 | 67.2 | 74.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1996 | 76.1 | 73.1 | 79.1 | 76.8 | 73.9 | 79.7 | 70.2 | 66.1 | 74.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1995 | 75.8 | 72.5 | 78.9 | 76.5 | 73.4 | 79.6 | 69.6 | 65.2 | 73.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1994 | 75.7 | 72.4 | 79.0 | 76.5 | 73.3 | 79.6 | 69.5 | 64.9 | 73.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1993 | 75.5 | 72.2 | 78.8 | 76.3 | 73.1 | 79.5 | 69.2 | 64.6 | 73.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1992 | 75.8 | 72.3 | 79.1 | 76.5 | 73.2 | 79.8 | 69.6 | 65.0 | 73.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1991 | 75.5 | 72.0 | 78.9 | 76.3 | 72.9 | 79.6 | 69.3 | 64.6 | 73.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1990 | 75.4 | 71.8 | 78.8 | 76.1 | 72.7 | 79.4 | 69.1 | 64.5 | 73.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1989 | 75.1 | 71.7 | 78.5 | 75.9 | 72.5 | 79.2 | 68.8 | 64.3 | 73.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1988 | 74.9 | 71.4 | 78.3 | 75.6 | 72.2 | 78.9 | 68.9 | 64.4 | 73.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1987 | 74.9 | 71.4 | 78.3 | 75.6 | 72.1 | 78.9 | 69.1 | 64.7 | 73.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1986 | 74.7 | 71.2 | 78.2 | 75.4 | 71.9 | 78.8 | 69.1 | 64.8 | 73.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1985 | 74.7 | 71.1 | 78.2 | 75.3 | 71.8 | 78.7 | 69.3 | 65.0 | 73.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1984 | 74.7 | 71.1 | 78.2 | 75.3 | 71.8 | 78.7 | 69.5 | 65.3 | 73.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1983 | 74.6 | 71.0 | 78.1 | 75.2 | 71.6 | 78.7 | 69.4 | 65.2 | 73.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1982 | 74.5 | 70.8 | 78.1 | 75.1 | 71.5 | 78.7 | 69.4 | 65.1 | 73.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1981 | 74.1 | 70.4 | 77.8 | 74.8 | 71.1 | 78.4 | 68.9 | 64.5 | 73.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1980 | 73.7 | 70.0 | 77.4 | 74.4 | 70.7 | 78.1 | 68.1 | 63.8 | 72.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1979 | 73.9 | 70.0 | 77.8 | 74.6 | 70.8 | 78.4 | 68.5 | 64.0 | 72.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1978 | 73.5 | 69.6 | 77.3 | 74.1 | 70.4 | 78.0 | 68.1 | 63.7 | 72.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1977 | 73.3 | 69.5 | 77.2 | 74.0 | 70.2 | 77.9 | 67.7 | 63.4 | 72.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1976 | 72.9 | 69.1 | 76.8 | 73.6 | 69.9 | 77.5 | 67.2 | 62.9 | 71.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1975 | 72.6 | 68.8 | 76.6 | 73.4 | 69.5 | 77.3 | 66.8 | 62.4 | 71.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1970 | 70.8 | 67.1 | 74.7 | 71.7 | 68.0 | 75.6 | 64.1 | 60.0 | 68.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1960 | 69.7 | 66.6 | 73.1 | 70.6 | 67.4 | 74.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1950 | 68.2 | 65.6 | 71.1 | 69.1 | 66.5 | 72.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1940 | 62.9 | 60.8 | 65.2 | 64.2 | 62.1 | 66.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

--- Data not available.

¹ Includes races other than white and black.

² Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported by 34 states and the District of Columbia in 2008, by 27 states and the District of Columbia in 2007, by 25 states and the District of Columbia in 2006, by 21 states and the District of Columbia in 2005, by 15 states in 2004, and by 7 states in 2003; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

Table 9. Death rates by age and age-adjusted death rates for the 15 leading causes of death in 2008: United States, 1999-2008

[Rates on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Rates are based on populations enumerated as of April 1 for 2000 and estimated as of July 1 for all other years; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) and year | Age | | | | | | | | | | | | Age-adjusted rate ³ |
|---|-----------------------|---------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|--------------------------------|
| | All ages ¹ | Under 1 year ² | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over | |
| All causes | | | | | | | | | | | | | |
| 2008 | 813.0 | 650.5 | 28.3 | 14.1 | 75.6 | 103.3 | 179.7 | 420.4 | 879.2 | 1,995.6 | 5,017.7 | 13,015.1 | 758.3 |
| 2007 | 803.6 | 684.5 | 28.6 | 15.3 | 79.9 | 104.9 | 184.4 | 420.9 | 877.7 | 2,011.3 | 5,011.6 | 12,946.5 | 760.2 |
| 2006 | 810.4 | 690.7 | 28.4 | 15.2 | 82.2 | 106.3 | 190.2 | 427.5 | 890.9 | 2,062.1 | 5,115.0 | 13,253.1 | 776.5 |
| 2005 | 825.9 | 692.5 | 29.4 | 16.3 | 81.4 | 104.4 | 193.3 | 432.0 | 906.9 | 2,137.1 | 5,260.0 | 13,798.6 | 798.8 |
| 2004 | 816.5 | 685.2 | 29.9 | 16.8 | 80.1 | 102.1 | 193.5 | 427.0 | 910.3 | 2,164.6 | 5,275.1 | 13,823.5 | 800.8 |
| 2003 | 841.9 | 700.0 | 31.5 | 17.0 | 81.5 | 103.6 | 201.6 | 433.2 | 940.9 | 2,255.0 | 5,463.1 | 14,593.3 | 832.7 |
| 2002 | 847.3 | 695.0 | 31.2 | 17.4 | 81.4 | 103.6 | 202.9 | 430.1 | 952.4 | 2,314.7 | 5,556.9 | 14,828.3 | 845.3 |
| 2001 | 848.5 | 683.4 | 33.3 | 17.3 | 80.7 | 105.2 | 203.6 | 428.9 | 964.6 | 2,353.3 | 5,582.4 | 15,112.8 | 854.5 |
| 2000 | 854.0 | 736.7 | 32.4 | 18.0 | 79.9 | 101.4 | 198.9 | 425.6 | 992.2 | 2,399.1 | 5,666.5 | 15,524.4 | 869.0 |
| 1999 | 857.0 | 736.0 | 34.2 | 18.6 | 79.3 | 102.2 | 198.0 | 418.2 | 1,005.0 | 2,457.3 | 5,714.5 | 15,554.6 | 875.6 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | | | | | | | | | | | | | |
| 2008 | 202.9 | 9.2 | 1.1 | 0.6 | 2.5 | 7.9 | 26.7 | 85.4 | 198.0 | 449.8 | 1,276.7 | 4,175.7 | 186.5 |
| 2007 | 204.3 | 10.0 | 1.1 | 0.6 | 2.6 | 7.9 | 27.4 | 85.3 | 200.3 | 462.9 | 1,315.0 | 4,267.7 | 190.9 |
| 2006 | 211.0 | 8.4 | 1.0 | 0.6 | 2.5 | 8.2 | 28.3 | 88.0 | 207.3 | 490.3 | 1,383.1 | 4,480.8 | 200.2 |
| 2005 | 220.0 | 8.7 | 0.9 | 0.6 | 2.7 | 8.1 | 28.9 | 89.7 | 214.8 | 518.9 | 1,460.8 | 4,778.4 | 211.1 |
| 2004 | 222.2 | 10.3 | 1.2 | 0.6 | 2.5 | 7.9 | 29.3 | 90.2 | 218.8 | 541.6 | 1,506.3 | 4,895.9 | 217.0 |
| 2003 | 235.6 | 11.0 | 1.2 | 0.6 | 2.7 | 8.2 | 30.7 | 92.5 | 233.2 | 585.0 | 1,611.1 | 5,278.4 | 232.3 |
| 2002 | 241.7 | 12.4 | 1.1 | 0.6 | 2.5 | 7.9 | 30.5 | 93.7 | 241.5 | 615.9 | 1,677.2 | 5,466.8 | 240.8 |
| 2001 | 245.8 | 11.9 | 1.5 | 0.7 | 2.5 | 8.0 | 29.6 | 92.9 | 246.9 | 635.1 | 1,725.7 | 5,664.2 | 247.8 |
| 2000 | 252.6 | 13.0 | 1.2 | 0.7 | 2.6 | 7.4 | 29.2 | 94.2 | 261.2 | 665.6 | 1,780.3 | 5,926.1 | 257.6 |
| 1999 | 259.9 | 13.8 | 1.2 | 0.7 | 2.8 | 7.6 | 30.2 | 95.7 | 269.9 | 701.7 | 1,849.9 | 6,063.0 | 266.5 |
| Malignant neoplasms (C00-C97) | | | | | | | | | | | | | |
| 2008 | 186.0 | 1.6 | 2.4 | 2.2 | 3.9 | 8.6 | 29.9 | 113.6 | 309.0 | 701.5 | 1,235.8 | 1,566.1 | 175.3 |
| 2007 | 186.6 | 1.7 | 2.2 | 2.4 | 3.9 | 8.5 | 30.8 | 114.3 | 315.4 | 715.5 | 1,256.3 | 1,590.2 | 178.4 |
| 2006 | 187.0 | 1.8 | 2.3 | 2.2 | 3.9 | 9.0 | 31.9 | 116.3 | 321.2 | 727.2 | 1,263.8 | 1,606.1 | 180.7 |
| 2005 | 188.7 | 1.8 | 2.3 | 2.5 | 4.1 | 9.0 | 33.2 | 118.6 | 326.9 | 742.7 | 1,274.8 | 1,637.7 | 183.8 |
| 2004 | 188.6 | 1.8 | 2.5 | 2.5 | 4.1 | 9.1 | 33.4 | 119.0 | 333.4 | 755.1 | 1,280.4 | 1,653.3 | 185.8 |
| 2003 | 191.5 | 1.9 | 2.5 | 2.6 | 4.0 | 9.4 | 35.0 | 122.2 | 343.0 | 770.3 | 1,302.5 | 1,698.2 | 190.1 |
| 2002 | 193.2 | 1.8 | 2.6 | 2.6 | 4.3 | 9.7 | 35.8 | 123.8 | 351.1 | 792.1 | 1,311.9 | 1,723.9 | 193.5 |
| 2001 | 194.4 | 1.6 | 2.7 | 2.5 | 4.3 | 10.1 | 36.8 | 126.5 | 356.5 | 802.8 | 1,315.8 | 1,765.6 | 196.0 |
| 2000 | 196.5 | 2.4 | 2.7 | 2.5 | 4.4 | 9.8 | 36.6 | 127.5 | 366.7 | 816.3 | 1,335.6 | 1,819.4 | 199.6 |
| 1999 | 197.0 | 1.8 | 2.7 | 2.5 | 4.5 | 10.0 | 37.1 | 127.6 | 374.6 | 827.1 | 1,331.5 | 1,805.8 | 200.8 |
| Chronic lower respiratory diseases (J40-J47) | | | | | | | | | | | | | |
| 2008 | 46.4 | 0.7 | 0.3 | 0.3 | 0.4 | 0.6 | 1.9 | 9.9 | 41.7 | 158.9 | 396.9 | 656.2 | 44.0 |
| 2007 | 42.4 | 1.0 | 0.3 | 0.3 | 0.4 | 0.6 | 1.8 | 9.5 | 39.1 | 148.1 | 368.9 | 596.1 | 40.8 |
| 2006 | 41.6 | 0.7 | 0.3 | 0.3 | 0.4 | 0.6 | 1.9 | 9.1 | 39.2 | 149.3 | 363.4 | 589.1 | 40.5 |
| 2005 | 44.2 | 0.8 | 0.3 | 0.3 | 0.4 | 0.6 | 2.0 | 9.4 | 42.0 | 160.5 | 385.6 | 637.2 | 43.2 |
| 2004 | 41.5 | 0.9 | 0.3 | 0.3 | 0.4 | 0.6 | 2.0 | 8.4 | 40.4 | 153.8 | 366.7 | 601.7 | 41.1 |
| 2003 | 43.5 | 0.8 | 0.3 | 0.3 | 0.5 | 0.7 | 2.1 | 8.7 | 43.3 | 163.2 | 383.0 | 635.1 | 43.3 |
| 2002 | 43.3 | 1.0 | 0.4 | 0.3 | 0.5 | 0.8 | 2.2 | 8.7 | 42.4 | 163.0 | 386.7 | 637.6 | 43.5 |
| 2001 | 43.2 | 1.0 | 0.3 | 0.3 | 0.4 | 0.7 | 2.2 | 8.5 | 44.1 | 167.9 | 379.8 | 644.7 | 43.7 |
| 2000 | 43.4 | 0.9 | 0.3 | 0.3 | 0.5 | 0.7 | 2.1 | 8.6 | 44.2 | 169.4 | 386.1 | 648.6 | 44.2 |
| 1999 | 44.5 | 0.9 | 0.4 | 0.3 | 0.5 | 0.8 | 2.0 | 8.5 | 47.5 | 177.2 | 397.8 | 646.0 | 45.4 |
| Cerebrovascular diseases (I60-I69) | | | | | | | | | | | | | |
| 2008 | 44.1 | 3.3 | 0.4 | 0.2 | 0.4 | 1.3 | 4.8 | 13.8 | 31.0 | 88.9 | 314.5 | 972.6 | 40.7 |
| 2007 | 45.1 | 3.1 | 0.3 | 0.2 | 0.5 | 1.2 | 4.9 | 14.6 | 32.1 | 93.0 | 322.3 | 1,015.5 | 42.2 |
| 2006 | 45.8 | 3.4 | 0.3 | 0.2 | 0.5 | 1.3 | 5.1 | 14.7 | 33.3 | 96.3 | 335.1 | 1,039.6 | 43.6 |
| 2005 | 48.4 | 3.1 | 0.4 | 0.2 | 0.5 | 1.4 | 5.2 | 15.0 | 33.0 | 101.1 | 359.0 | 1,141.8 | 46.6 |
| 2004 | 51.1 | 3.1 | 0.3 | 0.2 | 0.5 | 1.4 | 5.4 | 14.9 | 34.3 | 107.8 | 386.2 | 1,245.9 | 50.0 |
| 2003 | 54.2 | 2.5 | 0.3 | 0.2 | 0.5 | 1.5 | 5.5 | 15.0 | 35.6 | 112.9 | 410.7 | 1,370.1 | 53.5 |
| 2002 | 56.4 | 2.9 | 0.3 | 0.2 | 0.4 | 1.4 | 5.4 | 15.1 | 37.2 | 120.3 | 431.0 | 1,445.9 | 56.2 |
| 2001 | 57.4 | 2.7 | 0.4 | 0.2 | 0.5 | 1.5 | 5.5 | 15.1 | 38.0 | 123.4 | 443.9 | 1,500.2 | 57.9 |
| 2000 | 59.6 | 3.3 | 0.3 | 0.2 | 0.5 | 1.5 | 5.8 | 16.0 | 41.0 | 128.6 | 461.3 | 1,589.2 | 60.9 |
| 1999 | 60.0 | 2.7 | 0.3 | 0.2 | 0.5 | 1.4 | 5.7 | 15.2 | 40.6 | 130.8 | 469.8 | 1,614.8 | 61.6 |

Table 9. Death rates by age and age-adjusted death rates for the 15 leading causes of death in 2008: United States, 1999-2008

[Rates on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Rates are based on populations enumerated as of April 1 for 2000 and estimated as of July 1 for all other years; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) and year | Age | | | | | | | | | | | | Age-adjusted rate ³ |
|--|-----------------------|---------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|--------------------------------|
| | All ages ¹ | Under 1 year ² | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over | |
| Accidents (unintentional injuries) (V01-X59,Y85-Y86) | | | | | | | | | | | | | |
| 2008 | 40.1 | 30.5 | 8.8 | 4.6 | 33.1 | 35.6 | 37.8 | 45.9 | 37.9 | 44.7 | 106.2 | 289.0 | 38.8 |
| 2007 | 41.0 | 30.2 | 9.6 | 5.5 | 37.4 | 36.9 | 39.2 | 46.3 | 37.3 | 45.2 | 105.5 | 286.7 | 40.0 |
| 2006 | 40.6 | 27.8 | 9.9 | 5.6 | 38.2 | 37.0 | 40.2 | 45.5 | 36.2 | 44.5 | 105.1 | 274.9 | 39.8 |
| 2005 | 39.7 | 26.4 | 10.3 | 6.0 | 37.4 | 34.9 | 38.6 | 43.2 | 35.8 | 46.3 | 106.1 | 279.5 | 39.1 |
| 2004 | 38.1 | 25.8 | 10.3 | 6.5 | 37.0 | 32.6 | 37.3 | 40.7 | 33.2 | 44.0 | 103.7 | 276.7 | 37.7 |
| 2003 | 37.6 | 23.6 | 10.9 | 6.4 | 37.1 | 31.5 | 37.8 | 38.8 | 32.9 | 44.1 | 101.9 | 278.9 | 37.3 |
| 2002 | 37.0 | 23.5 | 10.5 | 6.6 | 38.0 | 31.5 | 37.2 | 36.6 | 31.4 | 44.2 | 101.3 | 275.4 | 36.9 |
| 2001 | 35.7 | 24.2 | 11.2 | 6.9 | 36.1 | 29.9 | 35.4 | 34.1 | 30.3 | 42.8 | 100.9 | 276.4 | 35.7 |
| 2000 | 34.8 | 23.1 | 11.9 | 7.3 | 36.0 | 29.5 | 34.1 | 32.6 | 30.9 | 41.9 | 95.1 | 273.5 | 34.9 |
| 1999 | 35.1 | 22.3 | 12.4 | 7.6 | 35.3 | 29.6 | 33.8 | 31.8 | 30.6 | 44.6 | 100.5 | 282.4 | 35.3 |
| Alzheimer's disease (G30) | | | | | | | | | | | | | |
| 2008 | 27.1 | * | * | * | * | * | * | 0.2 | 2.2 | 21.5 | 193.3 | 910.1 | 24.4 |
| 2007 | 24.7 | * | * | * | * | * | * | 0.2 | 2.2 | 20.6 | 176.7 | 849.1 | 22.7 |
| 2006 | 24.2 | * | * | * | * | * | * | 0.2 | 2.1 | 20.2 | 175.6 | 848.3 | 22.6 |
| 2005 | 24.2 | * | * | * | * | * | * | 0.2 | 2.1 | 20.5 | 177.3 | 861.6 | 22.9 |
| 2004 | 22.5 | * | * | * | * | * | * | 0.2 | 1.9 | 19.7 | 168.7 | 818.8 | 21.8 |
| 2003 | 21.8 | * | * | * | * | * | * | 0.2 | 2.0 | 20.9 | 164.4 | 802.4 | 21.4 |
| 2002 | 20.4 | * | * | * | * | * | * | 0.1 | 1.9 | 19.7 | 158.1 | 752.3 | 20.2 |
| 2001 | 18.9 | * | * | * | * | * | * | 0.2 | 2.1 | 18.7 | 147.5 | 710.3 | 19.1 |
| 2000 | 17.6 | * | * | * | * | * | * | 0.2 | 2.0 | 18.7 | 139.6 | 667.7 | 18.1 |
| 1999 | 16.0 | * | * | * | * | * | * | 0.2 | 1.9 | 17.4 | 129.5 | 601.3 | 16.5 |
| Diabetes mellitus (E10-E14) | | | | | | | | | | | | | |
| 2008 | 23.2 | * | * | 0.1 | 0.5 | 1.4 | 4.4 | 12.7 | 33.8 | 76.1 | 153.8 | 271.4 | 21.8 |
| 2007 | 23.7 | * | * | 0.1 | 0.4 | 1.5 | 4.6 | 13.1 | 34.6 | 78.1 | 162.7 | 276.2 | 22.5 |
| 2006 | 24.2 | * | * | 0.1 | 0.4 | 1.7 | 4.8 | 13.2 | 36.2 | 81.8 | 166.8 | 285.2 | 23.3 |
| 2005 | 25.3 | * | * | 0.1 | 0.5 | 1.5 | 4.7 | 13.4 | 37.2 | 86.8 | 177.2 | 312.1 | 24.6 |
| 2004 | 24.9 | * | * | 0.1 | 0.4 | 1.5 | 4.6 | 13.4 | 37.1 | 87.2 | 176.9 | 307.0 | 24.5 |
| 2003 | 25.5 | * | * | 0.1 | 0.4 | 1.6 | 4.6 | 13.9 | 38.5 | 90.8 | 181.1 | 317.5 | 25.3 |
| 2002 | 25.4 | * | * | 0.1 | 0.4 | 1.6 | 4.8 | 13.7 | 37.7 | 91.4 | 182.8 | 320.6 | 25.4 |
| 2001 | 25.1 | * | * | 0.1 | 0.4 | 1.5 | 4.3 | 13.6 | 37.8 | 91.4 | 181.4 | 321.8 | 25.3 |
| 2000 | 24.6 | * | * | 0.1 | 0.4 | 1.6 | 4.3 | 13.1 | 37.8 | 90.7 | 179.5 | 319.7 | 25.0 |
| 1999 | 24.5 | * | * | 0.1 | 0.4 | 1.4 | 4.3 | 12.9 | 38.3 | 91.8 | 178.0 | 317.2 | 25.0 |
| Influenza and pneumonia (J09-J18) | | | | | | | | | | | | | |
| 2008 | 18.5 | 5.2 | 0.9 | 0.2 | 0.5 | 0.9 | 2.1 | 5.1 | 11.1 | 31.1 | 119.1 | 465.2 | 16.9 |
| 2007 | 17.5 | 5.2 | 0.7 | 0.3 | 0.4 | 0.8 | 1.8 | 4.4 | 9.6 | 28.7 | 114.1 | 463.2 | 16.2 |
| 2006 | 18.8 | 6.4 | 0.8 | 0.2 | 0.4 | 0.8 | 1.9 | 4.6 | 10.0 | 32.0 | 127.8 | 502.5 | 17.8 |
| 2005 | 21.3 | 6.5 | 0.7 | 0.3 | 0.4 | 0.9 | 2.1 | 5.1 | 11.3 | 35.5 | 142.2 | 593.9 | 20.3 |
| 2004 | 20.3 | 6.7 | 0.7 | 0.2 | 0.4 | 0.8 | 2.0 | 4.6 | 10.8 | 34.6 | 139.3 | 582.6 | 19.8 |
| 2003 | 22.4 | 8.0 | 1.0 | 0.4 | 0.5 | 0.9 | 2.2 | 5.2 | 11.2 | 37.3 | 151.1 | 666.1 | 22.0 |
| 2002 | 22.8 | 6.5 | 0.7 | 0.2 | 0.4 | 0.9 | 2.2 | 4.8 | 11.2 | 37.5 | 156.9 | 696.6 | 22.6 |
| 2001 | 21.8 | 7.4 | 0.7 | 0.2 | 0.5 | 0.9 | 2.2 | 4.6 | 10.7 | 36.3 | 148.5 | 685.6 | 22.0 |
| 2000 | 23.2 | 7.6 | 0.7 | 0.2 | 0.5 | 0.9 | 2.4 | 4.7 | 11.9 | 39.1 | 160.3 | 744.1 | 23.7 |
| 1999 | 22.8 | 8.4 | 0.8 | 0.2 | 0.5 | 0.8 | 2.4 | 4.6 | 11.0 | 37.2 | 157.0 | 751.8 | 23.5 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | | | | | | | | | | | | | |
| 2008 | 15.9 | 3.3 | * | * | 0.2 | 0.6 | 1.8 | 5.0 | 14.3 | 40.7 | 113.8 | 295.7 | 14.8 |
| 2007 | 15.4 | 3.4 | 0.1 | 0.1 | 0.2 | 0.6 | 1.7 | 5.1 | 13.6 | 40.1 | 113.0 | 290.6 | 14.5 |
| 2006 | 15.1 | 3.9 | * | * | 0.2 | 0.7 | 1.8 | 5.2 | 13.8 | 39.4 | 111.4 | 290.5 | 14.5 |
| 2005 | 14.8 | 3.9 | * | 0.1 | 0.2 | 0.7 | 1.7 | 4.8 | 13.6 | 39.3 | 110.3 | 288.3 | 14.3 |
| 2004 | 14.5 | 4.3 | * | 0.1 | 0.2 | 0.6 | 1.8 | 5.0 | 13.6 | 38.6 | 108.4 | 286.6 | 14.2 |
| 2003 | 14.6 | 4.5 | * | 0.1 | 0.2 | 0.7 | 1.8 | 4.9 | 13.6 | 40.1 | 109.5 | 293.1 | 14.4 |
| 2002 | 14.2 | 4.3 | * | 0.1 | 0.2 | 0.7 | 1.7 | 4.7 | 13.0 | 39.2 | 109.1 | 288.6 | 14.2 |
| 2001 | 13.9 | 3.3 | * | 0.0 | 0.2 | 0.6 | 1.7 | 4.6 | 13.0 | 40.2 | 104.2 | 287.7 | 14.0 |
| 2000 | 13.2 | 4.3 | * | 0.1 | 0.2 | 0.6 | 1.6 | 4.4 | 12.8 | 38.0 | 100.8 | 277.8 | 13.5 |
| 1999 | 12.7 | 4.4 | * | 0.1 | 0.2 | 0.6 | 1.6 | 4.0 | 12.0 | 37.1 | 97.6 | 268.9 | 13.0 |
| Intentional self-harm (suicide) (*U03,X60-X84,Y87.0) | | | | | | | | | | | | | |
| 2008 | 11.9 | ... | ... | 0.6 | 10.1 | 12.9 | 15.8 | 18.7 | 16.2 | 13.9 | 16.2 | 14.9 | 11.6 |
| 2007 | 11.5 | ... | ... | 0.5 | 9.7 | 13.0 | 15.6 | 17.7 | 15.5 | 12.6 | 16.3 | 15.6 | 11.3 |
| 2006 | 11.1 | ... | ... | 0.5 | 9.9 | 12.3 | 15.1 | 17.2 | 14.5 | 12.6 | 15.9 | 15.9 | 10.9 |
| 2005 | 11.0 | ... | ... | 0.7 | 10.0 | 12.4 | 14.9 | 16.5 | 13.9 | 12.6 | 16.9 | 16.9 | 10.9 |
| 2004 | 11.0 | ... | ... | 0.7 | 10.3 | 12.7 | 15.0 | 16.6 | 13.8 | 12.3 | 16.3 | 16.4 | 10.9 |
| 2003 | 10.8 | ... | ... | 0.6 | 9.7 | 12.7 | 14.9 | 15.9 | 13.8 | 12.7 | 16.4 | 16.9 | 10.8 |
| 2002 | 11.0 | ... | ... | 0.6 | 9.9 | 12.6 | 15.3 | 15.7 | 13.6 | 13.5 | 17.7 | 18.0 | 10.9 |
| 2001 ⁴ | 10.8 | ... | ... | 0.7 | 9.9 | 12.8 | 14.7 | 15.2 | 13.1 | 13.3 | 17.4 | 17.5 | 10.7 |
| 2000 | 10.4 | ... | ... | 0.7 | 10.2 | 12.0 | 14.5 | 14.4 | 12.1 | 12.5 | 17.6 | 19.6 | 10.4 |
| 1999 | 10.5 | ... | ... | 0.6 | 10.1 | 12.7 | 14.3 | 13.9 | 12.2 | 13.4 | 18.1 | 19.3 | 10.5 |

Table 9. Death rates by age and age-adjusted death rates for the 15 leading causes of death in 2008: United States, 1999-2008

[Rates on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Rates are based on populations enumerated as of April 1 for 2000 and estimated as of July 1 for all other years; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) and year | Age | | | | | | | | | | | | Age-adjusted rate ³ |
|--|-----------------------|---------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|--------------------------------|
| | All ages ¹ | Under 1 year ² | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over | |
| Septicemia (A40-A41) | | | | | | | | | | | | | |
| 2008 | 11.8 | 6.7 | 0.6 | 0.2 | 0.3 | 0.9 | 2.1 | 5.7 | 13.5 | 32.0 | 82.3 | 172.4 | 11.1 |
| 2007 | 11.5 | 6.6 | 0.5 | 0.2 | 0.4 | 0.7 | 2.1 | 5.5 | 12.9 | 32.8 | 79.9 | 174.4 | 11.0 |
| 2006 | 11.4 | 6.5 | 0.5 | 0.2 | 0.3 | 0.7 | 2.0 | 5.2 | 12.8 | 32.1 | 82.4 | 177.3 | 11.0 |
| 2005 | 11.5 | 7.4 | 0.5 | 0.2 | 0.4 | 0.8 | 1.9 | 5.2 | 12.9 | 32.6 | 81.4 | 187.3 | 11.2 |
| 2004 | 11.4 | 6.6 | 0.5 | 0.2 | 0.3 | 0.8 | 1.9 | 5.4 | 12.9 | 32.4 | 81.6 | 186.7 | 11.2 |
| 2003 | 11.7 | 6.9 | 0.5 | 0.2 | 0.4 | 0.8 | 2.1 | 5.3 | 13.1 | 32.6 | 85.0 | 202.5 | 11.6 |
| 2002 | 11.7 | 7.3 | 0.5 | 0.2 | 0.3 | 0.8 | 1.9 | 5.2 | 12.6 | 34.7 | 86.5 | 203.0 | 11.7 |
| 2001 | 11.3 | 7.7 | 0.7 | 0.2 | 0.3 | 0.7 | 1.8 | 5.0 | 12.3 | 32.8 | 82.3 | 205.9 | 11.4 |
| 2000 | 11.1 | 7.2 | 0.6 | 0.2 | 0.3 | 0.7 | 1.9 | 4.9 | 11.9 | 31.0 | 80.4 | 215.7 | 11.3 |
| 1999 | 11.0 | 7.5 | 0.6 | 0.2 | 0.3 | 0.7 | 1.8 | 4.6 | 11.4 | 31.2 | 79.4 | 220.7 | 11.3 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | | | | | | | | | | | | | |
| 2008 | 9.9 | * | * | * | 0.1 | 1.0 | 6.0 | 18.5 | 25.3 | 26.8 | 28.1 | 19.9 | 9.2 |
| 2007 | 9.7 | * | * | * | 0.1 | 0.9 | 6.0 | 18.7 | 24.5 | 26.7 | 28.4 | 19.8 | 9.1 |
| 2006 | 9.2 | * | * | * | 0.1 | 0.8 | 5.8 | 17.8 | 22.8 | 26.0 | 29.0 | 19.4 | 8.8 |
| 2005 | 9.3 | * | * | * | 0.1 | 0.8 | 6.1 | 17.7 | 23.5 | 27.2 | 29.0 | 19.7 | 9.0 |
| 2004 | 9.2 | * | * | * | * | 0.8 | 6.3 | 18.0 | 22.6 | 27.7 | 28.8 | 19.7 | 9.0 |
| 2003 | 9.5 | * | * | * | * | 0.9 | 6.8 | 18.3 | 23.0 | 29.5 | 30.0 | 20.1 | 9.3 |
| 2002 | 9.5 | * | * | * | 0.1 | 0.9 | 7.0 | 18.0 | 22.9 | 29.4 | 31.4 | 21.4 | 9.4 |
| 2001 | 9.5 | * | * | * | 0.1 | 1.0 | 7.4 | 18.5 | 22.7 | 30.0 | 30.2 | 22.2 | 9.5 |
| 2000 | 9.4 | * | * | * | 0.1 | 1.0 | 7.5 | 17.7 | 23.8 | 29.8 | 31.0 | 23.1 | 9.5 |
| 1999 | 9.4 | * | * | * | 0.1 | 1.0 | 7.3 | 17.4 | 23.7 | 30.6 | 31.9 | 23.2 | 9.6 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | | | | | | | | | | | | | |
| 2008 | 8.5 | * | * | * | 0.1 | 0.3 | 1.0 | 3.0 | 7.3 | 16.8 | 52.1 | 195.6 | 7.7 |
| 2007 | 7.9 | * | * | * | 0.1 | 0.2 | 0.9 | 2.8 | 6.5 | 16.2 | 49.5 | 191.1 | 7.4 |
| 2006 | 8.0 | * | * | * | 0.0 | 0.3 | 0.9 | 3.0 | 6.9 | 16.8 | 51.0 | 189.4 | 7.5 |
| 2005 | 8.4 | * | * | * | 0.1 | 0.2 | 0.9 | 2.7 | 6.4 | 17.7 | 55.6 | 210.0 | 8.0 |
| 2004 | 7.9 | * | * | * | 0.1 | 0.3 | 0.8 | 2.7 | 6.3 | 17.1 | 52.6 | 198.5 | 7.7 |
| 2003 | 7.5 | * | * | * | 0.1 | 0.2 | 0.8 | 2.5 | 6.3 | 16.9 | 51.7 | 188.9 | 7.4 |
| 2002 | 7.0 | * | * | * | 0.1 | 0.2 | 0.8 | 2.3 | 5.7 | 16.0 | 48.2 | 180.4 | 7.0 |
| 2001 | 6.8 | * | * | * | 0.1 | 0.3 | 0.7 | 2.4 | 5.8 | 15.5 | 47.7 | 171.9 | 6.8 |
| 2000 | 6.4 | * | * | * | * | 0.2 | 0.8 | 2.3 | 5.9 | 15.1 | 45.5 | 162.9 | 6.5 |
| 1999 | 6.1 | * | * | * | * | 0.2 | 0.7 | 2.2 | 5.5 | 15.2 | 43.6 | 152.1 | 6.2 |
| Parkinson's disease (G20-G21) | | | | | | | | | | | | | |
| 2008 | 6.7 | * | * | * | * | * | * | 0.2 | 1.2 | 12.5 | 71.4 | 142.9 | 6.4 |
| 2007 | 6.7 | * | * | * | * | * | * | 0.1 | 1.2 | 11.9 | 71.9 | 143.5 | 6.4 |
| 2006 | 6.5 | * | * | * | * | * | * | 0.2 | 1.3 | 12.2 | 69.8 | 144.8 | 6.3 |
| 2005 | 6.6 | * | * | * | * | * | * | 0.2 | 1.4 | 13.0 | 71.2 | 143.7 | 6.4 |
| 2004 | 6.1 | * | * | * | * | * | * | 0.2 | 1.2 | 12.0 | 67.5 | 135.8 | 6.1 |
| 2003 | 6.2 | * | * | * | * | * | * | 0.2 | 1.3 | 12.7 | 67.8 | 138.2 | 6.2 |
| 2002 | 5.9 | * | * | * | * | * | * | 0.1 | 1.2 | 12.2 | 63.9 | 135.2 | 5.9 |
| 2001 | 5.8 | * | * | * | * | * | * | 0.1 | 1.2 | 11.7 | 64.6 | 134.2 | 5.9 |
| 2000 | 5.6 | * | * | * | * | * | * | 0.1 | 1.1 | 11.5 | 61.9 | 131.9 | 5.7 |
| 1999 | 5.2 | * | * | * | * | * | * | 0.1 | 1.0 | 11.0 | 58.2 | 124.4 | 5.4 |
| Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | | | | | | | | | | | | | |
| 2008 | 5.9 | 7.9 | 2.5 | 0.8 | 12.4 | 11.3 | 6.8 | 4.8 | 2.9 | 2.3 | 1.8 | 2.1 | 5.9 |
| 2007 | 6.1 | 8.3 | 2.4 | 0.9 | 13.1 | 11.7 | 7.1 | 4.9 | 3.0 | 2.1 | 2.1 | 1.5 | 6.1 |
| 2006 | 6.2 | 8.1 | 2.2 | 1.0 | 13.5 | 11.7 | 6.9 | 5.1 | 3.2 | 2.1 | 2.1 | 1.9 | 6.2 |
| 2005 | 6.1 | 7.5 | 2.3 | 0.8 | 13.0 | 11.8 | 7.1 | 4.8 | 2.8 | 2.4 | 2.2 | 2.1 | 6.1 |
| 2004 | 5.9 | 8.0 | 2.4 | 0.8 | 12.2 | 11.2 | 6.8 | 4.8 | 3.0 | 2.4 | 2.2 | 2.1 | 5.9 |
| 2003 | 6.1 | 8.5 | 2.4 | 0.8 | 13.0 | 11.3 | 7.0 | 4.9 | 2.8 | 2.4 | 2.5 | 2.2 | 6.0 |
| 2002 | 6.1 | 7.5 | 2.7 | 0.9 | 12.9 | 11.2 | 7.2 | 4.8 | 3.2 | 2.3 | 2.3 | 2.1 | 6.1 |
| 2001 ⁴ | 7.1 | 8.2 | 2.7 | 0.8 | 13.3 | 13.1 | 9.5 | 6.3 | 4.0 | 2.9 | 2.5 | 2.4 | 7.1 |
| 2000 | 6.0 | 9.2 | 2.3 | 0.9 | 12.6 | 10.4 | 7.1 | 4.7 | 3.0 | 2.4 | 2.4 | 2.4 | 5.9 |
| 1999 | 6.1 | 8.7 | 2.5 | 1.1 | 12.9 | 10.5 | 7.1 | 4.6 | 3.0 | 2.6 | 2.5 | 2.4 | 6.0 |

* Figure does not meet standards of reliability or precision, see "Technical Notes."

... Category not applicable.

¹Figures for age not stated included in "All ages" but not distributed among age groups.

²Death rates for "Under 1 year" (based on population estimates) differ from infant mortality rates (based on live births); see "Technical Notes."

³For method of computation, see "Technical Notes."

⁴Figures include September 11, 2001 related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes" from *Deaths: Final Data for 2001*.

Table 10. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2008

[The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All ages | Under 1 year | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over | Not stated |
|--|-----------|--------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|------------|
| All causes | 2,471,984 | 28,059 | 4,730 | 5,651 | 32,198 | 42,275 | 76,370 | 186,542 | 296,182 | 401,579 | 653,560 | 744,691 | 147 |
| Salmonella infections (A01-A02) | 44 | 4 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | 8 | 8 | 11 | - |
| Shigellosis and amebiasis (A03,A06) | 6 | - | - | - | - | - | 1 | - | 3 | 1 | 1 | - | - |
| Certain other intestinal infections (A04,A07-A09) | 7,876 | 8 | 6 | - | 4 | 15 | 39 | 142 | 435 | 1,003 | 2,791 | 3,432 | 1 |
| Tuberculosis (A16-A19) | 585 | - | 2 | 3 | 6 | 14 | 26 | 80 | 90 | 114 | 145 | 105 | - |
| Respiratory tuberculosis (A16) | 449 | - | 2 | 1 | 5 | 8 | 15 | 58 | 69 | 85 | 121 | 85 | - |
| Other tuberculosis (A17-A19) | 136 | - | - | 2 | 1 | 6 | 11 | 22 | 21 | 29 | 24 | 20 | - |
| Whooping cough (A37) | 20 | 18 | - | - | - | - | 1 | - | - | - | - | 1 | - |
| Scarlet fever and erysipelas (A38,A46) | 3 | - | - | - | - | 1 | - | - | - | 1 | - | 1 | - |
| Meningococcal infection (A39) | 102 | 9 | 11 | 8 | 19 | 11 | 11 | 8 | 6 | 8 | 6 | 5 | - |
| Septicemia (A40-A41) | 35,927 | 289 | 93 | 61 | 139 | 359 | 892 | 2,514 | 4,552 | 6,448 | 10,717 | 9,863 | - |
| Syphilis (A50-A53) | 34 | - | - | - | 1 | - | 2 | 3 | 5 | 3 | 7 | 13 | - |
| Acute poliomyelitis (A80) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | 2 | - | - | - | 1 | - | - | - | - | - | 1 | - | - |
| Measles (B05) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Viral hepatitis (B15-B19) | 7,629 | 2 | - | 2 | 9 | 51 | 447 | 2,732 | 2,751 | 882 | 600 | 153 | - |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 10,285 | - | 2 | 1 | 168 | 975 | 2,838 | 3,730 | 1,908 | 516 | 116 | 31 | - |
| Malaria (B50-B54) | 5 | - | - | - | - | 1 | - | 2 | 1 | - | 1 | - | - |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 5,914 | 148 | 66 | 46 | 78 | 107 | 219 | 507 | 912 | 1,129 | 1,557 | 1,145 | - |
| Malignant neoplasms (C00-C97) | 565,469 | 70 | 394 | 890 | 1,663 | 3,521 | 12,699 | 50,403 | 104,091 | 141,159 | 160,960 | 89,610 | 9 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 8,019 | - | - | 2 | 17 | 53 | 236 | 1,144 | 1,995 | 1,941 | 1,633 | 998 | - |
| Malignant neoplasm of esophagus (C15) | 13,714 | - | - | 3 | 3 | 29 | 236 | 1,441 | 3,304 | 3,838 | 3,443 | 1,417 | - |
| Malignant neoplasm of stomach (C16) | 11,352 | - | - | 1 | 20 | 129 | 407 | 1,182 | 1,978 | 2,558 | 3,059 | 2,018 | - |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 53,321 | 1 | - | 1 | 52 | 314 | 1,419 | 4,802 | 9,076 | 11,770 | 14,936 | 10,948 | 2 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 18,213 | 1 | 20 | 17 | 38 | 81 | 335 | 2,480 | 4,737 | 4,105 | 4,465 | 1,934 | - |
| Malignant neoplasm of pancreas (C25) | 35,236 | 1 | - | 1 | 7 | 53 | 506 | 2,840 | 6,681 | 9,115 | 10,414 | 5,616 | 2 |
| Malignant neoplasm of larynx (C32) | 3,760 | - | - | - | - | 3 | 52 | 411 | 973 | 1,136 | 853 | 332 | - |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 158,656 | 4 | 3 | 5 | 29 | 145 | 1,604 | 12,532 | 30,796 | 48,293 | 47,948 | 17,297 | - |
| Malignant melanoma of skin (C43) | 8,623 | 2 | 1 | - | 40 | 188 | 412 | 1,104 | 1,742 | 1,897 | 2,123 | 1,114 | - |
| Malignant neoplasm of breast (C50) | 41,026 | - | - | - | 13 | 331 | 2,148 | 5,962 | 8,797 | 8,441 | 8,820 | 6,514 | - |
| Malignant neoplasm of cervix uteri (C53) | 4,008 | - | - | - | 13 | 152 | 609 | 977 | 880 | 653 | 473 | 251 | - |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 7,675 | - | - | - | 6 | 30 | 147 | 612 | 1,702 | 2,032 | 1,896 | 1,250 | - |
| Malignant neoplasm of ovary (C56) | 14,362 | - | - | 3 | 12 | 94 | 379 | 1,539 | 2,921 | 3,609 | 3,783 | 2,022 | - |
| Malignant neoplasm of prostate (C61) | 28,472 | - | 1 | - | - | 1 | 23 | 458 | 2,385 | 5,645 | 10,721 | 9,237 | 1 |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 12,895 | 1 | 12 | 33 | 24 | 49 | 225 | 1,268 | 2,679 | 3,211 | 3,436 | 1,957 | - |
| Malignant neoplasm of bladder (C67) | 14,036 | 1 | - | - | 3 | 14 | 95 | 592 | 1,600 | 2,952 | 4,932 | 3,847 | - |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 13,724 | 11 | 119 | 299 | 220 | 362 | 844 | 2,016 | 3,161 | 3,139 | 2,587 | 966 | - |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 54,954 | 28 | 127 | 287 | 594 | 813 | 1,320 | 3,555 | 7,859 | 12,329 | 17,591 | 10,449 | 2 |
| Hodgkin's disease (C81) | 1,171 | - | - | 1 | 56 | 94 | 117 | 146 | 177 | 210 | 256 | 114 | - |
| Non-Hodgkin's lymphoma (C82-C85) | 20,369 | 1 | 4 | 34 | 127 | 221 | 469 | 1,290 | 2,910 | 4,413 | 6,791 | 4,108 | 1 |
| Leukemia (C91-C95) | 22,335 | 27 | 123 | 252 | 410 | 490 | 621 | 1,436 | 2,956 | 4,798 | 6,840 | 4,381 | 1 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 11,020 | - | - | - | 1 | 8 | 112 | 679 | 1,811 | 2,898 | 3,676 | 1,835 | - |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 59 | - | - | - | - | - | 1 | 4 | 5 | 10 | 28 | 11 | - |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 63,423 | 20 | 111 | 238 | 572 | 680 | 1,702 | 5,488 | 10,825 | 14,495 | 17,847 | 11,443 | 2 |

Table 10. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2008

[The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All ages | Under 1 year | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over | Not stated |
|--|----------|--------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|------------|
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 14,470 | 61 | 46 | 88 | 95 | 152 | 306 | 714 | 1,379 | 2,517 | 4,724 | 4,388 | - |
| Anemias (D50-D64) | 5,018 | 15 | 34 | 38 | 102 | 155 | 211 | 244 | 366 | 562 | 1,276 | 2,015 | - |
| Diabetes mellitus (E10-E14) | 70,553 | 4 | 5 | 36 | 204 | 574 | 1,854 | 5,622 | 11,370 | 15,315 | 20,037 | 15,531 | 1 |
| Nutritional deficiencies (E40-E64) | 2,976 | 10 | 2 | 2 | 6 | 13 | 46 | 124 | 214 | 369 | 808 | 1,382 | - |
| Malnutrition (E40-E46) | 2,760 | 8 | 2 | 1 | 6 | 11 | 43 | 113 | 197 | 350 | 760 | 1,269 | - |
| Other nutritional deficiencies (E50-E64) | 216 | 2 | - | 1 | - | 2 | 3 | 11 | 17 | 19 | 48 | 113 | - |
| Meningitis (G00,G03) | 633 | 68 | 11 | 16 | 24 | 46 | 52 | 110 | 105 | 85 | 76 | 40 | - |
| Parkinson's disease (G20-G21) | 20,483 | 1 | - | - | 4 | 4 | 13 | 68 | 398 | 2,512 | 9,304 | 8,179 | - |
| Alzheimer's disease (G30) | 82,435 | - | - | - | - | 1 | 8 | 107 | 745 | 4,326 | 25,172 | 52,075 | 1 |
| Major cardiovascular diseases (I00-I78) | 804,483 | 571 | 256 | 337 | 1,333 | 4,058 | 14,226 | 46,432 | 82,009 | 116,296 | 222,494 | 316,436 | 35 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 616,828 | 396 | 186 | 229 | 1,065 | 3,254 | 11,336 | 37,892 | 66,711 | 90,520 | 166,286 | 238,924 | 29 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 3,141 | 2 | 4 | - | 10 | 34 | 55 | 188 | 340 | 548 | 992 | 968 | - |
| Hypertensive heart disease (I11) | 32,391 | 1 | - | 1 | 53 | 353 | 1,390 | 3,895 | 4,837 | 4,251 | 6,416 | 11,189 | 5 |
| Hypertensive heart and renal disease (I13) | 2,872 | - | - | 1 | 6 | 24 | 93 | 198 | 287 | 390 | 692 | 1,191 | - |
| Ischemic heart diseases (I20-I25) | 405,309 | 12 | 4 | 21 | 144 | 1,045 | 5,952 | 24,359 | 46,665 | 63,623 | 112,397 | 151,064 | 23 |
| Acute myocardial infarction (I21-I22) | 133,958 | 4 | 2 | 5 | 57 | 416 | 2,250 | 9,511 | 18,164 | 23,410 | 37,190 | 42,945 | 4 |
| Other acute ischemic heart diseases (I24) | 4,252 | 2 | - | 2 | 3 | 21 | 104 | 435 | 663 | 725 | 1,008 | 1,289 | - |
| Other forms of chronic ischemic heart disease (I20,I25) | 267,099 | 6 | 2 | 14 | 84 | 608 | 3,598 | 14,413 | 27,838 | 39,488 | 74,199 | 106,830 | 19 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 58,625 | 1 | - | 3 | 21 | 217 | 1,351 | 5,803 | 10,009 | 10,078 | 13,553 | 17,576 | 13 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 208,474 | 5 | 2 | 11 | 63 | 391 | 2,247 | 8,610 | 17,829 | 29,410 | 60,646 | 89,254 | 6 |
| Other heart diseases (I26-I51) | 173,115 | 381 | 178 | 206 | 852 | 1,798 | 3,846 | 9,252 | 14,582 | 21,718 | 45,789 | 74,512 | 1 |
| Acute and subacute endocarditis (I33) | 1,180 | 2 | 2 | - | 16 | 37 | 70 | 161 | 214 | 262 | 268 | 148 | - |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 827 | 25 | 29 | 13 | 30 | 61 | 74 | 111 | 130 | 109 | 143 | 102 | - |
| Heart failure (I50) | 56,830 | 23 | 8 | 10 | 36 | 99 | 294 | 1,166 | 2,765 | 5,627 | 15,396 | 31,406 | - |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 114,278 | 331 | 139 | 183 | 770 | 1,601 | 3,408 | 7,814 | 11,473 | 15,720 | 29,982 | 42,856 | 1 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 25,742 | 7 | 3 | 1 | 22 | 126 | 438 | 1,322 | 2,464 | 3,387 | 6,783 | 11,189 | - |
| Cerebrovascular diseases (I60-I69) | 134,148 | 141 | 63 | 97 | 189 | 539 | 2,035 | 6,112 | 10,459 | 17,897 | 40,963 | 55,648 | 5 |
| Atherosclerosis (I70) | 7,836 | 4 | - | 1 | - | 3 | 21 | 131 | 372 | 769 | 2,103 | 4,431 | 1 |
| Other diseases of circulatory system (I71-I78) | 19,929 | 23 | 4 | 9 | 57 | 136 | 396 | 975 | 2,003 | 3,723 | 6,359 | 6,244 | - |
| Aortic aneurysm and dissection (I71) | 11,079 | 1 | - | 5 | 39 | 99 | 284 | 638 | 1,159 | 2,228 | 3,742 | 2,884 | - |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 8,850 | 22 | 4 | 4 | 18 | 37 | 112 | 337 | 844 | 1,495 | 2,617 | 3,360 | - |
| Other disorders of circulatory system (I80-I99) | 4,042 | 23 | 2 | 3 | 53 | 138 | 315 | 564 | 581 | 594 | 850 | 919 | - |
| Influenza and pneumonia (J09-J18) | 56,284 | 226 | 142 | 89 | 206 | 371 | 880 | 2,253 | 3,734 | 6,252 | 15,512 | 26,618 | 1 |
| Influenza (J09-J11) | 1,722 | 16 | 24 | 32 | 20 | 29 | 44 | 77 | 122 | 129 | 413 | 816 | - |
| Pneumonia (J12-J18) | 54,562 | 210 | 118 | 57 | 186 | 342 | 836 | 2,176 | 3,612 | 6,123 | 15,099 | 25,802 | 1 |
| Other acute lower respiratory infections (J20-J22,U04) | 284 | 43 | 23 | 3 | 2 | 5 | 7 | 22 | 20 | 20 | 43 | 96 | - |
| Acute bronchitis and bronchiolitis (J20-J21) | 235 | 43 | 23 | 3 | 2 | 5 | 6 | 20 | 17 | 13 | 32 | 71 | - |
| Other and unspecified acute lower respiratory infections (J22,U04) | 49 | - | - | - | - | - | 1 | 2 | 3 | 7 | 11 | 25 | - |
| Chronic lower respiratory diseases (J40-J47) | 141,090 | 32 | 54 | 119 | 163 | 252 | 812 | 4,392 | 14,042 | 31,975 | 51,700 | 37,548 | 1 |
| Bronchitis, chronic and unspecified (J40-J42) | 731 | 23 | 15 | 2 | 5 | 13 | 13 | 29 | 61 | 97 | 175 | 298 | - |
| Emphysema (J43) | 12,448 | 1 | - | - | 1 | 4 | 69 | 502 | 1,485 | 3,260 | 4,585 | 2,541 | - |
| Asthma (J45-J46) | 3,397 | 6 | 37 | 112 | 141 | 182 | 308 | 497 | 470 | 438 | 547 | 659 | - |
| Other chronic lower respiratory diseases (J44,J47) | 124,514 | 2 | 2 | 5 | 16 | 53 | 422 | 3,364 | 12,026 | 28,180 | 46,393 | 34,050 | 1 |

Table 10. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2008

| Cause of death (based on ICD-10, 2004) | All ages | Under 1 year | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over | Not stated |
|--|----------|--------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|------------|
| Pneumoconioses and chemical effects (J60-J66,J68) | 908 | - | - | - | - | 2 | 3 | 18 | 60 | 176 | 361 | 288 | - |
| Pneumonitis due to solids and liquids (J69) | 16,608 | 11 | 10 | 5 | 41 | 81 | 158 | 467 | 923 | 1,683 | 5,031 | 8,198 | - |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 29,925 | 266 | 100 | 61 | 136 | 204 | 489 | 1,442 | 3,192 | 5,806 | 10,050 | 8,179 | - |
| Peptic ulcer (K25-K28) | 3,073 | 1 | 3 | 1 | 6 | 13 | 72 | 268 | 434 | 479 | 874 | 922 | - |
| Diseases of appendix (K35-K38) | 418 | 2 | 4 | 10 | 9 | 13 | 21 | 40 | 59 | 65 | 105 | 90 | - |
| Hemia (K40-K46) | 1,674 | 17 | 2 | 2 | 4 | 11 | 36 | 104 | 168 | 212 | 491 | 627 | - |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 29,963 | 10 | - | 1 | 24 | 423 | 2,562 | 8,220 | 8,526 | 5,395 | 3,664 | 1,137 | 1 |
| Alcoholic liver disease (K70) | 14,864 | - | - | - | 18 | 318 | 1,827 | 5,180 | 4,576 | 2,060 | 759 | 126 | - |
| Other chronic liver disease and cirrhosis (K73-K74) | 15,099 | 10 | - | 1 | 6 | 105 | 735 | 3,040 | 3,950 | 3,335 | 2,905 | 1,011 | 1 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 3,417 | - | - | 1 | 7 | 29 | 51 | 141 | 273 | 509 | 1,057 | 1,349 | - |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 48,237 | 143 | 12 | 17 | 80 | 258 | 780 | 2,220 | 4,803 | 8,182 | 14,819 | 16,920 | 3 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 160 | 4 | 2 | - | 3 | 2 | 5 | 11 | 14 | 28 | 49 | 42 | - |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 4,109 | - | 2 | 1 | 7 | 19 | 39 | 130 | 310 | 529 | 1,187 | 1,884 | 1 |
| Renal failure (N17-N19) | 43,935 | 139 | 8 | 16 | 69 | 236 | 736 | 2,074 | 4,474 | 7,619 | 13,574 | 14,988 | 2 |
| Other disorders of kidney (N25,N27) | 33 | - | - | - | 1 | 1 | - | 5 | 5 | 6 | 9 | 6 | - |
| Infections of kidney (N10-N12,N13.6,N15.1) | 627 | 4 | 1 | 2 | 6 | 6 | 25 | 62 | 68 | 81 | 180 | 192 | - |
| Hyperplasia of prostate (N40) | 502 | - | - | - | - | - | - | 1 | 12 | 47 | 165 | 277 | - |
| Inflammatory diseases of female pelvic organs (N70-N76) | 136 | 1 | - | - | 2 | 5 | 7 | 9 | 14 | 20 | 40 | 38 | - |
| Pregnancy, childbirth and the puerperium (O00-O09) | 795 | ... | ... | ... | 169 | 352 | 202 | 67 | 3 | 1 | 1 | - | - |
| Pregnancy with abortive outcome (O00-O07) | 34 | ... | ... | ... | 11 | 13 | 10 | - | - | - | - | - | - |
| Other complications of pregnancy, childbirth and the puerperium (O10-O09) | 761 | ... | ... | ... | 158 | 339 | 192 | 67 | 3 | 1 | 1 | - | - |
| Certain conditions originating in the perinatal period (P00-P96) | 13,933 | 13,800 | 51 | 32 | 20 | 9 | 6 | 5 | 5 | 1 | 2 | 1 | 1 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 10,288 | 5,638 | 521 | 331 | 467 | 379 | 450 | 720 | 762 | 379 | 344 | 297 | - |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 38,522 | 3,546 | 273 | 146 | 670 | 1,046 | 1,688 | 2,855 | 2,856 | 3,039 | 6,703 | 15,655 | 45 |
| All other diseases (Residual) | 252,490 | 1,245 | 620 | 816 | 1,989 | 3,134 | 6,945 | 16,645 | 23,972 | 30,451 | 63,816 | 102,849 | 8 |
| Accidents (unintentional injuries) (V01-X59,Y85-Y86) | 121,902 | 1,315 | 1,469 | 1,859 | 14,089 | 14,588 | 16,065 | 20,354 | 12,782 | 8,994 | 13,827 | 16,538 | 22 |
| Transport accidents (V01-V99,Y85) | 42,709 | 104 | 489 | 1,090 | 9,297 | 6,930 | 6,164 | 6,766 | 4,840 | 3,110 | 2,655 | 1,258 | 6 |
| Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) | 39,790 | 103 | 463 | 1,027 | 8,946 | 6,570 | 5,672 | 6,101 | 4,356 | 2,826 | 2,515 | 1,208 | 3 |
| Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9) | 1,140 | - | 20 | 30 | 189 | 146 | 173 | 250 | 147 | 99 | 56 | 27 | 3 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85) | 1,779 | 1 | 6 | 33 | 162 | 214 | 319 | 415 | 337 | 185 | 84 | 23 | - |
| Nontransport accidents (W00-X59,Y86) | 79,193 | 1,211 | 980 | 769 | 4,792 | 7,658 | 9,901 | 13,588 | 7,942 | 5,884 | 11,172 | 15,280 | 16 |
| Falls (W00-W19) | 24,013 | 13 | 38 | 40 | 233 | 297 | 540 | 1,300 | 1,809 | 2,745 | 7,007 | 9,990 | 1 |
| Accidental discharge of firearms (W32-W34) | 592 | - | 21 | 41 | 132 | 89 | 85 | 99 | 57 | 37 | 22 | 9 | - |
| Accidental drowning and submersion (W65-W74) | 3,548 | 41 | 443 | 261 | 569 | 429 | 406 | 510 | 356 | 210 | 217 | 103 | 3 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 2,912 | 20 | 166 | 175 | 146 | 151 | 248 | 468 | 464 | 427 | 405 | 240 | 2 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 31,116 | 11 | 35 | 48 | 3,188 | 5,946 | 7,545 | 9,496 | 3,547 | 725 | 375 | 196 | 4 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31,W35-W64,W75-W99,X10-X39,X50-X59,Y86) | 17,012 | 1,126 | 277 | 204 | 524 | 746 | 1,077 | 1,715 | 1,709 | 1,740 | 3,146 | 4,742 | 6 |
| Intentional self-harm (suicide) (*U03,X60-X84,Y87.0) | 36,035 | ... | ... | 222 | 4,298 | 5,300 | 6,703 | 8,287 | 5,465 | 2,796 | 2,108 | 851 | 5 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 18,223 | ... | ... | 50 | 2,009 | 2,357 | 2,796 | 3,789 | 3,079 | 1,933 | 1,607 | 603 | - |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60-X71,X75-X84,Y87.0) | 17,812 | ... | ... | 172 | 2,289 | 2,943 | 3,907 | 4,498 | 2,386 | 863 | 501 | 248 | 5 |
| Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | 17,826 | 340 | 421 | 320 | 5,275 | 4,610 | 2,906 | 2,137 | 987 | 466 | 235 | 122 | 7 |
| Assault (homicide) by discharge of firearms (*U01.4,X93-X95) | 12,179 | 9 | 56 | 187 | 4,394 | 3,612 | 1,966 | 1,146 | 489 | 196 | 88 | 34 | 2 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3,*U01.5-*U01.9,*U02,X85-X92,X96-Y09,Y87.1) | 5,647 | 331 | 365 | 133 | 881 | 998 | 940 | 991 | 498 | 270 | 147 | 88 | 5 |
| Legal intervention (Y35,Y89.0) | 381 | - | - | - | 85 | 108 | 94 | 67 | 18 | 7 | 1 | 1 | - |
| Events of undetermined intent (Y10-Y34,Y87.2,Y89.9) | 5,051 | 94 | 74 | 60 | 500 | 823 | 1,079 | 1,403 | 669 | 167 | 104 | 72 | 6 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 273 | - | 2 | 10 | 70 | 53 | 36 | 40 | 32 | 18 | 8 | 2 | 2 |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9) | 4,778 | 94 | 72 | 50 | 430 | 770 | 1,043 | 1,363 | 637 | 149 | 96 | 70 | 4 |
| Operations of war and their sequelae (Y36,Y89.1) | 31 | - | - | 1 | 3 | 2 | 2 | 1 | 4 | 3 | 11 | 4 | - |
| Complications of medical and surgical care (Y40-Y84,Y88) | 2,590 | 24 | 18 | 21 | 36 | 54 | 120 | 233 | 407 | 525 | 665 | 487 | - |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ¹ | 7,476 | 3 | 1 | - | 3 | 12 | 35 | 128 | 411 | 968 | 2,673 | 3,241 | 1 |
| Drug-induced deaths ^{2,3} | 38,649 | 21 | 55 | 56 | 3,592 | 7,002 | 9,377 | 11,921 | 4,774 | 1,068 | 518 | 261 | 4 |
| Alcohol-induced deaths ^{2,4} | 24,189 | 1 | - | 2 | 189 | 811 | 3,207 | 8,254 | 7,080 | 3,144 | 1,230 | 269 | 2 |
| Injury by firearms ^{2,5} | 31,593 | 9 | 79 | 288 | 6,685 | 6,202 | 4,959 | 5,127 | 3,674 | 2,191 | 1,726 | 649 | 4 |

- Quantity zero.

... Category not applicable.

¹Included in "Certain other intestinal infections (A04,A07-A09)" show n above. Beginning with data year 2006, Enterocolitis due to *Clostridium difficile* (A04.7) is shown separately at the bottom of tables showing 113 selected causes and is included in the list of rankable causes, see "Technical Notes."²Included in selected categories above.³Includes ICD-10 codes D62.1,D69.0,D69.2,D61.1,D64.2,E06.4,E16.0,E23.1,E24.2,E27.3,E66.1,F11.0-F11.5,F11.7-F11.9,F12.0-F12.5,F12.7-F12.9,F13.0-F13.5,F13.7-F13.9,F14.0-F14.5,F14.7-F14.9,F15.0-F15.5,F15.7-F15.9,F16.0-F16.5,F16.7-F16.9,F17.0-F17.3,F17.5-F17.7,F17.9-F18.0-F18.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9,G21.1,G24.0,G25.1,G25.4,G25.6,G44.4,G62.0,G72.0,G95.2,J70.2-J70.4,K85.3,L10.5,L27.0-L27.1,M10.2,M32.0,M80.4,M81.4,M83.5,M87.1,F50.2,F78.1-F78.5,X40-X44,X60-X64,X85, and Y10-Y14. Trend data for Drug-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://w.w.cdc.gov/nchs/deaths.htm>.⁴Includes ICD-10 codes E24.4,F10,G31.2,G62.1,G72.1,M2.6,K29.2,K70,K85.2,K86.0,F78.0,X45,X65, and Y15. Trend data for Alcohol-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://w.w.cdc.gov/nchs/deaths.htm>.⁵Includes ICD-10 codes *U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24, and Y35.0. Trend data for Injury by firearms, previously shown in this report, can be found through a link from the online version of this report, available from <http://w.w.cdc.gov/nchs/deaths.htm>.

NOTE: Confirmation of deaths from selected causes of death, considered to be of public health concern, were not provided by the following states--Massachusetts, North Carolina, and West Virginia; see "Technical Notes."

Table 11. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2008

| Cause of death (based on ICD-10, 2004) | All ages ¹ | Under 1 year ² | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over |
|--|-----------------------|---------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|
| All causes | 813.0 | 650.5 | 28.3 | 14.1 | 75.6 | 103.3 | 179.7 | 420.4 | 879.2 | 1,995.6 | 5,017.7 | 13,015.1 |
| Salmonella infections (A01-A02) | 0.0 | * | * | * | * | * | * | * | * | * | * | * |
| Shigellosis and amebiasis (A03,A06) | * | * | * | * | * | * | * | * | * | * | * | * |
| Certain other intestinal infections (A04,A07-A09) | 2.6 | * | * | * | * | * | 0.1 | 0.3 | 1.3 | 5.0 | 21.4 | 60.0 |
| Tuberculosis (A16-A19) | 0.2 | * | * | * | * | * | 0.1 | 0.2 | 0.3 | 0.6 | 1.1 | 1.8 |
| Respiratory tuberculosis (A16) | 0.1 | * | * | * | * | * | * | 0.1 | 0.2 | 0.4 | 0.9 | 1.5 |
| Other tuberculosis (A17-A19) | 0.0 | * | * | * | * | * | * | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 |
| Whooping cough (A37) | 0.0 | * | * | * | * | * | * | * | * | * | * | * |
| Scarlet fever and erysipelas (A38,A46) | * | * | * | * | * | * | * | * | * | * | * | * |
| Meningococcal infection (A39) | 0.0 | * | * | * | * | * | * | * | * | * | * | * |
| Septicemia (A40-A41) | 11.8 | 6.7 | 0.6 | 0.2 | 0.3 | 0.9 | 2.1 | 5.7 | 13.5 | 32.0 | 82.3 | 172.4 |
| Syphilis (A50-A53) | 0.0 | * | * | * | * | * | * | * | * | * | * | * |
| Acute poliomyelitis (A80) | * | * | * | * | * | * | * | * | * | * | * | * |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | * | * | * | * | * | * | * | * | * | * | * | * |
| Measles (B05) | * | * | * | * | * | * | * | * | * | * | * | * |
| Viral hepatitis (B15-B19) | 2.5 | * | * | * | * | 0.1 | 1.1 | 6.2 | 8.2 | 4.4 | 4.6 | 2.7 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 3.4 | * | * | * | 0.4 | 2.4 | 6.7 | 8.4 | 5.7 | 2.6 | 0.9 | 0.5 |
| Malaria (B50-B54) | * | * | * | * | * | * | * | * | * | * | * | * |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 1.9 | 3.4 | 0.4 | 0.1 | 0.2 | 0.3 | 0.5 | 1.1 | 2.7 | 5.6 | 12.0 | 20.0 |
| Malignant neoplasms (C00-C97) | 186.0 | 1.6 | 2.4 | 2.2 | 3.9 | 8.6 | 29.9 | 113.6 | 309.0 | 701.5 | 1,235.8 | 1,566.1 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 2.6 | * | * | * | * | 0.1 | 0.6 | 2.6 | 5.9 | 9.6 | 12.5 | 17.4 |
| Malignant neoplasm of esophagus (C15) | 4.5 | * | * | * | * | 0.1 | 0.6 | 3.2 | 9.8 | 19.1 | 26.4 | 24.8 |
| Malignant neoplasm of stomach (C16) | 3.7 | * | * | * | 0.0 | 0.3 | 1.0 | 2.7 | 5.9 | 12.7 | 23.5 | 35.3 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 17.5 | * | * | * | 0.1 | 0.8 | 3.3 | 10.8 | 26.9 | 58.5 | 114.7 | 191.3 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 6.0 | * | 0.1 | * | 0.1 | 0.2 | 0.8 | 5.6 | 14.1 | 20.4 | 34.3 | 33.8 |
| Malignant neoplasm of pancreas (C25) | 11.6 | * | * | * | * | 0.1 | 1.2 | 6.4 | 19.8 | 45.3 | 80.0 | 98.2 |
| Malignant neoplasm of larynx (C32) | 1.2 | * | * | * | * | * | 0.1 | 0.9 | 2.9 | 5.6 | 6.5 | 5.8 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 52.2 | * | * | * | 0.1 | 0.4 | 3.8 | 28.2 | 91.4 | 240.0 | 368.1 | 302.3 |
| Malignant melanoma of skin (C43) | 2.8 | * | * | * | 0.1 | 0.5 | 1.0 | 2.5 | 5.2 | 9.4 | 16.3 | 19.5 |
| Malignant neoplasm of breast (C50) | 13.5 | * | * | * | * | 0.8 | 5.1 | 13.4 | 26.1 | 41.9 | 67.7 | 113.8 |
| Malignant neoplasm of cervix uteri (C53) | 1.3 | * | * | * | * | 0.4 | 1.4 | 2.2 | 2.6 | 3.2 | 3.6 | 4.4 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 2.5 | * | * | * | * | 0.1 | 0.3 | 1.4 | 5.1 | 10.1 | 14.6 | 21.8 |
| Malignant neoplasm of ovary (C56) | 4.7 | * | * | * | * | 0.2 | 0.9 | 3.5 | 8.7 | 17.9 | 29.0 | 35.3 |
| Malignant neoplasm of prostate (C61) | 9.4 | * | * | * | * | * | 0.1 | 1.0 | 7.1 | 28.1 | 82.3 | 161.4 |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 4.2 | * | * | 0.1 | 0.1 | 0.1 | 0.5 | 2.9 | 8.0 | 16.0 | 26.4 | 34.2 |
| Malignant neoplasm of bladder (C67) | 4.6 | * | * | * | * | * | 0.2 | 1.3 | 4.7 | 14.7 | 37.9 | 67.2 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 4.5 | * | 0.7 | 0.7 | 0.5 | 0.9 | 2.0 | 4.5 | 9.4 | 15.6 | 19.9 | 16.9 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 18.1 | 0.6 | 0.8 | 0.7 | 1.4 | 2.0 | 3.1 | 8.0 | 23.3 | 61.3 | 135.1 | 182.6 |
| Hodgkin's disease (C81) | 0.4 | * | * | * | 0.1 | 0.2 | 0.3 | 0.3 | 0.5 | 1.0 | 2.0 | 2.0 |
| Non-Hodgkin's lymphoma (C82-C85) | 6.7 | * | * | 0.1 | 0.3 | 0.5 | 1.1 | 2.9 | 8.6 | 21.9 | 52.1 | 71.8 |
| Leukemia (C91-C95) | 7.3 | 0.6 | 0.7 | 0.6 | 1.0 | 1.2 | 1.5 | 3.2 | 8.8 | 23.8 | 52.5 | 76.6 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 3.6 | * | * | * | * | * | 0.3 | 1.5 | 5.4 | 14.4 | 28.2 | 32.1 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 0.0 | lymph | * | * | * | * | * | * | * | * | 0.2 | * |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 20.9 | 0.5 | 0.7 | 0.6 | 1.3 | 1.7 | 4.0 | 12.4 | 32.1 | 72.0 | 137.0 | 200.0 |

Table 11. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2008

| Cause of death (based on ICD-10, 2004) | All ages ¹ | Under 1 year ² | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over |
|--|-----------------------|---------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 4.8 | 1.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.7 | 1.6 | 4.1 | 12.5 | 36.3 | 76.7 |
| Anemias (D50-D64) | 1.7 | * | 0.2 | 0.1 | 0.2 | 0.4 | 0.5 | 0.5 | 1.1 | 2.8 | 9.8 | 35.2 |
| Diabetes mellitus (E10-E14) | 23.2 | * | * | 0.1 | 0.5 | 1.4 | 4.4 | 12.7 | 33.8 | 76.1 | 153.8 | 271.4 |
| Nutritional deficiencies (E40-E64) | 1.0 | * | * | * | * | * | 0.1 | 0.3 | 0.6 | 1.8 | 6.2 | 24.2 |
| Malnutrition (E40-E46) | 0.9 | * | * | * | * | * | 0.1 | 0.3 | 0.6 | 1.7 | 5.8 | 22.2 |
| Other nutritional deficiencies (E50-E64) | 0.1 | * | * | * | * | * | * | * | * | * | 0.4 | 2.0 |
| Meningitis (G00,G03) | 0.2 | 1.6 | * | * | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 |
| Parkinson's disease (G20-G21) | 6.7 | * | * | * | * | * | * | 0.2 | 1.2 | 12.5 | 71.4 | 142.9 |
| Alzheimer's disease (G30) | 27.1 | * | * | * | * | * | * | 0.2 | 2.2 | 21.5 | 193.3 | 910.1 |
| Major cardiovascular diseases (I00-I78) | 264.6 | 13.2 | 1.5 | 0.8 | 3.1 | 9.9 | 33.5 | 104.6 | 243.4 | 577.9 | 1,708.2 | 5,530.4 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 202.9 | 9.2 | 1.1 | 0.6 | 2.5 | 7.9 | 26.7 | 85.4 | 198.0 | 449.8 | 1,276.7 | 4,175.7 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 1.0 | * | * | * | * | 0.1 | 0.1 | 0.4 | 1.0 | 2.7 | 7.6 | 16.9 |
| Hypertensive heart disease (I11) | 10.7 | * | * | * | 0.1 | 0.9 | 3.3 | 8.8 | 14.4 | 21.1 | 49.3 | 195.6 |
| Hypertensive heart and renal disease (I13) | 0.9 | * | * | * | * | 0.1 | 0.2 | 0.4 | 0.9 | 1.9 | 5.3 | 20.8 |
| Ischemic heart diseases (I20-I25) | 133.3 | * | * | 0.1 | 0.3 | 2.6 | 14.0 | 54.9 | 138.5 | 316.2 | 862.9 | 2,640.2 |
| Acute myocardial infarction (I21-I22) | 44.1 | * | * | * | 0.1 | 1.0 | 5.3 | 21.4 | 53.9 | 116.3 | 285.5 | 750.6 |
| Other acute ischemic heart diseases (I24) | 1.4 | * | * | * | * | 0.1 | 0.2 | 1.0 | 2.0 | 3.6 | 7.7 | 22.5 |
| Other forms of chronic ischemic heart disease (I20,I25) | 87.8 | * | * | * | 0.2 | 1.5 | 8.5 | 32.5 | 82.6 | 196.2 | 569.7 | 1,867.1 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 19.3 | * | * | * | 0.0 | 0.5 | 3.2 | 13.1 | 29.7 | 50.1 | 104.1 | 307.2 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 68.6 | * | * | * | 0.1 | 1.0 | 5.3 | 19.4 | 52.9 | 146.2 | 465.6 | 1,559.9 |
| Other heart diseases (I26-I51) | 56.9 | 8.8 | 1.1 | 0.5 | 2.0 | 4.4 | 9.0 | 20.9 | 43.3 | 107.9 | 351.5 | 1,302.3 |
| Acute and subacute endocarditis (I33) | 0.4 | * | * | * | * | 0.1 | 0.2 | 0.4 | 0.6 | 1.3 | 2.1 | 2.6 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 0.3 | 0.6 | 0.2 | * | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 1.1 | 1.8 |
| Heart failure (I50) | 18.7 | 0.5 | * | * | 0.1 | 0.2 | 0.7 | 2.6 | 8.2 | 28.0 | 118.2 | 548.9 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 37.6 | 7.7 | 0.8 | 0.5 | 1.8 | 3.9 | 8.0 | 17.6 | 34.1 | 78.1 | 230.2 | 749.0 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 8.5 | * | * | * | 0.1 | 0.3 | 1.0 | 3.0 | 7.3 | 16.8 | 52.1 | 195.6 |
| Cerebrovascular diseases (I60-I69) | 44.1 | 3.3 | 0.4 | 0.2 | 0.4 | 1.3 | 4.8 | 13.8 | 31.0 | 88.9 | 314.5 | 972.6 |
| Atherosclerosis (I70) | 2.6 | * | * | * | * | * | 0.0 | 0.3 | 1.1 | 3.8 | 16.1 | 77.4 |
| Other diseases of circulatory system (I71-I78) | 6.6 | 0.5 | * | * | 0.1 | 0.3 | 0.9 | 2.2 | 5.9 | 18.5 | 48.8 | 109.1 |
| Aortic aneurysm and dissection (I71) | 3.6 | * | * | * | 0.1 | 0.2 | 0.7 | 1.4 | 3.4 | 11.1 | 28.7 | 50.4 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 2.9 | 0.5 | * | * | * | 0.1 | 0.3 | 0.8 | 2.5 | 7.4 | 20.1 | 58.7 |
| Other disorders of circulatory system (I80-I99) | 1.3 | 0.5 | * | * | 0.1 | 0.3 | 0.7 | 1.3 | 1.7 | 3.0 | 6.5 | 16.1 |
| Influenza and pneumonia (J09-J18) | 18.5 | 5.2 | 0.9 | 0.2 | 0.5 | 0.9 | 2.1 | 5.1 | 11.1 | 31.1 | 119.1 | 465.2 |
| Influenza (J09-J11) | 0.6 | * | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.4 | 0.6 | 3.2 | 14.3 |
| Pneumonia (J12-J18) | 17.9 | 4.9 | 0.7 | 0.1 | 0.4 | 0.8 | 2.0 | 4.9 | 10.7 | 30.4 | 115.9 | 450.9 |
| Other acute lower respiratory infections (J20-J22,U04) | 0.1 | 1.0 | 0.1 | * | * | * | * | 0.0 | 0.1 | 0.1 | 0.3 | 1.7 |
| Acute bronchitis and bronchiolitis (J20-J21) | 0.1 | 1.0 | 0.1 | * | * | * | * | 0.0 | * | * | 0.2 | 1.2 |
| Other and unspecified acute lower respiratory infections (J22,U04) | 0.0 | * | * | * | * | * | * | * | * | * | * | 0.4 |
| Chronic lower respiratory diseases (J40-J47) | 46.4 | 0.7 | 0.3 | 0.3 | 0.4 | 0.6 | 1.9 | 9.9 | 41.7 | 158.9 | 396.9 | 656.2 |
| Bronchitis, chronic and unspecified (J40-J42) | 0.2 | 0.5 | * | * | * | * | * | 0.1 | 0.2 | 0.5 | 1.3 | 5.2 |
| Emphysema (J43) | 4.1 | * | * | * | * | * | 0.2 | 1.1 | 4.4 | 16.2 | 35.2 | 44.4 |
| Asthma (J45-J46) | 1.1 | * | 0.2 | 0.3 | 0.3 | 0.4 | 0.7 | 1.1 | 1.4 | 2.2 | 4.2 | 11.5 |
| Other chronic lower respiratory diseases (J44,J47) | 41.0 | * | * | * | * | 0.1 | 1.0 | 7.6 | 35.7 | 140.0 | 356.2 | 595.1 |

Table 11. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by age: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All ages ¹ | Under 1 year ² | 1-4 years | 5-14 years | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75-84 years | 85 years and over |
|--|-----------------------|---------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|
| Pneumoconioses and chemical effects (J60-J66,J68) | 0.3 | * | * | * | * | * | * | * | 0.2 | 0.9 | 2.8 | 5.0 |
| Pneumonitis due to solids and liquids (J69) | 5.5 | * | * | * | 0.1 | 0.2 | 0.4 | 1.1 | 2.7 | 8.4 | 38.6 | 143.3 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 9.8 | 6.2 | 0.6 | 0.2 | 0.3 | 0.5 | 1.2 | 3.2 | 9.5 | 28.9 | 77.2 | 142.9 |
| Peptic ulcer (K25-K28) | 1.0 | * | * | * | * | * | 0.2 | 0.6 | 1.3 | 2.4 | 6.7 | 16.1 |
| Diseases of appendix (K35-K38) | 0.1 | * | * | * | * | * | 0.0 | 0.1 | 0.2 | 0.3 | 0.8 | 1.6 |
| Hernia (K40-K46) | 0.6 | * | * | * | * | * | 0.1 | 0.2 | 0.5 | 1.1 | 3.8 | 11.0 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 9.9 | * | * | * | 0.1 | 1.0 | 6.0 | 18.5 | 25.3 | 26.8 | 28.1 | 19.9 |
| Alcoholic liver disease (K70) | 4.9 | * | * | * | * | 0.8 | 4.3 | 11.7 | 13.6 | 10.2 | 5.8 | 2.2 |
| Other chronic liver disease and cirrhosis (K73-K74) | 5.0 | * | * | * | * | 0.3 | 1.7 | 6.9 | 11.7 | 16.6 | 22.3 | 17.7 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 1.1 | * | * | * | * | 0.1 | 0.1 | 0.3 | 0.8 | 2.5 | 8.1 | 23.6 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 15.9 | 3.3 | * | * | 0.2 | 0.6 | 1.8 | 5.0 | 14.3 | 40.7 | 113.8 | 295.7 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 0.1 | * | * | * | * | * | * | * | * | 0.1 | 0.4 | 0.7 |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 1.4 | * | * | * | * | * | 0.1 | 0.3 | 0.9 | 2.6 | 9.1 | 32.9 |
| Renal failure (N17-N19) | 14.4 | 3.2 | * | * | 0.2 | 0.6 | 1.7 | 4.7 | 13.3 | 37.9 | 104.2 | 261.9 |
| Other disorders of kidney (N25,N27) | 0.0 | * | * | * | * | * | * | * | * | * | * | * |
| Infections of kidney (N10-N12,N13.6,N15.1) | 0.2 | * | * | * | * | * | 0.1 | 0.1 | 0.2 | 0.4 | 1.4 | 3.4 |
| Hyperplasia of prostate (N40) | 0.2 | * | * | * | * | * | * | * | * | 0.2 | 1.3 | 4.8 |
| Inflammatory diseases of female pelvic organs (N70-N76) | 0.0 | * | * | * | * | * | * | * | * | 0.1 | 0.3 | 0.7 |
| Pregnancy, childbirth and the puerperium (O00-O99) | 0.3 | ... | ... | * | 0.4 | 0.9 | 0.5 | 0.2 | * | * | * | * |
| Pregnancy with abortive outcome (O00-O07) | 0.0 | ... | ... | * | * | * | * | * | * | * | * | * |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 0.3 | ... | ... | * | 0.4 | 0.8 | 0.5 | 0.2 | * | * | * | * |
| Certain conditions originating in the perinatal period (P00-P96) | 4.6 | 320.0 | 0.3 | 0.1 | 0.0 | * | * | * | * | * | * | * |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 3.4 | 130.7 | 3.1 | 0.8 | 1.1 | 0.9 | 1.1 | 1.6 | 2.3 | 1.9 | 2.6 | 5.2 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 12.7 | 82.2 | 1.6 | 0.4 | 1.6 | 2.6 | 4.0 | 6.4 | 8.5 | 15.1 | 51.5 | 273.6 |
| All other diseases (Residual) | 83.0 | 28.9 | 3.7 | 2.0 | 4.7 | 7.7 | 16.3 | 37.5 | 71.2 | 151.3 | 489.9 | 1,797.5 |
| Accidents (unintentional injuries) (V01-X59,Y85-Y86) | 40.1 | 30.5 | 8.8 | 4.6 | 33.1 | 35.6 | 37.8 | 45.9 | 37.9 | 44.7 | 106.2 | 289.0 |
| Transport accidents (V01-V99,Y85) | 14.0 | 2.4 | 2.9 | 2.7 | 21.8 | 16.9 | 14.5 | 15.2 | 14.4 | 15.5 | 20.4 | 22.0 |
| Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) | 13.1 | 2.4 | 2.8 | 2.6 | 21.0 | 16.1 | 13.3 | 13.7 | 12.9 | 14.0 | 19.3 | 21.1 |
| Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9) | 0.4 | * | 0.1 | 0.1 | 0.4 | 0.4 | 0.4 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85) | 0.6 | * | * | 0.1 | 0.4 | 0.5 | 0.8 | 0.9 | 1.0 | 0.9 | 0.6 | 0.4 |
| Nontransport accidents (W00-X59,Y86) | 26.0 | 28.1 | 5.9 | 1.9 | 11.3 | 18.7 | 23.3 | 30.6 | 23.6 | 29.2 | 85.8 | 267.1 |
| Falls (W00-W19) | 7.9 | * | 0.2 | 0.1 | 0.5 | 0.7 | 1.3 | 2.9 | 5.4 | 13.6 | 53.8 | 174.6 |
| Accidental discharge of firearms (W32-W34) | 0.2 | * | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | * |
| Accidental drowning and submersion (W65-W74) | 1.2 | 1.0 | 2.7 | 0.7 | 1.3 | 1.0 | 1.0 | 1.1 | 1.1 | 1.0 | 1.7 | 1.8 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 1.0 | 0.5 | 1.0 | 0.4 | 0.3 | 0.4 | 0.6 | 1.1 | 1.4 | 2.1 | 3.1 | 4.2 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 10.2 | * | 0.2 | 0.1 | 7.5 | 14.5 | 17.8 | 21.4 | 10.5 | 3.6 | 2.9 | 3.4 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31,W35-W64,W75-W99,X10-X39,X50-X59,Y86) | 5.6 | 26.1 | 1.7 | 0.5 | 1.2 | 1.8 | 2.5 | 3.9 | 5.1 | 8.6 | 24.2 | 82.9 |
| Intentional self-harm (suicide) (*U03,X60-X84,Y87.0) | 11.9 | ... | ... | 0.6 | 10.1 | 12.9 | 15.8 | 18.7 | 16.2 | 13.9 | 16.2 | 14.9 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 6.0 | ... | ... | 0.1 | 4.7 | 5.8 | 6.6 | 8.5 | 9.1 | 9.6 | 12.3 | 10.5 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60-X71,X75-X84,Y87.0) | 5.9 | ... | ... | 0.4 | 5.4 | 7.2 | 9.2 | 10.1 | 7.1 | 4.3 | 3.8 | 4.3 |
| Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | 5.9 | 7.9 | 2.5 | 0.8 | 12.4 | 11.3 | 6.8 | 4.8 | 2.9 | 2.3 | 1.8 | 2.1 |
| Assault (homicide) by discharge of firearms (*U01.4,X93-X95) | 4.0 | * | 0.3 | 0.5 | 10.3 | 8.8 | 4.6 | 2.6 | 1.5 | 1.0 | 0.7 | 0.6 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3,*U01.5-*U01.9,*U02,X85-X92,X96-Y09,Y87.1) | 1.9 | 7.7 | 2.2 | 0.3 | 2.1 | 2.4 | 2.2 | 2.2 | 1.5 | 1.3 | 1.1 | 1.5 |
| Legal intervention (Y35,Y89.0) | 0.1 | * | * | * | 0.2 | 0.3 | 0.2 | 0.2 | * | * | * | * |
| Events of undetermined intent (Y10-Y34,Y87.2,Y89.9) | 1.7 | 2.2 | 0.4 | 0.1 | 1.2 | 2.0 | 2.5 | 3.2 | 2.0 | 0.8 | 0.8 | 1.3 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 0.1 | * | * | * | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | * | * | * |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9) | 1.6 | 2.2 | 0.4 | 0.1 | 1.0 | 1.9 | 2.5 | 3.1 | 1.9 | 0.7 | 0.7 | 1.2 |
| Operations of war and their sequelae (Y36,Y89.1) | 0.0 | * | * | * | * | * | * | * | * | * | * | * |
| Complications of medical and surgical care (Y40-Y84,Y88) | 0.9 | 0.6 | * | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 1.2 | 2.6 | 5.1 | 8.5 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ³ | 2.5 | * | * | * | * | * | 0.1 | 0.3 | 1.2 | 4.8 | 20.5 | 56.6 |
| Drug-induced deaths ^{4,5} | 12.7 | 0.5 | 0.3 | 0.1 | 8.4 | 17.1 | 22.1 | 26.9 | 14.2 | 5.3 | 4.0 | 4.6 |
| Alcohol-induced deaths ^{4,6} | 8.0 | * | * | * | 0.4 | 2.0 | 7.5 | 18.6 | 21.0 | 15.6 | 9.4 | 4.7 |
| Injury by firearms ^{4,7} | 10.4 | * | 0.5 | 0.7 | 15.7 | 15.2 | 11.7 | 11.6 | 10.9 | 10.9 | 13.3 | 11.3 |

0.0 Quantity more than zero but less than 0.05.

* Figure does not meet standards of reliability or precision; see "Technical Notes."

... Category not applicable.

¹Figures for age not stated included in "All ages" but not distributed among age groups.

²Death rates for "Under 1 year" (based on population estimates) differ from infant mortality rates (based on live births); see "Technical Notes."

³Included in "Certain other intestinal infections (A04.A07-A09)" show n above. Beginning with data year 2006, Enterocolitis due to *Clostridium difficile* (A04.7) is shown separately at the bottom of tables showing 113 selected causes and is included in the list of rankable causes, see "Technical Notes."

⁴Included in selected categories above.

⁵Includes ICD-10 codes D52.1,D59.0,D59.2,D61.1,D64.2,E06.4,E16.0,E23.1,E24.2,E27.3,E86.1,F11.0-F11.5,F11.7-F11.9,F12.0-F12.5,F12.7-F12.9,F13.0-F13.5,F13.7-F13.9,F14.0-F14.5,F14.7-F14.9,F15.0-F15.5,F15.7-F15.9,F16.0-F16.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9,F18.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9,G21.1,G24.0,G25.1,G25.4,G25.6,G44.4,G62.0,G72.0,G85.2,J70.2-J70.4,K85.3,L10.5,L27.0-L27.1,M10.2,M32.0,M80.4,M81.4,M82.5,M87.1,R50.2,R78.1,R78.5,X40-X44,X60-X64,X65, and Y10-Y14. Trend data for Drug-induced deaths, previously show n in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

⁶Includes ICD-10 codes E24.4,F10,G31.2,G62.1,G72.1,I42.6,K29.2,K70,K85.2,K86.0,R78.0,X45,X65, and Y15. Trend data for Alcohol-induced deaths, previously show n in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

⁷Includes ICD-10 codes *U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24, and Y35.0. Trend data for Injury by firearms, previously show n in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

NOTE: Confirmation of deaths from selected causes of death, considered to be of public health concern, were not provided by the following states--Massachusetts, North Carolina, and West Virginia; see "Technical Notes."

Table 12. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|-----------|-----------|--------------------|-----------|-----------|--------------------|---------|---------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 2,471,984 | 1,226,197 | 1,245,787 | 2,120,233 | 1,046,183 | 1,074,050 | 289,072 | 147,143 | 141,929 |
| Salmonella infections (A01-A02) | 44 | 24 | 20 | 32 | 20 | 12 | 9 | 2 | 7 |
| Shigellosis and amebiasis (A03,A06) | 6 | 4 | 2 | 5 | 3 | 2 | - | - | - |
| Certain other intestinal infections (A04,A07-A09) | 7,876 | 2,996 | 4,880 | 7,268 | 2,749 | 4,519 | 467 | 178 | 289 |
| Tuberculosis (A16-A19) | 585 | 375 | 210 | 332 | 210 | 122 | 136 | 87 | 49 |
| Respiratory tuberculosis (A16) | 449 | 294 | 155 | 246 | 154 | 92 | 106 | 73 | 33 |
| Other tuberculosis (A17-A19) | 136 | 81 | 55 | 86 | 56 | 30 | 30 | 14 | 16 |
| Whooping cough (A37) | 20 | 9 | 11 | 18 | 7 | 11 | - | - | - |
| Scarlet fever and erysipelas (A38,A46) | 3 | 2 | 1 | 2 | 1 | 1 | - | - | - |
| Meningococcal infection (A39) | 102 | 56 | 46 | 75 | 42 | 33 | 25 | 13 | 12 |
| Septicemia (A40-A41) | 35,927 | 16,328 | 19,599 | 28,697 | 13,066 | 15,631 | 6,426 | 2,877 | 3,549 |
| Syphilis (A50-A53) | 34 | 23 | 11 | 13 | 11 | 2 | 19 | 10 | 9 |
| Acute poliomyelitis (A80) | - | - | - | - | - | - | - | - | - |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | 2 | 1 | 1 | 2 | 1 | 1 | - | - | - |
| Measles (B05) | - | - | - | - | - | - | - | - | - |
| Viral hepatitis (B15-B19) | 7,629 | 5,019 | 2,610 | 6,111 | 4,064 | 2,047 | 1,115 | 728 | 387 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 10,285 | 7,406 | 2,879 | 4,339 | 3,489 | 850 | 5,780 | 3,790 | 1,990 |
| Malaria (B50-B54) | 5 | 4 | 1 | 2 | 2 | - | 3 | 2 | 1 |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 5,914 | 2,979 | 2,935 | 4,952 | 2,458 | 2,494 | 738 | 408 | 330 |
| Malignant neoplasms (C00-C97) | 565,469 | 295,259 | 270,210 | 485,893 | 254,124 | 231,769 | 63,954 | 33,019 | 30,935 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 8,019 | 5,488 | 2,531 | 6,712 | 4,551 | 2,161 | 1,002 | 730 | 272 |
| Malignant neoplasm of esophagus (C15) | 13,714 | 10,847 | 2,867 | 12,019 | 9,629 | 2,390 | 1,432 | 1,016 | 416 |
| Malignant neoplasm of stomach (C16) | 11,352 | 6,735 | 4,617 | 8,469 | 5,064 | 3,405 | 2,057 | 1,196 | 861 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 53,321 | 27,094 | 26,227 | 44,751 | 22,741 | 22,010 | 6,908 | 3,508 | 3,400 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 18,213 | 12,302 | 5,911 | 14,377 | 9,631 | 4,746 | 2,466 | 1,748 | 718 |
| Malignant neoplasm of pancreas (C25) | 35,236 | 17,515 | 17,721 | 30,124 | 15,125 | 14,999 | 4,109 | 1,894 | 2,215 |
| Malignant neoplasm of larynx (C32) | 3,760 | 2,949 | 811 | 3,059 | 2,399 | 660 | 645 | 503 | 142 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 158,656 | 88,586 | 70,070 | 138,715 | 76,761 | 61,954 | 16,250 | 9,638 | 6,612 |
| Malignant melanoma of skin (C43) | 8,623 | 5,672 | 2,951 | 8,450 | 5,586 | 2,864 | 120 | 57 | 63 |
| Malignant neoplasm of breast (C50) | 41,026 | 437 | 40,589 | 34,055 | 350 | 33,705 | 5,928 | 77 | 5,851 |
| Malignant neoplasm of cervix uteri (C53) | 4,008 | ... | 4,008 | 3,018 | ... | 3,018 | 799 | ... | 799 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 7,675 | ... | 7,675 | 6,176 | ... | 6,176 | 1,286 | ... | 1,286 |
| Malignant neoplasm of ovary (C56) | 14,362 | ... | 14,362 | 12,725 | ... | 12,725 | 1,200 | ... | 1,200 |
| Malignant neoplasm of prostate (C61) | 28,472 | 28,472 | ... | 23,362 | 23,362 | ... | 4,588 | 4,588 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 12,895 | 8,206 | 4,689 | 11,352 | 7,241 | 4,111 | 1,203 | 743 | 460 |
| Malignant neoplasm of bladder (C67) | 14,036 | 9,791 | 4,245 | 12,853 | 9,107 | 3,746 | 950 | 516 | 434 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 13,724 | 7,686 | 6,038 | 12,568 | 7,049 | 5,519 | 840 | 455 | 385 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 54,954 | 30,449 | 24,505 | 48,348 | 26,927 | 21,421 | 5,269 | 2,804 | 2,465 |
| Hodgkin's disease (C81) | 1,171 | 639 | 532 | 1,026 | 559 | 467 | 119 | 64 | 55 |
| Non-Hodgkin's lymphoma (C82-C85) | 20,369 | 11,004 | 9,365 | 18,476 | 9,984 | 8,492 | 1,360 | 736 | 624 |
| Leukemia (C91-C95) | 22,335 | 12,711 | 9,624 | 19,894 | 11,374 | 8,520 | 1,903 | 1,057 | 846 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 11,020 | 6,057 | 4,963 | 8,900 | 4,978 | 3,922 | 1,882 | 943 | 939 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 59 | 38 | 21 | 52 | 32 | 20 | 5 | 4 | 1 |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 63,423 | 33,030 | 30,393 | 54,760 | 28,601 | 26,159 | 6,902 | 3,546 | 3,356 |

Table 12. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|--|---------|---------|--------------------|---------|---------|--------------------|--------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| | In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 14,470 | 7,461 | 7,009 | 12,944 | 6,727 | 6,217 | 1,157 | 554 |
| Anemias (D50-D64) | 5,018 | 2,052 | 2,966 | 3,879 | 1,551 | 2,328 | 1,015 | 451 | 564 |
| Diabetes mellitus (E10-E14) | 70,553 | 35,346 | 35,207 | 55,893 | 28,598 | 27,295 | 12,064 | 5,457 | 6,607 |
| Nutritional deficiencies (E40-E64) | 2,976 | 1,138 | 1,838 | 2,528 | 934 | 1,594 | 374 | 176 | 198 |
| Malnutrition (E40-E46) | 2,760 | 1,058 | 1,702 | 2,335 | 866 | 1,469 | 356 | 167 | 189 |
| Other nutritional deficiencies (E50-E64) | 216 | 80 | 136 | 193 | 68 | 125 | 18 | 9 | 9 |
| Meningitis (G00,G03) | 633 | 341 | 292 | 483 | 261 | 222 | 119 | 63 | 56 |
| Parkinson's disease (G20-G21) | 20,483 | 11,960 | 8,523 | 19,330 | 11,325 | 8,005 | 745 | 399 | 346 |
| Alzheimer's disease (G30) | 82,435 | 24,516 | 57,919 | 76,263 | 22,752 | 53,511 | 5,075 | 1,412 | 3,663 |
| Major cardiovascular diseases (I00-I78) | 804,483 | 388,514 | 415,969 | 689,805 | 332,360 | 357,445 | 95,273 | 46,119 | 49,154 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 616,828 | 311,201 | 305,627 | 532,304 | 268,317 | 263,987 | 70,731 | 35,387 | 35,344 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 3,141 | 1,025 | 2,116 | 2,755 | 882 | 1,873 | 263 | 97 | 166 |
| Hypertensive heart disease (I11) | 32,391 | 15,201 | 17,190 | 24,115 | 10,996 | 13,119 | 7,471 | 3,786 | 3,685 |
| Hypertensive heart and renal disease (I13) | 2,872 | 1,250 | 1,622 | 1,945 | 834 | 1,111 | 835 | 375 | 460 |
| Ischemic heart diseases (I20-I25) | 405,309 | 216,248 | 189,061 | 353,839 | 189,354 | 164,485 | 41,898 | 21,407 | 20,491 |
| Acute myocardial infarction (I21-I22) | 133,958 | 72,447 | 61,511 | 117,118 | 63,842 | 53,276 | 13,791 | 6,883 | 6,908 |
| Other acute ischemic heart diseases (I24) | 4,252 | 2,219 | 2,033 | 3,580 | 1,859 | 1,721 | 565 | 302 | 263 |
| Other forms of chronic ischemic heart disease (I20,I25) | 267,099 | 141,582 | 125,517 | 233,141 | 123,653 | 109,488 | 27,542 | 14,222 | 13,320 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 58,625 | 33,341 | 25,284 | 48,490 | 27,425 | 21,065 | 8,608 | 4,952 | 3,656 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 208,474 | 108,241 | 100,233 | 184,651 | 96,228 | 88,423 | 18,934 | 9,270 | 9,664 |
| Other heart diseases (I26-I51) | 173,115 | 77,477 | 95,638 | 149,650 | 66,251 | 83,399 | 20,264 | 9,722 | 10,542 |
| Acute and subacute endocarditis (I33) | 1,180 | 662 | 518 | 946 | 542 | 404 | 207 | 108 | 99 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 827 | 406 | 421 | 650 | 318 | 332 | 146 | 70 | 76 |
| Heart failure (I50) | 56,830 | 23,017 | 33,813 | 50,522 | 20,278 | 30,244 | 5,459 | 2,391 | 3,068 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 114,278 | 53,392 | 60,886 | 97,532 | 45,113 | 52,419 | 14,452 | 7,153 | 7,299 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 25,742 | 10,325 | 15,417 | 19,858 | 7,746 | 12,112 | 5,066 | 2,209 | 2,857 |
| Cerebrovascular diseases (I60-I69) | 134,148 | 53,525 | 80,623 | 113,244 | 44,457 | 68,787 | 16,710 | 7,222 | 9,488 |
| Atherosclerosis (I70) | 7,836 | 3,012 | 4,824 | 7,063 | 2,673 | 4,390 | 651 | 277 | 374 |
| Other diseases of circulatory system (I71-I78) | 19,929 | 10,451 | 9,478 | 17,336 | 9,167 | 8,169 | 2,115 | 1,024 | 1,091 |
| Aortic aneurysm and dissection (I71) | 11,079 | 6,502 | 4,577 | 9,834 | 5,797 | 4,037 | 924 | 512 | 412 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 8,850 | 3,949 | 4,901 | 7,502 | 3,370 | 4,132 | 1,191 | 512 | 679 |
| Other disorders of circulatory system (I80-I99) | 4,042 | 1,857 | 2,185 | 3,220 | 1,460 | 1,760 | 760 | 365 | 395 |
| Influenza and pneumonia (J09-J18) | 56,284 | 25,571 | 30,713 | 48,941 | 22,048 | 26,893 | 5,456 | 2,572 | 2,884 |
| Influenza (J09-J11) | 1,722 | 690 | 1,032 | 1,596 | 630 | 966 | 83 | 37 | 46 |
| Pneumonia (J12-J18) | 54,562 | 24,881 | 29,681 | 47,345 | 21,418 | 25,927 | 5,373 | 2,535 | 2,838 |
| Other acute lower respiratory infections (J20-J22,U04) | 284 | 126 | 158 | 237 | 100 | 137 | 36 | 19 | 17 |
| Acute bronchitis and bronchiolitis (J20-J21) | 235 | 106 | 129 | 193 | 81 | 112 | 31 | 18 | 13 |
| Other and unspecified acute lower respiratory infections (J22,U04) | 49 | 20 | 29 | 44 | 19 | 25 | 5 | 1 | 4 |
| Chronic lower respiratory diseases (J40-J47) | 141,090 | 67,122 | 73,968 | 130,221 | 61,383 | 68,838 | 8,766 | 4,548 | 4,218 |
| Bronchitis, chronic and unspecified (J40-J42) | 731 | 311 | 420 | 658 | 269 | 389 | 62 | 37 | 25 |
| Emphysema (J43) | 12,448 | 6,467 | 5,981 | 11,595 | 5,945 | 5,650 | 677 | 404 | 273 |
| Asthma (J45-J46) | 3,397 | 1,186 | 2,211 | 2,342 | 755 | 1,587 | 902 | 375 | 527 |
| Other chronic lower respiratory diseases (J44,J47) | 124,514 | 59,158 | 65,356 | 115,626 | 54,414 | 61,212 | 7,125 | 3,732 | 3,393 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 908 | 859 | 49 | 865 | 820 | 45 | 37 | 34 | 3 |
| Pneumonitis due to solids and liquids (J69) | 16,608 | 8,650 | 7,958 | 14,776 | 7,702 | 7,074 | 1,478 | 754 | 724 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 29,925 | 14,916 | 15,009 | 26,368 | 13,199 | 13,169 | 2,786 | 1,311 | 1,475 |

Table 12. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|---------|---------|--------------------|--------|---------|--------------------|--------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 3,073 | 1,551 | 1,522 | 2,646 | 1,305 | 1,341 | 309 | 188 | 121 |
| Diseases of appendix (K35-K38) | 418 | 242 | 176 | 347 | 197 | 150 | 56 | 37 | 19 |
| Hernia (K40-K46) | 1,674 | 717 | 957 | 1,502 | 634 | 868 | 146 | 73 | 73 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 29,963 | 19,646 | 10,317 | 26,275 | 17,288 | 8,987 | 2,506 | 1,680 | 826 |
| Alcoholic liver disease (K70) | 14,864 | 10,817 | 4,047 | 12,955 | 9,551 | 3,404 | 1,200 | 820 | 380 |
| Other chronic liver disease and cirrhosis (K73-K74) | 15,099 | 8,829 | 6,270 | 13,320 | 7,737 | 5,583 | 1,306 | 860 | 446 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 3,417 | 1,585 | 1,832 | 2,990 | 1,381 | 1,609 | 308 | 143 | 165 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 48,237 | 23,533 | 24,704 | 38,352 | 18,992 | 19,360 | 8,619 | 3,919 | 4,700 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 160 | 73 | 87 | 129 | 61 | 68 | 28 | 9 | 19 |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 4,109 | 1,970 | 2,139 | 3,312 | 1,608 | 1,704 | 686 | 310 | 376 |
| Renal failure (N17-N19) | 43,935 | 21,477 | 22,458 | 34,884 | 17,313 | 17,571 | 7,900 | 3,598 | 4,302 |
| Other disorders of kidney (N25,N27) | 33 | 13 | 20 | 27 | 10 | 17 | 5 | 2 | 3 |
| Infections of kidney (N10-N12,N13.6,N15.1) | 627 | 179 | 448 | 533 | 147 | 386 | 67 | 24 | 43 |
| Hyperplasia of prostate (N40) | 502 | 502 | ... | 458 | 458 | ... | 37 | 37 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 136 | ... | 136 | 112 | ... | 112 | 19 | ... | 19 |
| Pregnancy, childbirth and the puerperium (O00-O99) | 795 | ... | 795 | 499 | ... | 499 | 252 | ... | 252 |
| Pregnancy with abortive outcome (O00-O07) | 34 | ... | 34 | 18 | ... | 18 | 15 | ... | 15 |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 761 | ... | 761 | 481 | ... | 481 | 237 | ... | 237 |
| Certain conditions originating in the perinatal period (P00-P96) | 13,933 | 7,919 | 6,014 | 8,455 | 4,831 | 3,624 | 4,844 | 2,731 | 2,113 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 10,288 | 5,395 | 4,893 | 8,156 | 4,271 | 3,885 | 1,689 | 881 | 808 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 38,522 | 16,803 | 21,719 | 32,544 | 13,783 | 18,761 | 5,235 | 2,640 | 2,595 |
| All other diseases (Residual) | 252,490 | 101,521 | 150,969 | 219,962 | 87,775 | 132,187 | 27,092 | 11,315 | 15,777 |
| Accidents (unintentional injuries) (V01-X59,Y85-Y86) | 121,902 | 78,378 | 43,524 | 105,715 | 67,471 | 38,244 | 12,447 | 8,453 | 3,994 |
| Transport accidents (V01-V99,Y85) | 42,709 | 30,650 | 12,059 | 35,772 | 25,732 | 10,040 | 5,206 | 3,789 | 1,417 |
| Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) | 39,790 | 28,291 | 11,499 | 33,293 | 23,721 | 9,572 | 4,872 | 3,521 | 1,351 |
| Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9) | 1,140 | 907 | 233 | 925 | 739 | 186 | 173 | 137 | 36 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85) | 1,779 | 1,452 | 327 | 1,554 | 1,272 | 282 | 161 | 131 | 30 |
| Nontransport accidents (W00-X59,Y86) | 79,193 | 47,728 | 31,465 | 69,943 | 41,739 | 28,204 | 7,241 | 4,664 | 2,577 |
| Falls (W00-W19) | 24,013 | 12,318 | 11,695 | 22,351 | 11,335 | 11,016 | 1,036 | 603 | 433 |
| Accidental discharge of firearms (W32-W34) | 592 | 510 | 82 | 479 | 411 | 68 | 94 | 85 | 9 |
| Accidental drowning and submersion (W65-W74) | 3,548 | 2,726 | 822 | 2,808 | 2,149 | 659 | 548 | 433 | 115 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 2,912 | 1,705 | 1,207 | 2,231 | 1,303 | 928 | 611 | 362 | 249 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 31,116 | 20,533 | 10,583 | 27,430 | 18,063 | 9,367 | 3,001 | 1,995 | 1,006 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31,W35-W64,W75-W99,X10-X39,X50-X59,Y86) | 17,012 | 9,936 | 7,076 | 14,644 | 8,478 | 6,166 | 1,951 | 1,186 | 765 |
| Intentional self-harm (suicide) (*U03,X60-X84,Y87.0) | 36,035 | 28,450 | 7,585 | 32,644 | 25,801 | 6,843 | 2,106 | 1,759 | 347 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 18,223 | 15,931 | 2,292 | 16,840 | 14,683 | 2,157 | 1,049 | 952 | 97 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60-X71,X75-X84,Y87.0) | 17,812 | 12,519 | 5,293 | 15,804 | 11,118 | 4,686 | 1,057 | 807 | 250 |
| Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | 17,826 | 14,135 | 3,691 | 8,893 | 6,556 | 2,337 | 8,335 | 7,148 | 1,187 |
| Assault (homicide) by discharge of firearms (*U01.4,X93-X95) | 12,179 | 10,361 | 1,818 | 5,305 | 4,198 | 1,107 | 6,569 | 5,925 | 644 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3,*U01.5-*U01.9,*U02,X85-X92,X96-Y09,Y87.1) | 5,647 | 3,774 | 1,873 | 3,588 | 2,358 | 1,230 | 1,766 | 1,223 | 543 |
| Legal intervention (Y35,Y89.0) | 381 | 369 | 12 | 245 | 237 | 8 | 120 | 118 | 2 |
| Events of undetermined intent (Y10-Y34,Y87.2,Y89.9) | 5,051 | 3,144 | 1,907 | 4,237 | 2,594 | 1,643 | 669 | 454 | 215 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 273 | 220 | 53 | 225 | 179 | 46 | 41 | 34 | 7 |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9) | 4,778 | 2,924 | 1,854 | 4,012 | 2,415 | 1,597 | 628 | 420 | 208 |
| Operations of war and their sequelae (Y36,Y89.1) | 31 | 31 | - | 25 | 25 | - | 4 | 4 | - |
| Complications of medical and surgical care (Y40-Y84,Y88) | 2,590 | 1,183 | 1,407 | 2,149 | 970 | 1,179 | 399 | 191 | 208 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 7,476 | 2,847 | 4,629 | 6,899 | 2,619 | 4,280 | 445 | 165 | 280 |
| Drug-induced deaths ^{5,6} | 38,649 | 23,928 | 14,721 | 34,237 | 21,093 | 13,144 | 3,662 | 2,381 | 1,281 |
| Alcohol-induced deaths ^{5,7} | 24,189 | 18,152 | 6,037 | 20,783 | 15,689 | 5,094 | 2,279 | 1,692 | 587 |
| Injury by firearms ^{5,8} | 31,593 | 27,336 | 4,257 | 23,065 | 19,679 | 3,386 | 7,847 | 7,088 | 759 |

Table 12. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|-------|--------|--|--------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 14,776 | 8,163 | 6,613 | 47,903 | 24,708 | 23,195 |
| Salmonella infections (A01-A02) | - | - | - | 3 | 2 | 1 |
| Shigellosis and amebiasis (A03,A06) | - | - | - | 1 | 1 | - |
| Certain other intestinal infections (A04,A07-A09) | 30 | 16 | 14 | 111 | 53 | 58 |
| Tuberculosis (A16-A19) | 18 | 8 | 10 | 99 | 70 | 29 |
| Respiratory tuberculosis (A16) | 13 | 5 | 8 | 84 | 62 | 22 |
| Other tuberculosis (A17-A19) | 5 | 3 | 2 | 15 | 8 | 7 |
| Whooping cough (A37) | 2 | 2 | - | - | - | - |
| Scarlet fever and erysipelas (A38,A46) | - | - | - | 1 | 1 | - |
| Meningococcal infection (A39) | 1 | 1 | - | 1 | - | 1 |
| Septicemia (A40-A41) | 244 | 117 | 127 | 560 | 268 | 292 |
| Syphilis (A50-A53) | - | - | - | 2 | 2 | - |
| Acute poliomyelitis (A80) | - | - | - | - | - | - |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | - | - | - | - | - | - |
| Measles (B05) | - | - | - | - | - | - |
| Viral hepatitis (B15-B19) | 100 | 61 | 39 | 303 | 166 | 137 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 66 | 50 | 16 | 100 | 77 | 23 |
| Malaria (B50-B54) | - | - | - | - | - | - |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 54 | 26 | 28 | 170 | 87 | 83 |
| Malignant neoplasms (C00-C97) | 2,727 | 1,452 | 1,275 | 12,895 | 6,664 | 6,231 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 49 | 39 | 10 | 256 | 168 | 88 |
| Malignant neoplasm of esophagus (C15) | 63 | 54 | 9 | 200 | 148 | 52 |
| Malignant neoplasm of stomach (C16) | 71 | 45 | 26 | 755 | 430 | 325 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 313 | 157 | 156 | 1,349 | 688 | 661 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 151 | 103 | 48 | 1,219 | 820 | 399 |
| Malignant neoplasm of pancreas (C25) | 130 | 67 | 63 | 873 | 429 | 444 |
| Malignant neoplasm of larynx (C32) | 18 | 15 | 3 | 38 | 32 | 6 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 730 | 415 | 315 | 2,961 | 1,772 | 1,189 |
| Malignant melanoma of skin (C43) | 13 | 3 | 10 | 40 | 26 | 14 |
| Malignant neoplasm of breast (C50) | 173 | 3 | 170 | 870 | 7 | 863 |
| Malignant neoplasm of cervix uteri (C53) | 49 | ... | 49 | 142 | ... | 142 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 32 | ... | 32 | 181 | ... | 181 |
| Malignant neoplasm of ovary (C56) | 66 | ... | 66 | 371 | ... | 371 |
| Malignant neoplasm of prostate (C61) | 133 | 133 | ... | 389 | 389 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 115 | 72 | 43 | 225 | 150 | 75 |
| Malignant neoplasm of bladder (C67) | 48 | 30 | 18 | 185 | 138 | 47 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 63 | 33 | 30 | 253 | 149 | 104 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 198 | 114 | 84 | 1,139 | 604 | 535 |
| Hodgkin's disease (C81) | 3 | 3 | - | 23 | 13 | 10 |
| Non-Hodgkin's lymphoma (C82-C85) | 67 | 35 | 32 | 466 | 249 | 217 |
| Leukemia (C91-C95) | 83 | 47 | 36 | 455 | 233 | 222 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 45 | 29 | 16 | 193 | 107 | 86 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | - | - | - | 2 | 2 | - |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 312 | 169 | 143 | 1,449 | 714 | 735 |

Table 12. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|-------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 56 | 28 | 28 | 313 | 152 | 161 |
| Anemias (D50-D64) | 27 | 11 | 16 | 97 | 39 | 58 |
| Diabetes mellitus (E10-E14) | 779 | 388 | 391 | 1,817 | 903 | 914 |
| Nutritional deficiencies (E40-E64) | 22 | 7 | 15 | 52 | 21 | 31 |
| Malnutrition (E40-E46) | 21 | 6 | 15 | 48 | 19 | 29 |
| Other nutritional deficiencies (E50-E64) | 1 | 1 | - | 4 | 2 | 2 |
| Meningitis (G00,G03) | 11 | 6 | 5 | 20 | 11 | 9 |
| Parkinson's disease (G20-G21) | 69 | 39 | 30 | 339 | 197 | 142 |
| Alzheimer's disease (G30) | 204 | 62 | 142 | 893 | 290 | 603 |
| Major cardiovascular diseases (I00-I78) | 3,398 | 1,873 | 1,525 | 16,007 | 8,162 | 7,845 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 2,657 | 1,527 | 1,130 | 11,136 | 5,970 | 5,166 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 20 | 12 | 8 | 103 | 34 | 69 |
| Hypertensive heart disease (I11) | 139 | 83 | 56 | 666 | 336 | 330 |
| Hypertensive heart and renal disease (I13) | 13 | 6 | 7 | 79 | 35 | 44 |
| Ischemic heart diseases (I20-I25) | 1,739 | 1,058 | 681 | 7,833 | 4,429 | 3,404 |
| Acute myocardial infarction (I21-I22) | 601 | 377 | 224 | 2,448 | 1,345 | 1,103 |
| Other acute ischemic heart diseases (I24) | 59 | 36 | 23 | 48 | 22 | 26 |
| Other forms of chronic ischemic heart disease (I20,I25) | 1,079 | 645 | 434 | 5,337 | 3,062 | 2,275 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 331 | 214 | 117 | 1,196 | 750 | 446 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 748 | 431 | 317 | 4,141 | 2,312 | 1,829 |
| Other heart diseases (I26-I51) | 746 | 368 | 378 | 2,455 | 1,136 | 1,319 |
| Acute and subacute endocarditis (I33) | 12 | 5 | 7 | 15 | 7 | 8 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 8 | 5 | 3 | 23 | 13 | 10 |
| Heart failure (I50) | 235 | 97 | 138 | 614 | 251 | 363 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 491 | 261 | 230 | 1,803 | 865 | 938 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 111 | 56 | 55 | 707 | 314 | 393 |
| Cerebrovascular diseases (I60-I69) | 517 | 234 | 283 | 3,677 | 1,612 | 2,065 |
| Atherosclerosis (I70) | 33 | 15 | 18 | 89 | 47 | 42 |
| Other diseases of circulatory system (I71-I78) | 80 | 41 | 39 | 398 | 219 | 179 |
| Aortic aneurysm and dissection (I71) | 42 | 23 | 19 | 279 | 170 | 109 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 38 | 18 | 20 | 119 | 49 | 70 |
| Other disorders of circulatory system (I80-I99) | 21 | 12 | 9 | 41 | 20 | 21 |
| Influenza and pneumonia (J09-J18) | 379 | 186 | 193 | 1,508 | 765 | 743 |
| Influenza (J09-J11) | 16 | 9 | 7 | 27 | 14 | 13 |
| Pneumonia (J12-J18) | 363 | 177 | 186 | 1,481 | 751 | 730 |
| Other acute lower respiratory infections (J20-J22,U04) | 3 | 1 | 2 | 8 | 6 | 2 |
| Acute bronchitis and bronchiolitis (J20-J21) | 3 | 1 | 2 | 8 | 6 | 2 |
| Other and unspecified acute lower respiratory infections (J22,U04) | - | - | - | - | - | - |
| Chronic lower respiratory diseases (J40-J47) | 619 | 308 | 311 | 1,484 | 883 | 601 |
| Bronchitis, chronic and unspecified (J40-J42) | 3 | 2 | 1 | 8 | 3 | 5 |
| Emphysema (J43) | 55 | 31 | 24 | 121 | 87 | 34 |
| Asthma (J45-J46) | 22 | 10 | 12 | 131 | 46 | 85 |
| Other chronic lower respiratory diseases (J44,J47) | 539 | 265 | 274 | 1,224 | 747 | 477 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 3 | 2 | 1 | 3 | 3 | - |
| Pneumonitis due to solids and liquids (J69) | 76 | 39 | 37 | 278 | 155 | 123 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 209 | 111 | 98 | 562 | 295 | 267 |

Table 12. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| | Peptic ulcer (K25-K28) | 25 | 14 | 11 | 93 | 44 |
| Diseases of appendix (K35-K38) | 6 | 5 | 1 | 9 | 3 | 6 |
| Hernia (K40-K46) | 11 | 3 | 8 | 15 | 7 | 8 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 742 | 406 | 336 | 440 | 272 | 168 |
| Alcoholic liver disease (K70) | 527 | 295 | 232 | 182 | 151 | 31 |
| Other chronic liver disease and cirrhosis (K73-K74) | 215 | 111 | 104 | 258 | 121 | 137 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 26 | 9 | 17 | 93 | 52 | 41 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 338 | 155 | 183 | 928 | 467 | 461 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 1 | 1 | - | 2 | 2 | - |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 21 | 10 | 11 | 90 | 42 | 48 |
| Renal failure (N17-N19) | 315 | 143 | 172 | 836 | 423 | 413 |
| Other disorders of kidney (N25,N27) | 1 | 1 | - | - | - | - |
| Infections of kidney (N10-N12,N13.6,N15.1) | 7 | 2 | 5 | 20 | 6 | 14 |
| Hyperplasia of prostate (N40) | 1 | 1 | ... | 6 | 6 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 2 | ... | 2 | 3 | ... | 3 |
| Pregnancy, childbirth and the puerperium (O00-O99) | 10 | ... | 10 | 34 | ... | 34 |
| Pregnancy with abortive outcome (O00-O07) | - | ... | - | 1 | ... | 1 |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 10 | ... | 10 | 33 | ... | 33 |
| Certain conditions originating in the perinatal period (P00-P96) | 139 | 79 | 60 | 495 | 278 | 217 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 117 | 69 | 48 | 326 | 174 | 152 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 258 | 136 | 122 | 485 | 244 | 241 |
| All other diseases (Residual) | 1,536 | 752 | 784 | 3,900 | 1,679 | 2,221 |

[Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

Table 12. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes."]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|-------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59, Y85-Y86) | 1,682 | 1,158 | 524 | 2,058 | 1,296 | 762 |
| Transport accidents (V01-V99, Y85) | 759 | 508 | 251 | 972 | 621 | 351 |
| Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) | 716 | 470 | 246 | 909 | 579 | 330 |
| Other land transport accidents (V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9) | 22 | 19 | 3 | 20 | 12 | 8 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99, Y85) | 21 | 19 | 2 | 43 | 30 | 13 |
| Nontransport accidents (W00-X59, Y86) | 923 | 650 | 273 | 1,086 | 675 | 411 |
| Falls (W00-W19) | 142 | 93 | 49 | 484 | 287 | 197 |
| Accidental discharge of firearms (W32-W34) | 16 | 11 | 5 | 3 | 3 | - |
| Accidental drowning and submersion (W65-W74) | 64 | 53 | 11 | 128 | 91 | 37 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 36 | 23 | 13 | 34 | 17 | 17 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 470 | 325 | 145 | 215 | 150 | 65 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86) | 195 | 145 | 50 | 222 | 127 | 95 |
| Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | 409 | 308 | 101 | 876 | 582 | 294 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 153 | 136 | 17 | 181 | 160 | 21 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03, X60-X71, X75-X84, Y87.0) | 256 | 172 | 84 | 695 | 422 | 273 |
| Assault (homicide) (*U01-*U02, X85-Y09, Y87.1) | 255 | 192 | 63 | 343 | 239 | 104 |
| Assault (homicide) by discharge of firearms (*U01.4, X93-X95) | 97 | 74 | 23 | 208 | 164 | 44 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3, *U01.5-*U01.9, *U02, X85-X92, X96-Y09, Y87.1) | 158 | 118 | 40 | 135 | 75 | 60 |
| Legal intervention (Y35, Y89.0) | 10 | 9 | 1 | 6 | 5 | 1 |
| Events of undetermined intent (Y10-Y34, Y87.2, Y89.9) | 70 | 51 | 19 | 75 | 45 | 30 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 3 | 3 | - | 4 | 4 | - |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21, Y25-Y34, Y87.2, Y89.9) | 67 | 48 | 19 | 71 | 41 | 30 |
| Operations of war and their sequelae (Y36, Y89.1) | - | - | - | 2 | 2 | - |
| Complications of medical and surgical care (Y40-Y84, Y88) | 14 | 8 | 6 | 28 | 14 | 14 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 28 | 14 | 14 | 104 | 49 | 55 |
| Drug-induced deaths ^{5,6} | 451 | 273 | 178 | 299 | 181 | 118 |
| Alcohol-induced deaths ^{5,7} | 853 | 542 | 311 | 274 | 229 | 45 |
| Injury by firearms ^{5,8} | 279 | 233 | 46 | 402 | 336 | 66 |

- Quantity zero.

... Category not applicable.

¹Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported by 34 states and the District of Columbia in 2008; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

²Includes Aleuts and Eskimos.

³Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

⁴Included in "Certain other intestinal infections (A04, A07-A09)" shown above. Beginning with data year 2006, Enterocolitis due to *Clostridium difficile* (A04.7) is shown separately at the bottom of tables showing 113 selected causes and is included in the list of rankable causes, see "Technical Notes."

⁵Included in selected categories above.

⁶Includes ICD-10 codes D52.1, D59.0, D59.2, D61.1, D64.2, E06.4, E16.0, E23.1, E24.2, E27.3, E66.1, F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0, F17.3-F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, G21.1, G24.0, G25.1, G25.4, G25.6, G44.4, G62.0, G72.0, I95.2, J70.2-J70.4, K85.3, L10.5, L27.0-L27.1, M10.2, M32.0, M80.4, M81.4, M83.5, M87.1, R50.2, R78.1-R78.5, X40-X44, X60-X64, X85, and Y10-Y14. Trend data for Drug-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

⁷Includes ICD-10 codes E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, R78.0, X45, X65, and Y15. Trend data for Alcohol-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

⁸Includes ICD-10 codes *U01.4, W32-W34, X72-X74, X93-X95, Y22-Y24, and Y35.0. Trend data for Injury by firearms, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

NOTE: Confirmation of deaths from selected causes of death, considered to be of public health concern, were not provided by the following states--Massachusetts, North Carolina, and West Virginia; see "Technical Notes."

Table 13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins | | | Hispanic | | | Non-Hispanic ¹ | | |
|--|-------------|-----------|-----------|------------|--------|--------|---------------------------|-----------|-----------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 2,471,984 | 1,226,197 | 1,245,787 | 139,241 | 76,861 | 62,380 | 2,327,636 | 1,146,394 | 1,181,242 |
| Salmonella infections (A01-A02) | 44 | 24 | 20 | 4 | 4 | - | 40 | 20 | 20 |
| Shigellosis and amebiasis (A03,A06) | 6 | 4 | 2 | 1 | - | 1 | 5 | 4 | 1 |
| Certain other intestinal infections (A04,A07-A09) | 7,876 | 2,996 | 4,880 | 373 | 150 | 223 | 7,493 | 2,841 | 4,652 |
| Tuberculosis (A16-A19) | 585 | 375 | 210 | 103 | 77 | 26 | 480 | 296 | 184 |
| Respiratory tuberculosis (A16) | 449 | 294 | 155 | 74 | 54 | 20 | 373 | 238 | 135 |
| Other tuberculosis (A17-A19) | 136 | 81 | 55 | 29 | 23 | 6 | 107 | 58 | 49 |
| Whooping cough (A37) | 20 | 9 | 11 | 9 | 4 | 5 | 11 | 5 | 6 |
| Scarlet fever and erysipelas (A38,A46) | 3 | 2 | 1 | - | - | - | 3 | 2 | 1 |
| Meningococcal infection (A39) | 102 | 56 | 46 | 17 | 11 | 6 | 85 | 45 | 40 |
| Septicemia (A40-A41) | 35,927 | 16,328 | 19,599 | 2,004 | 973 | 1,031 | 33,839 | 15,310 | 18,529 |
| Syphilis (A50-A53) | 34 | 23 | 11 | 3 | 1 | 2 | 31 | 22 | 9 |
| Acute poliomyelitis (A80) | - | - | - | - | - | - | - | - | - |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | 2 | 1 | 1 | 2 | 1 | 1 | - | - | - |
| Measles (B05) | - | - | - | - | - | - | - | - | - |
| Viral hepatitis (B15-B19) | 7,629 | 5,019 | 2,610 | 1,189 | 774 | 415 | 6,422 | 4,232 | 2,190 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 10,285 | 7,406 | 2,879 | 1,365 | 1,037 | 328 | 8,846 | 6,314 | 2,532 |
| Malaria (B50-B54) | 5 | 4 | 1 | - | - | - | 5 | 4 | 1 |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 5,914 | 2,979 | 2,935 | 441 | 242 | 199 | 5,462 | 2,732 | 2,730 |
| Malignant neoplasms (C00-C97) | 565,469 | 295,259 | 270,210 | 28,851 | 15,283 | 13,568 | 535,675 | 279,433 | 256,242 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 8,019 | 5,488 | 2,531 | 357 | 264 | 93 | 7,645 | 5,211 | 2,434 |
| Malignant neoplasm of esophagus (C15) | 13,714 | 10,847 | 2,867 | 565 | 461 | 104 | 13,127 | 10,366 | 2,761 |
| Malignant neoplasm of stomach (C16) | 11,352 | 6,735 | 4,617 | 1,398 | 804 | 594 | 9,934 | 5,918 | 4,016 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 53,321 | 27,094 | 26,227 | 2,954 | 1,658 | 1,296 | 50,273 | 25,390 | 24,883 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 18,213 | 12,302 | 5,911 | 2,071 | 1,391 | 680 | 16,108 | 10,885 | 5,223 |
| Malignant neoplasm of pancreas (C25) | 35,236 | 17,515 | 17,721 | 1,942 | 1,011 | 931 | 33,240 | 16,471 | 16,769 |
| Malignant neoplasm of larynx (C32) | 3,760 | 2,949 | 811 | 191 | 164 | 27 | 3,558 | 2,775 | 783 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 158,656 | 88,586 | 70,070 | 4,804 | 3,007 | 1,797 | 153,586 | 85,415 | 68,171 |
| Malignant melanoma of skin (C43) | 8,623 | 5,672 | 2,951 | 185 | 116 | 69 | 8,429 | 5,550 | 2,879 |
| Malignant neoplasm of breast (C50) | 41,026 | 437 | 40,589 | 2,151 | 11 | 2,140 | 38,815 | 423 | 38,392 |
| Malignant neoplasm of cervix uteri (C53) | 4,008 | ... | 4,008 | 472 | ... | 472 | 3,530 | ... | 3,530 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 7,675 | ... | 7,675 | 472 | ... | 472 | 7,193 | ... | 7,193 |
| Malignant neoplasm of ovary (C56) | 14,362 | ... | 14,362 | 783 | ... | 783 | 13,562 | ... | 13,562 |
| Malignant neoplasm of prostate (C61) | 28,472 | 28,472 | ... | 1,436 | 1,436 | ... | 26,980 | 26,980 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 12,895 | 8,206 | 4,689 | 841 | 525 | 316 | 12,040 | 7,671 | 4,369 |
| Malignant neoplasm of bladder (C67) | 14,036 | 9,791 | 4,245 | 463 | 308 | 155 | 13,552 | 9,468 | 4,084 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 13,724 | 7,686 | 6,038 | 857 | 466 | 391 | 12,844 | 7,207 | 5,637 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 54,954 | 30,449 | 24,505 | 3,295 | 1,833 | 1,462 | 51,569 | 28,567 | 23,002 |
| Hodgkin's disease (C81) | 1,171 | 639 | 532 | 118 | 63 | 55 | 1,051 | 574 | 477 |
| Non-Hodgkin's lymphoma (C82-C85) | 20,369 | 11,004 | 9,365 | 1,213 | 670 | 543 | 19,132 | 10,318 | 8,814 |
| Leukemia (C91-C95) | 22,335 | 12,711 | 9,624 | 1,360 | 770 | 590 | 20,927 | 11,917 | 9,010 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 11,020 | 6,057 | 4,963 | 601 | 328 | 273 | 10,403 | 5,722 | 4,681 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 59 | 38 | 21 | 3 | 2 | 1 | 56 | 36 | 20 |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 63,423 | 33,030 | 30,393 | 3,614 | 1,828 | 1,786 | 59,690 | 31,136 | 28,554 |

Table 13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins | | | Hispanic | | | Non-Hispanic ¹ | | |
|--|-------------|---------|---------|------------|--------|--------|---------------------------|---------|---------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 14,470 | 7,461 | 7,009 | 697 | 338 | 359 | 13,764 | 7,120 | 6,644 |
| Anemias (D50-D64) | 5,018 | 2,052 | 2,966 | 236 | 120 | 116 | 4,772 | 1,926 | 2,846 |
| Diabetes mellitus (E10-E14) | 70,553 | 35,346 | 35,207 | 6,544 | 3,314 | 3,230 | 63,848 | 31,938 | 31,910 |
| Nutritional deficiencies (E40-E64) | 2,976 | 1,138 | 1,838 | 150 | 68 | 82 | 2,824 | 1,069 | 1,755 |
| Malnutrition (E40-E46) | 2,760 | 1,058 | 1,702 | 143 | 66 | 77 | 2,615 | 991 | 1,624 |
| Other nutritional deficiencies (E50-E64) | 216 | 80 | 136 | 7 | 2 | 5 | 209 | 78 | 131 |
| Meningitis (G00,G03) | 633 | 341 | 292 | 86 | 47 | 39 | 545 | 292 | 253 |
| Parkinson's disease (G20-G21) | 20,483 | 11,960 | 8,523 | 842 | 473 | 369 | 19,617 | 11,473 | 8,144 |
| Alzheimer's disease (G30) | 82,435 | 24,516 | 57,919 | 3,005 | 966 | 2,039 | 79,323 | 23,519 | 55,804 |
| Major cardiovascular diseases (I00-I78) | 804,483 | 388,514 | 415,969 | 38,724 | 20,119 | 18,605 | 764,061 | 367,406 | 396,655 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 616,828 | 311,201 | 305,627 | 28,951 | 15,498 | 13,453 | 586,514 | 294,876 | 291,638 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 3,141 | 1,025 | 2,116 | 154 | 49 | 105 | 2,983 | 976 | 2,007 |
| Hypertensive heart disease (I11) | 32,391 | 15,201 | 17,190 | 1,779 | 1,003 | 776 | 30,479 | 14,112 | 16,367 |
| Hypertensive heart and renal disease (I13) | 2,872 | 1,250 | 1,622 | 164 | 71 | 93 | 2,703 | 1,175 | 1,528 |
| Ischemic heart diseases (I20-I25) | 405,309 | 216,248 | 189,061 | 20,261 | 11,120 | 9,141 | 384,127 | 204,552 | 179,575 |
| Acute myocardial infarction (I21-I22) | 133,958 | 72,447 | 61,511 | 6,611 | 3,624 | 2,987 | 127,087 | 68,662 | 58,425 |
| Other acute ischemic heart diseases (I24) | 4,252 | 2,219 | 2,033 | 125 | 69 | 56 | 4,111 | 2,137 | 1,974 |
| Other forms of chronic ischemic heart disease (I20,I25) | 267,099 | 141,582 | 125,517 | 13,525 | 7,427 | 6,098 | 252,929 | 133,753 | 119,176 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 58,625 | 33,341 | 25,284 | 3,208 | 2,019 | 1,189 | 55,137 | 31,135 | 24,002 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 208,474 | 108,241 | 100,233 | 10,317 | 5,408 | 4,909 | 197,792 | 102,618 | 95,174 |
| Other heart diseases (I26-I51) | 173,115 | 77,477 | 95,638 | 6,593 | 3,255 | 3,338 | 166,222 | 74,061 | 92,161 |
| Acute and subacute endocarditis (I33) | 1,180 | 662 | 518 | 77 | 57 | 20 | 1,101 | 603 | 498 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 827 | 406 | 421 | 71 | 34 | 37 | 754 | 372 | 382 |
| Heart failure (I50) | 56,830 | 23,017 | 33,813 | 1,966 | 843 | 1,123 | 54,769 | 22,130 | 32,639 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 114,278 | 53,392 | 60,886 | 4,479 | 2,321 | 2,158 | 109,598 | 50,956 | 58,642 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 25,742 | 10,325 | 15,417 | 1,522 | 666 | 856 | 24,180 | 9,641 | 14,539 |
| Cerebrovascular diseases (I60-I69) | 134,148 | 53,525 | 80,623 | 7,121 | 3,370 | 3,751 | 126,777 | 50,037 | 76,740 |
| Atherosclerosis (I70) | 7,836 | 3,012 | 4,824 | 282 | 112 | 170 | 7,546 | 2,896 | 4,650 |
| Other diseases of circulatory system (I71-I78) | 19,929 | 10,451 | 9,478 | 848 | 473 | 375 | 19,044 | 9,956 | 9,088 |
| Aortic aneurysm and dissection (I71) | 11,079 | 6,502 | 4,577 | 425 | 282 | 143 | 10,634 | 6,208 | 4,426 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 8,850 | 3,949 | 4,901 | 423 | 191 | 232 | 8,410 | 3,748 | 4,662 |
| Other disorders of circulatory system (I80-I99) | 4,042 | 1,857 | 2,185 | 210 | 115 | 95 | 3,825 | 1,738 | 2,087 |
| Influenza and pneumonia (J09-J18) | 56,284 | 25,571 | 30,713 | 3,176 | 1,544 | 1,632 | 53,024 | 23,983 | 29,041 |
| Influenza (J09-J11) | 1,722 | 690 | 1,032 | 73 | 32 | 41 | 1,645 | 656 | 989 |
| Pneumonia (J12-J18) | 54,562 | 24,881 | 29,681 | 3,103 | 1,512 | 1,591 | 51,379 | 23,327 | 28,052 |
| Other acute lower respiratory infections (J20-J22,U04) | 284 | 126 | 158 | 22 | 9 | 13 | 261 | 116 | 145 |
| Acute bronchitis and bronchiolitis (J20-J21) | 235 | 106 | 129 | 21 | 9 | 12 | 213 | 96 | 117 |
| Other and unspecified acute lower respiratory infections (J22,U04) | 49 | 20 | 29 | 1 | - | 1 | 48 | 20 | 28 |
| Chronic lower respiratory diseases (J40-J47) | 141,090 | 67,122 | 73,968 | 3,949 | 2,019 | 1,930 | 136,895 | 64,959 | 71,936 |
| Bronchitis, chronic and unspecified (J40-J42) | 731 | 311 | 420 | 47 | 29 | 18 | 682 | 281 | 401 |
| Emphysema (J43) | 12,448 | 6,467 | 5,981 | 284 | 174 | 110 | 12,143 | 6,280 | 5,863 |
| Asthma (J45-J46) | 3,397 | 1,186 | 2,211 | 271 | 116 | 155 | 3,115 | 1,067 | 2,048 |
| Other chronic lower respiratory diseases (J44,J47) | 124,514 | 59,158 | 65,356 | 3,347 | 1,700 | 1,647 | 120,955 | 57,331 | 63,624 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 908 | 859 | 49 | 22 | 20 | 2 | 882 | 835 | 47 |
| Pneumonitis due to solids and liquids (J69) | 16,608 | 8,650 | 7,958 | 639 | 329 | 310 | 15,949 | 8,309 | 7,640 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 29,925 | 14,916 | 15,009 | 1,803 | 901 | 902 | 28,071 | 13,987 | 14,084 |

Table 13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins | | | Hispanic | | | Non-Hispanic ¹ | | |
|--|-------------|---------|---------|------------|-------|--------|---------------------------|--------|---------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 3,073 | 1,551 | 1,522 | 155 | 95 | 60 | 2,908 | 1,449 | 1,459 |
| Diseases of appendix (K35-K38) | 418 | 242 | 176 | 43 | 33 | 10 | 375 | 209 | 166 |
| Hernia (K40-K46) | 1,674 | 717 | 957 | 108 | 44 | 64 | 1,563 | 671 | 892 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 29,963 | 19,646 | 10,317 | 4,091 | 2,850 | 1,241 | 25,813 | 16,754 | 9,059 |
| Alcoholic liver disease (K70) | 14,864 | 10,817 | 4,047 | 2,152 | 1,757 | 395 | 12,675 | 9,029 | 3,646 |
| Other chronic liver disease and cirrhosis (K73-K74) | 15,099 | 8,829 | 6,270 | 1,939 | 1,093 | 846 | 13,138 | 7,725 | 5,413 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 3,417 | 1,585 | 1,832 | 281 | 115 | 166 | 3,132 | 1,468 | 1,664 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 48,237 | 23,533 | 24,704 | 2,903 | 1,456 | 1,447 | 45,245 | 22,035 | 23,210 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 160 | 73 | 87 | 7 | 4 | 3 | 153 | 69 | 84 |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 4,109 | 1,970 | 2,139 | 233 | 126 | 107 | 3,866 | 1,837 | 2,029 |
| Renal failure (N17-N19) | 43,935 | 21,477 | 22,458 | 2,661 | 1,325 | 1,336 | 41,195 | 20,117 | 21,078 |
| Other disorders of kidney (N25,N27) | 33 | 13 | 20 | 2 | 1 | 1 | 31 | 12 | 19 |
| Infections of kidney (N10-N12,N13.6,N15.1) | 627 | 179 | 448 | 59 | 18 | 41 | 566 | 161 | 405 |
| Hyperplasia of prostate (N40) | 502 | 502 | ... | 21 | 21 | ... | 477 | 477 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 136 | ... | 136 | 6 | ... | 6 | 129 | ... | 129 |
| Pregnancy, childbirth and the puerperium (O00-O99) | 795 | ... | 795 | 154 | ... | 154 | 636 | ... | 636 |
| Pregnancy with abortive outcome (O00-O07) | 34 | ... | 34 | 7 | ... | 7 | 26 | ... | 26 |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 761 | ... | 761 | 147 | ... | 147 | 610 | ... | 610 |
| Certain conditions originating in the perinatal period (P00-P96) | 13,933 | 7,919 | 6,014 | 2,873 | 1,645 | 1,228 | 10,901 | 6,182 | 4,719 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 10,288 | 5,395 | 4,893 | 2,011 | 1,061 | 950 | 8,225 | 4,308 | 3,917 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 38,522 | 16,803 | 21,719 | 2,195 | 1,229 | 966 | 36,209 | 15,512 | 20,697 |
| All other diseases (Residual) | 252,490 | 101,521 | 150,969 | 12,561 | 5,866 | 6,695 | 239,433 | 95,428 | 144,005 |

Table 13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins | | | Hispanic | | | Non-Hispanic ¹ | | |
|--|-------------|--------|--------|------------|-------|--------|---------------------------|--------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59, Y85-Y86) | 121,902 | 78,378 | 43,524 | 11,080 | 8,363 | 2,717 | 110,476 | 69,771 | 40,705 |
| Transport accidents (V01-V99, Y85) | 42,709 | 30,650 | 12,059 | 5,413 | 4,186 | 1,227 | 37,190 | 26,384 | 10,806 |
| Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) | 39,790 | 28,291 | 11,499 | 5,105 | 3,920 | 1,185 | 34,590 | 24,300 | 10,290 |
| Other land transport accidents (V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9) | 1,140 | 907 | 233 | 187 | 158 | 29 | 945 | 742 | 203 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99, Y85) | 1,779 | 1,452 | 327 | 121 | 108 | 13 | 1,655 | 1,342 | 313 |
| Nontransport accidents (W00-X59, Y86) | 79,193 | 47,728 | 31,465 | 5,667 | 4,177 | 1,490 | 73,286 | 43,387 | 29,899 |
| Falls (W00-W19) | 24,013 | 12,318 | 11,695 | 1,267 | 828 | 439 | 22,707 | 11,471 | 11,236 |
| Accidental discharge of firearms (W32-W34) | 592 | 510 | 82 | 39 | 33 | 6 | 551 | 475 | 76 |
| Accidental drowning and submersion (W65-W74) | 3,548 | 2,726 | 822 | 500 | 399 | 101 | 3,033 | 2,315 | 718 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 2,912 | 1,705 | 1,207 | 189 | 118 | 71 | 2,707 | 1,576 | 1,131 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 31,116 | 20,533 | 10,583 | 2,564 | 2,007 | 557 | 28,432 | 18,439 | 9,993 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86) | 17,012 | 9,936 | 7,076 | 1,108 | 792 | 316 | 15,856 | 9,111 | 6,745 |
| Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | 36,035 | 28,450 | 7,585 | 2,345 | 1,955 | 390 | 33,589 | 26,417 | 7,172 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 18,223 | 15,931 | 2,292 | 863 | 786 | 77 | 17,318 | 15,109 | 2,209 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03, X60-X71, X75-X84, Y87.0) | 17,812 | 12,519 | 5,293 | 1,482 | 1,169 | 313 | 16,271 | 11,308 | 4,963 |
| Assault (homicide) (*U01-*U02, X85-Y09, Y87.1) | 17,826 | 14,135 | 3,691 | 3,331 | 2,777 | 554 | 14,427 | 11,305 | 3,122 |
| Assault (homicide) by discharge of firearms (*U01.4, X93-X95) | 12,179 | 10,361 | 1,818 | 2,260 | 2,003 | 257 | 9,882 | 8,327 | 1,555 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3, *U01.5-*U01.9, *U02, X85-X92, X96-Y09, Y87.1) | 5,647 | 3,774 | 1,873 | 1,071 | 774 | 297 | 4,545 | 2,978 | 1,567 |
| Legal intervention (Y35, Y89.0) | 381 | 369 | 12 | 79 | 78 | 1 | 302 | 291 | 11 |
| Events of undetermined intent (Y10-Y34, Y87.2, Y89.9) | 5,051 | 3,144 | 1,907 | 326 | 251 | 75 | 4,707 | 2,879 | 1,828 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 273 | 220 | 53 | 22 | 19 | 3 | 247 | 197 | 50 |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21, Y25-Y34, Y87.2, Y89.9) | 4,778 | 2,924 | 1,854 | 304 | 232 | 72 | 4,460 | 2,682 | 1,778 |
| Operations of war and their sequelae (Y36, Y89.1) | 31 | 31 | - | 1 | 1 | - | 30 | 30 | - |
| Complications of medical and surgical care (Y40-Y84, Y88) | 2,590 | 1,183 | 1,407 | 151 | 64 | 87 | 2,435 | 1,117 | 1,318 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 7,476 | 2,847 | 4,629 | 351 | 142 | 209 | 7,115 | 2,700 | 4,415 |
| Drug-induced deaths ^{5,6} | 38,649 | 23,928 | 14,721 | 2,761 | 2,033 | 728 | 35,735 | 21,791 | 13,944 |
| Alcohol-induced deaths ^{5,7} | 24,189 | 18,152 | 6,037 | 3,021 | 2,522 | 499 | 21,085 | 15,561 | 5,524 |
| Injury by firearms ^{5,8} | 31,593 | 27,336 | 4,257 | 3,256 | 2,912 | 344 | 28,252 | 24,351 | 3,901 |

Table 13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ² | | | Non-Hispanic black ² | | | Origin not stated ³ | | |
|--|---------------------------------|---------|-----------|---------------------------------|---------|---------|--------------------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 1,981,034 | 969,288 | 1,011,746 | 285,522 | 145,168 | 140,354 | 5,107 | 2,942 | 2,165 |
| Salmonella infections (A01-A02) | 28 | 16 | 12 | 9 | 2 | 7 | - | - | - |
| Shigellosis and amebiasis (A03,A06) | 4 | 3 | 1 | - | - | - | - | - | - |
| Certain other intestinal infections (A04,A07-A09) | 6,890 | 2,595 | 4,295 | 464 | 177 | 287 | 10 | 5 | 5 |
| Tuberculosis (A16-A19) | 231 | 134 | 97 | 134 | 85 | 49 | 2 | 2 | - |
| Respiratory tuberculosis (A16) | 174 | 101 | 73 | 104 | 71 | 33 | 2 | 2 | - |
| Other tuberculosis (A17-A19) | 57 | 33 | 24 | 30 | 14 | 16 | - | - | - |
| Whooping cough (A37) | 9 | 3 | 6 | - | - | - | - | - | - |
| Scarlet fever and erysipelas (A38,A46) | 2 | 1 | 1 | - | - | - | - | - | - |
| Meningococcal infection (A39) | 58 | 31 | 27 | 25 | 13 | 12 | - | - | - |
| Septicemia (A40-A41) | 26,692 | 12,092 | 14,600 | 6,359 | 2,841 | 3,518 | 84 | 45 | 39 |
| Syphilis (A50-A53) | 11 | 10 | 1 | 18 | 10 | 8 | - | - | - |
| Acute poliomyelitis (A80) | - | - | - | - | - | - | - | - | - |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | - | - | - | - | - | - | - | - | - |
| Measles (B05) | - | - | - | - | - | - | - | - | - |
| Viral hepatitis (B15-B19) | 4,935 | 3,295 | 1,640 | 1,103 | 721 | 382 | 18 | 13 | 5 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 3,003 | 2,471 | 532 | 5,686 | 3,724 | 1,962 | 74 | 55 | 19 |
| Malaria (B50-B54) | 2 | 2 | - | 3 | 2 | 1 | - | - | - |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 4,518 | 2,219 | 2,299 | 725 | 402 | 323 | 11 | 5 | 6 |
| Malignant neoplasms (C00-C97) | 457,084 | 238,846 | 218,238 | 63,279 | 32,654 | 30,625 | 943 | 543 | 400 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 6,353 | 4,282 | 2,071 | 992 | 724 | 268 | 17 | 13 | 4 |
| Malignant neoplasm of esophagus (C15) | 11,458 | 9,167 | 2,291 | 1,415 | 1,004 | 411 | 22 | 20 | 2 |
| Malignant neoplasm of stomach (C16) | 7,085 | 4,269 | 2,816 | 2,029 | 1,180 | 849 | 20 | 13 | 7 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 41,812 | 21,090 | 20,722 | 6,833 | 3,473 | 3,360 | 94 | 46 | 48 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 12,321 | 8,250 | 4,071 | 2,444 | 1,735 | 709 | 34 | 26 | 8 |
| Malignant neoplasm of pancreas (C25) | 28,191 | 14,112 | 14,079 | 4,062 | 1,870 | 2,192 | 54 | 33 | 21 |
| Malignant neoplasm of larynx (C32) | 2,869 | 2,234 | 635 | 635 | 496 | 139 | 11 | 10 | 1 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 133,866 | 73,732 | 60,134 | 16,101 | 9,542 | 6,559 | 266 | 164 | 102 |
| Malignant melanoma of skin (C43) | 8,260 | 5,468 | 2,792 | 118 | 55 | 63 | 9 | 6 | 3 |
| Malignant neoplasm of breast (C50) | 31,903 | 338 | 31,565 | 5,883 | 75 | 5,808 | 60 | 3 | 57 |
| Malignant neoplasm of cervix uteri (C53) | 2,551 | ... | 2,551 | 793 | ... | 793 | 6 | ... | 6 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 5,712 | ... | 5,712 | 1,275 | ... | 1,275 | 10 | ... | 10 |
| Malignant neoplasm of ovary (C56) | 11,951 | ... | 11,951 | 1,184 | ... | 1,184 | 17 | ... | 17 |
| Malignant neoplasm of prostate (C61) | 21,951 | 21,951 | ... | 4,520 | 4,520 | ... | 56 | 56 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 10,515 | 6,716 | 3,799 | 1,194 | 740 | 454 | 14 | 10 | 4 |
| Malignant neoplasm of bladder (C67) | 12,379 | 8,789 | 3,590 | 945 | 513 | 432 | 21 | 15 | 6 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 11,699 | 6,575 | 5,124 | 832 | 452 | 380 | 23 | 13 | 10 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 45,058 | 25,102 | 19,956 | 5,206 | 2,770 | 2,436 | 90 | 49 | 41 |
| Hodgkin's disease (C81) | 907 | 495 | 412 | 118 | 63 | 55 | 2 | 2 | - |
| Non-Hodgkin's lymphoma (C82-C85) | 17,268 | 9,316 | 7,952 | 1,341 | 726 | 615 | 24 | 16 | 8 |
| Leukemia (C91-C95) | 18,532 | 10,606 | 7,926 | 1,870 | 1,039 | 831 | 48 | 24 | 24 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 8,302 | 4,655 | 3,647 | 1,872 | 938 | 934 | 16 | 7 | 9 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 49 | 30 | 19 | 5 | 4 | 1 | - | - | - |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 51,150 | 26,771 | 24,379 | 6,818 | 3,505 | 3,313 | 119 | 66 | 53 |

Table 13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ² | | | Non-Hispanic black ² | | | Origin not stated ³ | | |
|--|---------------------------------|---------|---------|---------------------------------|--------|--------|--------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 12,255 | 6,393 | 5,862 | 1,148 | 550 | 598 | 9 | 3 | 6 |
| Anemias (D50-D64) | 3,645 | 1,434 | 2,211 | 1,004 | 443 | 561 | 10 | 6 | 4 |
| Diabetes mellitus (E10-E14) | 49,388 | 25,303 | 24,085 | 11,934 | 5,378 | 6,556 | 161 | 94 | 67 |
| Nutritional deficiencies (E40-E64) | 2,381 | 868 | 1,513 | 370 | 173 | 197 | 2 | 1 | 1 |
| Malnutrition (E40-E46) | 2,195 | 802 | 1,393 | 352 | 164 | 188 | 2 | 1 | 1 |
| Other nutritional deficiencies (E50-E64) | 186 | 66 | 120 | 18 | 9 | 9 | - | - | - |
| Meningitis (G00,G03) | 397 | 214 | 183 | 118 | 62 | 56 | 2 | 2 | - |
| Parkinson's disease (G20-G21) | 18,474 | 10,845 | 7,629 | 739 | 394 | 345 | 24 | 14 | 10 |
| Alzheimer's disease (G30) | 73,219 | 21,780 | 51,439 | 5,024 | 1,394 | 3,630 | 107 | 31 | 76 |
| Major cardiovascular diseases (I00-I78) | 650,843 | 312,004 | 338,839 | 94,214 | 45,579 | 48,635 | 1,698 | 989 | 709 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 503,096 | 252,572 | 250,524 | 69,918 | 34,965 | 34,953 | 1,363 | 827 | 536 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 2,603 | 833 | 1,770 | 261 | 97 | 164 | 4 | - | 4 |
| Hypertensive heart disease (I11) | 22,331 | 9,977 | 12,354 | 7,361 | 3,722 | 3,639 | 133 | 86 | 47 |
| Hypertensive heart and renal disease (I13) | 1,783 | 763 | 1,020 | 830 | 372 | 458 | 5 | 4 | 1 |
| Ischemic heart diseases (I20-I25) | 333,378 | 178,052 | 155,326 | 41,373 | 21,131 | 20,242 | 921 | 576 | 345 |
| Acute myocardial infarction (I21-I22) | 110,461 | 60,166 | 50,295 | 13,645 | 6,811 | 6,834 | 260 | 161 | 99 |
| Other acute ischemic heart diseases (I24) | 3,447 | 1,781 | 1,666 | 558 | 299 | 259 | 16 | 13 | 3 |
| Other forms of chronic ischemic heart disease (I20,I25) | 219,470 | 116,105 | 103,365 | 27,170 | 14,021 | 13,149 | 645 | 402 | 243 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 45,179 | 25,335 | 19,844 | 8,469 | 4,864 | 3,605 | 280 | 187 | 93 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 174,291 | 90,770 | 83,521 | 18,701 | 9,157 | 9,544 | 365 | 215 | 150 |
| Other heart diseases (I26-I51) | 143,001 | 62,947 | 80,054 | 20,093 | 9,643 | 10,450 | 300 | 161 | 139 |
| Acute and subacute endocarditis (I33) | 871 | 486 | 385 | 204 | 106 | 98 | 2 | 2 | - |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 580 | 285 | 295 | 145 | 70 | 75 | 2 | - | 2 |
| Heart failure (I50) | 48,518 | 19,406 | 29,112 | 5,415 | 2,380 | 3,035 | 95 | 44 | 51 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 93,032 | 42,770 | 50,262 | 14,329 | 7,087 | 7,242 | 201 | 115 | 86 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 18,351 | 7,088 | 11,263 | 5,028 | 2,194 | 2,834 | 40 | 18 | 22 |
| Cerebrovascular diseases (I60-I69) | 106,134 | 41,092 | 65,042 | 16,527 | 7,135 | 9,392 | 250 | 118 | 132 |
| Atherosclerosis (I70) | 6,781 | 2,561 | 4,220 | 648 | 276 | 372 | 8 | 4 | 4 |
| Other diseases of circulatory system (I71-I78) | 16,481 | 8,691 | 7,790 | 2,093 | 1,009 | 1,084 | 37 | 22 | 15 |
| Aortic aneurysm and dissection (I71) | 9,409 | 5,515 | 3,894 | 910 | 503 | 407 | 20 | 12 | 8 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 7,072 | 3,176 | 3,896 | 1,183 | 506 | 677 | 17 | 10 | 7 |
| Other disorders of circulatory system (I80-I99) | 3,007 | 1,343 | 1,664 | 756 | 363 | 393 | 7 | 4 | 3 |
| Influenza and pneumonia (J09-J18) | 45,780 | 20,516 | 25,264 | 5,396 | 2,542 | 2,854 | 84 | 44 | 40 |
| Influenza (J09-J11) | 1,523 | 598 | 925 | 81 | 37 | 44 | 4 | 2 | 2 |
| Pneumonia (J12-J18) | 44,257 | 19,918 | 24,339 | 5,315 | 2,505 | 2,810 | 80 | 42 | 38 |
| Other acute lower respiratory infections (J20-J22,U04) | 215 | 90 | 125 | 35 | 19 | 16 | 1 | 1 | - |
| Acute bronchitis and bronchiolitis (J20-J21) | 172 | 71 | 101 | 30 | 18 | 12 | 1 | 1 | - |
| Other and unspecified acute lower respiratory infections (J22,U04) | 43 | 19 | 24 | 5 | 1 | 4 | - | - | - |
| Chronic lower respiratory diseases (J40-J47) | 126,146 | 59,284 | 66,862 | 8,679 | 4,497 | 4,182 | 246 | 144 | 102 |
| Bronchitis, chronic and unspecified (J40-J42) | 610 | 240 | 370 | 61 | 36 | 25 | 2 | 1 | 1 |
| Emphysema (J43) | 11,302 | 5,767 | 5,535 | 668 | 397 | 271 | 21 | 13 | 8 |
| Asthma (J45-J46) | 2,070 | 641 | 1,429 | 892 | 370 | 522 | 11 | 3 | 8 |
| Other chronic lower respiratory diseases (J44,J47) | 112,164 | 52,636 | 59,528 | 7,058 | 3,694 | 3,364 | 212 | 127 | 85 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 839 | 796 | 43 | 37 | 34 | 3 | 4 | 4 | - |
| Pneumonitis due to solids and liquids (J69) | 14,135 | 7,369 | 6,766 | 1,466 | 751 | 715 | 20 | 12 | 8 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 24,564 | 12,301 | 12,263 | 2,753 | 1,292 | 1,461 | 51 | 28 | 23 |
| Peptic ulcer (K25-K28) | 2,491 | 1,210 | 1,281 | 300 | 181 | 119 | 10 | 7 | 3 |

Table 13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ² | | | Non-Hispanic black ² | | | Origin not stated ³ | | |
|--|---------------------------------|--------|---------|---------------------------------|--------|--------|--------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 2,491 | 1,210 | 1,281 | 300 | 181 | 119 | 10 | 7 | 3 |
| Diseases of appendix (K35-K38) | 305 | 164 | 141 | 56 | 37 | 19 | - | - | - |
| Hernia (K40-K46) | 1,391 | 588 | 803 | 146 | 73 | 73 | 3 | 2 | 1 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 22,210 | 14,452 | 7,758 | 2,464 | 1,653 | 811 | 59 | 42 | 17 |
| Alcoholic liver disease (K70) | 10,819 | 7,802 | 3,017 | 1,177 | 801 | 376 | 37 | 31 | 6 |
| Other chronic liver disease and cirrhosis (K73-K74) | 11,391 | 6,650 | 4,741 | 1,287 | 852 | 435 | 22 | 11 | 11 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 2,713 | 1,266 | 1,447 | 303 | 142 | 161 | 4 | 2 | 2 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 35,439 | 17,535 | 17,904 | 8,564 | 3,893 | 4,671 | 89 | 42 | 47 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 123 | 57 | 66 | 27 | 9 | 18 | - | - | - |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 3,077 | 1,479 | 1,598 | 680 | 306 | 374 | 10 | 7 | 3 |
| Renal failure (N17-N19) | 32,214 | 15,990 | 16,224 | 7,852 | 3,576 | 4,276 | 79 | 35 | 44 |
| Other disorders of kidney (N25,N27) | 25 | 9 | 16 | 5 | 2 | 3 | - | - | - |
| Infections of kidney (N10-N12,N13.6,N15.1) | 474 | 129 | 345 | 66 | 24 | 42 | 2 | - | 2 |
| Hyperplasia of prostate (N40) | 435 | 435 | ... | 35 | 35 | ... | 4 | 4 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 105 | ... | 105 | 19 | ... | 19 | 1 | ... | 1 |
| Pregnancy, childbirth and the puerperium (O00-O99) | 345 | ... | 345 | 247 | ... | 247 | 5 | ... | 5 |
| Pregnancy with abortive outcome (O00-O07) | 10 | ... | 10 | 15 | ... | 15 | 1 | ... | 1 |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 335 | ... | 335 | 232 | ... | 232 | 4 | ... | 4 |
| Certain conditions originating in the perinatal period (P00-P96) | 5,695 | 3,253 | 2,442 | 4,627 | 2,608 | 2,019 | 159 | 92 | 67 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 6,186 | 3,230 | 2,956 | 1,624 | 847 | 777 | 52 | 26 | 26 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 30,364 | 12,567 | 17,797 | 5,145 | 2,591 | 2,554 | 118 | 62 | 56 |
| All other diseases (Residual) | 207,369 | 81,906 | 125,463 | 26,781 | 11,171 | 15,610 | 496 | 227 | 269 |

Table 13. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearm, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ² | | | Non-Hispanic black ² | | | Origin not stated ³ | | |
|--|---------------------------------|--------|--------|---------------------------------|-------|--------|--------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59, Y85-Y86) | | | | | | | | | |
| Transport accidents (V01-V99, Y85) | 94,722 | 59,173 | 35,549 | 12,215 | 8,282 | 3,933 | 346 | 244 | 102 |
| Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) | 30,440 | 21,597 | 8,843 | 5,117 | 3,723 | 1,394 | 106 | 80 | 26 |
| Other land transport accidents (V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9) | 28,272 | 19,855 | 8,417 | 4,788 | 3,458 | 1,330 | 95 | 71 | 24 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99, Y85) | 736 | 578 | 158 | 168 | 134 | 34 | 8 | 7 | 1 |
| Nontransport accidents (W00-X59, Y86) | 1,432 | 1,164 | 268 | 161 | 131 | 30 | 3 | 2 | 1 |
| Falls (W00-W19) | 64,282 | 37,576 | 26,706 | 7,098 | 4,559 | 2,539 | 240 | 164 | 76 |
| Accidental discharge of firearms (W32-W34) | 21,084 | 10,517 | 10,567 | 1,015 | 587 | 428 | 39 | 19 | 20 |
| Accidental drowning and submersion (W65-W74) | 441 | 378 | 63 | 93 | 84 | 9 | 2 | 2 | - |
| Accidental exposure to smoke, fire and flames (X00-X09) | 2,317 | 1,759 | 558 | 534 | 420 | 114 | 15 | 12 | 3 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 2,037 | 1,181 | 856 | 603 | 356 | 247 | 16 | 11 | 5 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86) | 24,855 | 16,047 | 8,808 | 2,938 | 1,948 | 990 | 120 | 87 | 33 |
| Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | 13,548 | 7,694 | 5,854 | 1,915 | 1,164 | 751 | 48 | 33 | 15 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 30,281 | 23,835 | 6,446 | 2,063 | 1,721 | 342 | 101 | 78 | 23 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03, X60-X71, X75-X84, Y87.0) | 15,968 | 13,891 | 2,077 | 1,034 | 938 | 96 | 42 | 36 | 6 |
| Assault (homicide) (*U01-*U02, X85-Y09, Y87.1) | 14,313 | 9,944 | 4,369 | 1,029 | 783 | 246 | 59 | 42 | 17 |
| Assault (homicide) by discharge of firearms (*U01.4, X93-X95) | 5,656 | 3,855 | 1,801 | 8,206 | 7,047 | 1,159 | 68 | 53 | 15 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3, *U01.5-*U01.9, *U02, X85-X92, X96-Y09, Y87.1) | 3,117 | 2,256 | 861 | 6,481 | 5,851 | 630 | 37 | 31 | 6 |
| Legal intervention (Y35, Y89.0) | 2,539 | 1,599 | 940 | 1,725 | 1,196 | 529 | 31 | 22 | 9 |
| Events of undetermined intent (Y10-Y34, Y87.2, Y89.9) | 167 | 160 | 7 | 120 | 118 | 2 | - | - | - |
| Discharge of firearms, undetermined intent (Y22-Y24) | 3,909 | 2,343 | 1,566 | 664 | 449 | 215 | 18 | 14 | 4 |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21, Y25-Y34, Y87.2, Y89.9) | 202 | 159 | 43 | 39 | 32 | 7 | 4 | 4 | - |
| Operations of war and their sequelae (Y36, Y89.1) | 3,707 | 2,184 | 1,523 | 625 | 417 | 208 | 14 | 10 | 4 |
| Complications of medical and surgical care (Y40-Y84, Y88) | 25 | 25 | - | 3 | 3 | - | - | - | - |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 1,997 | 904 | 1,093 | 396 | 191 | 205 | 4 | 2 | 2 |
| Drug-induced deaths ^{5,6} | 6,543 | 2,473 | 4,070 | 442 | 164 | 278 | 10 | 5 | 5 |
| Alcohol-induced deaths ^{5,7} | 31,448 | 19,044 | 12,404 | 3,589 | 2,326 | 1,263 | 153 | 104 | 49 |
| Injury by firearms ^{5,8} | 17,759 | 13,160 | 4,599 | 2,240 | 1,660 | 580 | 83 | 69 | 14 |
| | 19,873 | 16,822 | 3,051 | 7,741 | 6,997 | 744 | 85 | 73 | 12 |

- Quantity zero.
 ... Category not applicable.
¹Includes races other than white and black.
²Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported by 34 states and the District of Columbia in 2008; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."
³Includes deaths for which Hispanic origin was not reported on the death certificate.
⁴Included in "Certain other intestinal infections (A04, A07-A09)" shown above. Beginning with data year 2006, Enterocolitis due to *Clostridium difficile* (A04.7) is shown separately at the bottom of tables showing 113 selected causes and is included in the list of rankable causes, see "Technical Notes."
⁵Included in selected categories above.
⁶Includes ICD-10 codes D52.1, D59.0, D59.2, D61.1, D64.2, E06.4, E16.0, E23.1, E24.2, E27.3, E66.1, F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0-F17.3, F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, G21.1, G24.0, G25.1, G25.4, G25.6, G44.4, G62.0, G72.0, I95.2, J70.2-J70.4, K85.3, L10.5, L27.0-L27.1, M10.2, M32.0, M80.4, M81.4, M83.5, M87.1, R50.2, R78.1, R78.5, X40-X44, X60-X64, X85, and Y10-Y14. Trend data for Drug-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.
⁷Includes ICD-10 codes E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, R78.0, X45, X65, and Y15. Trend data for Alcohol-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.
⁸Includes ICD-10 codes *U01.4, W32-W34, X72-X74, X93-X95, Y22-Y24, and Y35.0. Trend data for Injury by firearms, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

NOTE: Confirmation of deaths from selected causes of death, considered to be of public health concern, were not provided by the following states--Massachusetts, North Carolina, and West Virginia; see "Technical Notes."

Table 14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|-------|--------|--------------------|-------|--------|--------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 813.0 | 817.9 | 808.2 | 864.6 | 860.3 | 868.7 | 716.1 | 762.7 | 673.5 |
| Salmonella infections (A01-A02) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | * | * | * | * |
| Shigellosis and amebiasis (A03,A06) | * | * | * | * | * | * | * | * | * |
| Certain other intestinal infections (A04,A07-A09) | 2.6 | 2.0 | 3.2 | 3.0 | 2.3 | 3.7 | 1.2 | 0.9 | 1.4 |
| Tuberculosis (A16-A19) | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.5 | 0.2 |
| Respiratory tuberculosis (A16) | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.2 |
| Other tuberculosis (A17-A19) | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | * | * |
| Whooping cough (A37) | 0.0 | * | * | * | * | * | * | * | * |
| Scarlet fever and erysipelas (A38,A46) | * | * | * | * | * | * | * | * | * |
| Meningococcal infection (A39) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | * | * |
| Septicemia (A40-A41) | 11.8 | 10.9 | 12.7 | 11.7 | 10.7 | 12.6 | 15.9 | 14.9 | 16.8 |
| Syphilis (A50-A53) | 0.0 | 0.0 | * | * | * | * | * | * | * |
| Acute poliomyelitis (A80) | * | * | * | * | * | * | * | * | * |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | * | * | * | * | * | * | * | * | * |
| Measles (B05) | * | * | * | * | * | * | * | * | * |
| Viral hepatitis (B15-B19) | 2.5 | 3.3 | 1.7 | 2.5 | 3.3 | 1.7 | 2.8 | 3.8 | 1.8 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 3.4 | 4.9 | 1.9 | 1.8 | 2.9 | 0.7 | 14.3 | 19.6 | 9.4 |
| Malaria (B50-B54) | * | * | * | * | * | * | * | * | * |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 1.9 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 1.8 | 2.1 | 1.6 |
| Malignant neoplasms (C00-C97) | 186.0 | 196.9 | 175.3 | 198.1 | 209.0 | 187.5 | 158.4 | 171.1 | 146.8 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 2.6 | 3.7 | 1.6 | 2.7 | 3.7 | 1.7 | 2.5 | 3.8 | 1.3 |
| Malignant neoplasm of esophagus (C15) | 4.5 | 7.2 | 1.9 | 4.9 | 7.9 | 1.9 | 3.5 | 5.3 | 2.0 |
| Malignant neoplasm of stomach (C16) | 3.7 | 4.5 | 3.0 | 3.5 | 4.2 | 2.8 | 5.1 | 6.2 | 4.1 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 17.5 | 18.1 | 17.0 | 18.2 | 18.7 | 17.8 | 17.1 | 18.2 | 16.1 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 6.0 | 8.2 | 3.8 | 5.9 | 7.9 | 3.8 | 6.1 | 9.1 | 3.4 |
| Malignant neoplasm of pancreas (C25) | 11.6 | 11.7 | 11.5 | 12.3 | 12.4 | 12.1 | 10.2 | 9.8 | 10.5 |
| Malignant neoplasm of larynx (C32) | 1.2 | 2.0 | 0.5 | 1.2 | 2.0 | 0.5 | 1.6 | 2.6 | 0.7 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 52.2 | 59.1 | 45.5 | 56.6 | 63.1 | 50.1 | 40.3 | 50.0 | 31.4 |
| Malignant melanoma of skin (C43) | 2.8 | 3.8 | 1.9 | 3.4 | 4.6 | 2.3 | 0.3 | 0.3 | 0.3 |
| Malignant neoplasm of breast (C50) | 13.5 | 0.3 | 26.3 | 13.9 | 0.3 | 27.3 | 14.7 | 0.4 | 27.8 |
| Malignant neoplasm of cervix uteri (C53) | 1.3 | ... | 2.6 | 1.2 | ... | 2.4 | 2.0 | ... | 3.8 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 2.5 | ... | 5.0 | 2.5 | ... | 5.0 | 3.2 | ... | 6.1 |
| Malignant neoplasm of ovary (C56) | 4.7 | ... | 9.3 | 5.2 | ... | 10.3 | 3.0 | ... | 5.7 |
| Malignant neoplasm of prostate (C61) | 9.4 | 19.0 | ... | 9.5 | 19.2 | ... | 11.4 | 23.8 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 4.2 | 5.5 | 3.0 | 4.6 | 6.0 | 3.3 | 3.0 | 3.9 | 2.2 |
| Malignant neoplasm of bladder (C67) | 4.6 | 6.5 | 2.8 | 5.2 | 7.5 | 3.0 | 2.4 | 2.7 | 2.1 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 4.5 | 5.1 | 3.9 | 5.1 | 5.8 | 4.5 | 2.1 | 2.4 | 1.8 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 18.1 | 20.3 | 15.9 | 19.7 | 22.1 | 17.3 | 13.1 | 14.5 | 11.7 |
| Hodgkin's disease (C81) | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 |
| Non-Hodgkin's lymphoma (C82-C85) | 6.7 | 7.3 | 6.1 | 7.5 | 8.2 | 6.9 | 3.4 | 3.8 | 3.0 |
| Leukemia (C91-C95) | 7.3 | 8.5 | 6.2 | 8.1 | 9.4 | 6.9 | 4.7 | 5.5 | 4.0 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 3.6 | 4.0 | 3.2 | 3.6 | 4.1 | 3.2 | 4.7 | 4.9 | 4.5 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | * | * | * |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 20.9 | 22.0 | 19.7 | 22.3 | 23.5 | 21.2 | 17.1 | 18.4 | 15.9 |

Table 14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|-------|--------|--------------------|-------|--------|--------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 4.8 | 5.0 | 4.5 | 5.3 | 5.5 | 5.0 | 2.9 | 2.9 | 2.9 |
| Anemias (D50-D64) | 1.7 | 1.4 | 1.9 | 1.6 | 1.3 | 1.9 | 2.5 | 2.3 | 2.7 |
| Diabetes mellitus (E10-E14) | 23.2 | 23.6 | 22.8 | 22.8 | 23.5 | 22.1 | 29.9 | 28.3 | 31.4 |
| Nutritional deficiencies (E40-E64) | 1.0 | 0.8 | 1.2 | 1.0 | 0.8 | 1.3 | 0.9 | 0.9 | 0.9 |
| Malnutrition (E40-E46) | 0.9 | 0.7 | 1.1 | 1.0 | 0.7 | 1.2 | 0.9 | 0.9 | 0.9 |
| Other nutritional deficiencies (E50-E64) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | * | * | * |
| Meningitis (G00,G03) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 |
| Parkinson's disease (G20-G21) | 6.7 | 8.0 | 5.5 | 7.9 | 9.3 | 6.5 | 1.8 | 2.1 | 1.6 |
| Alzheimer's disease (G30) | 27.1 | 16.4 | 37.6 | 31.1 | 18.7 | 43.3 | 12.6 | 7.3 | 17.4 |
| Major cardiovascular diseases (I00-I78) | 264.6 | 259.1 | 269.9 | 281.3 | 273.3 | 289.1 | 236.0 | 239.1 | 233.2 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 202.9 | 207.6 | 198.3 | 217.1 | 220.6 | 213.5 | 175.2 | 183.4 | 167.7 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 1.0 | 0.7 | 1.4 | 1.1 | 0.7 | 1.5 | 0.7 | 0.5 | 0.8 |
| Hypertensive heart disease (I11) | 10.7 | 10.1 | 11.2 | 9.8 | 9.0 | 10.6 | 18.5 | 19.6 | 17.5 |
| Hypertensive heart and renal disease (I13) | 0.9 | 0.8 | 1.1 | 0.8 | 0.7 | 0.9 | 2.1 | 1.9 | 2.2 |
| Ischemic heart diseases (I20-I25) | 133.3 | 144.2 | 122.7 | 144.3 | 155.7 | 133.0 | 103.8 | 111.0 | 97.2 |
| Acute myocardial infarction (I21-I22) | 44.1 | 48.3 | 39.9 | 47.8 | 52.5 | 43.1 | 34.2 | 35.7 | 32.8 |
| Other acute ischemic heart diseases (I24) | 1.4 | 1.5 | 1.3 | 1.5 | 1.5 | 1.4 | 1.4 | 1.6 | 1.2 |
| Other forms of chronic ischemic heart disease (I20,I25) | 87.8 | 94.4 | 81.4 | 95.1 | 101.7 | 88.6 | 68.2 | 73.7 | 63.2 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 19.3 | 22.2 | 16.4 | 19.8 | 22.6 | 17.0 | 21.3 | 25.7 | 17.3 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 68.6 | 72.2 | 65.0 | 75.3 | 79.1 | 71.5 | 46.9 | 48.0 | 45.9 |
| Other heart diseases (I26-I51) | 56.9 | 51.7 | 62.0 | 61.0 | 54.5 | 67.5 | 50.2 | 50.4 | 50.0 |
| Acute and subacute endocarditis (I33) | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.5 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 |
| Heart failure (I50) | 18.7 | 15.4 | 21.9 | 20.6 | 16.7 | 24.5 | 13.5 | 12.4 | 14.6 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 37.6 | 35.6 | 39.5 | 39.8 | 37.1 | 42.4 | 35.8 | 37.1 | 34.6 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 8.5 | 6.9 | 10.0 | 8.1 | 6.4 | 9.8 | 12.6 | 11.5 | 13.6 |
| Cerebrovascular diseases (I60-I69) | 44.1 | 35.7 | 52.3 | 46.2 | 36.6 | 55.6 | 41.4 | 37.4 | 45.0 |
| Atherosclerosis (I70) | 2.6 | 2.0 | 3.1 | 2.9 | 2.2 | 3.6 | 1.6 | 1.4 | 1.8 |
| Other diseases of circulatory system (I71-I78) | 6.6 | 7.0 | 6.1 | 7.1 | 7.5 | 6.6 | 5.2 | 5.3 | 5.2 |
| Aortic aneurysm and dissection (I71) | 3.6 | 4.3 | 3.0 | 4.0 | 4.8 | 3.3 | 2.3 | 2.7 | 2.0 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 2.9 | 2.6 | 3.2 | 3.1 | 2.8 | 3.3 | 3.0 | 2.7 | 3.2 |
| Other disorders of circulatory system (I80-I99) | 1.3 | 1.2 | 1.4 | 1.3 | 1.2 | 1.4 | 1.9 | 1.9 | 1.9 |
| Influenza and pneumonia (J09-J18) | 18.5 | 17.1 | 19.9 | 20.0 | 18.1 | 21.8 | 13.5 | 13.3 | 13.7 |
| Influenza (J09-J11) | 0.6 | 0.5 | 0.7 | 0.7 | 0.5 | 0.8 | 0.2 | 0.2 | 0.2 |
| Pneumonia (J12-J18) | 17.9 | 16.6 | 19.3 | 19.3 | 17.6 | 21.0 | 13.3 | 13.1 | 13.5 |
| Other acute lower respiratory infections (J20-J22,U04) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | * | * |
| Acute bronchitis and bronchiolitis (J20-J21) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | * | * |
| Other and unspecified acute lower respiratory infections (J22,U04) | 0.0 | 0.0 | 0.0 | 0.0 | * | 0.0 | * | * | * |
| Chronic lower respiratory diseases (J40-J47) | 46.4 | 44.8 | 48.0 | 53.1 | 50.5 | 55.7 | 21.7 | 23.6 | 20.0 |
| Bronchitis, chronic and unspecified (J40-J42) | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 |
| Emphysema (J43) | 4.1 | 4.3 | 3.9 | 4.7 | 4.9 | 4.6 | 1.7 | 2.1 | 1.3 |
| Asthma (J45-J46) | 1.1 | 0.8 | 1.4 | 1.0 | 0.6 | 1.3 | 2.2 | 1.9 | 2.5 |
| Other chronic lower respiratory diseases (J44,J47) | 41.0 | 39.5 | 42.4 | 47.1 | 44.7 | 49.5 | 17.7 | 19.3 | 16.1 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 0.3 | 0.6 | 0.0 | 0.4 | 0.7 | 0.0 | 0.1 | 0.2 | * |
| Pneumonitis due to solids and liquids (J69) | 5.5 | 5.8 | 5.2 | 6.0 | 6.3 | 5.7 | 3.7 | 3.9 | 3.4 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 9.8 | 9.9 | 9.7 | 10.8 | 10.9 | 10.7 | 6.9 | 6.8 | 7.0 |

Table 14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------------------|------|--------|--------------------|------|--------|--------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| | Peptic ulcer (K25-K28) | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 | 0.8 | 1.0 |
| Diseases of appendix (K35-K38) | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | * |
| Hernia (K40-K46) | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.7 | 0.4 | 0.4 | 0.3 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 9.9 | 13.1 | 6.7 | 10.7 | 14.2 | 7.3 | 6.2 | 8.7 | 3.9 |
| Alcoholic liver disease (K70) | 4.9 | 7.2 | 2.6 | 5.3 | 7.9 | 2.8 | 3.0 | 4.3 | 1.8 |
| Other chronic liver disease and cirrhosis (K73-K74) | 5.0 | 5.9 | 4.1 | 5.4 | 6.4 | 4.5 | 3.2 | 4.5 | 2.1 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 1.1 | 1.1 | 1.2 | 1.2 | 1.1 | 1.3 | 0.8 | 0.7 | 0.8 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 15.9 | 15.7 | 16.0 | 15.6 | 15.6 | 15.7 | 21.4 | 20.3 | 22.3 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | * | * |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 1.4 | 1.3 | 1.4 | 1.4 | 1.3 | 1.4 | 1.7 | 1.6 | 1.8 |
| Renal failure (N17-N19) | 14.4 | 14.3 | 14.6 | 14.2 | 14.2 | 14.2 | 19.6 | 18.6 | 20.4 |
| Other disorders of kidney (N25,N27) | 0.0 | * | 0.0 | 0.0 | * | * | * | * | * |
| Infections of kidney (N10-N12,N13.6,N15.1) | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 |
| Hyperplasia of prostate (N40) | 0.2 | 0.3 | ... | 0.2 | 0.4 | ... | 0.1 | 0.2 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 0.0 | ... | 0.1 | 0.0 | ... | 0.1 | * | ... | * |
| Pregnancy, childbirth and the puerperium (O00-O99) | 0.3 | ... | 0.5 | 0.2 | ... | 0.4 | 0.6 | ... | 1.2 |
| Pregnancy with abortive outcome (O00-O07) | 0.0 | ... | 0.0 | * | ... | * | * | ... | * |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 0.3 | ... | 0.5 | 0.2 | ... | 0.4 | 0.6 | ... | 1.1 |
| Certain conditions originating in the perinatal period (P00-P96) | 4.6 | 5.3 | 3.9 | 3.4 | 4.0 | 2.9 | 12.0 | 14.2 | 10.0 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 3.4 | 3.6 | 3.2 | 3.3 | 3.5 | 3.1 | 4.2 | 4.6 | 3.8 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 12.7 | 11.2 | 14.1 | 13.3 | 11.3 | 15.2 | 13.0 | 13.7 | 12.3 |
| All other diseases (Residual) | 83.0 | 67.7 | 97.9 | 89.7 | 72.2 | 106.9 | 67.1 | 58.6 | 74.9 |

Table 14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|------|--------|--------------------|------|--------|--------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59,Y85-Y86) | 40.1 | 52.3 | 28.2 | 43.1 | 55.5 | 30.9 | 30.8 | 43.8 | 19.0 |
| Transport accidents (V01-V99,Y85) | 14.0 | 20.4 | 7.8 | 14.6 | 21.2 | 8.1 | 12.9 | 19.6 | 6.7 |
| Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) | 13.1 | 18.9 | 7.5 | 13.6 | 19.5 | 7.7 | 12.1 | 18.3 | 6.4 |
| Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9) | 0.4 | 0.6 | 0.2 | 0.4 | 0.6 | 0.2 | 0.4 | 0.7 | 0.2 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85) | 0.6 | 1.0 | 0.2 | 0.6 | 1.0 | 0.2 | 0.4 | 0.7 | 0.1 |
| Nontransport accidents (W00-X59,Y86) | 26.0 | 31.8 | 20.4 | 28.5 | 34.3 | 22.8 | 17.9 | 24.2 | 12.2 |
| Falls (W00-W19) | 7.9 | 8.2 | 7.6 | 9.1 | 9.3 | 8.9 | 2.6 | 3.1 | 2.1 |
| Accidental discharge of firearms (W32-W34) | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.4 | * |
| Accidental drowning and submersion (W65-W74) | 1.2 | 1.8 | 0.5 | 1.1 | 1.8 | 0.5 | 1.4 | 2.2 | 0.5 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 1.0 | 1.1 | 0.8 | 0.9 | 1.1 | 0.8 | 1.5 | 1.9 | 1.2 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 10.2 | 13.7 | 6.9 | 11.2 | 14.9 | 7.6 | 7.4 | 10.3 | 4.8 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31,W35-W64,W75-W99,X10-X39,X50-X59,Y86) | 5.6 | 6.6 | 4.6 | 6.0 | 7.0 | 5.0 | 4.8 | 6.1 | 3.6 |
| Intentional self-harm (suicide) (*U03,X60-X84,Y87.0) | 11.9 | 19.0 | 4.9 | 13.3 | 21.2 | 5.5 | 5.2 | 9.1 | 1.6 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 6.0 | 10.6 | 1.5 | 6.9 | 12.1 | 1.7 | 2.6 | 4.9 | 0.5 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60-X71,X75-X84,Y87.0) | 5.9 | 8.4 | 3.4 | 6.4 | 9.1 | 3.8 | 2.6 | 4.2 | 1.2 |
| Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | 5.9 | 9.4 | 2.4 | 3.6 | 5.4 | 1.9 | 20.6 | 37.1 | 5.6 |
| Assault (homicide) by discharge of firearms (*U01.4,X93-X95) | 4.0 | 6.9 | 1.2 | 2.2 | 3.5 | 0.9 | 16.3 | 30.7 | 3.1 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3,*U01.5-*U01.9,*U02,X85-X92,X96-Y09,Y87.1) | 1.9 | 2.5 | 1.2 | 1.5 | 1.9 | 1.0 | 4.4 | 6.3 | 2.6 |
| Legal intervention (Y35,Y89.0) | 0.1 | 0.2 | * | 0.1 | 0.2 | * | 0.3 | 0.6 | * |
| Events of undetermined intent (Y10-Y34,Y87.2,Y89.9) | 1.7 | 2.1 | 1.2 | 1.7 | 2.1 | 1.3 | 1.7 | 2.4 | 1.0 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | * |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9) | 1.6 | 2.0 | 1.2 | 1.6 | 2.0 | 1.3 | 1.6 | 2.2 | 1.0 |
| Operations of war and their sequelae (Y36,Y89.1) | 0.0 | 0.0 | * | 0.0 | 0.0 | * | * | * | * |
| Complications of medical and surgical care (Y40-Y84,Y88) | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 1.0 | 1.0 | 1.0 | 1.0 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 2.5 | 1.9 | 3.0 | 2.8 | 2.2 | 3.5 | 1.1 | 0.9 | 1.3 |
| Drug-induced deaths ^{5,6} | 12.7 | 16.0 | 9.6 | 14.0 | 17.3 | 10.6 | 9.1 | 12.3 | 6.1 |
| Alcohol-induced deaths ^{5,7} | 8.0 | 12.1 | 3.9 | 8.5 | 12.9 | 4.1 | 5.6 | 8.8 | 2.8 |
| Injury by firearms ^{5,8} | 10.4 | 18.2 | 2.8 | 9.4 | 16.2 | 2.7 | 19.4 | 36.7 | 3.6 |

Table 14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|-------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 431.8 | 477.6 | 386.1 | 318.7 | 337.7 | 300.7 |
| Salmonella infections (A01-A02) | * | * | * | * | * | * |
| Shigellosis and amebiasis (A03,A06) | * | * | * | * | * | * |
| Certain other intestinal infections (A04,A07-A09) | 0.9 | * | * | 0.7 | 0.7 | 0.8 |
| Tuberculosis (A16-A19) | * | * | * | 0.7 | 1.0 | 0.4 |
| Respiratory tuberculosis (A16) | * | * | * | 0.6 | 0.8 | 0.3 |
| Other tuberculosis (A17-A19) | * | * | * | * | * | * |
| Whooping cough (A37) | * | * | * | * | * | * |
| Scarlet fever and erysipelas (A38,A46) | * | * | * | * | * | * |
| Meningococcal infection (A39) | * | * | * | * | * | * |
| Septicemia (A40-A41) | 7.1 | 6.8 | 7.4 | 3.7 | 3.7 | 3.8 |
| Syphilis (A50-A53) | * | * | * | * | * | * |
| Acute poliomyelitis (A80) | * | * | * | * | * | * |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | * | * | * | * | * | * |
| Measles (B05) | * | * | * | * | * | * |
| Viral hepatitis (B15-B19) | 2.9 | 3.6 | 2.3 | 2.0 | 2.3 | 1.8 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 1.9 | 2.9 | * | 0.7 | 1.1 | 0.3 |
| Malaria (B50-B54) | * | * | * | * | * | * |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 1.6 | 1.5 | 1.6 | 1.1 | 1.2 | 1.1 |
| Malignant neoplasms (C00-C97) | 79.7 | 84.9 | 74.4 | 85.8 | 91.1 | 80.8 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 1.4 | 2.3 | * | 1.7 | 2.3 | 1.1 |
| Malignant neoplasm of esophagus (C15) | 1.8 | 3.2 | * | 1.3 | 2.0 | 0.7 |
| Malignant neoplasm of stomach (C16) | 2.1 | 2.6 | 1.5 | 5.0 | 5.9 | 4.2 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 9.1 | 9.2 | 9.1 | 9.0 | 9.4 | 8.6 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 4.4 | 6.0 | 2.8 | 8.1 | 11.2 | 5.2 |
| Malignant neoplasm of pancreas (C25) | 3.8 | 3.9 | 3.7 | 5.8 | 5.9 | 5.8 |
| Malignant neoplasm of larynx (C32) | * | * | * | 0.3 | 0.4 | * |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 21.3 | 24.3 | 18.4 | 19.7 | 24.2 | 15.4 |
| Malignant melanoma of skin (C43) | * | * | * | 0.3 | 0.4 | * |
| Malignant neoplasm of breast (C50) | 5.1 | * | 9.9 | 5.8 | * | 11.2 |
| Malignant neoplasm of cervix uteri (C53) | 1.4 | ... | 2.9 | 0.9 | ... | 1.8 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 0.9 | ... | 1.9 | 1.2 | ... | 2.3 |
| Malignant neoplasm of ovary (C56) | 1.9 | ... | 3.9 | 2.5 | ... | 4.8 |
| Malignant neoplasm of prostate (C61) | 3.9 | 7.8 | ... | 2.6 | 5.3 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 3.4 | 4.2 | 2.5 | 1.5 | 2.0 | 1.0 |
| Malignant neoplasm of bladder (C67) | 1.4 | 1.8 | * | 1.2 | 1.9 | 0.6 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 1.8 | 1.9 | 1.8 | 1.7 | 2.0 | 1.3 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 5.8 | 6.7 | 4.9 | 7.6 | 8.3 | 6.9 |
| Hodgkin's disease (C81) | * | * | * | 0.2 | * | * |
| Non-Hodgkin's lymphoma (C82-C85) | 2.0 | 2.0 | 1.9 | 3.1 | 3.4 | 2.8 |
| Leukemia (C91-C95) | 2.4 | 2.7 | 2.1 | 3.0 | 3.2 | 2.9 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 1.3 | 1.7 | * | 1.3 | 1.5 | 1.1 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | * | * | * | * | * | * |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 9.1 | 9.9 | 8.3 | 9.6 | 9.8 | 9.5 |

Table 14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|-------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 |
| Anemias (D50-D64) | 0.8 | * | * | 0.6 | 0.5 | 0.8 |
| Diabetes mellitus (E10-E14) | 22.8 | 22.7 | 22.8 | 12.1 | 12.3 | 11.8 |
| Nutritional deficiencies (E40-E64) | 0.6 | * | * | 0.3 | 0.3 | 0.4 |
| Malnutrition (E40-E46) | 0.6 | * | * | 0.3 | * | 0.4 |
| Other nutritional deficiencies (E50-E64) | * | * | * | * | * | * |
| Meningitis (G00,G03) | * | * | * | 0.1 | * | * |
| Parkinson's disease (G20-G21) | 2.0 | 2.3 | 1.8 | 2.3 | 2.7 | 1.8 |
| Alzheimer's disease (G30) | 6.0 | 3.6 | 8.3 | 5.9 | 4.0 | 7.8 |
| Major cardiovascular diseases (I00-I78) | 99.3 | 109.6 | 89.0 | 106.5 | 111.5 | 101.7 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 77.6 | 89.3 | 66.0 | 74.1 | 81.6 | 67.0 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 0.6 | * | * | 0.7 | 0.5 | 0.9 |
| Hypertensive heart disease (I11) | 4.1 | 4.9 | 3.3 | 4.4 | 4.6 | 4.3 |
| Hypertensive heart and renal disease (I13) | * | * | * | 0.5 | 0.5 | 0.6 |
| Ischemic heart diseases (I20-I25) | 50.8 | 61.9 | 39.8 | 52.1 | 60.5 | 44.1 |
| Acute myocardial infarction (I21-I22) | 17.6 | 22.1 | 13.1 | 16.3 | 18.4 | 14.3 |
| Other acute ischemic heart diseases (I24) | 1.7 | 2.1 | 1.3 | 0.3 | 0.3 | 0.3 |
| Other forms of chronic ischemic heart disease (I20,I25) | 31.5 | 37.7 | 25.3 | 35.5 | 41.8 | 29.5 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 9.7 | 12.5 | 6.8 | 8.0 | 10.2 | 5.8 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 21.9 | 25.2 | 18.5 | 27.5 | 31.6 | 23.7 |
| Other heart diseases (I26-I51) | 21.8 | 21.5 | 22.1 | 16.3 | 15.5 | 17.1 |
| Acute and subacute endocarditis (I33) | * | * | * | * | * | * |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | * | * | * | 0.2 | * | * |
| Heart failure (I50) | 6.9 | 5.7 | 8.1 | 4.1 | 3.4 | 4.7 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 14.3 | 15.3 | 13.4 | 12.0 | 11.8 | 12.2 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 3.2 | 3.3 | 3.2 | 4.7 | 4.3 | 5.1 |
| Cerebrovascular diseases (I60-I69) | 15.1 | 13.7 | 16.5 | 24.5 | 22.0 | 26.8 |
| Atherosclerosis (I70) | 1.0 | * | * | 0.6 | 0.6 | 0.5 |
| Other diseases of circulatory system (I71-I78) | 2.3 | 2.4 | 2.3 | 2.6 | 3.0 | 2.3 |
| Aortic aneurysm and dissection (I71) | 1.2 | 1.3 | * | 1.9 | 2.3 | 1.4 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 1.1 | * | 1.2 | 0.8 | 0.7 | 0.9 |
| Other disorders of circulatory system (I80-I99) | 0.6 | * | * | 0.3 | 0.3 | 0.3 |
| Influenza and pneumonia (J09-J18) | 11.1 | 10.9 | 11.3 | 10.0 | 10.5 | 9.6 |
| Influenza (J09-J11) | * | * | * | 0.2 | * | * |
| Pneumonia (J12-J18) | 10.6 | 10.4 | 10.9 | 9.9 | 10.3 | 9.5 |
| Other acute lower respiratory infections (J20-J22,U04) | * | * | * | * | * | * |
| Acute bronchitis and bronchiolitis (J20-J21) | * | * | * | * | * | * |
| Other and unspecified acute lower respiratory infections (J22,U04) | * | * | * | * | * | * |
| Chronic lower respiratory diseases (J40-J47) | 18.1 | 18.0 | 18.2 | 9.9 | 12.1 | 7.8 |
| Bronchitis, chronic and unspecified (J40-J42) | * | * | * | * | * | * |
| Emphysema (J43) | 1.6 | 1.8 | 1.4 | 0.8 | 1.2 | 0.4 |
| Asthma (J45-J46) | 0.6 | * | * | 0.9 | 0.6 | 1.1 |
| Other chronic lower respiratory diseases (J44,J47) | 15.8 | 15.5 | 16.0 | 8.1 | 10.2 | 6.2 |
| Pneumoconioses and chemical effects (J60-J66,J68) | * | * | * | * | * | * |
| Pneumonitis due to solids and liquids (J69) | 2.2 | 2.3 | 2.2 | 1.8 | 2.1 | 1.6 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 6.1 | 6.5 | 5.7 | 3.7 | 4.0 | 3.5 |

Table 14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|------|--------|--|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 0.7 | * | * | 0.6 | 0.6 | 0.6 |
| Diseases of appendix (K35-K38) | * | * | * | * | * | * |
| Hernia (K40-K46) | * | * | * | * | * | * |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 21.7 | 23.8 | 19.6 | 2.9 | 3.7 | 2.2 |
| Alcoholic liver disease (K70) | 15.4 | 17.3 | 13.5 | 1.2 | 2.1 | 0.4 |
| Other chronic liver disease and cirrhosis (K73-K74) | 6.3 | 6.5 | 6.1 | 1.7 | 1.7 | 1.8 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 0.8 | * | * | 0.6 | 0.7 | 0.5 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 9.9 | 9.1 | 10.7 | 6.2 | 6.4 | 6.0 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | * | * | * | * | * | * |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 0.6 | * | * | 0.6 | 0.6 | 0.6 |
| Renal failure (N17-N19) | 9.2 | 8.4 | 10.0 | 5.6 | 5.8 | 5.4 |
| Other disorders of kidney (N25,N27) | * | * | * | * | * | * |
| Infections of kidney (N10-N12,N13.6,N15.1) | * | * | * | 0.1 | * | * |
| Hyperplasia of prostate (N40) | * | * | ... | * | * | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | * | ... | * | * | ... | * |
| Pregnancy, childbirth and the puerperium (O00-O99) | * | ... | * | 0.2 | ... | 0.4 |
| Pregnancy with abortive outcome (O00-O07) | * | ... | * | * | ... | * |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | * | ... | * | 0.2 | ... | 0.4 |
| Certain conditions originating in the perinatal period (P00-P96) | 4.1 | 4.6 | 3.5 | 3.3 | 3.8 | 2.8 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 3.4 | 4.0 | 2.8 | 2.2 | 2.4 | 2.0 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 7.5 | 8.0 | 7.1 | 3.2 | 3.3 | 3.1 |
| All other diseases (Residual) | 44.9 | 44.0 | 45.8 | 25.9 | 22.9 | 28.8 |

Table 14. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|------|--------|--|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59, Y85-Y86) | 49.2 | 67.7 | 30.6 | 13.7 | 17.7 | 9.9 |
| Transport accidents (V01-V99, Y85) | 22.2 | 29.7 | 14.7 | 6.5 | 8.5 | 4.6 |
| Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) | 20.9 | 27.5 | 14.4 | 6.0 | 7.9 | 4.3 |
| Other land transport accidents (V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9) | 0.6 | * | * | 0.1 | * | * |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99, Y85) | 0.6 | * | * | 0.3 | 0.4 | * |
| Nontransport accidents (W00-X59, Y86) | 27.0 | 38.0 | 15.9 | 7.2 | 9.2 | 5.3 |
| Falls (W00-W19) | 4.1 | 5.4 | 2.9 | 3.2 | 3.9 | 2.6 |
| Accidental discharge of firearms (W32-W34) | * | * | * | * | * | * |
| Accidental drowning and submersion (W65-W74) | 1.9 | 3.1 | * | 0.9 | 1.2 | 0.5 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 1.1 | 1.3 | * | 0.2 | * | * |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 13.7 | 19.0 | 8.5 | 1.4 | 2.0 | 0.8 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86) | 5.7 | 8.5 | 2.9 | 1.5 | 1.7 | 1.2 |
| Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | 12.0 | 18.0 | 5.9 | 5.8 | 8.0 | 3.8 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 4.5 | 8.0 | * | 1.2 | 2.2 | 0.3 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03, X60-X71, X75-X84, Y87.0) | 7.5 | 10.1 | 4.9 | 4.6 | 5.8 | 3.5 |
| Assault (homicide) (*U01-*U02, X85-Y09, Y87.1) | 7.5 | 11.2 | 3.7 | 2.3 | 3.3 | 1.3 |
| Assault (homicide) by discharge of firearms (*U01.4, X93-X95) | 2.8 | 4.3 | 1.3 | 1.4 | 2.2 | 0.6 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3, *U01.5-*U01.9, *U02, X85-X92, X96-Y09, Y87.1) | 4.6 | 6.9 | 2.3 | 0.9 | 1.0 | 0.8 |
| Legal intervention (Y35, Y89.0) | * | * | * | * | * | * |
| Events of undetermined intent (Y10-Y34, Y87.2, Y89.9) | 2.0 | 3.0 | * | 0.5 | 0.6 | 0.4 |
| Discharge of firearms, undetermined intent (Y22-Y24) | * | * | * | * | * | * |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21, Y25-Y34, Y87.2, Y89.9) | 2.0 | 2.8 | * | 0.5 | 0.6 | 0.4 |
| Operations of war and their sequelae (Y36, Y89.1) | * | * | * | * | * | * |
| Complications of medical and surgical care (Y40-Y84, Y88) | * | * | * | 0.2 | * | * |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 0.8 | * | * | 0.7 | 0.7 | 0.7 |
| Drug-induced deaths ^{5,6} | 13.2 | 16.0 | 10.4 | 2.0 | 2.5 | 1.5 |
| Alcohol-induced deaths ^{5,7} | 24.9 | 31.7 | 18.2 | 1.8 | 3.1 | 0.6 |
| Injury by firearms ^{5,8} | 8.2 | 13.6 | 2.7 | 2.7 | 4.6 | 0.9 |

0.0 Quantity more than zero but less than 0.05.

* Figure does not meet standards of reliability or precision; see "Technical Notes."

... Category not applicable.

¹Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported by 34 states and the District of Columbia in 2008; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

²Includes Aleuts and Eskimos.

³Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

⁴Included in "Certain other intestinal infections (A04, A07-A09)" shown above. Beginning with data year 2006, Enterocolitis due to *Clostridium difficile* (A04.7) is shown separately at the bottom of tables showing 113 selected causes and is included in the list of rankable causes, see "Technical Notes."

⁵Included in selected categories above.

⁶Includes ICD-10 codes D52.1, D59.0, D59.2, D61.1, D64.2, E06.4, E16.0, E23.1, E24.2, E27.3, E66.1, F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0-F17.3, F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, G21.1, G24.0, G25.1, G25.4, G25.6, G44.4, G62.0, G72.0, I95.2, J70.2-J70.4, K85.3, L10.5, L27.0-L27.1, M10.2, M32.0, M80.4, M81.4, M83.5, M87.1, R50.2, R78.1-R78.5, X40-X44, X60-X64, X85, and Y10-Y14. Trend data for Drug-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

⁷Includes ICD-10 codes E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, R78.0, X45, X65, and Y15. Trend data for Alcohol-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

⁸Includes ICD-10 codes *U01.4, W32-W34, X72-X74, X93-X95, Y22-Y24, and Y35.0. Trend data for Injury by firearms, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

Table 15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | |
|--|--------------------------|-------|--------|------------|-------|--------|---------------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 813.0 | 817.9 | 808.2 | 296.6 | 316.9 | 274.9 | 905.3 | 912.2 | 898.7 |
| Salmonella infections (A01-A02) | 0.0 | 0.0 | 0.0 | * | * | * | 0.0 | 0.0 | 0.0 |
| Shigellosis and amebiasis (A03,A06) | * | * | * | * | * | * | * | * | * |
| Certain other intestinal infections (A04,A07-A09) | 2.6 | 2.0 | 3.2 | 0.8 | 0.6 | 1.0 | 2.9 | 2.3 | 3.5 |
| Tuberculosis (A16-A19) | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.1 |
| Respiratory tuberculosis (A16) | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 |
| Other tuberculosis (A17-A19) | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | * | 0.0 | 0.0 | 0.0 |
| Whooping cough (A37) | 0.0 | * | * | * | * | * | * | * | * |
| Scarlet fever and erysipelas (A38,A46) | * | * | * | * | * | * | * | * | * |
| Meningococcal infection (A39) | 0.0 | 0.0 | 0.0 | * | * | * | 0.0 | 0.0 | 0.0 |
| Septicemia (A40-A41) | 11.8 | 10.9 | 12.7 | 4.3 | 4.0 | 4.5 | 13.2 | 12.2 | 14.1 |
| Syphilis (A50-A53) | 0.0 | 0.0 | * | * | * | * | 0.0 | 0.0 | * |
| Acute poliomyelitis (A80) | * | * | * | * | * | * | * | * | * |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | * | * | * | * | * | * | * | * | * |
| Measles (B05) | * | * | * | * | * | * | * | * | * |
| Viral hepatitis (B15-B19) | 2.5 | 3.3 | 1.7 | 2.5 | 3.2 | 1.8 | 2.5 | 3.4 | 1.7 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 3.4 | 4.9 | 1.9 | 2.9 | 4.3 | 1.4 | 3.4 | 5.0 | 1.9 |
| Malaria (B50-B54) | * | * | * | * | * | * | * | * | * |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 1.9 | 2.0 | 1.9 | 0.9 | 1.0 | 0.9 | 2.1 | 2.2 | 2.1 |
| Malignant neoplasms (C00-C97) | 186.0 | 196.9 | 175.3 | 61.5 | 63.0 | 59.8 | 208.3 | 222.4 | 194.9 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 2.6 | 3.7 | 1.6 | 0.8 | 1.1 | 0.4 | 3.0 | 4.1 | 1.9 |
| Malignant neoplasm of esophagus (C15) | 4.5 | 7.2 | 1.9 | 1.2 | 1.9 | 0.5 | 5.1 | 8.2 | 2.1 |
| Malignant neoplasm of stomach (C16) | 3.7 | 4.5 | 3.0 | 3.0 | 3.3 | 2.6 | 3.9 | 4.7 | 3.1 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 17.5 | 18.1 | 17.0 | 6.3 | 6.8 | 5.7 | 19.6 | 20.2 | 18.9 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 6.0 | 8.2 | 3.8 | 4.4 | 5.7 | 3.0 | 6.3 | 8.7 | 4.0 |
| Malignant neoplasm of pancreas (C25) | 11.6 | 11.7 | 11.5 | 4.1 | 4.2 | 4.1 | 12.9 | 13.1 | 12.8 |
| Malignant neoplasm of larynx (C32) | 1.2 | 2.0 | 0.5 | 0.4 | 0.7 | 0.1 | 1.4 | 2.2 | 0.6 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 52.2 | 59.1 | 45.5 | 10.2 | 12.4 | 7.9 | 59.7 | 68.0 | 51.9 |
| Malignant melanoma of skin (C43) | 2.8 | 3.8 | 1.9 | 0.4 | 0.5 | 0.3 | 3.3 | 4.4 | 2.2 |
| Malignant neoplasm of breast (C50) | 13.5 | 0.3 | 26.3 | 4.6 | * | 9.4 | 15.1 | 0.3 | 29.2 |
| Malignant neoplasm of cervix uteri (C53) | 1.3 | ... | 2.6 | 1.0 | ... | 2.1 | 1.4 | ... | 2.7 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 2.5 | ... | 5.0 | 1.0 | ... | 2.1 | 2.8 | ... | 5.5 |
| Malignant neoplasm of ovary (C56) | 4.7 | ... | 9.3 | 1.7 | ... | 3.5 | 5.3 | ... | 10.3 |
| Malignant neoplasm of prostate (C61) | 9.4 | 19.0 | ... | 3.1 | 5.9 | ... | 10.5 | 21.5 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 4.2 | 5.5 | 3.0 | 1.8 | 2.2 | 1.4 | 4.7 | 6.1 | 3.3 |
| Malignant neoplasm of bladder (C67) | 4.6 | 6.5 | 2.8 | 1.0 | 1.3 | 0.7 | 5.3 | 7.5 | 3.1 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 4.5 | 5.1 | 3.9 | 1.8 | 1.9 | 1.7 | 5.0 | 5.7 | 4.3 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 18.1 | 20.3 | 15.9 | 7.0 | 7.6 | 6.4 | 20.1 | 22.7 | 17.5 |
| Hodgkin's disease (C81) | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.5 | 0.4 |
| Non-Hodgkin's lymphoma (C82-C85) | 6.7 | 7.3 | 6.1 | 2.6 | 2.8 | 2.4 | 7.4 | 8.2 | 6.7 |
| Leukemia (C91-C95) | 7.3 | 8.5 | 6.2 | 2.9 | 3.2 | 2.6 | 8.1 | 9.5 | 6.9 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 3.6 | 4.0 | 3.2 | 1.3 | 1.4 | 1.2 | 4.0 | 4.6 | 3.6 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 0.0 | 0.0 | 0.0 | * | * | * | 0.0 | 0.0 | 0.0 |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 20.9 | 22.0 | 19.7 | 7.7 | 7.5 | 7.9 | 23.2 | 24.8 | 21.7 |

Table 15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | |
|--|--------------------------|-------|--------|------------|------|--------|---------------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 4.8 | 5.0 | 4.5 | 1.5 | 1.4 | 1.6 | 5.4 | 5.7 | 5.1 |
| Anemias (D50-D64) | 1.7 | 1.4 | 1.9 | 0.5 | 0.5 | 0.5 | 1.9 | 1.5 | 2.2 |
| Diabetes mellitus (E10-E14) | 23.2 | 23.6 | 22.8 | 13.9 | 13.7 | 14.2 | 24.8 | 25.4 | 24.3 |
| Nutritional deficiencies (E40-E64) | 1.0 | 0.8 | 1.2 | 0.3 | 0.3 | 0.4 | 1.1 | 0.9 | 1.3 |
| Malnutrition (E40-E46) | 0.9 | 0.7 | 1.1 | 0.3 | 0.3 | 0.3 | 1.0 | 0.8 | 1.2 |
| Other nutritional deficiencies (E50-E64) | 0.1 | 0.1 | 0.1 | * | * | * | 0.1 | 0.1 | 0.1 |
| Meningitis (G00,G03) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Parkinson's disease (G20-G21) | 6.7 | 8.0 | 5.5 | 1.8 | 2.0 | 1.6 | 7.6 | 9.1 | 6.2 |
| Alzheimer's disease (G30) | 27.1 | 16.4 | 37.6 | 6.4 | 4.0 | 9.0 | 30.9 | 18.7 | 42.5 |
| Major cardiovascular diseases (I00-I78) | 264.6 | 259.1 | 269.9 | 82.5 | 82.9 | 82.0 | 297.2 | 292.4 | 301.8 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 202.9 | 207.6 | 198.3 | 61.7 | 63.9 | 59.3 | 228.1 | 234.6 | 221.9 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 1.0 | 0.7 | 1.4 | 0.3 | 0.2 | 0.5 | 1.2 | 0.8 | 1.5 |
| Hypertensive heart disease (I11) | 10.7 | 10.1 | 11.2 | 3.8 | 4.1 | 3.4 | 11.9 | 11.2 | 12.5 |
| Hypertensive heart and renal disease (I13) | 0.9 | 0.8 | 1.1 | 0.3 | 0.3 | 0.4 | 1.1 | 0.9 | 1.2 |
| Ischemic heart diseases (I20-I25) | 133.3 | 144.2 | 122.7 | 43.2 | 45.8 | 40.3 | 149.4 | 162.8 | 136.6 |
| Acute myocardial infarction (I21-I22) | 44.1 | 48.3 | 39.9 | 14.1 | 14.9 | 13.2 | 49.4 | 54.6 | 44.4 |
| Other acute ischemic heart diseases (I24) | 1.4 | 1.5 | 1.3 | 0.3 | 0.3 | 0.2 | 1.6 | 1.7 | 1.5 |
| Other forms of chronic ischemic heart disease (I20,I25) | 87.8 | 94.4 | 81.4 | 28.8 | 30.6 | 26.9 | 98.4 | 106.4 | 90.7 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 19.3 | 22.2 | 16.4 | 6.8 | 8.3 | 5.2 | 21.4 | 24.8 | 18.3 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 68.6 | 72.2 | 65.0 | 22.0 | 22.3 | 21.6 | 76.9 | 81.7 | 72.4 |
| Other heart diseases (I26-I51) | 56.9 | 51.7 | 62.0 | 14.0 | 13.4 | 14.7 | 64.6 | 58.9 | 70.1 |
| Acute and subacute endocarditis (I33) | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.4 | 0.5 | 0.4 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 |
| Heart failure (I50) | 18.7 | 15.4 | 21.9 | 4.2 | 3.5 | 4.9 | 21.3 | 17.6 | 24.8 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 37.6 | 35.6 | 39.5 | 9.5 | 9.6 | 9.5 | 42.6 | 40.5 | 44.6 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 8.5 | 6.9 | 10.0 | 3.2 | 2.7 | 3.8 | 9.4 | 7.7 | 11.1 |
| Cerebrovascular diseases (I60-I69) | 44.1 | 35.7 | 52.3 | 15.2 | 13.9 | 16.5 | 49.3 | 39.8 | 58.4 |
| Atherosclerosis (I70) | 2.6 | 2.0 | 3.1 | 0.6 | 0.5 | 0.7 | 2.9 | 2.3 | 3.5 |
| Other diseases of circulatory system (I71-I78) | 6.6 | 7.0 | 6.1 | 1.8 | 2.0 | 1.7 | 7.4 | 7.9 | 6.9 |
| Aortic aneurysm and dissection (I71) | 3.6 | 4.3 | 3.0 | 0.9 | 1.2 | 0.6 | 4.1 | 4.9 | 3.4 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 2.9 | 2.6 | 3.2 | 0.9 | 0.8 | 1.0 | 3.3 | 3.0 | 3.5 |
| Other disorders of circulatory system (I80-I99) | 1.3 | 1.2 | 1.4 | 0.4 | 0.5 | 0.4 | 1.5 | 1.4 | 1.6 |
| Influenza and pneumonia (J09-J18) | 18.5 | 17.1 | 19.9 | 6.8 | 6.4 | 7.2 | 20.6 | 19.1 | 22.1 |
| Influenza (J09-J11) | 0.6 | 0.5 | 0.7 | 0.2 | 0.1 | 0.2 | 0.6 | 0.5 | 0.8 |
| Pneumonia (J12-J18) | 17.9 | 16.6 | 19.3 | 6.6 | 6.2 | 7.0 | 20.0 | 18.6 | 21.3 |
| Other acute lower respiratory infections (J20-J22,U04) | 0.1 | 0.1 | 0.1 | 0.0 | * | * | 0.1 | 0.1 | 0.1 |
| Acute bronchitis and bronchiolitis (J20-J21) | 0.1 | 0.1 | 0.1 | 0.0 | * | * | 0.1 | 0.1 | 0.1 |
| Other and unspecified acute lower respiratory infections (J22,U04) | 0.0 | 0.0 | 0.0 | * | * | * | 0.0 | 0.0 | 0.0 |
| Chronic lower respiratory diseases (J40-J47) | 46.4 | 44.8 | 48.0 | 8.4 | 8.3 | 8.5 | 53.2 | 51.7 | 54.7 |
| Bronchitis, chronic and unspecified (J40-J42) | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | * | 0.3 | 0.2 | 0.3 |
| Emphysema (J43) | 4.1 | 4.3 | 3.9 | 0.6 | 0.7 | 0.5 | 4.7 | 5.0 | 4.5 |
| Asthma (J45-J46) | 1.1 | 0.8 | 1.4 | 0.6 | 0.5 | 0.7 | 1.2 | 0.8 | 1.6 |
| Other chronic lower respiratory diseases (J44,J47) | 41.0 | 39.5 | 42.4 | 7.1 | 7.0 | 7.3 | 47.0 | 45.6 | 48.4 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 0.3 | 0.6 | 0.0 | 0.0 | 0.1 | * | 0.3 | 0.7 | 0.0 |
| Pneumonitis due to solids and liquids (J69) | 5.5 | 5.8 | 5.2 | 1.4 | 1.4 | 1.4 | 6.2 | 6.6 | 5.8 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 9.8 | 9.9 | 9.7 | 3.8 | 3.7 | 4.0 | 10.9 | 11.1 | 10.7 |

Table 15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | |
|--|--------------------------|------|--------|------------|------|--------|---------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 1.0 | 1.0 | 1.0 | 0.3 | 0.4 | 0.3 | 1.1 | 1.2 | 1.1 |
| Diseases of appendix (K35-K38) | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | * | 0.1 | 0.2 | 0.1 |
| Hernia (K40-K46) | 0.6 | 0.5 | 0.6 | 0.2 | 0.2 | 0.3 | 0.6 | 0.5 | 0.7 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 9.9 | 13.1 | 6.7 | 8.7 | 11.8 | 5.5 | 10.0 | 13.3 | 6.9 |
| Alcoholic liver disease (K70) | 4.9 | 7.2 | 2.6 | 4.6 | 7.2 | 1.7 | 4.9 | 7.2 | 2.8 |
| Other chronic liver disease and cirrhosis (K73-K74) | 5.0 | 5.9 | 4.1 | 4.1 | 4.5 | 3.7 | 5.1 | 6.1 | 4.1 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 1.1 | 1.1 | 1.2 | 0.6 | 0.5 | 0.7 | 1.2 | 1.2 | 1.3 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 15.9 | 15.7 | 16.0 | 6.2 | 6.0 | 6.4 | 17.6 | 17.5 | 17.7 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 0.1 | 0.0 | 0.1 | * | * | * | 0.1 | 0.1 | 0.1 |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 1.4 | 1.3 | 1.4 | 0.5 | 0.5 | 0.5 | 1.5 | 1.5 | 1.5 |
| Renal failure (N17-N19) | 14.4 | 14.3 | 14.6 | 5.7 | 5.5 | 5.9 | 16.0 | 16.0 | 16.0 |
| Other disorders of kidney (N25,N27) | 0.0 | * | 0.0 | * | * | * | 0.0 | * | * |
| Infections of kidney (N10-N12,N13.6,N15.1) | 0.2 | 0.1 | 0.3 | 0.1 | * | 0.2 | 0.2 | 0.1 | 0.3 |
| Hyperplasia of prostate (N40) | 0.2 | 0.3 | ... | 0.0 | 0.1 | ... | 0.2 | 0.4 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 0.0 | ... | 0.1 | * | ... | * | 0.1 | ... | 0.1 |
| Pregnancy, childbirth and the puerperium (O00-O99) | 0.3 | ... | 0.5 | 0.3 | ... | 0.7 | 0.2 | ... | 0.5 |
| Pregnancy with abortive outcome (O00-O07) | 0.0 | ... | 0.0 | * | ... | * | 0.0 | ... | 0.0 |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 0.3 | ... | 0.5 | 0.3 | ... | 0.6 | 0.2 | ... | 0.5 |
| Certain conditions originating in the perinatal period (P00-P96) | 4.6 | 5.3 | 3.9 | 6.1 | 6.8 | 5.4 | 4.2 | 4.9 | 3.6 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 3.4 | 3.6 | 3.2 | 4.3 | 4.4 | 4.2 | 3.2 | 3.4 | 3.0 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 12.7 | 11.2 | 14.1 | 4.7 | 5.1 | 4.3 | 14.1 | 12.3 | 15.7 |
| All other diseases (Residual) | 83.0 | 67.7 | 97.9 | 26.8 | 24.2 | 29.5 | 93.1 | 75.9 | 109.6 |

Table 15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | |
|---|--------------------------|------|--------|------------|------|--------|---------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59,Y85-Y86) | 40.1 | 52.3 | 28.2 | 23.6 | 34.5 | 12.0 | 43.0 | 55.5 | 31.0 |
| Transport accidents (V01-V99,Y85) | 14.0 | 20.4 | 7.8 | 11.5 | 17.3 | 5.4 | 14.5 | 21.0 | 8.2 |
| Motor vehicle accidents (V02-V04, V09.0,V09.2,V12-V14,V19.0-V19.2, V19.4-V19.6,V20-V79,V80.3-V80.5, V81.0-V81.1,V82.0-V82.1,V83-V86, V87.0-V87.8,V88.0-V88.8,V89.0, V89.2) | 13.1 | 18.9 | 7.5 | 10.9 | 16.2 | 5.2 | 13.5 | 19.3 | 7.8 |
| Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9, V10-V11,V15-V18,V19.3,V19.8- V19.9,V80.0-V80.2,V80.6-V80.9, V81.2-V81.9,V82.2-V82.9,V87.9, V88.9,V89.1,V89.3,V89.9) | 0.4 | 0.6 | 0.2 | 0.4 | 0.7 | 0.1 | 0.4 | 0.6 | 0.2 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85) | 0.6 | 1.0 | 0.2 | 0.3 | 0.4 | * | 0.6 | 1.1 | 0.2 |
| Nontransport accidents (W00-X59,Y86) | 26.0 | 31.8 | 20.4 | 12.1 | 17.2 | 6.6 | 28.5 | 34.5 | 22.7 |
| Falls (W00-W19) | 7.9 | 8.2 | 7.6 | 2.7 | 3.4 | 1.9 | 8.8 | 9.1 | 8.5 |
| Accidental discharge of firearms (W32-W34) | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | * | 0.2 | 0.4 | 0.1 |
| Accidental drowning and submersion (W65-W74) | 1.2 | 1.8 | 0.5 | 1.1 | 1.6 | 0.4 | 1.2 | 1.8 | 0.5 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 1.0 | 1.1 | 0.8 | 0.4 | 0.5 | 0.3 | 1.1 | 1.3 | 0.9 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 10.2 | 13.7 | 6.9 | 5.5 | 8.3 | 2.5 | 11.1 | 14.7 | 7.6 |
| Other and unspecified nontransport accidents and their sequelae (W20- W31,W35-W64,W75-W99,X10-X39, X50-X59,Y86) | 5.6 | 6.6 | 4.6 | 2.4 | 3.3 | 1.4 | 6.2 | 7.2 | 5.1 |
| Intentional self-harm (suicide) (*U03,X60-X84,Y87.0) | 11.9 | 19.0 | 4.9 | 5.0 | 8.1 | 1.7 | 13.1 | 21.0 | 5.5 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 6.0 | 10.6 | 1.5 | 1.8 | 3.2 | 0.3 | 6.7 | 12.0 | 1.7 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60-X71,X75-X84, Y87.0) | 5.9 | 8.4 | 3.4 | 3.2 | 4.8 | 1.4 | 6.3 | 9.0 | 3.8 |
| Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | 5.9 | 9.4 | 2.4 | 7.1 | 11.4 | 2.4 | 5.6 | 9.0 | 2.4 |
| Assault (homicide) by discharge of firearms (*U01.4,X93-X95) | 4.0 | 6.9 | 1.2 | 4.8 | 8.3 | 1.1 | 3.8 | 6.6 | 1.2 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3,*U01.5-*U01.9, *U02,X85-X92,X96-Y09,Y87.1) | 1.9 | 2.5 | 1.2 | 2.3 | 3.2 | 1.3 | 1.8 | 2.4 | 1.2 |
| Legal intervention (Y35,Y89.0) | 0.1 | 0.2 | * | 0.2 | 0.3 | * | 0.1 | 0.2 | * |
| Events of undetermined intent (Y10-Y34,Y87.2,Y89.9) | 1.7 | 2.1 | 1.2 | 0.7 | 1.0 | 0.3 | 1.8 | 2.3 | 1.4 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 0.1 | 0.1 | 0.0 | 0.0 | * | * | 0.1 | 0.2 | 0.0 |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9) | 1.6 | 2.0 | 1.2 | 0.6 | 1.0 | 0.3 | 1.7 | 2.1 | 1.4 |
| Operations of war and their sequelae (Y36,Y89.1) | 0.0 | 0.0 | * | * | * | * | 0.0 | 0.0 | * |
| Complications of medical and surgical care (Y40-Y84,Y88) | 0.9 | 0.8 | 0.9 | 0.3 | 0.3 | 0.4 | 0.9 | 0.9 | 1.0 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 2.5 | 1.9 | 3.0 | 0.7 | 0.6 | 0.9 | 2.8 | 2.1 | 3.4 |
| Drug-induced deaths ^{5,6} | 12.7 | 16.0 | 9.6 | 5.9 | 8.4 | 3.2 | 13.9 | 17.3 | 10.6 |
| Alcohol-induced deaths ^{5,7} | 8.0 | 12.1 | 3.9 | 6.4 | 10.4 | 2.2 | 8.2 | 12.4 | 4.2 |
| Injury by firearms ^{5,8} | 10.4 | 18.2 | 2.8 | 6.9 | 12.0 | 1.5 | 11.0 | 19.4 | 3.0 |

Table 15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the International Classification of Diseases, Tenth Revision (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|--|---------------------------------|-------|--------|---------------------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 982.0 | 978.2 | 985.5 | 745.2 | 794.3 | 700.5 |
| Salmonella infections (A01-A02) | 0.0 | * | * | * | * | * |
| Shigellosis and amebiasis (A03,A06) | * | * | * | * | * | * |
| Certain other intestinal infections (A04,A07-A09) | 3.4 | 2.6 | 4.2 | 1.2 | 1.0 | 1.4 |
| Tuberculosis (A16-A19) | 0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.2 |
| Respiratory tuberculosis (A16) | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.2 |
| Other tuberculosis (A17-A19) | 0.0 | 0.0 | 0.0 | 0.1 | * | * |
| Whooping cough (A37) | * | * | * | * | * | * |
| Scarlet fever and erysipelas (A38,A46) | * | * | * | * | * | * |
| Meningococcal infection (A39) | 0.0 | 0.0 | 0.0 | 0.1 | * | * |
| Septicemia (A40-A41) | 13.2 | 12.2 | 14.2 | 16.6 | 15.5 | 17.6 |
| Syphilis (A50-A53) | * | * | * | * | * | * |
| Acute poliomyelitis (A80) | * | * | * | * | * | * |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | * | * | * | * | * | * |
| Measles (B05) | * | * | * | * | * | * |
| Viral hepatitis (B15-B19) | 2.4 | 3.3 | 1.6 | 2.9 | 3.9 | 1.9 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 1.5 | 2.5 | 0.5 | 14.8 | 20.4 | 9.8 |
| Malaria (B50-B54) | * | * | * | * | * | * |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 2.2 | 2.2 | 2.2 | 1.9 | 2.2 | 1.6 |
| Malignant neoplasms (C00-C97) | 226.6 | 241.1 | 212.6 | 165.2 | 178.7 | 152.8 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 3.1 | 4.3 | 2.0 | 2.6 | 4.0 | 1.3 |
| Malignant neoplasm of esophagus (C15) | 5.7 | 9.3 | 2.2 | 3.7 | 5.5 | 2.1 |
| Malignant neoplasm of stomach (C16) | 3.5 | 4.3 | 2.7 | 5.3 | 6.5 | 4.2 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 20.7 | 21.3 | 20.2 | 17.8 | 19.0 | 16.8 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 6.1 | 8.3 | 4.0 | 6.4 | 9.5 | 3.5 |
| Malignant neoplasm of pancreas (C25) | 14.0 | 14.2 | 13.7 | 10.6 | 10.2 | 10.9 |
| Malignant neoplasm of larynx (C32) | 1.4 | 2.3 | 0.6 | 1.7 | 2.7 | 0.7 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 66.4 | 74.4 | 58.6 | 42.0 | 52.2 | 32.7 |
| Malignant melanoma of skin (C43) | 4.1 | 5.5 | 2.7 | 0.3 | 0.3 | 0.3 |
| Malignant neoplasm of breast (C50) | 15.8 | 0.3 | 30.7 | 15.4 | 0.4 | 29.0 |
| Malignant neoplasm of cervix uteri (C53) | 1.3 | ... | 2.5 | 2.1 | ... | 4.0 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 2.8 | ... | 5.6 | 3.3 | ... | 6.4 |
| Malignant neoplasm of ovary (C56) | 5.9 | ... | 11.6 | 3.1 | ... | 5.9 |
| Malignant neoplasm of prostate (C61) | 10.9 | 22.2 | ... | 11.8 | 24.7 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 5.2 | 6.8 | 3.7 | 3.1 | 4.0 | 2.3 |
| Malignant neoplasm of bladder (C67) | 6.1 | 8.9 | 3.5 | 2.5 | 2.8 | 2.2 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 5.8 | 6.6 | 5.0 | 2.2 | 2.5 | 1.9 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 22.3 | 25.3 | 19.4 | 13.6 | 15.2 | 12.2 |
| Hodgkin's disease (C81) | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 |
| Non-Hodgkin's lymphoma (C82-C85) | 8.6 | 9.4 | 7.7 | 3.5 | 4.0 | 3.1 |
| Leukemia (C91-C95) | 9.2 | 10.7 | 7.7 | 4.9 | 5.7 | 4.1 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 4.1 | 4.7 | 3.6 | 4.9 | 5.1 | 4.7 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 0.0 | 0.0 | * | * | * | * |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 25.4 | 27.0 | 23.7 | 17.8 | 19.2 | 16.5 |

Table 15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the International Classification of Diseases, Tenth Revision (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|--|---------------------------------|-------|--------|---------------------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 6.1 | 6.5 | 5.7 | 3.0 | 3.0 | 3.0 |
| Anemias (D50-D64) | 1.8 | 1.4 | 2.2 | 2.6 | 2.4 | 2.8 |
| Diabetes mellitus (E10-E14) | 24.5 | 25.5 | 23.5 | 31.1 | 29.4 | 32.7 |
| Nutritional deficiencies (E40-E64) | 1.2 | 0.9 | 1.5 | 1.0 | 0.9 | 1.0 |
| Malnutrition (E40-E46) | 1.1 | 0.8 | 1.4 | 0.9 | 0.9 | 0.9 |
| Other nutritional deficiencies (E50-E64) | 0.1 | 0.1 | 0.1 | * | * | * |
| Meningitis (G00,G03) | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 |
| Parkinson's disease (G20-G21) | 9.2 | 10.9 | 7.4 | 1.9 | 2.2 | 1.7 |
| Alzheimer's disease (G30) | 36.3 | 22.0 | 50.1 | 13.1 | 7.6 | 18.1 |
| Major cardiovascular diseases (I00-I78) | 322.6 | 314.9 | 330.1 | 245.9 | 249.4 | 242.7 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 249.4 | 254.9 | 244.0 | 182.5 | 191.3 | 174.4 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 1.3 | 0.8 | 1.7 | 0.7 | 0.5 | 0.8 |
| Hypertensive heart disease (I11) | 11.1 | 10.1 | 12.0 | 19.2 | 20.4 | 18.2 |
| Hypertensive heart and renal disease (I13) | 0.9 | 0.8 | 1.0 | 2.2 | 2.0 | 2.3 |
| Ischemic heart diseases (I20-I25) | 165.2 | 179.7 | 151.3 | 108.0 | 115.6 | 101.0 |
| Acute myocardial infarction (I21-I22) | 54.8 | 60.7 | 49.0 | 35.6 | 37.3 | 34.1 |
| Other acute ischemic heart diseases (I24) | 1.7 | 1.8 | 1.6 | 1.5 | 1.6 | 1.3 |
| Other forms of chronic ischemic heart disease (I20,I25) | 108.8 | 117.2 | 100.7 | 70.9 | 76.7 | 65.6 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 22.4 | 25.6 | 19.3 | 22.1 | 26.6 | 18.0 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 86.4 | 91.6 | 81.4 | 48.8 | 50.1 | 47.6 |
| Other heart diseases (I26-I51) | 70.9 | 63.5 | 78.0 | 52.4 | 52.8 | 52.2 |
| Acute and subacute endocarditis (I33) | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 0.5 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 |
| Heart failure (I50) | 24.0 | 19.6 | 28.4 | 14.1 | 13.0 | 15.1 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 46.1 | 43.2 | 49.0 | 37.4 | 38.8 | 36.1 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 9.1 | 7.2 | 11.0 | 13.1 | 12.0 | 14.1 |
| Cerebrovascular diseases (I60-I69) | 52.6 | 41.5 | 63.4 | 43.1 | 39.0 | 46.9 |
| Atherosclerosis (I70) | 3.4 | 2.6 | 4.1 | 1.7 | 1.5 | 1.9 |
| Other diseases of circulatory system (I71-I78) | 8.2 | 8.8 | 7.6 | 5.5 | 5.5 | 5.4 |
| Aortic aneurysm and dissection (I71) | 4.7 | 5.6 | 3.8 | 2.4 | 2.8 | 2.0 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 3.5 | 3.2 | 3.8 | 3.1 | 2.8 | 3.4 |
| Other disorders of circulatory system (I80-I99) | 1.5 | 1.4 | 1.6 | 2.0 | 2.0 | 2.0 |
| Influenza and pneumonia (J09-J18) | 22.7 | 20.7 | 24.6 | 14.1 | 13.9 | 14.2 |
| Influenza (J09-J11) | 0.8 | 0.6 | 0.9 | 0.2 | 0.2 | 0.2 |
| Pneumonia (J12-J18) | 21.9 | 20.1 | 23.7 | 13.9 | 13.7 | 14.0 |
| Other acute lower respiratory infections (J20-J22,U04) | 0.1 | 0.1 | 0.1 | 0.1 | * | * |
| Acute bronchitis and bronchiolitis (J20-J21) | 0.1 | 0.1 | 0.1 | 0.1 | * | * |
| Other and unspecified acute lower respiratory infections (J22,U04) | 0.0 | * | 0.0 | * | * | * |
| Chronic lower respiratory diseases (J40-J47) | 62.5 | 59.8 | 65.1 | 22.7 | 24.6 | 20.9 |
| Bronchitis, chronic and unspecified (J40-J42) | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.1 |
| Emphysema (J43) | 5.6 | 5.8 | 5.4 | 1.7 | 2.2 | 1.4 |
| Asthma (J45-J46) | 1.0 | 0.6 | 1.4 | 2.3 | 2.0 | 2.6 |
| Other chronic lower respiratory diseases (J44,J47) | 55.6 | 53.1 | 58.0 | 18.4 | 20.2 | 16.8 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 0.4 | 0.8 | 0.0 | 0.1 | 0.2 | * |
| Pneumonitis due to solids and liquids (J69) | 7.0 | 7.4 | 6.6 | 3.8 | 4.1 | 3.6 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 12.2 | 12.4 | 11.9 | 7.2 | 7.1 | 7.3 |

Table 15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the International Classification of Diseases, Tenth Revision (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|--|---------------------------------|------|--------|---------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 1.2 | 1.2 | 1.2 | 0.8 | 1.0 | 0.6 |
| Diseases of appendix (K35-K38) | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | * |
| Hernia (K40-K46) | 0.7 | 0.6 | 0.8 | 0.4 | 0.4 | 0.4 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 11.0 | 14.6 | 7.6 | 6.4 | 9.0 | 4.0 |
| Alcoholic liver disease (K70) | 5.4 | 7.9 | 2.9 | 3.1 | 4.4 | 1.9 |
| Other chronic liver disease and cirrhosis (K73-K74) | 5.6 | 6.7 | 4.6 | 3.4 | 4.7 | 2.2 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 1.3 | 1.3 | 1.4 | 0.8 | 0.8 | 0.8 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 17.6 | 17.7 | 17.4 | 22.4 | 21.3 | 23.3 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 0.1 | 0.1 | 0.1 | 0.1 | * | * |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 1.5 | 1.5 | 1.6 | 1.8 | 1.7 | 1.9 |
| Renal failure (N17-N19) | 16.0 | 16.1 | 15.8 | 20.5 | 19.6 | 21.3 |
| Other disorders of kidney (N25,N27) | 0.0 | * | * | * | * | * |
| Infections of kidney (N10-N12,N13.6,N15.1) | 0.2 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 |
| Hyperplasia of prostate (N40) | 0.2 | 0.4 | ... | 0.1 | 0.2 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 0.1 | ... | 0.1 | * | ... | * |
| Pregnancy, childbirth and the puerperium (O00-O99) | 0.2 | ... | 0.3 | 0.6 | ... | 1.2 |
| Pregnancy with abortive outcome (O00-O07) | * | ... | * | * | ... | * |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 0.2 | ... | 0.3 | 0.6 | ... | 1.2 |
| Certain conditions originating in the perinatal period (P00-P96) | 2.8 | 3.3 | 2.4 | 12.1 | 14.3 | 10.1 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 3.1 | 3.3 | 2.9 | 4.2 | 4.6 | 3.9 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 15.1 | 12.7 | 17.3 | 13.4 | 14.2 | 12.7 |
| All other diseases (Residual) | 102.8 | 82.7 | 122.2 | 69.9 | 61.1 | 77.9 |

Table 15. Death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Rates per 100,000 population in specified group. Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the International Classification of Diseases, Tenth Revision (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ² | | | Non-Hispanic black ³ | | |
|---|---------------------------------|------|--------|---------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59,Y85-Y86) | | | | | | |
| Transport accidents (V01-V99,Y85) | 47.0 | 59.7 | 34.6 | 31.9 | 45.3 | 19.6 |
| Motor vehicle accidents (V02-V04, V09.0,V09.2,V12-V14,V19.0-V19.2, V19.4-V19.6,V20-V79,V80.3-V80.5, V81.0-V81.1,V82.0-V82.1,V83-V86, V87.0-V87.8,V88.0-V88.8,V89.0, V89.2) | 15.1 | 21.8 | 8.6 | 13.4 | 20.4 | 7.0 |
| Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9, V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9, V81.2-V81.9,V82.2-V82.9,V87.9, V88.9,V89.1,V89.3,V89.9) | 14.0 | 20.0 | 8.2 | 12.5 | 18.9 | 6.6 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85) | 0.4 | 0.6 | 0.2 | 0.4 | 0.7 | 0.2 |
| Nontransport accidents (W00-X59,Y86) | 0.7 | 1.2 | 0.3 | 0.4 | 0.7 | 0.1 |
| Falls (W00-W19) | 31.9 | 37.9 | 26.0 | 18.5 | 24.9 | 12.7 |
| Accidental discharge of firearms (W32-W34) | 10.5 | 10.6 | 10.3 | 2.6 | 3.2 | 2.1 |
| Accidental drowning and submersion (W65-W74) | 0.2 | 0.4 | 0.1 | 0.2 | 0.5 | * |
| Accidental exposure to smoke, fire and flames (X00-X09) | 1.1 | 1.8 | 0.5 | 1.4 | 2.3 | 0.6 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 1.0 | 1.2 | 0.8 | 1.6 | 1.9 | 1.2 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31,W35-W64,W75-W99,X10-X39, X50-X59,Y86) | 12.3 | 16.2 | 8.6 | 7.7 | 10.7 | 4.9 |
| Intentional self-harm (suicide) (*U03,X60-X84,Y87.0) | 6.7 | 7.8 | 5.7 | 5.0 | 6.4 | 3.7 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 15.0 | 24.1 | 6.3 | 5.4 | 9.4 | 1.7 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60-X71,X75-X84, Y87.0) | 7.9 | 14.0 | 2.0 | 2.7 | 5.1 | 0.5 |
| Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | 7.1 | 10.0 | 4.3 | 2.7 | 4.3 | 1.2 |
| Assault (homicide) by discharge of firearms (*U01.4,X93-X95) | 2.8 | 3.9 | 1.8 | 21.4 | 38.6 | 5.8 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3,*U01.5-*U01.9, *U02,X85-X92,X96-Y09,Y87.1) | 1.5 | 2.3 | 0.8 | 16.9 | 32.0 | 3.1 |
| Legal intervention (Y35,Y89.0) | 1.3 | 1.6 | 0.9 | 4.5 | 6.5 | 2.6 |
| Events of undetermined intent (Y10-Y34,Y87.2,Y89.9) | 0.1 | 0.2 | * | 0.3 | 0.6 | * |
| Discharge of firearms, undetermined intent (Y22-Y24) | 1.9 | 2.4 | 1.5 | 1.7 | 2.5 | 1.1 |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9) | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | * |
| Operations of war and their sequelae (Y36,Y89.1) | 1.8 | 2.2 | 1.5 | 1.6 | 2.3 | 1.0 |
| Complications of medical and surgical care (Y40-Y84,Y88) | 0.0 | 0.0 | * | * | * | * |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 1.0 | 0.9 | 1.1 | 1.0 | 1.0 | 1.0 |
| Drug-induced deaths ^{5,6} | 3.2 | 2.5 | 4.0 | 1.2 | 0.9 | 1.4 |
| Alcohol-induced deaths ^{5,7} | 15.6 | 19.2 | 12.1 | 9.4 | 12.7 | 6.3 |
| Injury by firearms ^{5,8} | 8.8 | 13.3 | 4.5 | 5.8 | 9.1 | 2.9 |
| | 9.9 | 17.0 | 3.0 | 20.2 | 38.3 | 3.7 |

0.0 Quantity more than zero but less than 0.05.

* Figure does not meet standards of reliability or precision; see "Technical Notes."

... Category not applicable.

¹Figures for origin not stated are included in "All origins" but not distributed among specified origins.

²Includes races other than white and black.

³Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported by 34 states and the District of Columbia in 2008; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

⁴Included in "Certain other intestinal infections (A04,A07-A09)" show n above. Beginning with data year 2006, Enterocolitis due to *Clostridium difficile* (A04.7) is show n separately at the bottom of tables show ing 113 selected causes and is included in the list of rankable causes, see "Technical Notes."

⁵Included in selected categories above.

⁶Includes ICD-10 codes D52.1,D59.0,D59.2,D61.1,D64.2,E06.4,E16.0,E23.1,E24.2,E27.3,E66.1,F11.0-F11.5,F11.7-F11.9,F12.0-F12.5,F12.7-F12.9, F13.0-F13.5,F13.7-F13.9,F14.0-F14.5,F14.7-F14.9,F15.0-F15.5,F15.7-F15.9,F16.0-F16.5,F16.7-F16.9,F17.0,F17.3-F17.5,F17.7-F17.9,F18.0-F18.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9,G21.1,G24.0,G25.1,G25.4,G25.6,G44.4,G62.0,G72.0,I95.2,J70.2-J70.4,K85.3,L10.5,L27.0-L27.1, M10.2,M32.0,M80.4,M81.4,M83.5,M87.1,R50.2,R78.1-R78.5,X40-X44,X60-X64,X85, and Y10-Y14. Trend data for Drug-induced deaths, previously show n in this report, can be found through a link from the online version of this report, available from <http://w w w . c d c . g o v / n c h s / d e a t h s . h t m>.

⁷Includes ICD-10 codes E24.4,F10,G31.2,G62.1,G72.1,I42.6,K29.2,K70,K85.2,K86.0,R78.0,X45,X65, and Y15. Trend data for Alcohol-induced deaths, previously show n in this report, can be found through a link from the online version of this report, available from <http://w w w . c d c . g o v / n c h s / d e a t h s . h t m>.

⁸Includes ICD-10 codes *U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24, and Y35.0. Trend data for Injury by firearms, previously show n in this report, can be found through a link from the online version of this report, available from <http://w w w . c d c . g o v / n c h s / d e a t h s . h t m>.

Table 16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes."]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|-------|--------|--------------------|-------|--------|--------------------|---------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 758.3 | 900.6 | 643.4 | 750.3 | 889.2 | 636.9 | 934.9 | 1,150.4 | 778.4 |
| Salmonella infections (A01-A02) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | * | * | * | * |
| Shigellosis and amebiasis (A03,A06) | * | * | * | * | * | * | * | * | * |
| Certain other intestinal infections (A04,A07-A09) | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.6 | 1.7 | 1.7 | 1.7 |
| Tuberculosis (A16-A19) | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | 0.7 | 0.3 |
| Respiratory tuberculosis (A16) | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.6 | 0.2 |
| Other tuberculosis (A17-A19) | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | * | * |
| Whooping cough (A37) | 0.0 | * | * | * | * | * | * | * | * |
| Scarlet fever and erysipelas (A38,A46) | * | * | * | * | * | * | * | * | * |
| Meningococcal infection (A39) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | * | * |
| Septicemia (A40-A41) | 11.1 | 12.1 | 10.3 | 10.2 | 11.2 | 9.5 | 21.6 | 24.4 | 19.8 |
| Syphilis (A50-A53) | 0.0 | 0.0 | * | * | * | * | * | * | * |
| Acute poliomyelitis (A80) | * | * | * | * | * | * | * | * | * |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | * | * | * | * | * | * | * | * | * |
| Measles (B05) | * | * | * | * | * | * | * | * | * |
| Viral hepatitis (B15-B19) | 2.3 | 3.1 | 1.5 | 2.2 | 3.0 | 1.4 | 3.1 | 4.4 | 2.0 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 3.3 | 4.8 | 1.9 | 1.7 | 2.8 | 0.7 | 15.3 | 21.9 | 9.8 |
| Malaria (B50-B54) | * | * | * | * | * | * | * | * | * |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 1.8 | 2.2 | 1.6 | 1.8 | 2.1 | 1.6 | 2.3 | 3.0 | 1.8 |
| Malignant neoplasms (C00-C97) | 175.3 | 213.6 | 148.5 | 174.7 | 211.7 | 148.5 | 209.1 | 272.4 | 170.0 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 2.4 | 3.7 | 1.4 | 2.4 | 3.6 | 1.4 | 3.0 | 5.2 | 1.5 |
| Malignant neoplasm of esophagus (C15) | 4.2 | 7.5 | 1.6 | 4.3 | 7.7 | 1.5 | 4.5 | 7.7 | 2.3 |
| Malignant neoplasm of stomach (C16) | 3.5 | 4.8 | 2.5 | 3.0 | 4.2 | 2.1 | 6.8 | 9.9 | 4.8 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 16.4 | 19.5 | 14.0 | 16.0 | 18.9 | 13.6 | 22.8 | 28.6 | 18.9 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 5.6 | 8.3 | 3.2 | 5.1 | 7.6 | 3.0 | 7.5 | 12.2 | 3.9 |
| Malignant neoplasm of pancreas (C25) | 10.9 | 12.5 | 9.6 | 10.8 | 12.4 | 9.4 | 13.6 | 15.1 | 12.5 |
| Malignant neoplasm of larynx (C32) | 1.1 | 2.1 | 0.5 | 1.1 | 1.9 | 0.4 | 2.0 | 3.9 | 0.8 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 49.5 | 63.6 | 39.0 | 50.2 | 63.4 | 40.2 | 53.4 | 78.5 | 36.9 |
| Malignant melanoma of skin (C43) | 2.7 | 4.0 | 1.7 | 3.1 | 4.6 | 1.9 | 0.4 | 0.5 | 0.3 |
| Malignant neoplasm of breast (C50) | 12.6 | 0.3 | 22.5 | 12.2 | 0.3 | 21.9 | 18.4 | 0.6 | 31.1 |
| Malignant neoplasm of cervix uteri (C53) | 1.2 | ... | 2.4 | 1.1 | ... | 2.1 | 2.4 | ... | 4.2 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 2.4 | ... | 4.2 | 2.2 | ... | 3.9 | 4.2 | ... | 7.1 |
| Malignant neoplasm of ovary (C56) | 4.4 | ... | 8.0 | 4.6 | ... | 8.2 | 3.9 | ... | 6.6 |
| Malignant neoplasm of prostate (C61) | 8.8 | 22.3 | ... | 8.2 | 20.8 | ... | 16.8 | 46.2 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 4.0 | 5.8 | 2.6 | 4.1 | 5.9 | 2.6 | 3.9 | 5.8 | 2.6 |
| Malignant neoplasm of bladder (C67) | 4.3 | 7.4 | 2.2 | 4.5 | 7.9 | 2.2 | 3.3 | 4.7 | 2.5 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 4.3 | 5.2 | 3.4 | 4.6 | 5.6 | 3.8 | 2.5 | 3.2 | 2.0 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 17.2 | 22.4 | 13.3 | 17.5 | 22.8 | 13.5 | 17.2 | 22.3 | 13.8 |
| Hodgkin's disease (C81) | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 |
| Non-Hodgkin's lymphoma (C82-C85) | 6.3 | 8.1 | 5.0 | 6.7 | 8.5 | 5.3 | 4.3 | 5.5 | 3.4 |
| Leukemia (C91-C95) | 7.0 | 9.4 | 5.3 | 7.2 | 9.7 | 5.4 | 6.2 | 8.4 | 4.7 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 3.4 | 4.4 | 2.7 | 3.2 | 4.2 | 2.5 | 6.4 | 8.0 | 5.4 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | * | * | * |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 19.7 | 23.9 | 16.5 | 19.7 | 23.8 | 16.5 | 22.2 | 27.9 | 18.3 |

Table 16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|-------|--------|--------------------|-------|--------|--------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 4.5 | 5.7 | 3.7 | 4.6 | 5.9 | 3.7 | 3.9 | 4.6 | 3.4 |
| Anemias (D50-D64) | 1.5 | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 | 3.1 | 3.1 | 3.0 |
| Diabetes mellitus (E10-E14) | 21.8 | 25.6 | 18.8 | 19.9 | 23.9 | 16.7 | 40.5 | 44.8 | 37.2 |
| Nutritional deficiencies (E40-E64) | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 1.3 | 1.7 | 1.1 |
| Malnutrition (E40-E46) | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.3 | 1.6 | 1.1 |
| Other nutritional deficiencies (E50-E64) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | * | * | * |
| Meningitis (G00,G03) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 |
| Parkinson's disease (G20-G21) | 6.4 | 9.7 | 4.3 | 6.8 | 10.3 | 4.5 | 2.9 | 4.3 | 2.1 |
| Alzheimer's disease (G30) | 24.4 | 20.1 | 26.7 | 25.4 | 21.0 | 27.9 | 19.7 | 16.3 | 21.1 |
| Major cardiovascular diseases (I00-I78) | 243.5 | 291.3 | 204.9 | 238.3 | 286.0 | 199.4 | 323.0 | 387.7 | 275.3 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 186.5 | 232.3 | 150.4 | 183.9 | 229.9 | 147.2 | 238.6 | 295.6 | 197.5 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 1.0 | 0.8 | 1.1 | 1.0 | 0.8 | 1.1 | 0.8 | 0.8 | 0.9 |
| Hypertensive heart disease (I11) | 9.8 | 10.7 | 8.5 | 8.3 | 9.1 | 7.3 | 23.9 | 28.7 | 20.1 |
| Hypertensive heart and renal disease (I13) | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 2.8 | 3.0 | 2.5 |
| Ischemic heart diseases (I20-I25) | 122.7 | 161.2 | 93.0 | 122.5 | 161.7 | 91.9 | 143.7 | 183.7 | 115.6 |
| Acute myocardial infarction (I21-I22) | 40.7 | 53.2 | 30.9 | 40.9 | 53.7 | 30.5 | 47.0 | 58.3 | 38.9 |
| Other acute ischemic heart diseases (I24) | 1.3 | 1.6 | 1.0 | 1.2 | 1.5 | 1.0 | 1.9 | 2.4 | 1.4 |
| Other forms of chronic ischemic heart disease (I20,I25) | 80.7 | 106.4 | 61.1 | 80.3 | 106.4 | 60.3 | 94.8 | 122.9 | 75.1 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 17.7 | 23.7 | 12.6 | 16.9 | 22.5 | 12.0 | 28.4 | 39.9 | 20.3 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 63.0 | 82.7 | 48.4 | 63.5 | 83.9 | 48.4 | 66.4 | 83.0 | 54.9 |
| Other heart diseases (I26-I51) | 52.3 | 58.7 | 46.9 | 51.5 | 57.7 | 46.2 | 67.5 | 79.5 | 58.5 |
| Acute and subacute endocarditis (I33) | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.6 | 0.7 | 0.5 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.4 |
| Heart failure (I50) | 16.9 | 18.1 | 15.8 | 17.0 | 18.2 | 15.9 | 19.4 | 22.1 | 17.4 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 34.7 | 39.8 | 30.6 | 33.9 | 38.8 | 29.8 | 47.0 | 56.3 | 40.2 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 7.7 | 7.8 | 7.5 | 6.8 | 6.7 | 6.6 | 17.2 | 18.6 | 16.0 |
| Cerebrovascular diseases (I60-I69) | 40.7 | 40.9 | 39.9 | 39.1 | 39.0 | 38.6 | 57.4 | 62.1 | 53.4 |
| Atherosclerosis (I70) | 2.3 | 2.4 | 2.2 | 2.4 | 2.4 | 2.3 | 2.4 | 2.8 | 2.1 |
| Other diseases of circulatory system (I71-I78) | 6.1 | 7.8 | 4.8 | 6.1 | 7.9 | 4.8 | 7.2 | 8.7 | 6.2 |
| Aortic aneurysm and dissection (I71) | 3.4 | 4.9 | 2.4 | 3.5 | 5.0 | 2.4 | 3.0 | 4.0 | 2.3 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 2.7 | 3.0 | 2.5 | 2.6 | 2.9 | 2.3 | 4.2 | 4.7 | 3.9 |
| Other disorders of circulatory system (I80-I99) | 1.2 | 1.3 | 1.2 | 1.1 | 1.2 | 1.1 | 2.3 | 2.6 | 2.1 |
| Influenza and pneumonia (J09-J18) | 16.9 | 19.9 | 15.0 | 16.7 | 19.5 | 14.9 | 18.9 | 23.2 | 16.1 |
| Influenza (J09-J11) | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.2 | 0.3 | 0.2 |
| Pneumonia (J12-J18) | 16.4 | 19.3 | 14.4 | 16.2 | 19.0 | 14.3 | 18.6 | 22.9 | 15.9 |
| Other acute lower respiratory infections (J20-J22,U04) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | * | * |
| Acute bronchitis and bronchiolitis (J20-J21) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | * | * |
| Other and unspecified acute lower respiratory infections (J22,U04) | 0.0 | 0.0 | 0.0 | 0.0 | * | 0.0 | * | * | * |
| Chronic lower respiratory diseases (J40-J47) | 44.0 | 51.4 | 39.1 | 46.4 | 53.5 | 41.9 | 30.4 | 41.5 | 23.9 |
| Bronchitis, chronic and unspecified (J40-J42) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 |
| Emphysema (J43) | 3.9 | 4.9 | 3.2 | 4.2 | 5.1 | 3.5 | 2.3 | 3.5 | 1.6 |
| Asthma (J45-J46) | 1.0 | 0.8 | 1.2 | 0.9 | 0.6 | 1.0 | 2.5 | 2.1 | 2.7 |
| Other chronic lower respiratory diseases (J44,J47) | 38.8 | 45.5 | 34.5 | 41.2 | 47.5 | 37.1 | 25.4 | 35.6 | 19.5 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 0.3 | 0.7 | 0.0 | 0.3 | 0.7 | 0.0 | 0.1 | 0.3 | * |
| Pneumonitis due to solids and liquids (J69) | 5.0 | 6.8 | 3.9 | 5.0 | 6.9 | 3.9 | 5.3 | 7.4 | 4.1 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 9.3 | 11.3 | 7.9 | 9.4 | 11.4 | 7.9 | 9.0 | 10.5 | 8.1 |

Table 16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|------|--------|--------------------|------|--------|--------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 0.9 | 1.1 | 0.8 | 0.9 | 1.1 | 0.8 | 1.0 | 1.5 | 0.7 |
| Diseases of appendix (K35-K38) | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | * |
| Hernia (K40-K46) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.4 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 9.2 | 12.7 | 6.0 | 9.6 | 13.2 | 6.2 | 7.0 | 10.6 | 4.2 |
| Alcoholic liver disease (K70) | 4.5 | 6.9 | 2.4 | 4.8 | 7.2 | 2.5 | 3.3 | 5.1 | 1.9 |
| Other chronic liver disease and cirrhosis (K73-K74) | 4.6 | 5.9 | 3.5 | 4.8 | 6.0 | 3.7 | 3.7 | 5.6 | 2.3 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 1.0 | 1.2 | 0.9 | 1.0 | 1.2 | 0.9 | 1.0 | 1.3 | 0.9 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 14.8 | 18.0 | 12.6 | 13.4 | 16.7 | 11.2 | 29.4 | 33.8 | 26.4 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | * | * |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 1.2 | 1.5 | 1.0 | 1.1 | 1.4 | 0.9 | 2.4 | 2.8 | 2.1 |
| Renal failure (N17-N19) | 13.5 | 16.4 | 11.5 | 12.2 | 15.2 | 10.2 | 26.9 | 31.0 | 24.2 |
| Other disorders of kidney (N25,N27) | 0.0 | * | 0.0 | 0.0 | * | * | * | * | * |
| Infections of kidney (N10-N12,N13.6,N15.1) | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| Hyperplasia of prostate (N40) | 0.1 | 0.4 | ... | 0.1 | 0.4 | ... | 0.1 | 0.4 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 0.0 | ... | 0.1 | 0.0 | ... | 0.1 | * | ... | * |
| Pregnancy, childbirth and the puerperium (O00-O99) | 0.3 | ... | 0.6 | 0.2 | ... | 0.4 | 0.6 | ... | 1.2 |
| Pregnancy with abortive outcome (O00-O07) | 0.0 | ... | 0.0 | * | ... | * | * | ... | * |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 0.3 | ... | 0.5 | 0.2 | ... | 0.4 | 0.6 | ... | 1.1 |
| Certain conditions originating in the perinatal period (P00-P96) | 4.5 | 5.0 | 3.9 | 3.5 | 4.0 | 3.1 | 9.4 | 10.3 | 8.4 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 3.3 | 3.5 | 3.1 | 3.3 | 3.5 | 3.1 | 3.6 | 3.8 | 3.4 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 11.7 | 12.1 | 10.8 | 11.4 | 11.7 | 10.7 | 15.4 | 17.7 | 13.3 |
| All other diseases (Residual) | 76.3 | 75.8 | 75.1 | 76.2 | 75.4 | 74.9 | 90.6 | 94.5 | 86.7 |

Table 16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by race and sex: United States, 2008

[Age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All races | | | White ¹ | | | Black ¹ | | |
|--|------------|------|--------|--------------------|------|--------|--------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59, Y85-Y86) | 38.8 | 53.6 | 25.1 | 40.7 | 55.7 | 26.5 | 33.3 | 49.4 | 19.9 |
| Transport accidents (V01-V99, Y85) | 13.8 | 20.4 | 7.6 | 14.3 | 20.9 | 7.8 | 13.2 | 20.6 | 6.8 |
| Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) | 12.9 | 18.8 | 7.3 | 13.3 | 19.3 | 7.5 | 12.3 | 19.1 | 6.5 |
| Other land transport accidents (V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9) | 0.4 | 0.6 | 0.1 | 0.4 | 0.6 | 0.1 | 0.4 | 0.8 | 0.2 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99, Y85) | 0.6 | 0.9 | 0.2 | 0.6 | 1.0 | 0.2 | 0.4 | 0.7 | 0.1 |
| Nontransport accidents (W00-X59, Y86) | 25.0 | 33.2 | 17.5 | 26.4 | 34.8 | 18.6 | 20.1 | 28.9 | 13.1 |
| Falls (W00-W19) | 7.3 | 9.4 | 5.7 | 7.8 | 9.9 | 6.2 | 3.4 | 4.9 | 2.4 |
| Accidental discharge of firearms (W32-W34) | 0.2 | 0.4 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 0.4 | * |
| Accidental drowning and submersion (W65-W74) | 1.2 | 1.8 | 0.5 | 1.1 | 1.7 | 0.5 | 1.3 | 2.1 | 0.6 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 0.9 | 1.2 | 0.7 | 0.8 | 1.1 | 0.7 | 1.7 | 2.4 | 1.3 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 10.2 | 13.5 | 6.8 | 11.1 | 14.6 | 7.5 | 7.8 | 11.3 | 4.9 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86) | 5.3 | 7.0 | 3.7 | 5.3 | 7.1 | 3.7 | 5.6 | 7.7 | 3.9 |
| Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | 11.6 | 18.9 | 4.8 | 12.9 | 20.8 | 5.4 | 5.3 | 9.5 | 1.7 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 5.8 | 10.7 | 1.4 | 6.5 | 11.8 | 1.7 | 2.7 | 5.2 | 0.5 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03, X60-X71, X75-X84, Y87.0) | 5.8 | 8.3 | 3.4 | 6.3 | 9.0 | 3.7 | 2.6 | 4.3 | 1.2 |
| Assault (homicide) (*U01-*U02, X85-Y09, Y87.1) | 5.9 | 9.3 | 2.4 | 3.7 | 5.4 | 1.9 | 19.5 | 34.4 | 5.5 |
| Assault (homicide) by discharge of firearms (*U01.4, X93-X95) | 4.0 | 6.8 | 1.2 | 2.2 | 3.4 | 0.9 | 15.2 | 28.1 | 2.9 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3, *U01.5-*U01.9, *U02, X85-X92, X96-Y09, Y87.1) | 1.8 | 2.5 | 1.2 | 1.5 | 1.9 | 1.0 | 4.3 | 6.4 | 2.5 |
| Legal intervention (Y35, Y89.0) | 0.1 | 0.2 | * | 0.1 | 0.2 | * | 0.3 | 0.6 | * |
| Events of undetermined intent (Y10-Y34, Y87.2, Y89.9) | 1.6 | 2.1 | 1.2 | 1.7 | 2.1 | 1.3 | 1.7 | 2.5 | 1.0 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | * |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21, Y25-Y34, Y87.2, Y89.9) | 1.5 | 1.9 | 1.2 | 1.6 | 1.9 | 1.3 | 1.6 | 2.3 | 1.0 |
| Operations of war and their sequelae (Y36, Y89.1) | 0.0 | 0.0 | * | 0.0 | 0.0 | * | * | * | * |
| Complications of medical and surgical care (Y40-Y84, Y88) | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 1.3 | 1.5 | 1.1 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 | 1.6 | 1.6 | 1.6 |
| Drug-induced deaths ^{5,6} | 12.6 | 15.7 | 9.4 | 13.8 | 17.1 | 10.5 | 9.5 | 13.4 | 6.2 |
| Alcohol-induced deaths ^{5,7} | 7.4 | 11.6 | 3.6 | 7.7 | 11.9 | 3.7 | 6.2 | 10.6 | 2.9 |
| Injury by firearms ^{5,8} | 10.3 | 18.2 | 2.7 | 9.1 | 15.9 | 2.7 | 18.4 | 34.4 | 3.5 |

Table 16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|-------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 610.1 | 717.3 | 515.1 | 413.7 | 492.8 | 353.1 |
| Salmonella infections (A01-A02) | * | * | * | * | * | * |
| Shigellosis and amebiasis (A03,A06) | * | * | * | * | * | * |
| Certain other intestinal infections (A04,A07-A09) | 1.4 | * | * | 1.0 | 1.2 | 0.9 |
| Tuberculosis (A16-A19) | * | * | * | 0.9 | 1.5 | 0.4 |
| Respiratory tuberculosis (A16) | * | * | * | 0.8 | 1.4 | 0.3 |
| Other tuberculosis (A17-A19) | * | * | * | * | * | * |
| Whooping cough (A37) | * | * | * | * | * | * |
| Scarlet fever and erysipelas (A38,A46) | * | * | * | * | * | * |
| Meningococcal infection (A39) | * | * | * | * | * | * |
| Septicemia (A40-A41) | 10.6 | 10.8 | 10.4 | 4.9 | 5.4 | 4.5 |
| Syphilis (A50-A53) | * | * | * | * | * | * |
| Acute poliomyelitis (A80) | * | * | * | * | * | * |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | * | * | * | * | * | * |
| Measles (B05) | * | * | * | * | * | * |
| Viral hepatitis (B15-B19) | 3.3 | 4.1 | 2.6 | 2.4 | 2.7 | 2.0 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 2.1 | 3.3 | * | 0.6 | 1.0 | 0.3 |
| Malaria (B50-B54) | * | * | * | * | * | * |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 2.3 | 2.4 | 2.2 | 1.4 | 1.6 | 1.2 |
| Malignant neoplasms (C00-C97) | 119.6 | 142.0 | 102.3 | 106.5 | 128.8 | 90.6 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 2.0 | 3.3 | * | 2.0 | 2.9 | 1.2 |
| Malignant neoplasm of esophagus (C15) | 2.7 | 5.3 | * | 1.6 | 2.7 | 0.8 |
| Malignant neoplasm of stomach (C16) | 3.0 | 3.8 | 2.2 | 6.4 | 8.5 | 4.8 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 13.8 | 15.0 | 12.6 | 11.3 | 13.4 | 9.7 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 6.3 | 9.1 | 3.9 | 9.8 | 14.4 | 6.0 |
| Malignant neoplasm of pancreas (C25) | 5.6 | 6.5 | 4.9 | 7.4 | 8.3 | 6.7 |
| Malignant neoplasm of larynx (C32) | * | * | * | 0.3 | 0.6 | * |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 33.2 | 41.7 | 26.3 | 25.1 | 35.1 | 17.8 |
| Malignant melanoma of skin (C43) | * | * | * | 0.3 | 0.4 | * |
| Malignant neoplasm of breast (C50) | 6.9 | * | 12.6 | 6.5 | * | 11.7 |
| Malignant neoplasm of cervix uteri (C53) | 1.8 | ... | 3.4 | 1.0 | ... | 1.9 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 1.4 | ... | 2.6 | 1.4 | ... | 2.5 |
| Malignant neoplasm of ovary (C56) | 2.8 | ... | 5.0 | 2.9 | ... | 5.2 |
| Malignant neoplasm of prostate (C61) | 6.9 | 16.6 | ... | 3.7 | 9.1 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 4.9 | 6.3 | 3.6 | 1.8 | 2.7 | 1.1 |
| Malignant neoplasm of bladder (C67) | 2.3 | 2.9 | * | 1.7 | 3.1 | 0.7 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 2.4 | 2.8 | 2.2 | 1.9 | 2.4 | 1.5 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 8.6 | 11.1 | 6.7 | 9.5 | 11.6 | 7.8 |
| Hodgkin's disease (C81) | * | * | * | 0.2 | * | * |
| Non-Hodgkin's lymphoma (C82-C85) | 3.0 | 3.3 | 2.7 | 4.0 | 5.0 | 3.2 |
| Leukemia (C91-C95) | 3.5 | 4.5 | 2.7 | 3.6 | 4.2 | 3.1 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 2.1 | 3.0 | * | 1.7 | 2.1 | 1.3 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | * | * | * | * | * | * |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 13.5 | 15.6 | 11.7 | 12.0 | 13.4 | 10.8 |

Table 16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|-------|--------|--|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 2.6 | 3.1 | 2.3 | 2.7 | 3.2 | 2.4 |
| Anemias (D50-D64) | 1.3 | * | * | 0.8 | 0.8 | 0.9 |
| Diabetes mellitus (E10-E14) | 34.5 | 36.4 | 32.6 | 16.0 | 18.2 | 14.2 |
| Nutritional deficiencies (E40-E64) | 1.1 | * | * | 0.5 | 0.5 | 0.5 |
| Malnutrition (E40-E46) | 1.1 | * | * | 0.5 | * | 0.5 |
| Other nutritional deficiencies (E50-E64) | * | * | * | * | * | * |
| Meningitis (G00,G03) | * | * | * | 0.2 | * | * |
| Parkinson's disease (G20-G21) | 4.0 | 5.6 | 2.9 | 3.3 | 4.7 | 2.3 |
| Alzheimer's disease (G30) | 11.4 | 9.2 | 12.9 | 8.9 | 7.4 | 9.9 |
| Major cardiovascular diseases (I00-I78) | 155.0 | 185.6 | 128.0 | 144.5 | 171.4 | 123.5 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 119.8 | 149.1 | 94.3 | 100.5 | 124.7 | 81.7 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 0.8 | * | * | 0.9 | 0.7 | 1.0 |
| Hypertensive heart disease (I11) | 5.8 | 6.9 | 4.6 | 5.9 | 6.7 | 5.2 |
| Hypertensive heart and renal disease (I13) | * | * | * | 0.7 | 0.7 | 0.7 |
| Ischemic heart diseases (I20-I25) | 79.5 | 105.1 | 57.8 | 70.9 | 92.7 | 54.2 |
| Acute myocardial infarction (I21-I22) | 26.8 | 36.1 | 19.0 | 22.1 | 28.0 | 17.5 |
| Other acute ischemic heart diseases (I24) | 2.6 | 3.1 | 2.0 | 0.4 | 0.4 | 0.4 |
| Other forms of chronic ischemic heart disease (I20,I25) | 50.1 | 65.9 | 36.9 | 48.4 | 64.2 | 36.3 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 14.6 | 20.3 | 9.6 | 10.2 | 14.2 | 7.0 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 35.6 | 45.5 | 27.2 | 38.2 | 50.1 | 29.3 |
| Other heart diseases (I26-I51) | 33.1 | 35.4 | 30.8 | 22.1 | 24.0 | 20.6 |
| Acute and subacute endocarditis (I33) | * | * | * | * | * | * |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | * | * | * | 0.2 | * | * |
| Heart failure (I50) | 11.7 | 11.4 | 11.8 | 5.8 | 5.9 | 5.8 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 20.7 | 23.3 | 18.2 | 15.9 | 17.7 | 14.5 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 5.3 | 6.2 | 4.6 | 6.7 | 7.1 | 6.3 |
| Cerebrovascular diseases (I60-I69) | 24.5 | 24.5 | 24.0 | 33.0 | 34.0 | 32.1 |
| Atherosclerosis (I70) | 1.7 | * | * | 0.9 | 1.1 | 0.7 |
| Other diseases of circulatory system (I71-I78) | 3.8 | 4.3 | 3.4 | 3.5 | 4.6 | 2.8 |
| Aortic aneurysm and dissection (I71) | 2.0 | 2.3 | * | 2.5 | 3.5 | 1.7 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 1.8 | * | 1.7 | 1.1 | 1.1 | 1.1 |
| Other disorders of circulatory system (I80-I99) | 0.9 | * | * | 0.3 | 0.4 | 0.3 |
| Influenza and pneumonia (J09-J18) | 17.2 | 20.0 | 15.4 | 14.3 | 17.8 | 11.9 |
| Influenza (J09-J11) | * | * | * | 0.2 | * | * |
| Pneumonia (J12-J18) | 16.5 | 19.0 | 14.9 | 14.1 | 17.5 | 11.7 |
| Other acute lower respiratory infections (J20-J22,U04) | * | * | * | * | * | * |
| Acute bronchitis and bronchiolitis (J20-J21) | * | * | * | * | * | * |
| Other and unspecified acute lower respiratory infections (J22,U04) | * | * | * | * | * | * |
| Chronic lower respiratory diseases (J40-J47) | 29.3 | 32.8 | 26.7 | 14.1 | 20.6 | 9.6 |
| Bronchitis, chronic and unspecified (J40-J42) | * | * | * | * | * | * |
| Emphysema (J43) | 2.4 | 2.9 | 2.0 | 1.1 | 1.9 | 0.5 |
| Asthma (J45-J46) | 0.8 | * | * | 1.1 | 0.9 | 1.3 |
| Other chronic lower respiratory diseases (J44,J47) | 26.0 | 29.1 | 23.7 | 11.8 | 17.8 | 7.7 |
| Pneumoconioses and chemical effects (J60-J66,J68) | * | * | * | * | * | * |
| Pneumonitis due to solids and liquids (J69) | 3.9 | 4.9 | 3.1 | 2.7 | 3.8 | 2.0 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 9.2 | 11.3 | 7.7 | 5.1 | 6.2 | 4.2 |

Table 16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|------|--------|--|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 1.1 | * | * | 0.9 | 1.0 | 0.8 |
| Diseases of appendix (K35-K38) | * | * | * | * | * | * |
| Hernia (K40-K46) | * | * | * | * | * | * |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 25.7 | 28.9 | 22.8 | 3.4 | 4.4 | 2.5 |
| Alcoholic liver disease (K70) | 17.7 | 20.4 | 15.3 | 1.2 | 2.2 | 0.4 |
| Other chronic liver disease and cirrhosis (K73-K74) | 8.0 | 8.5 | 7.5 | 2.2 | 2.1 | 2.1 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 1.2 | * | * | 0.8 | 1.1 | 0.6 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 15.6 | 16.7 | 14.9 | 8.4 | 10.0 | 7.2 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | * | * | * | * | * | * |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 1.1 | * | * | 0.9 | 1.0 | 0.8 |
| Renal failure (N17-N19) | 14.4 | 15.2 | 13.9 | 7.5 | 9.0 | 6.4 |
| Other disorders of kidney (N25,N27) | * | * | * | * | * | * |
| Infections of kidney (N10-N12,N13.6,N15.1) | * | * | * | 0.2 | * | * |
| Hyperplasia of prostate (N40) | * | * | ... | * | * | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | * | ... | * | * | ... | * |
| Pregnancy, childbirth and the puerperium (O00-O99) | * | ... | * | 0.2 | ... | 0.4 |
| Pregnancy with abortive outcome (O00-O07) | * | ... | * | * | ... | * |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | * | ... | * | 0.2 | ... | 0.4 |
| Certain conditions originating in the perinatal period (P00-P96) | 2.8 | 3.1 | 2.4 | 3.0 | 3.3 | 2.7 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 2.7 | 3.1 | 2.3 | 2.1 | 2.2 | 1.9 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 8.2 | 9.1 | 7.3 | 4.0 | 4.4 | 3.6 |
| All other diseases (Residual) | 64.7 | 67.5 | 61.0 | 34.8 | 35.0 | 34.4 |

Table 16. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by race and sex: United States, 2008

[Age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | American Indian or Alaska Native ^{1,2} | | | Asian or Pacific Islander ^{1,3} | | |
|--|---|------|--------|--|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59,Y85-Y86) | 53.5 | 74.5 | 33.5 | 15.4 | 20.7 | 10.8 |
| Transport accidents (V01-V99,Y85) | 22.4 | 29.9 | 15.0 | 6.7 | 8.9 | 4.7 |
| Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) | 21.1 | 27.6 | 14.6 | 6.3 | 8.3 | 4.4 |
| Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9) | 0.7 | * | * | 0.1 | * | * |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85) | 0.7 | * | * | 0.3 | 0.4 | * |
| Nontransport accidents (W00-X59,Y86) | 31.1 | 44.6 | 18.4 | 8.7 | 11.8 | 6.1 |
| Falls (W00-W19) | 6.4 | 9.0 | 4.3 | 4.4 | 6.1 | 3.2 |
| Accidental discharge of firearms (W32-W34) | * | * | * | * | * | * |
| Accidental drowning and submersion (W65-W74) | 1.8 | 3.0 | * | 0.9 | 1.2 | 0.5 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 1.2 | 1.4 | * | 0.3 | * | * |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 14.4 | 19.8 | 9.0 | 1.4 | 2.0 | 0.8 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31,W35-W64,W75-W99,X10-X39,X50-X59,Y86) | 7.0 | 10.9 | 3.5 | 1.8 | 2.2 | 1.4 |
| Intentional self-harm (suicide) (*U03,X60-X84,Y87.0) | 11.7 | 17.7 | 5.8 | 5.8 | 8.2 | 3.7 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 4.5 | 8.2 | * | 1.2 | 2.2 | 0.3 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60-X71,X75-X84,Y87.0) | 7.2 | 9.5 | 4.8 | 4.6 | 5.9 | 3.5 |
| Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | 7.1 | 10.7 | 3.6 | 2.3 | 3.1 | 1.4 |
| Assault (homicide) by discharge of firearms (*U01.4,X93-X95) | 2.6 | 3.9 | 1.4 | 1.3 | 2.1 | 0.6 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3,*U01.5-*U01.9,*U02,X85-X92,X96-Y09,Y87.1) | 4.5 | 6.8 | 2.2 | 0.9 | 1.0 | 0.8 |
| Legal intervention (Y35,Y89.0) | * | * | * | * | * | * |
| Events of undetermined intent (Y10-Y34,Y87.2,Y89.9) | 2.1 | 3.0 | * | 0.5 | 0.6 | 0.4 |
| Discharge of firearms, undetermined intent (Y22-Y24) | * | * | * | * | * | * |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9) | 2.0 | 2.9 | * | 0.5 | 0.6 | 0.4 |
| Operations of war and their sequelae (Y36,Y89.1) | * | * | * | * | * | * |
| Complications of medical and surgical care (Y40-Y84,Y88) | * | * | * | 0.2 | * | * |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 1.3 | * | * | 1.0 | 1.1 | 0.9 |
| Drug-induced deaths ^{5,6} | 13.7 | 16.5 | 10.9 | 1.9 | 2.4 | 1.5 |
| Alcohol-induced deaths ^{5,7} | 28.5 | 37.2 | 20.4 | 1.8 | 3.3 | 0.6 |
| Injury by firearms ^{5,8} | 8.0 | 13.3 | 2.7 | 2.6 | 4.5 | 0.8 |

¹Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported by 34 states and the District of Columbia in 2008; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

²Includes Aleuts and Eskimos.

³Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

⁴Included in "Certain other intestinal infections (A04,A07-A09)" shown above. Beginning with data year 2006, Enterocolitis due to *Clostridium difficile* (A04.7) is shown separately at the bottom of tables showing 113 selected causes and is included in the list of rankable causes, see "Technical Notes."

⁵Included in selected categories above.

⁶Includes ICD-10 codes D52.1,D59.0,D59.2,D61.1,D64.2,E06.4,E16.0,E23.1,E24.2,E27.3,E66.1,F11.0-F11.5,F11.7-F11.9,F12.0-F12.5,F12.7-F12.9,F13.0-F13.5,F13.7-F13.9,F14.0-F14.5,F14.7-F14.9,F15.0-F15.5,F15.7-F15.9,F16.0-F16.5,F16.7-F16.9,F17.0-F17.3,F17.5-F17.7,F17.9,F18.0-F18.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9,G21.1,G24.0,G25.1,G25.4,G25.6,G44.4,G62.0,G72.0,I95.2,J70.2-J70.4,K85.3,L10.5,L27.0-L27.1,M10.2,M32.0,M80.4,M81.4,M83.5,M87.1,R50.2,R78.1-R78.5,X40-X44,X60-X64,X85, and Y10-Y14. Trend data for Drug-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

⁷Includes ICD-10 codes E24.4,F10,G31.2,G62.1,G72.1,I42.6,K29.2,K70,K85.2,K86.0,R78.0,X45,X65, and Y15. Trend data for Alcohol-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

⁸Includes ICD-10 codes *U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24, and Y35.0. Trend data for Injury by firearms, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

0.0 Quantity more than zero but less than 0.05.

* Figure does not meet standards of reliability or precision; see "Technical Notes."

... Category not applicable.

NOTE: Confirmation of deaths from selected causes of death, considered to be of public health concern, were not provided by the following states-- Massachusetts, North Carolina, and West Virginia; see "Technical Notes."

Table 17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | |
|--|--------------------------|-------|--------|------------|-------|--------|---------------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 758.3 | 900.6 | 643.4 | 532.2 | 630.7 | 445.7 | 775.8 | 922.2 | 658.5 |
| Salmonella infections (A01-A02) | 0.0 | 0.0 | 0.0 | - | - | - | 0.0 | 0.0 | 0.0 |
| Shigellosis and amebiasis (A03,A06) | - | - | - | - | - | - | - | - | - |
| Certain other intestinal infections (A04,A07-A09) | 2.4 | 2.4 | 2.4 | 1.7 | 1.6 | 1.8 | 2.4 | 2.4 | 2.5 |
| Tuberculosis (A16-A19) | 0.2 | 0.3 | 0.1 | 0.3 | 0.6 | 0.2 | 0.1 | 0.2 | 0.1 |
| Respiratory tuberculosis (A16) | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.1 | 0.1 | 0.2 | 0.1 |
| Other tuberculosis (A17-A19) | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | - | 0.0 | 0.0 | 0.0 |
| Whooping cough (A37) | 0.0 | - | - | - | - | - | - | - | - |
| Scarlet fever and erysipelas (A38,A46) | - | - | - | - | - | - | - | - | - |
| Meningococcal infection (A39) | 0.0 | 0.0 | 0.0 | - | - | - | 0.0 | 0.0 | 0.0 |
| Septicemia (A40-A41) | 11.1 | 12.1 | 10.3 | 8.2 | 8.9 | 7.6 | 11.3 | 12.4 | 10.6 |
| Syphilis (A50-A53) | 0.0 | 0.0 | - | - | - | - | 0.0 | 0.0 | - |
| Acute poliomyelitis (A80) | - | - | - | - | - | - | - | - | - |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | - | - | - | - | - | - | - | - | - |
| Measles (B05) | - | - | - | - | - | - | - | - | - |
| Viral hepatitis (B15-B19) | 2.3 | 3.1 | 1.5 | 3.8 | 4.8 | 2.7 | 2.1 | 2.9 | 1.4 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 3.3 | 4.8 | 1.9 | 3.6 | 5.4 | 1.7 | 3.3 | 4.7 | 1.9 |
| Malaria (B50-B54) | - | - | - | - | - | - | - | - | - |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 1.8 | 2.2 | 1.6 | 1.5 | 1.7 | 1.3 | 1.9 | 2.2 | 1.6 |
| Malignant neoplasms (C00-C97) | 175.3 | 213.6 | 148.5 | 114.6 | 139.6 | 96.6 | 180.1 | 219.3 | 152.5 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 2.4 | 3.7 | 1.4 | 1.4 | 2.3 | 0.7 | 2.5 | 3.9 | 1.4 |
| Malignant neoplasm of esophagus (C15) | 4.2 | 7.5 | 1.6 | 2.3 | 4.1 | 0.8 | 4.4 | 7.8 | 1.6 |
| Malignant neoplasm of stomach (C16) | 3.5 | 4.8 | 2.5 | 5.3 | 6.9 | 4.1 | 3.3 | 4.6 | 2.3 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 16.4 | 19.5 | 14.0 | 11.9 | 15.0 | 9.5 | 16.8 | 19.9 | 14.3 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 5.6 | 8.3 | 3.2 | 8.1 | 11.5 | 5.1 | 5.4 | 8.1 | 3.1 |
| Malignant neoplasm of pancreas (C25) | 10.9 | 12.5 | 9.6 | 8.1 | 9.3 | 7.1 | 11.1 | 12.7 | 9.8 |
| Malignant neoplasm of larynx (C32) | 1.1 | 2.1 | 0.5 | 0.8 | 1.5 | 0.2 | 1.2 | 2.1 | 0.5 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 49.5 | 63.6 | 39.0 | 20.5 | 29.7 | 13.7 | 51.8 | 66.3 | 41.0 |
| Malignant melanoma of skin (C43) | 2.7 | 4.0 | 1.7 | 0.7 | 0.9 | 0.5 | 2.8 | 4.3 | 1.8 |
| Malignant neoplasm of breast (C50) | 12.6 | 0.3 | 22.5 | 7.8 | - | 14.3 | 13.0 | 0.3 | 23.2 |
| Malignant neoplasm of cervix uteri (C53) | 1.2 | ... | 2.4 | 1.5 | ... | 2.8 | 1.2 | ... | 2.3 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 2.4 | ... | 4.2 | 1.8 | ... | 3.3 | 2.4 | ... | 4.2 |
| Malignant neoplasm of ovary (C56) | 4.4 | ... | 8.0 | 3.0 | ... | 5.5 | 4.6 | ... | 8.1 |
| Malignant neoplasm of prostate (C61) | 8.8 | 22.3 | ... | 6.7 | 16.5 | ... | 9.0 | 22.7 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 4.0 | 5.8 | 2.6 | 3.3 | 4.6 | 2.3 | 4.0 | 5.9 | 2.6 |
| Malignant neoplasm of bladder (C67) | 4.3 | 7.4 | 2.2 | 2.0 | 3.2 | 1.2 | 4.5 | 7.7 | 2.3 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 4.3 | 5.2 | 3.4 | 2.8 | 3.2 | 2.4 | 4.4 | 5.5 | 3.5 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 17.2 | 22.4 | 13.3 | 12.4 | 15.2 | 10.2 | 17.5 | 22.9 | 13.5 |
| Hodgkin's disease (C81) | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.4 | 0.3 |
| Non-Hodgkin's lymphoma (C82-C85) | 6.3 | 8.1 | 5.0 | 4.8 | 5.9 | 4.0 | 6.5 | 8.3 | 5.1 |
| Leukemia (C91-C95) | 7.0 | 9.4 | 5.3 | 4.7 | 5.8 | 3.8 | 7.1 | 9.6 | 5.3 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 3.4 | 4.4 | 2.7 | 2.5 | 3.0 | 2.0 | 3.5 | 4.5 | 2.7 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 0.0 | 0.0 | 0.0 | - | - | - | 0.0 | 0.0 | 0.0 |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 19.7 | 23.9 | 16.5 | 14.0 | 15.5 | 12.9 | 20.1 | 24.5 | 16.8 |

Table 17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | |
|--|--------------------------|-------|--------|------------|-------|--------|---------------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 4.5 | 5.7 | 3.7 | 2.8 | 3.1 | 2.5 | 4.6 | 5.9 | 3.7 |
| Anemias (D50-D64) | 1.5 | 1.6 | 1.5 | 1.0 | 1.0 | 0.9 | 1.6 | 1.6 | 1.6 |
| Diabetes mellitus (E10-E14) | 21.8 | 25.6 | 18.8 | 27.7 | 31.3 | 24.7 | 21.3 | 25.2 | 18.3 |
| Nutritional deficiencies (E40-E64) | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.9 | 0.9 | 0.9 |
| Malnutrition (E40-E46) | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.8 | 0.8 | 0.8 |
| Other nutritional deficiencies (E50-E64) | 0.1 | 0.1 | 0.1 | - | - | - | 0.1 | 0.1 | 0.1 |
| Meningitis (G00,G03) | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| Parkinson's disease (G20-G21) | 6.4 | 9.7 | 4.3 | 4.2 | 5.8 | 3.1 | 6.5 | 10.0 | 4.3 |
| Alzheimer's disease (G30) | 24.4 | 20.1 | 26.7 | 15.0 | 12.3 | 16.5 | 25.0 | 20.6 | 27.3 |
| Major cardiovascular diseases (I00-I78) | 243.5 | 291.3 | 204.9 | 169.0 | 197.6 | 144.4 | 248.7 | 298.2 | 209.0 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 186.5 | 232.3 | 150.4 | 126.3 | 151.9 | 104.6 | 190.9 | 238.5 | 153.5 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 1.0 | 0.8 | 1.1 | 0.6 | 0.4 | 0.8 | 1.0 | 0.8 | 1.1 |
| Hypertensive heart disease (I11) | 9.8 | 10.7 | 8.5 | 7.1 | 8.6 | 5.8 | 9.9 | 10.9 | 8.8 |
| Hypertensive heart and renal disease (I13) | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.9 | 1.0 | 0.8 |
| Ischemic heart diseases (I20-I25) | 122.7 | 161.2 | 93.0 | 90.0 | 111.5 | 72.0 | 125.0 | 164.9 | 94.4 |
| Acute myocardial infarction (I21-I22) | 40.7 | 53.2 | 30.9 | 29.1 | 35.8 | 23.5 | 41.7 | 54.6 | 31.5 |
| Other acute ischemic heart diseases (I24) | 1.3 | 1.6 | 1.0 | 0.5 | 0.6 | 0.4 | 1.4 | 1.7 | 1.1 |
| Other forms of chronic ischemic heart disease (I20,I25) | 80.7 | 106.4 | 61.1 | 60.4 | 75.1 | 48.1 | 82.0 | 108.7 | 61.9 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 17.7 | 23.7 | 12.6 | 13.3 | 17.9 | 9.2 | 18.0 | 24.1 | 12.8 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 63.0 | 82.7 | 48.4 | 47.1 | 57.2 | 39.0 | 64.0 | 84.6 | 49.0 |
| Other heart diseases (I26-I51) | 52.3 | 58.7 | 46.9 | 27.9 | 30.7 | 25.3 | 54.1 | 60.9 | 48.4 |
| Acute and subacute endocarditis (I33) | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.1 | 0.4 | 0.4 | 0.3 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 |
| Heart failure (I50) | 16.9 | 18.1 | 15.8 | 9.2 | 9.5 | 8.9 | 17.4 | 18.7 | 16.3 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 34.7 | 39.8 | 30.6 | 18.2 | 20.6 | 16.0 | 36.0 | 41.4 | 31.6 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 7.7 | 7.8 | 7.5 | 6.7 | 6.7 | 6.6 | 7.8 | 7.8 | 7.6 |
| Cerebrovascular diseases (I60-I69) | 40.7 | 40.9 | 39.9 | 30.9 | 33.1 | 28.9 | 41.3 | 41.4 | 40.6 |
| Atherosclerosis (I70) | 2.3 | 2.4 | 2.2 | 1.3 | 1.3 | 1.4 | 2.4 | 2.5 | 2.3 |
| Other diseases of circulatory system (I71-I78) | 6.1 | 7.8 | 4.8 | 3.6 | 4.6 | 2.9 | 6.3 | 8.1 | 5.0 |
| Aortic aneurysm and dissection (I71) | 3.4 | 4.9 | 2.4 | 1.8 | 2.7 | 1.1 | 3.6 | 5.0 | 2.5 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 2.7 | 3.0 | 2.5 | 1.8 | 1.9 | 1.8 | 2.7 | 3.1 | 2.5 |
| Other disorders of circulatory system (I80-I99) | 1.2 | 1.3 | 1.2 | 0.8 | 0.9 | 0.6 | 1.3 | 1.3 | 1.2 |
| Influenza and pneumonia (J09-J18) | 16.9 | 19.9 | 15.0 | 14.0 | 16.0 | 12.4 | 17.1 | 20.1 | 15.1 |
| Influenza (J09-J11) | 0.5 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.6 | 0.6 | 0.5 |
| Pneumonia (J12-J18) | 16.4 | 19.3 | 14.4 | 13.8 | 15.8 | 12.2 | 16.6 | 19.6 | 14.6 |
| Other acute lower respiratory infections (J20-J22,U04) | 0.1 | 0.1 | 0.1 | 0.0 | - | - | 0.1 | 0.1 | 0.1 |
| Acute bronchitis and bronchiolitis (J20-J21) | 0.1 | 0.1 | 0.1 | 0.0 | - | - | 0.1 | 0.1 | 0.1 |
| Other and unspecified acute lower respiratory infections (J22,U04) | 0.0 | 0.0 | 0.0 | - | - | - | 0.0 | 0.0 | 0.0 |
| Chronic lower respiratory diseases (J40-J47) | 44.0 | 51.4 | 39.1 | 18.3 | 22.6 | 15.3 | 45.8 | 53.5 | 40.9 |
| Bronchitis, chronic and unspecified (J40-J42) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | - | 0.2 | 0.2 | 0.2 |
| Emphysema (J43) | 3.9 | 4.9 | 3.2 | 1.3 | 2.0 | 0.9 | 4.1 | 5.1 | 3.4 |
| Asthma (J45-J46) | 1.0 | 0.8 | 1.2 | 0.9 | 0.8 | 1.0 | 1.1 | 0.8 | 1.3 |
| Other chronic lower respiratory diseases (J44,J47) | 38.8 | 45.5 | 34.5 | 15.8 | 19.6 | 13.2 | 40.4 | 47.4 | 36.0 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 0.3 | 0.7 | 0.0 | 0.1 | 0.2 | - | 0.3 | 0.7 | 0.0 |
| Pneumonitis due to solids and liquids (J69) | 5.0 | 6.8 | 3.9 | 2.9 | 3.6 | 2.4 | 5.1 | 7.1 | 4.0 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 9.3 | 11.3 | 7.9 | 7.6 | 8.6 | 6.8 | 9.4 | 11.4 | 8.0 |

Table 17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision* (ICD-10), Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | |
|--|--------------------------|------|--------|------------|------|--------|---------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 0.9 | 1.1 | 0.8 | 0.6 | 0.9 | 0.4 | 1.0 | 1.2 | 0.8 |
| Diseases of appendix (K35-K38) | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | - | 0.1 | 0.1 | 0.1 |
| Hernia (K40-K46) | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 9.2 | 12.7 | 6.0 | 13.7 | 19.1 | 8.6 | 8.7 | 12.1 | 5.8 |
| Alcoholic liver disease (K70) | 4.5 | 6.9 | 2.4 | 6.5 | 11.0 | 2.3 | 4.3 | 6.4 | 2.5 |
| Other chronic liver disease and cirrhosis (K73-K74) | 4.6 | 5.9 | 3.5 | 7.2 | 8.1 | 6.3 | 4.4 | 5.6 | 3.3 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 1.0 | 1.2 | 0.9 | 1.2 | 1.2 | 1.2 | 1.0 | 1.2 | 0.9 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 14.8 | 18.0 | 12.6 | 12.5 | 14.6 | 11.0 | 14.9 | 18.2 | 12.7 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 0.0 | 0.0 | 0.0 | - | - | - | 0.0 | 0.0 | 0.0 |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 1.2 | 1.5 | 1.0 | 1.0 | 1.3 | 0.8 | 1.3 | 1.5 | 1.0 |
| Renal failure (N17-N19) | 13.5 | 16.4 | 11.5 | 11.4 | 13.2 | 10.1 | 13.6 | 16.6 | 11.6 |
| Other disorders of kidney (N25,N27) | 0.0 | - | 0.0 | - | - | - | 0.0 | - | - |
| Infections of kidney (N10-N12,N13.6,N15.1) | 0.2 | 0.1 | 0.2 | 0.2 | - | 0.3 | 0.2 | 0.1 | 0.2 |
| Hyperplasia of prostate (N40) | 0.1 | 0.4 | ... | 0.1 | 0.3 | ... | 0.1 | 0.4 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 0.0 | ... | 0.1 | - | ... | - | 0.0 | ... | 0.1 |
| Pregnancy, childbirth and the puerperium (O00-O99) | 0.3 | ... | 0.6 | 0.3 | ... | 0.6 | 0.3 | ... | 0.5 |
| Pregnancy with abortive outcome (O00-O07) | 0.0 | ... | 0.0 | - | ... | - | 0.0 | ... | 0.0 |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 0.3 | ... | 0.5 | 0.3 | ... | 0.6 | 0.2 | ... | 0.5 |
| Certain conditions originating in the perinatal period (P00-P96) | 4.5 | 5.0 | 3.9 | 3.6 | 4.0 | 3.1 | 4.7 | 5.2 | 4.2 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 3.3 | 3.5 | 3.1 | 3.0 | 3.1 | 2.8 | 3.3 | 3.5 | 3.1 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 11.7 | 12.1 | 10.8 | 6.4 | 6.9 | 5.6 | 12.1 | 12.6 | 11.3 |
| All other diseases (Residual) | 76.3 | 75.8 | 75.1 | 50.4 | 50.8 | 48.7 | 78.2 | 77.7 | 76.9 |

Table 17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, drug-induced causes, alcohol-induced causes, and injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | All origins ¹ | | | Hispanic | | | Non-Hispanic ² | | |
|--|--------------------------|------|--------|------------|------|--------|---------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59, Y85-Y86) | 38.8 | 53.6 | 25.1 | 27.9 | 40.4 | 14.9 | 40.2 | 55.2 | 26.4 |
| Transport accidents (V01-V99, Y85) | 13.8 | 20.4 | 7.6 | 12.1 | 18.0 | 5.9 | 14.1 | 20.6 | 7.9 |
| Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) | 12.9 | 18.8 | 7.3 | 11.4 | 16.7 | 5.7 | 13.1 | 19.0 | 7.5 |
| Other land transport accidents (V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9) | 0.4 | 0.6 | 0.1 | 0.4 | 0.7 | 0.1 | 0.3 | 0.6 | 0.2 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99, Y85) | 0.6 | 0.9 | 0.2 | 0.3 | 0.5 | - | 0.6 | 1.0 | 0.2 |
| Nontransport accidents (W00-X59, Y86) | 25.0 | 33.2 | 17.5 | 15.8 | 22.4 | 9.0 | 26.1 | 34.6 | 18.5 |
| Falls (W00-W19) | 7.3 | 9.4 | 5.7 | 5.0 | 6.8 | 3.4 | 7.4 | 9.5 | 5.9 |
| Accidental discharge of firearms (W32-W34) | 0.2 | 0.4 | 0.1 | 0.1 | 0.1 | - | 0.2 | 0.4 | 0.1 |
| Accidental drowning and submersion (W65-W74) | 1.2 | 1.8 | 0.5 | 1.0 | 1.5 | 0.4 | 1.2 | 1.8 | 0.5 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 0.9 | 1.2 | 0.7 | 0.5 | 0.6 | 0.4 | 1.0 | 1.2 | 0.8 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 10.2 | 13.5 | 6.8 | 6.0 | 8.9 | 2.8 | 10.9 | 14.4 | 7.4 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86) | 5.3 | 7.0 | 3.7 | 3.1 | 4.4 | 1.9 | 5.5 | 7.3 | 3.9 |
| Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | 11.6 | 18.9 | 4.8 | 5.6 | 9.3 | 1.9 | 12.5 | 20.5 | 5.2 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 5.8 | 10.7 | 1.4 | 2.2 | 4.0 | 0.3 | 6.3 | 11.6 | 1.6 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03, X60-X71, X75-X84, Y87.0) | 5.8 | 8.3 | 3.4 | 3.5 | 5.4 | 1.5 | 6.2 | 8.8 | 3.6 |
| Assault (homicide) (*U01-U02, X85-Y09, Y87.1) | 5.9 | 9.3 | 2.4 | 6.6 | 10.5 | 2.4 | 5.7 | 9.0 | 2.4 |
| Assault (homicide) by discharge of firearms (*U01.4, X93-X95) | 4.0 | 6.8 | 1.2 | 4.4 | 7.4 | 1.1 | 4.0 | 6.7 | 1.2 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-U01.3, *U01.5-U01.9, *U02, X85-X92, X96-Y09, Y87.1) | 1.8 | 2.5 | 1.2 | 2.2 | 3.2 | 1.3 | 1.8 | 2.4 | 1.2 |
| Legal intervention (Y35, Y89.0) | 0.1 | 0.2 | - | 0.2 | 0.3 | - | 0.1 | 0.2 | - |
| Events of undetermined intent (Y10-Y34, Y87.2, Y89.9) | 1.6 | 2.1 | 1.2 | 0.7 | 1.1 | 0.4 | 1.8 | 2.2 | 1.3 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 0.1 | 0.1 | 0.0 | 0.0 | - | - | 0.1 | 0.1 | 0.0 |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21, Y25-Y34, Y87.2, Y89.9) | 1.5 | 1.9 | 1.2 | 0.7 | 1.0 | 0.4 | 1.7 | 2.1 | 1.3 |
| Operations of war and their sequelae (Y36, Y89.1) | 0.0 | 0.0 | - | - | - | - | 0.0 | 0.0 | - |
| Complications of medical and surgical care (Y40-Y84, Y88) | 0.8 | 0.9 | 0.8 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 0.8 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 2.3 | 2.3 | 2.3 | 1.6 | 1.6 | 1.7 | 2.3 | 2.3 | 2.3 |
| Drug-induced deaths ^{5,6} | 12.6 | 15.7 | 9.4 | 6.5 | 9.1 | 3.7 | 13.6 | 16.9 | 10.3 |
| Alcohol-induced deaths ^{5,7} | 7.4 | 11.6 | 3.6 | 8.8 | 15.1 | 2.9 | 7.2 | 11.1 | 3.7 |
| Injury by firearms ^{5,8} | 10.3 | 18.2 | 2.7 | 6.8 | 11.8 | 1.5 | 10.7 | 19.0 | 2.9 |

Table 17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|--|---------------------------------|-------|--------|---------------------------------|---------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| All causes | 766.2 | 908.5 | 650.8 | 955.2 | 1,176.6 | 794.8 |
| Salmonella infections (A01-A02) | 0.0 | - | - | - | - | - |
| Shigellosis and amebiasis (A03,A06) | - | - | - | - | - | - |
| Certain other intestinal infections (A04,A07-A09) | 2.6 | 2.5 | 2.6 | 1.7 | 1.7 | 1.7 |
| Tuberculosis (A16-A19) | 0.1 | 0.1 | 0.1 | 0.4 | 0.7 | 0.3 |
| Respiratory tuberculosis (A16) | 0.1 | 0.1 | 0.0 | 0.3 | 0.6 | 0.2 |
| Other tuberculosis (A17-A19) | 0.0 | 0.0 | 0.0 | 0.1 | - | - |
| Whooping cough (A37) | - | - | - | - | - | - |
| Scarlet fever and erysipelas (A38,A46) | - | - | - | - | - | - |
| Meningococcal infection (A39) | 0.0 | 0.0 | 0.0 | 0.1 | - | - |
| Septicemia (A40-A41) | 10.3 | 11.3 | 9.6 | 22.1 | 24.9 | 20.2 |
| Syphilis (A50-A53) | - | - | - | - | - | - |
| Acute poliomyelitis (A80) | - | - | - | - | - | - |
| Arthropod-borne viral encephalitis (A83-A84,A85.2) | - | - | - | - | - | - |
| Measles (B05) | - | - | - | - | - | - |
| Viral hepatitis (B15-B19) | 2.0 | 2.7 | 1.3 | 3.1 | 4.5 | 2.0 |
| Human immunodeficiency virus (HIV) disease (B20-B24) | 1.4 | 2.3 | 0.5 | 15.7 | 22.4 | 10.1 |
| Malaria (B50-B54) | - | - | - | - | - | - |
| Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20-A36,A42-A44,A48-A49,A54-A79,A81-A82,A85.0-A85.1,A85.8,A86-B04,B06-B09,B25-B49,B55-B99) | 1.8 | 2.1 | 1.6 | 2.3 | 3.1 | 1.8 |
| Malignant neoplasms (C00-C97) | 179.4 | 217.3 | 152.6 | 213.5 | 278.3 | 173.6 |
| Malignant neoplasms of lip, oral cavity and pharynx (C00-C14) | 2.5 | 3.7 | 1.4 | 3.1 | 5.3 | 1.5 |
| Malignant neoplasm of esophagus (C15) | 4.5 | 8.1 | 1.6 | 4.6 | 7.9 | 2.3 |
| Malignant neoplasm of stomach (C16) | 2.8 | 3.9 | 1.9 | 7.0 | 10.1 | 4.9 |
| Malignant neoplasms of colon, rectum and anus (C18-C21) | 16.3 | 19.2 | 13.9 | 23.3 | 29.2 | 19.2 |
| Malignant neoplasms of liver and intrahepatic bile ducts (C22) | 4.8 | 7.2 | 2.8 | 7.6 | 12.6 | 4.0 |
| Malignant neoplasm of pancreas (C25) | 11.0 | 12.6 | 9.6 | 13.9 | 15.4 | 12.7 |
| Malignant neoplasm of larynx (C32) | 1.1 | 2.0 | 0.5 | 2.1 | 4.0 | 0.8 |
| Malignant neoplasms of trachea, bronchus and lung (C33-C34) | 52.8 | 66.3 | 42.6 | 54.6 | 80.3 | 37.7 |
| Malignant melanoma of skin (C43) | 3.3 | 4.9 | 2.1 | 0.4 | 0.4 | 0.4 |
| Malignant neoplasm of breast (C50) | 12.5 | 0.3 | 22.5 | 18.9 | 0.6 | 31.9 |
| Malignant neoplasm of cervix uteri (C53) | 1.1 | ... | 2.1 | 2.5 | ... | 4.3 |
| Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) | 2.2 | ... | 4.0 | 4.3 | ... | 7.2 |
| Malignant neoplasm of ovary (C56) | 4.7 | ... | 8.5 | 4.0 | ... | 6.8 |
| Malignant neoplasm of prostate (C61) | 8.3 | 21.0 | ... | 17.1 | 47.0 | ... |
| Malignant neoplasms of kidney and renal pelvis (C64-C65) | 4.1 | 6.0 | 2.6 | 4.0 | 5.9 | 2.6 |
| Malignant neoplasm of bladder (C67) | 4.7 | 8.2 | 2.3 | 3.4 | 4.8 | 2.5 |
| Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) | 4.8 | 5.9 | 3.9 | 2.6 | 3.3 | 2.1 |
| Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) | 17.8 | 23.3 | 13.6 | 17.6 | 22.8 | 14.0 |
| Hodgkin's disease (C81) | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 |
| Non-Hodgkin's lymphoma (C82-C85) | 6.8 | 8.6 | 5.3 | 4.4 | 5.6 | 3.5 |
| Leukemia (C91-C95) | 7.4 | 9.9 | 5.5 | 6.3 | 8.6 | 4.7 |
| Multiple myeloma and immunoproliferative neoplasms (C88,C90) | 3.2 | 4.3 | 2.5 | 6.6 | 8.2 | 5.5 |
| Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) | 0.0 | 0.0 | - | - | - | - |
| All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69,C73-C80,C97) | 20.1 | 24.5 | 16.8 | 22.6 | 28.6 | 18.7 |

Table 17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|--|---------------------------------|-------|--------|---------------------------------|-------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 4.7 | 6.1 | 3.8 | 4.0 | 4.8 | 3.4 |
| Anemias (D50-D64) | 1.4 | 1.4 | 1.3 | 3.1 | 3.2 | 3.1 |
| Diabetes mellitus (E10-E14) | 19.1 | 23.2 | 16.0 | 41.3 | 45.6 | 38.0 |
| Nutritional deficiencies (E40-E64) | 0.9 | 0.8 | 0.9 | 1.3 | 1.7 | 1.2 |
| Malnutrition (E40-E46) | 0.8 | 0.8 | 0.8 | 1.3 | 1.6 | 1.1 |
| Other nutritional deficiencies (E50-E64) | 0.1 | 0.1 | 0.1 | - | - | - |
| Meningitis (G00,G03) | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 | 0.3 |
| Parkinson's disease (G20-G21) | 7.0 | 10.7 | 4.6 | 3.0 | 4.4 | 2.1 |
| Alzheimer's disease (G30) | 26.1 | 21.5 | 28.6 | 20.0 | 16.5 | 21.5 |
| Major cardiovascular diseases (I00-I78) | 243.0 | 292.4 | 202.8 | 329.3 | 396.0 | 280.3 |
| Diseases of heart (I00-I09,I11,I13,I20-I51) | 188.0 | 235.9 | 150.0 | 243.2 | 301.8 | 201.1 |
| Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09) | 1.0 | 0.8 | 1.1 | 0.8 | 0.8 | 0.9 |
| Hypertensive heart disease (I11) | 8.4 | 9.1 | 7.4 | 24.3 | 29.2 | 20.4 |
| Hypertensive heart and renal disease (I13) | 0.7 | 0.7 | 0.6 | 2.8 | 3.1 | 2.6 |
| Ischemic heart diseases (I20-I25) | 124.8 | 165.5 | 93.1 | 146.2 | 187.2 | 117.4 |
| Acute myocardial infarction (I21-I22) | 41.8 | 55.2 | 31.1 | 48.0 | 59.6 | 39.7 |
| Other acute ischemic heart diseases (I24) | 1.3 | 1.6 | 1.0 | 1.9 | 2.5 | 1.5 |
| Other forms of chronic ischemic heart disease (I20,I25) | 81.7 | 108.7 | 61.0 | 96.3 | 125.1 | 76.3 |
| Atherosclerotic cardiovascular disease, so described (I25.0) | 17.1 | 22.9 | 12.1 | 28.8 | 40.4 | 20.6 |
| All other forms of chronic ischemic heart disease (I20,I25.1-I25.9) | 64.6 | 85.8 | 48.9 | 67.5 | 84.6 | 55.7 |
| Other heart diseases (I26-I51) | 53.2 | 59.7 | 47.7 | 69.0 | 81.6 | 59.8 |
| Acute and subacute endocarditis (I33) | 0.4 | 0.4 | 0.3 | 0.6 | 0.7 | 0.5 |
| Diseases of pericardium and acute myocarditis (I30-I31,I40) | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.4 |
| Heart failure (I50) | 17.4 | 18.7 | 16.3 | 19.8 | 22.7 | 17.7 |
| All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) | 35.1 | 40.3 | 30.9 | 48.2 | 57.8 | 41.1 |
| Essential hypertension and hypertensive renal disease (I10,I12,I15) | 6.7 | 6.7 | 6.6 | 17.6 | 19.1 | 16.3 |
| Cerebrovascular diseases (I60-I69) | 39.5 | 39.2 | 39.0 | 58.6 | 63.4 | 54.5 |
| Atherosclerosis (I70) | 2.4 | 2.5 | 2.4 | 2.4 | 2.8 | 2.2 |
| Other diseases of circulatory system (I71-I78) | 6.3 | 8.1 | 4.9 | 7.4 | 8.8 | 6.3 |
| Aortic aneurysm and dissection (I71) | 3.7 | 5.2 | 2.5 | 3.1 | 4.0 | 2.4 |
| Other diseases of arteries, arterioles and capillaries (I72-I78) | 2.6 | 3.0 | 2.4 | 4.3 | 4.8 | 4.0 |
| Other disorders of circulatory system (I80-I99) | 1.2 | 1.2 | 1.2 | 2.4 | 2.7 | 2.2 |
| Influenza and pneumonia (J09-J18) | 16.9 | 19.7 | 15.0 | 19.3 | 23.7 | 16.4 |
| Influenza (J09-J11) | 0.6 | 0.6 | 0.6 | 0.3 | 0.3 | 0.2 |
| Pneumonia (J12-J18) | 16.3 | 19.2 | 14.4 | 19.0 | 23.4 | 16.2 |
| Other acute lower respiratory infections (J20-J22,U04) | 0.1 | 0.1 | 0.1 | 0.1 | - | - |
| Acute bronchitis and bronchiolitis (J20-J21) | 0.1 | 0.1 | 0.1 | 0.1 | - | - |
| Other and unspecified acute lower respiratory infections (J22,U04) | 0.0 | - | 0.0 | - | - | - |
| Chronic lower respiratory diseases (J40-J47) | 48.7 | 55.8 | 44.1 | 31.1 | 42.3 | 24.4 |
| Bronchitis, chronic and unspecified (J40-J42) | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 |
| Emphysema (J43) | 4.4 | 5.3 | 3.7 | 2.4 | 3.6 | 1.6 |
| Asthma (J45-J46) | 0.8 | 0.6 | 1.0 | 2.6 | 2.2 | 2.8 |
| Other chronic lower respiratory diseases (J44,J47) | 43.2 | 49.6 | 39.1 | 25.9 | 36.3 | 19.9 |
| Pneumoconioses and chemical effects (J60-J66,J68) | 0.3 | 0.8 | 0.0 | 0.1 | 0.4 | - |
| Pneumonitis due to solids and liquids (J69) | 5.2 | 7.2 | 4.0 | 5.4 | 7.6 | 4.2 |
| Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) | 9.5 | 11.6 | 8.0 | 9.2 | 10.7 | 8.3 |

Table 17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|--|---------------------------------|------|--------|---------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Peptic ulcer (K25-K28) | 0.9 | 1.1 | 0.8 | 1.0 | 1.4 | 0.7 |
| Diseases of appendix (K35-K38) | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | - |
| Hernia (K40-K46) | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.4 |
| Chronic liver disease and cirrhosis (K70,K73-K74) | 9.1 | 12.4 | 6.0 | 7.1 | 10.9 | 4.2 |
| Alcoholic liver disease (K70) | 4.5 | 6.7 | 2.5 | 3.3 | 5.1 | 1.9 |
| Other chronic liver disease and cirrhosis (K73-K74) | 4.5 | 5.8 | 3.5 | 3.8 | 5.7 | 2.3 |
| Cholelithiasis and other disorders of gallbladder (K80-K82) | 1.0 | 1.2 | 0.9 | 1.1 | 1.3 | 0.9 |
| Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) | 13.3 | 16.8 | 11.1 | 30.1 | 34.7 | 27.1 |
| Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) | 0.0 | 0.0 | 0.0 | 0.1 | - | - |
| Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03,N05-N07,N26) | 1.1 | 1.4 | 0.9 | 2.4 | 2.9 | 2.2 |
| Renal failure (N17-N19) | 12.2 | 15.2 | 10.1 | 27.6 | 31.8 | 24.8 |
| Other disorders of kidney (N25,N27) | 0.0 | - | - | - | - | - |
| Infections of kidney (N10-N12,N13.6,N15.1) | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| Hyperplasia of prostate (N40) | 0.2 | 0.4 | ... | 0.1 | 0.4 | ... |
| Inflammatory diseases of female pelvic organs (N70-N76) | 0.0 | ... | 0.1 | - | ... | - |
| Pregnancy, childbirth and the puerperium (O00-O99) | 0.2 | ... | 0.4 | 0.6 | ... | 1.2 |
| Pregnancy with abortive outcome (O00-O07) | - | ... | - | - | ... | - |
| Other complications of pregnancy, childbirth and the puerperium (O10-O99) | 0.2 | ... | 0.4 | 0.6 | ... | 1.2 |
| Certain conditions originating in the perinatal period (P00-P96) | 3.4 | 3.8 | 3.0 | 9.9 | 10.9 | 8.9 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 3.2 | 3.4 | 3.1 | 3.8 | 4.0 | 3.6 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 11.9 | 12.2 | 11.2 | 15.9 | 18.3 | 13.7 |
| All other diseases (Residual) | 78.0 | 77.3 | 76.7 | 92.4 | 96.5 | 88.4 |

Table 17. Age-adjusted death rates for 113 selected causes, Enterocolitis due to *Clostridium difficile*, Drug-induced causes, Alcohol-induced causes, and Injury by firearms, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes." The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes"]

| Cause of death (based on ICD-10, 2004) | Non-Hispanic white ³ | | | Non-Hispanic black ³ | | |
|--|---------------------------------|------|--------|---------------------------------|------|--------|
| | Both sexes | Male | Female | Both sexes | Male | Female |
| Accidents (unintentional injuries) (V01-X59, Y85-Y86) | 42.6 | 57.9 | 28.2 | 34.2 | 50.7 | 20.4 |
| Transport accidents (V01-V99, Y85) | 14.6 | 21.2 | 8.2 | 13.6 | 21.2 | 7.0 |
| Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2) | 13.6 | 19.6 | 7.8 | 12.7 | 19.7 | 6.7 |
| Other land transport accidents (V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9) | 0.3 | 0.6 | 0.1 | 0.5 | 0.8 | 0.2 |
| Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99, Y85) | 0.6 | 1.1 | 0.2 | 0.4 | 0.8 | 0.2 |
| Nontransport accidents (W00-X59, Y86) | 28.0 | 36.7 | 20.0 | 20.6 | 29.5 | 13.4 |
| Falls (W00-W19) | 7.9 | 10.1 | 6.3 | 3.5 | 4.9 | 2.5 |
| Accidental discharge of firearms (W32-W34) | 0.2 | 0.4 | 0.1 | 0.2 | 0.4 | - |
| Accidental drowning and submersion (W65-W74) | 1.1 | 1.7 | 0.5 | 1.4 | 2.2 | 0.6 |
| Accidental exposure to smoke, fire and flames (X00-X09) | 0.9 | 1.1 | 0.7 | 1.8 | 2.5 | 1.3 |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 12.2 | 16.0 | 8.4 | 8.0 | 11.5 | 5.0 |
| Other and unspecified nontransport accidents and their sequelae (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86) | 5.6 | 7.4 | 3.9 | 5.7 | 8.0 | 4.0 |
| Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | 14.1 | 22.9 | 6.0 | 5.4 | 9.8 | 1.7 |
| Intentional self-harm (suicide) by discharge of firearms (X72-X74) | 7.3 | 13.1 | 1.9 | 2.8 | 5.4 | 0.5 |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03, X60-X71, X75-X84, Y87.0) | 6.9 | 9.7 | 4.0 | 2.7 | 4.3 | 1.2 |
| Assault (homicide) (*U01-*U02, X85-Y09, Y87.1) | 2.8 | 3.9 | 1.8 | 20.2 | 35.7 | 5.6 |
| Assault (homicide) by discharge of firearms (*U01.4, X93-X95) | 1.6 | 2.3 | 0.9 | 15.8 | 29.2 | 3.0 |
| Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3, *U01.5-*U01.9, *U02, X85-X92, X96-Y09, Y87.1) | 1.3 | 1.6 | 0.9 | 4.4 | 6.6 | 2.6 |
| Legal intervention (Y35, Y89.0) | 0.1 | 0.2 | - | 0.3 | 0.6 | - |
| Events of undetermined intent (Y10-Y34, Y87.2, Y89.9) | 1.9 | 2.3 | 1.5 | 1.8 | 2.6 | 1.1 |
| Discharge of firearms, undetermined intent (Y22-Y24) | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | - |
| Other and unspecified events of undetermined intent and their sequelae (Y10-Y21, Y25-Y34, Y87.2, Y89.9) | 1.8 | 2.2 | 1.5 | 1.7 | 2.4 | 1.0 |
| Operations of war and their sequelae (Y36, Y89.1) | 0.0 | 0.0 | - | - | - | - |
| Complications of medical and surgical care (Y40-Y84, Y88) | 0.8 | 0.8 | 0.8 | 1.3 | 1.5 | 1.1 |
| Enterocolitis due to <i>Clostridium difficile</i> (A04.7) ⁴ | 2.4 | 2.4 | 2.5 | 1.6 | 1.7 | 1.6 |
| Drug-induced deaths ^{5,6} | 15.4 | 18.9 | 11.7 | 9.7 | 13.7 | 6.4 |
| Alcohol-induced deaths ^{5,7} | 7.5 | 11.4 | 3.8 | 6.4 | 10.8 | 3.0 |
| Injury by firearms ^{5,8} | 9.2 | 16.1 | 2.9 | 19.1 | 35.7 | 3.6 |

0.0 Quantity more than zero but less than 0.05.
 * Figure does not meet standards of reliability or precision; see "Technical Notes."
 ... Category not applicable.
¹Figures for origin not stated are included in "All origins" but not distributed among specified origins.
²Includes races other than white and black.
³Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported by 34 states and the District of Columbia in 2008; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."
⁴Included in "Certain other intestinal infections (A04, A07-A09)" shown above. Beginning with data year 2006, Enterocolitis due to *Clostridium difficile* (A04.7) is shown separately at the bottom of tables showing 113 selected causes and is included in the list of rankable causes, see "Technical Notes."
⁵Included in selected categories above.
⁶Includes ICD-10 codes D52.1, D59.0, D59.2, D61.1, D64.2, E06.4, E16.0, E23.1, E24.2, E27.3, E66.1, F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0-F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, G21.1, G24.0, G25.1, G25.4, G25.6, G44.4, G62.0, G72.0, I95.2, J70.2, J70.4, K85.3, L10.5, L27.0-L27.1, M10.2, M32.0, M80.4, M81.4, M83.5, M87.1, R50.2, R78.1-F78.5, X40-X44, X60-X64, X85, and Y10-Y14. Trend data for Drug-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.
⁷Includes ICD-10 codes E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, R78.0, X45, X65, and Y15. Trend data for Alcohol-induced deaths, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.
⁸Includes ICD-10 codes *U01.4, W32-W34, X72-X74, X93-X95, Y22-Y24, and Y35.0. Trend data for Injury by firearms, previously shown in this report, can be found through a link from the online version of this report, available from <http://www.cdc.gov/nchs/deaths.htm>.

NOTE: Confirmation of deaths from selected causes of death, considered to be of public health concern, were not provided by the following states-- Massachusetts, North Carolina, and West Virginia; see "Technical Notes."

Table 18. Number of deaths, death rates, and age-adjusted death rates for injury deaths, by mechanism and intent of death: United States, 2008

[Totals for selected causes of death differ from those shown in other tables that utilize standard mortality tabulation lists, see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008. Rates are per 100,000 population; age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Figure(s) in brackets [] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

| Mechanism and intent of death (based on the <i>International Classification of Diseases, Tenth Revision, Second Edition, 2004</i>) | Number | Rate | Age-adjusted rate ¹ |
|---|---------|------|--------------------------------|
| All injury (*U01-*U03, V01-Y36, Y85-Y87, Y89) | 181,226 | 59.6 | 58.1 |
| Unintentional (V01-X59, Y85-Y86) | 121,902 | 40.1 | 38.8 |
| Suicide (*U03, X60-X84, Y87.0) | 36,035 | 11.9 | 11.6 |
| Homicide (*U01-*U02, X85-Y09, Y87.1) | 17,826 | 5.9 | 5.9 |
| Undetermined (Y10-Y34, Y87.2, Y89.9) | 5,051 | 1.7 | 1.6 |
| Legal intervention/war (Y35-Y36, Y89[.0,.1]) | 412 | 0.1 | 0.1 |
| Cut/pierce (W25-W29, W45-W46, X78, X99, Y28, Y35.4) | 2,808 | 0.9 | 0.9 |
| Unintentional (W25-W29, W45-W46) | 87 | 0.0 | 0.0 |
| Suicide (X78) | 666 | 0.2 | 0.2 |
| Homicide (X99) | 2,043 | 0.7 | 0.7 |
| Undetermined (Y28) | 12 | * | * |
| Legal intervention/war (Y35.4) | - | * | * |
| Drowning (W65-W74, X71, X92, Y21) | 4,251 | 1.4 | 1.4 |
| Unintentional (W65-W74) | 3,548 | 1.2 | 1.2 |
| Suicide (X71) | 407 | 0.1 | 0.1 |
| Homicide (X92) | 56 | 0.0 | 0.0 |
| Undetermined (Y21) | 240 | 0.1 | 0.1 |
| Fall (W00-W19, X80, Y01, Y30) | 24,820 | 8.2 | 7.6 |
| Unintentional (W00-W19) | 24,013 | 7.9 | 7.3 |
| Suicide (X80) | 709 | 0.2 | 0.2 |
| Homicide (Y01) | 20 | 0.0 | 0.0 |
| Undetermined (Y30) | 78 | 0.0 | 0.0 |
| Fire/hot object or substance (*U01.3, X00-X19, X76-X77, X97-X98, Y26-Y27, Y36.3) ² | 3,382 | 1.1 | 1.1 |
| Unintentional (X00-X19) | 2,992 | 1.0 | 1.0 |
| Suicide (X76-X77) | 170 | 0.1 | 0.1 |
| Homicide (*U01.3, X97-X98) | 97 | 0.0 | 0.0 |
| Undetermined (Y26-Y27) | 123 | 0.0 | 0.1 |
| Legal intervention/war (Y36.3) | - | * | * |
| Fire/flare (X00-X09, X76, X97, Y26) | 3,297 | 1.1 | 1.1 |
| Unintentional (X00-X09) | 2,912 | 1.0 | 0.9 |
| Suicide (X76) | 169 | 0.1 | 0.1 |
| Homicide (X97) | 94 | 0.0 | 0.0 |
| Undetermined (Y26) | 122 | 0.0 | 0.1 |
| Hot object/substance (X10-X19, X77, X98, Y27) | 85 | 0.0 | 0.0 |
| Unintentional (X10-X19) | 80 | 0.0 | 0.0 |
| Suicide (X77) | 1 | * | * |
| Homicide (X98) | 3 | * | * |
| Undetermined (Y27) | 1 | * | * |
| Firearm (*U01.4, W32-W34, X72-X74, X93-X95, Y22-Y24, Y35.0) | 31,593 | 10.4 | 10.3 |
| Unintentional (W32-W34) | 592 | 0.2 | 0.2 |
| Suicide (X72-X74) | 18,223 | 6.0 | 5.8 |
| Homicide (*U01.4, X93-X95) | 12,179 | 4.0 | 4.0 |
| Undetermined (Y22-Y24) | 273 | 0.1 | 0.1 |
| Legal intervention/war (Y35.0) | 326 | 0.1 | 0.1 |
| Machinery (W24, W30-W31) ³ | 693 | 0.2 | 0.2 |

Table 18. Number of deaths, death rates, and age-adjusted death rates for injury deaths, by mechanism and intent of death: United States, 2008

[Totals for selected causes of death differ from those shown in other tables that utilize standard mortality tabulation lists, see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census, estimated as of July 1, 2008. Rates are per 100,000 population; age-adjusted rates are per 100,000 U.S. standard population; see "Technical Notes." Figure(s) in brackets [] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

| Mechanism and intent of death (based on the <i>International Classification of Diseases, Tenth Revision, Second Edition, 2004</i>) | Number | Rate | Age-adjusted rate ¹ |
|--|--------|------|--------------------------------|
| All transport (*U01.1,V01-V99,X82,Y03,Y32,Y36.1) | 42,094 | 13.8 | 13.7 |
| Unintentional (V01-V99) | 41,911 | 13.8 | 13.6 |
| Suicide (X82) | 129 | 0.0 | 0.1 |
| Homicide (*U01.1,Y03) | 37 | 0.0 | 0.0 |
| Undetermined (Y32) | 17 | * | * |
| Legal intervention/war (Y36.1) | - | * | * |
| Motor vehicle traffic (V02-V04[.1-.9],V09.2,V12-V14[.3-.9],V19[.4-.6],V20-V28[.3-.9],V29-V79[.4-.9],V80[.3-.5],V81.1,V82.1,V83-V86[.0-.3],V87[.0-.8],V89.2) ³ | 37,985 | 12.5 | 12.3 |
| Occupant (V30-V79[.4-.9],V83-V86[.0-.3]) ³ | 13,677 | 4.5 | 4.5 |
| Motorcyclist (V20-V28[.3-.9],V29[.4-.9]) ³ | 5,037 | 1.7 | 1.7 |
| Pedal cyclist (V12-V14[.3-.9],V19[.4-.6]) ³ | 582 | 0.2 | 0.2 |
| Pedestrian (V02-V04[.1-.9],V09.2) ³ | 4,489 | 1.5 | 1.5 |
| Other (V80[.3-.5],V81.1,V82.1) ³ | 8 | * | * |
| Unspecified (V87[.0-.8],V89.2) ³ | 14,192 | 4.7 | 4.6 |
| Pedal cyclist, other (V10-V11,V12-V14[.0-.2],V15-V18,V19[.0-.3,.8,.9]) ³ | 311 | 0.1 | 0.1 |
| Pedestrian, other (V01,V02-V04[.0],V05,V06,V09[.0,.1,.3,.9]) ³ | 1,089 | 0.4 | 0.4 |
| Other land transport (V20-V28[.0-.2],V29-V79[.0-.3],V80[.0-.2,.6-.9],V81-V82[.0,.2-.9],V83-V86[.4-.9],V87.9,V88[.0-.9],V89[.0,.1,.3,.9],X82,Y03,Y32) | 1,728 | 0.6 | 0.5 |
| Unintentional (V20-V28[.0-.2],V29-V79[.0-.3],V80[.0-.2,.6-.9],V81-V82[.0,.2-.9],V83-V86[.4-.9],V87.9,V88[.0-.9],V89[.0,.1,.3,.9]) | 1,545 | 0.5 | 0.5 |
| Suicide (X82) | 129 | 0.0 | 0.1 |
| Homicide (Y03) | 37 | 0.0 | 0.0 |
| Undetermined (Y32) | 17 | * | * |
| Other transport (*U01.1,V90-V99,Y36.1) | 981 | 0.3 | 0.3 |
| Unintentional (V90-V99) | 981 | 0.3 | 0.3 |
| Homicide (*U01.1) | - | * | * |
| Legal intervention/war (Y36.1) | - | * | * |
| Natural/environmental (W42-W43,W53-W64,W92-W99,X20-X39,X51-X57) ³ | 1,409 | 0.5 | 0.4 |
| Overexertion (X50) ³ | 7 | * | * |
| Poisoning (*U01[.6-.7],X40-X49,X60-X69,X85-X90,Y10-Y19,Y35.2) | 41,080 | 13.5 | 13.4 |
| Unintentional (X40-X49) | 31,116 | 10.2 | 10.2 |
| Suicide (X60-X69) | 6,442 | 2.1 | 2.1 |
| Homicide (*U01[.6-.7],X85-X90) | 101 | 0.0 | 0.0 |
| Undetermined (Y10-Y19) | 3,421 | 1.1 | 1.1 |
| Legal intervention/war (Y35.2) | - | * | * |
| Struck by or against (W20-W22,W50-W52,X79,Y00,Y04,Y29,Y35.3) | 1,060 | 0.3 | 0.3 |
| Unintentional (W20-W22,W50-W52) | 891 | 0.3 | 0.3 |
| Suicide (X79) | - | * | * |
| Homicide (Y00,Y04) | 169 | 0.1 | 0.1 |
| Undetermined (Y29) | - | * | * |
| Legal intervention/war (Y35.3) | - | * | * |
| Suffocation (W75-W84,X70,X91,Y20) | 15,434 | 5.1 | 5.0 |
| Unintentional (W75-W84) | 6,125 | 2.0 | 1.9 |
| Suicide (X70) | 8,578 | 2.8 | 2.8 |
| Homicide (X91) | 562 | 0.2 | 0.2 |
| Undetermined (Y20) | 169 | 0.1 | 0.0 |
| Other specified, classifiable (*U01[.0,.2,.5],*U03.0,W23,W35-W41,W44,W49,W85-W91,X75,X81,X96,Y02,Y05-Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4-.8],Y85) | 2,023 | 0.7 | 0.6 |
| Unintentional (W23,W35-W41,W44,W49,W85-W91,Y85) | 1,447 | 0.5 | 0.5 |
| Suicide (*U03.0,X75,X81) | 301 | 0.1 | 0.1 |
| Homicide (*U01[.0,.2,.5],X96,Y02,Y05-Y07) | 218 | 0.1 | 0.1 |
| Undetermined (Y25,Y31) | 16 | * | * |
| Legal intervention/war (Y35[.1,.5],Y36[.0,.2,.4-.8]) | 41 | 0.0 | 0.0 |
| Other specified, not elsewhere classified (*U01.8,*U02,X58,X83,Y08,Y33,Y35.6,Y86-Y87,Y89[.0-.1]) | 2,162 | 0.7 | 0.7 |
| Unintentional (X58,Y86) | 1,160 | 0.4 | 0.4 |
| Suicide (X83,Y87.0) | 222 | 0.1 | 0.1 |
| Homicide (*U01.8,*U02,Y08,Y87.1) | 549 | 0.2 | 0.2 |
| Undetermined (Y33,Y87.2) | 191 | 0.1 | 0.1 |
| Legal intervention/war (Y35.6,Y89[.0,.1]) | 40 | 0.0 | 0.0 |
| Unspecified (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9) | 8,410 | 2.8 | 2.6 |
| Unintentional (X59) | 5,911 | 1.9 | 1.8 |
| Suicide (*U03.9,X84) | 188 | 0.1 | 0.1 |
| Homicide (*U01.9,Y09) | 1,795 | 0.6 | 0.6 |
| Undetermined (Y34,Y89.9) | 511 | 0.2 | 0.2 |
| Legal intervention/war (Y35.7,Y36.9) | 5 | * | * |

0.0 Quantity more than zero but less than 0.05.

- Quantity zero.

* Figure does not meet standard of reliability or precision; see "Technical Notes."

¹ For method of computation, see "Technical Notes."

² Codes *U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

³ Intent of death is unintentional.

Table 19. Number of deaths, death rates, and age-adjusted death rates for major causes of death: United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, 2008

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census estimated as of July 1, 2008; see "Technical Notes." Numbers after causes of death are categories of the *International Classification of Diseases, Tenth Revision (ICD-10)*. The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the ICD-10; see "Technical Notes." For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

| Area | All causes | | | Human immunodeficiency virus (HIV) disease (B20-B24) | | | Malignant neoplasms (C00-C97) | | | Diabetes mellitus (E10-E14) | | |
|--------------------------------|------------|---------|--------------------------------|--|------|--------------------------------|-------------------------------|-------|--------------------------------|-----------------------------|------|--------------------------------|
| | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ |
| United States ² | 2,471,984 | 813.0 | 758.3 | 10,285 | 3.4 | 3.3 | 565,469 | 186.0 | 175.3 | 70,553 | 23.2 | 21.8 |
| Alabama | 47,707 | 1,023.3 | 930.2 | 181 | 3.9 | 3.9 | 10,182 | 218.4 | 195.6 | 1,386 | 29.7 | 26.7 |
| Alaska | 3,494 | 509.1 | 742.0 | 14 | * | * | 867 | 126.3 | 180.0 | 93 | 13.6 | 21.8 |
| Arizona | 45,823 | 704.9 | 653.7 | 112 | 1.7 | 1.8 | 10,081 | 155.1 | 145.3 | 1,173 | 18.0 | 16.9 |
| Arkansas | 29,322 | 1,026.9 | 899.6 | 69 | 2.4 | 2.5 | 6,526 | 228.6 | 200.1 | 901 | 31.6 | 27.7 |
| California | 234,766 | 638.7 | 660.3 | 949 | 2.6 | 2.6 | 54,686 | 148.8 | 156.8 | 7,375 | 20.1 | 21.1 |
| Colorado | 31,274 | 633.1 | 709.0 | 57 | 1.2 | 1.1 | 6,719 | 136.0 | 150.8 | 767 | 15.5 | 17.6 |
| Connecticut | 28,794 | 822.4 | 691.4 | 115 | 3.3 | 3.0 | 6,830 | 195.1 | 169.7 | 624 | 17.8 | 15.2 |
| Delaware | 7,622 | 873.0 | 780.8 | 57 | 6.5 | 6.2 | 1,912 | 219.0 | 194.0 | 217 | 24.9 | 22.2 |
| District of Columbia | 5,140 | 868.5 | 850.0 | 164 | 27.7 | 27.0 | 1,143 | 193.1 | 192.1 | 156 | 26.4 | 26.0 |
| Florida | 170,703 | 931.4 | 679.1 | 1,417 | 7.7 | 7.6 | 40,814 | 222.7 | 166.2 | 5,161 | 28.2 | 20.8 |
| Georgia | 69,640 | 719.0 | 831.9 | 508 | 5.2 | 5.2 | 14,621 | 151.0 | 171.4 | 1,496 | 15.4 | 17.6 |
| Hawaii | 9,501 | 737.5 | 590.6 | 19 | * | * | 2,194 | 170.3 | 140.7 | 286 | 22.2 | 18.1 |
| Idaho | 10,962 | 719.4 | 723.0 | 6 | * | * | 2,511 | 164.8 | 166.0 | 356 | 23.4 | 23.6 |
| Illinois | 103,471 | 802.0 | 770.9 | 333 | 2.6 | 2.5 | 24,300 | 188.3 | 184.4 | 2,846 | 22.1 | 21.5 |
| Indiana | 56,752 | 890.0 | 835.3 | 121 | 1.9 | 1.9 | 13,137 | 206.0 | 194.8 | 1,683 | 26.4 | 24.8 |
| Iowa | 28,541 | 950.6 | 744.2 | 14 | * | * | 6,424 | 214.0 | 177.7 | 764 | 25.4 | 20.2 |
| Kansas | 24,975 | 891.3 | 784.9 | 30 | 1.1 | 1.1 | 5,294 | 188.9 | 173.2 | 706 | 25.2 | 22.7 |
| Kentucky | 41,329 | 968.1 | 902.4 | 84 | 2.0 | 1.9 | 9,589 | 224.6 | 205.9 | 1,214 | 28.4 | 26.2 |
| Louisiana | 41,220 | 934.5 | 922.1 | 326 | 7.4 | 7.6 | 9,197 | 208.5 | 204.3 | 1,332 | 30.2 | 29.7 |
| Maine | 12,541 | 952.6 | 764.8 | 12 | * | * | 3,093 | 234.9 | 187.8 | 344 | 26.1 | 21.1 |
| Maryland | 43,892 | 779.1 | 771.7 | 435 | 7.7 | 7.3 | 10,360 | 183.9 | 180.8 | 1,239 | 22.0 | 21.7 |
| Massachusetts | 53,518 | 823.6 | 705.9 | 144 | 2.2 | 2.0 | 13,031 | 200.5 | 178.3 | 1,079 | 16.6 | 14.5 |
| Michigan | 88,445 | 884.1 | 811.9 | 194 | 1.9 | 1.9 | 20,211 | 202.0 | 185.9 | 2,752 | 27.5 | 25.4 |
| Minnesota | 38,499 | 737.5 | 675.4 | 39 | 0.7 | 0.7 | 9,446 | 180.9 | 172.0 | 1,087 | 20.8 | 19.2 |
| Mississippi | 28,984 | 986.3 | 950.1 | 152 | 5.2 | 5.4 | 6,166 | 209.8 | 201.8 | 758 | 25.8 | 24.7 |
| Missouri | 56,578 | 957.1 | 847.1 | 116 | 2.0 | 2.0 | 12,523 | 211.8 | 190.0 | 1,348 | 22.8 | 20.3 |
| Montana | 8,913 | 921.3 | 786.9 | 9 | * | * | 1,862 | 192.5 | 163.2 | 254 | 26.3 | 22.5 |
| Nebraska | 15,461 | 866.9 | 741.4 | 18 | * | * | 3,376 | 189.3 | 170.0 | 470 | 26.4 | 23.1 |
| Nevada | 19,335 | 743.6 | 808.6 | 80 | 3.1 | 3.0 | 4,404 | 169.4 | 179.0 | 373 | 14.3 | 15.4 |
| New Hampshire | 10,268 | 780.4 | 712.5 | 5 | * | * | 2,576 | 195.8 | 177.9 | 297 | 22.6 | 20.6 |
| New Jersey | 70,026 | 806.5 | 717.2 | 448 | 5.2 | 4.7 | 16,876 | 194.4 | 176.0 | 2,242 | 25.8 | 23.2 |
| New Mexico | 16,005 | 806.6 | 758.6 | 49 | 2.5 | 2.6 | 3,355 | 169.1 | 158.6 | 582 | 29.3 | 27.5 |
| New York | 148,698 | 762.9 | 676.0 | 1,255 | 6.4 | 6.0 | 35,351 | 181.4 | 163.8 | 3,605 | 18.5 | 16.6 |
| North Carolina | 77,283 | 838.0 | 825.6 | 356 | 3.9 | 3.7 | 17,453 | 189.2 | 183.8 | 2,170 | 23.5 | 22.9 |
| North Dakota | 5,871 | 915.2 | 713.2 | 3 | * | * | 1,354 | 211.1 | 174.6 | 201 | 31.3 | 25.3 |
| Ohio | 109,767 | 955.7 | 844.1 | 192 | 1.7 | 1.7 | 24,998 | 217.6 | 193.7 | 3,565 | 31.0 | 27.4 |
| Oklahoma | 37,014 | 1,016.2 | 931.0 | 82 | 2.3 | 2.4 | 7,657 | 210.2 | 192.6 | 1,103 | 30.3 | 28.0 |
| Oregon | 31,967 | 843.4 | 748.6 | 39 | 1.0 | 1.0 | 7,479 | 197.3 | 177.2 | 1,025 | 27.0 | 23.9 |
| Pennsylvania | 127,462 | 1,023.9 | 796.5 | 315 | 2.5 | 2.3 | 28,964 | 232.7 | 186.3 | 3,313 | 26.6 | 20.9 |
| Rhode Island | 9,738 | 926.7 | 749.4 | 26 | 2.5 | 2.2 | 2,227 | 211.9 | 180.6 | 195 | 18.6 | 15.3 |
| South Carolina | 40,289 | 899.3 | 839.5 | 229 | 5.1 | 5.0 | 9,199 | 205.3 | 187.9 | 1,133 | 25.3 | 23.4 |
| South Dakota | 7,083 | 880.8 | 708.8 | 5 | * | * | 1,570 | 195.2 | 165.4 | 216 | 26.9 | 21.7 |
| Tennessee | 58,820 | 946.4 | 888.8 | 271 | 4.4 | 4.3 | 13,162 | 211.8 | 195.4 | 1,733 | 27.9 | 25.9 |
| Texas | 164,914 | 677.9 | 776.0 | 860 | 3.5 | 3.7 | 35,713 | 146.8 | 168.1 | 5,155 | 21.2 | 24.5 |
| Utah | 14,040 | 513.1 | 659.1 | 21 | 0.8 | 0.9 | 2,492 | 91.1 | 119.4 | 468 | 17.1 | 22.5 |
| Vermont | 5,211 | 838.8 | 721.9 | 4 | * | * | 1,279 | 205.9 | 176.8 | 151 | 24.3 | 21.1 |
| Virginia | 59,100 | 760.7 | 762.7 | 184 | 2.4 | 2.3 | 13,983 | 180.0 | 177.8 | 1,534 | 19.7 | 19.6 |
| Washington | 48,627 | 742.5 | 723.7 | 89 | 1.4 | 1.3 | 11,618 | 177.4 | 173.9 | 1,590 | 24.3 | 23.9 |
| West Virginia | 21,557 | 1,188.1 | 958.5 | 30 | 1.7 | 1.7 | 4,605 | 253.8 | 201.6 | 753 | 41.5 | 32.8 |
| Wisconsin | 46,815 | 831.8 | 729.9 | 45 | 0.8 | 0.8 | 11,185 | 198.7 | 178.8 | 1,152 | 20.5 | 18.2 |
| Wyoming | 4,227 | 793.6 | 773.4 | 2 | * | * | 874 | 164.1 | 158.3 | 130 | 24.4 | 24.2 |
| Puerto Rico ³ | 29,050 | 734.7 | 707.2 | 421 | 10.6 | 10.9 | 5,044 | 127.6 | 119.8 | 2,842 | 71.9 | 67.5 |
| Virgin Islands ³ | 749 | 681.9 | 729.0 | 11 | * | * | 124 | 112.9 | 112.5 | 47 | 42.8 | 45.4 |
| Guam ³ | 783 | 444.9 | 699.7 | 2 | * | * | 134 | 76.1 | 122.2 | 47 | 26.7 | 46.8 |
| American Samoa ³ | 241 | 371.8 | 958.9 | - | * | * | 40 | 61.7 | 158.2 | 33 | 50.9 | 134.8 |
| Northern Marianas ³ | 178 | 322.2 | 877.5 | - | * | * | 25 | 45.3 | 110.3 | 23 | 41.6 | 140.9 |

Table 19. Number of deaths, death rates, and age-adjusted death rates for major causes of death: United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, 2008

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census estimated as of July 1, 2008; see "Technical Notes." Numbers after causes of death are categories of the *International Classification of Diseases, Tenth Revision* (ICD-10). The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the ICD-10; see "Technical Notes." For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

| Area | Parkinson's disease (G20-G21) | | | Alzheimer's disease (G30) | | | Diseases of heart (I00-I09,I11,I13,I20-I51) | | | Essential hypertension and hypertensive renal disease (I10,I12,I15) | | |
|--------------------------------|-------------------------------|------|--------------------------------|---------------------------|------|--------------------------------|---|-------|--------------------------------|---|------|--------------------------------|
| | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ |
| United States ² | 20,483 | 6.7 | 6.4 | 82,435 | 27.1 | 24.4 | 616,828 | 202.9 | 186.5 | 25,742 | 8.5 | 7.7 |
| Alabama | 348 | 7.5 | 6.8 | 1,518 | 32.6 | 29.3 | 12,074 | 259.0 | 233.1 | 501 | 10.7 | 9.7 |
| Alaska | 19 | * | * | 80 | 11.7 | 24.9 | 634 | 92.4 | 145.4 | 16 | * | * |
| Arizona | 488 | 7.5 | 6.9 | 2,099 | 32.3 | 28.3 | 10,385 | 159.8 | 145.6 | 475 | 7.3 | 6.6 |
| Arkansas | 167 | 5.8 | 5.2 | 893 | 31.3 | 26.1 | 7,516 | 263.2 | 226.2 | 256 | 9.0 | 7.6 |
| California | 2,026 | 5.5 | 5.9 | 10,098 | 27.5 | 27.9 | 60,709 | 165.2 | 170.2 | 3,423 | 9.3 | 9.6 |
| Colorado | 314 | 6.4 | 7.8 | 1,353 | 27.4 | 32.7 | 6,118 | 123.9 | 141.0 | 241 | 4.9 | 5.6 |
| Connecticut | 256 | 7.3 | 6.1 | 839 | 24.0 | 18.4 | 7,355 | 210.1 | 170.9 | 319 | 9.1 | 7.3 |
| Delaware | 50 | 5.7 | 5.2 | 204 | 23.4 | 20.5 | 1,777 | 203.5 | 179.4 | 51 | 5.8 | 5.1 |
| District of Columbia | 26 | 4.4 | 4.3 | 132 | 22.3 | 20.3 | 1,389 | 234.7 | 229.2 | 66 | 11.2 | 11.0 |
| Florida | 1,577 | 8.6 | 5.7 | 4,743 | 25.9 | 15.9 | 42,067 | 229.5 | 157.0 | 1,841 | 10.0 | 6.9 |
| Georgia | 427 | 4.4 | 5.7 | 1,929 | 19.9 | 25.6 | 15,721 | 162.3 | 190.5 | 945 | 9.8 | 11.3 |
| Hawaii | 79 | 6.1 | 4.8 | 218 | 16.9 | 11.8 | 2,313 | 179.6 | 141.0 | 101 | 7.8 | 5.9 |
| Idaho | 111 | 7.3 | 7.7 | 393 | 25.8 | 26.1 | 2,330 | 152.9 | 153.0 | 92 | 6.0 | 6.1 |
| Illinois | 886 | 6.9 | 6.7 | 3,192 | 24.7 | 22.8 | 26,078 | 202.1 | 191.9 | 930 | 7.2 | 6.7 |
| Indiana | 504 | 7.9 | 7.6 | 1,971 | 30.9 | 28.3 | 13,663 | 214.3 | 198.5 | 484 | 7.6 | 6.9 |
| Iowa | 305 | 10.2 | 7.6 | 1,332 | 44.4 | 30.4 | 7,284 | 242.6 | 182.2 | 268 | 8.9 | 6.4 |
| Kansas | 210 | 7.5 | 6.6 | 961 | 34.3 | 27.9 | 5,643 | 201.4 | 172.4 | 173 | 6.2 | 5.1 |
| Kentucky | 296 | 6.9 | 6.6 | 1,370 | 32.1 | 30.2 | 10,061 | 235.7 | 217.8 | 338 | 7.9 | 7.3 |
| Louisiana | 254 | 5.8 | 5.9 | 1,361 | 30.9 | 31.0 | 10,347 | 234.6 | 230.4 | 372 | 8.4 | 8.3 |
| Maine | 114 | 8.7 | 6.9 | 450 | 34.2 | 26.2 | 2,785 | 211.6 | 165.3 | 67 | 5.1 | 3.9 |
| Maryland | 351 | 6.2 | 6.5 | 1,016 | 18.0 | 18.2 | 11,157 | 198.0 | 195.5 | 441 | 7.8 | 7.7 |
| Massachusetts | 423 | 6.5 | 5.6 | 1,832 | 28.2 | 22.3 | 12,776 | 196.6 | 163.8 | 452 | 7.0 | 5.8 |
| Michigan | 766 | 7.7 | 7.2 | 2,739 | 27.4 | 24.7 | 24,344 | 243.4 | 220.3 | 899 | 9.0 | 8.1 |
| Minnesota | 466 | 8.9 | 8.4 | 1,344 | 25.7 | 22.2 | 7,367 | 141.1 | 126.6 | 509 | 9.8 | 8.6 |
| Mississippi | 152 | 5.2 | 5.1 | 916 | 31.2 | 29.8 | 7,997 | 272.1 | 260.2 | 459 | 15.6 | 15.0 |
| Missouri | 484 | 8.2 | 7.3 | 2,010 | 34.0 | 28.4 | 14,644 | 247.7 | 214.4 | 504 | 8.5 | 7.2 |
| Montana | 84 | 8.7 | 7.4 | 294 | 30.4 | 24.9 | 1,975 | 204.1 | 169.8 | 48 | 5.0 | 4.0 |
| Nebraska | 167 | 9.4 | 7.9 | 610 | 34.2 | 26.1 | 3,459 | 194.0 | 159.5 | 179 | 10.0 | 8.1 |
| Nevada | 119 | 4.6 | 5.5 | 279 | 10.7 | 13.2 | 4,646 | 178.7 | 195.7 | 129 | 5.0 | 5.8 |
| New Hampshire | 74 | 5.6 | 5.3 | 393 | 29.9 | 27.0 | 2,409 | 183.1 | 164.8 | 77 | 5.9 | 5.3 |
| New Jersey | 588 | 6.8 | 6.1 | 1,857 | 21.4 | 18.0 | 19,056 | 219.5 | 190.6 | 641 | 7.4 | 6.4 |
| New Mexico | 161 | 8.1 | 7.6 | 366 | 18.4 | 16.8 | 3,275 | 165.0 | 151.9 | 131 | 6.6 | 6.2 |
| New York | 929 | 4.8 | 4.2 | 2,303 | 11.8 | 9.9 | 49,324 | 253.1 | 218.9 | 1,850 | 9.5 | 8.2 |
| North Carolina | 534 | 5.8 | 6.0 | 2,624 | 28.5 | 28.8 | 17,335 | 188.0 | 184.9 | 760 | 8.2 | 8.1 |
| North Dakota | 48 | 7.5 | 5.7 | 312 | 48.6 | 31.6 | 1,391 | 216.8 | 158.8 | 65 | 10.1 | 6.8 |
| Ohio | 875 | 7.6 | 6.7 | 4,285 | 37.3 | 31.5 | 27,324 | 237.9 | 206.3 | 1,229 | 10.7 | 9.2 |
| Oklahoma | 241 | 6.6 | 6.1 | 1,061 | 29.1 | 25.8 | 9,767 | 268.2 | 242.2 | 331 | 9.1 | 8.2 |
| Oregon | 352 | 9.3 | 8.4 | 1,302 | 34.4 | 29.4 | 6,519 | 172.0 | 149.5 | 408 | 10.8 | 9.2 |
| Pennsylvania | 1,204 | 9.7 | 7.2 | 3,863 | 31.0 | 21.5 | 33,308 | 267.6 | 200.0 | 1,024 | 8.2 | 6.1 |
| Rhode Island | 95 | 9.0 | 7.4 | 359 | 34.2 | 24.5 | 2,657 | 252.9 | 195.2 | 71 | 6.8 | 5.3 |
| South Carolina | 292 | 6.5 | 6.3 | 1,492 | 33.3 | 31.6 | 8,996 | 200.8 | 186.0 | 446 | 10.0 | 9.2 |
| South Dakota | 69 | 8.6 | 6.8 | 402 | 50.0 | 35.3 | 1,681 | 209.0 | 160.8 | 68 | 8.5 | 6.4 |
| Tennessee | 395 | 6.4 | 6.2 | 2,423 | 39.0 | 37.3 | 14,661 | 235.9 | 220.1 | 555 | 8.9 | 8.4 |
| Texas | 1,272 | 5.2 | 6.5 | 5,280 | 21.7 | 26.3 | 38,384 | 157.8 | 183.3 | 1,589 | 6.5 | 7.6 |
| Utah | 178 | 6.5 | 9.0 | 409 | 14.9 | 20.5 | 2,844 | 103.9 | 138.0 | 108 | 3.9 | 5.2 |
| Vermont | 53 | 8.5 | 7.3 | 218 | 35.1 | 29.6 | 1,216 | 195.7 | 165.9 | 44 | 7.1 | 6.0 |
| Virginia | 490 | 6.3 | 6.7 | 1,763 | 22.7 | 23.5 | 13,675 | 176.0 | 176.6 | 570 | 7.3 | 7.3 |
| Washington | 518 | 7.9 | 8.0 | 3,105 | 47.4 | 45.7 | 10,916 | 166.7 | 161.0 | 525 | 8.0 | 7.8 |
| West Virginia | 165 | 9.1 | 7.2 | 662 | 36.5 | 28.3 | 5,264 | 290.1 | 228.1 | 235 | 13.0 | 10.1 |
| Wisconsin | 447 | 7.9 | 7.0 | 1,655 | 29.4 | 24.2 | 11,275 | 200.3 | 171.8 | 421 | 7.5 | 6.3 |
| Wyoming | 34 | 6.4 | 6.4 | 125 | 23.5 | 23.1 | 937 | 175.9 | 169.4 | 15 | * | * |
| Puerto Rico ³ | 118 | 3.0 | 2.9 | 1,589 | 40.2 | 39.8 | 5,351 | 135.3 | 129.2 | 518 | 13.1 | 12.7 |
| Virgin Islands ³ | 4 | * | * | 17 | * | * | 238 | 216.7 | 234.5 | 11 | * | * |
| Guam ³ | 4 | * | * | 11 | * | * | 194 | 110.2 | 193.1 | 9 | * | * |
| American Samoa ³ | - | * | * | 1 | * | * | 31 | 47.8 | 124.3 | 6 | * | * |
| Northern Marianas ³ | - | * | * | - | * | * | 26 | 47.1 | 147.4 | 1 | * | * |

Table 19. Number of deaths, death rates, and age-adjusted death rates for major causes of death: United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, 2008

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census estimated as of July 1, 2008; see "Technical Notes." Numbers after causes of death are categories of the *International Classification of Diseases, Tenth Revision* (ICD-10). The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the ICD-10; see "Technical Notes." For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

| Area | Cerebrovascular diseases (I60-I69) | | | Influenza and pneumonia (J09-J18) | | | Chronic lower respiratory diseases (J40-J47) | | | Chronic liver disease and cirrhosis (K70,K73-K74) | | |
|--------------------------------|------------------------------------|------|--------------------------------|-----------------------------------|------|--------------------------------|--|------|--------------------------------|---|------|--------------------------------|
| | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ |
| United States ² | 134,148 | 44.1 | 40.7 | 56,284 | 18.5 | 16.9 | 141,090 | 46.4 | 44.0 | 29,963 | 9.9 | 9.2 |
| Alabama | 2,863 | 61.4 | 55.4 | 912 | 19.6 | 17.6 | 2,733 | 58.6 | 52.9 | 489 | 10.5 | 9.3 |
| Alaska | 172 | 25.1 | 42.9 | 51 | 7.4 | 12.4 | 181 | 26.4 | 43.6 | 60 | 8.7 | 9.3 |
| Arizona | 2,147 | 33.0 | 30.1 | 1,068 | 16.4 | 15.0 | 2,939 | 45.2 | 41.9 | 794 | 12.2 | 11.9 |
| Arkansas | 1,722 | 60.3 | 52.0 | 846 | 29.6 | 25.1 | 1,887 | 66.1 | 57.4 | 247 | 8.7 | 7.9 |
| California | 14,048 | 38.2 | 39.7 | 6,560 | 17.8 | 18.4 | 13,426 | 36.5 | 38.9 | 4,152 | 11.3 | 11.4 |
| Colorado | 1,565 | 31.7 | 36.9 | 678 | 13.7 | 15.7 | 2,188 | 44.3 | 52.3 | 540 | 10.9 | 10.6 |
| Connecticut | 1,433 | 40.9 | 33.1 | 694 | 19.8 | 15.6 | 1,505 | 43.0 | 36.6 | 298 | 8.5 | 7.4 |
| Delaware | 365 | 41.8 | 36.7 | 135 | 15.5 | 13.9 | 472 | 54.1 | 48.2 | 91 | 10.4 | 9.3 |
| District of Columbia | 222 | 37.5 | 36.0 | 78 | 13.2 | 12.9 | 139 | 23.5 | 23.7 | 52 | 8.8 | 8.4 |
| Florida | 8,589 | 46.9 | 32.0 | 2,300 | 12.5 | 8.5 | 10,198 | 55.6 | 38.9 | 2,335 | 12.7 | 10.6 |
| Georgia | 3,805 | 39.3 | 47.2 | 1,498 | 15.5 | 18.7 | 3,546 | 36.6 | 44.2 | 665 | 6.9 | 7.1 |
| Hawaii | 642 | 49.8 | 38.4 | 270 | 21.0 | 15.9 | 293 | 22.7 | 18.4 | 112 | 8.7 | 7.6 |
| Idaho | 609 | 40.0 | 40.4 | 206 | 13.5 | 13.5 | 703 | 46.1 | 47.5 | 155 | 10.2 | 10.1 |
| Illinois | 5,788 | 44.9 | 42.6 | 2,672 | 20.7 | 19.4 | 5,602 | 43.4 | 42.9 | 1,145 | 8.9 | 8.6 |
| Indiana | 3,114 | 48.8 | 45.2 | 1,318 | 20.7 | 19.0 | 3,878 | 60.8 | 57.8 | 523 | 8.2 | 7.7 |
| Iowa | 1,732 | 57.7 | 42.8 | 829 | 27.6 | 19.7 | 1,848 | 61.5 | 49.3 | 217 | 7.2 | 6.3 |
| Kansas | 1,574 | 56.2 | 47.6 | 743 | 26.5 | 21.8 | 1,626 | 58.0 | 52.7 | 242 | 8.6 | 8.2 |
| Kentucky | 2,098 | 49.1 | 45.9 | 943 | 22.1 | 20.6 | 2,926 | 68.5 | 64.0 | 367 | 8.6 | 7.7 |
| Louisiana | 2,084 | 47.2 | 46.6 | 894 | 20.3 | 20.0 | 1,896 | 43.0 | 43.1 | 389 | 8.8 | 8.4 |
| Maine | 671 | 51.0 | 40.6 | 263 | 20.0 | 15.5 | 794 | 60.3 | 48.4 | 138 | 10.5 | 8.3 |
| Maryland | 2,330 | 41.4 | 41.4 | 1,008 | 17.9 | 17.9 | 1,982 | 35.2 | 35.8 | 408 | 7.2 | 6.8 |
| Massachusetts | 2,747 | 42.3 | 35.0 | 1,598 | 24.6 | 20.0 | 2,587 | 39.8 | 34.7 | 598 | 9.2 | 8.2 |
| Michigan | 4,769 | 47.7 | 43.4 | 1,853 | 18.5 | 16.8 | 5,185 | 51.8 | 48.2 | 1,084 | 10.8 | 9.7 |
| Minnesota | 2,199 | 42.1 | 37.7 | 745 | 14.3 | 12.4 | 2,096 | 40.2 | 38.3 | 380 | 7.3 | 6.8 |
| Mississippi | 1,592 | 54.2 | 51.9 | 626 | 21.3 | 20.4 | 1,520 | 51.7 | 50.2 | 269 | 9.2 | 8.8 |
| Missouri | 3,261 | 55.2 | 47.7 | 1,414 | 23.9 | 20.5 | 3,765 | 63.7 | 57.1 | 514 | 8.7 | 7.9 |
| Montana | 466 | 48.2 | 39.8 | 168 | 17.4 | 14.3 | 691 | 71.4 | 61.2 | 136 | 14.1 | 12.4 |
| Nebraska | 863 | 48.4 | 40.1 | 366 | 20.5 | 16.5 | 1,047 | 58.7 | 51.4 | 135 | 7.6 | 7.1 |
| Nevada | 906 | 34.8 | 39.2 | 496 | 19.1 | 21.2 | 1,257 | 48.3 | 54.8 | 323 | 12.4 | 11.9 |
| New Hampshire | 484 | 36.8 | 33.6 | 211 | 16.0 | 14.4 | 688 | 52.3 | 48.9 | 120 | 9.1 | 7.9 |
| New Jersey | 3,264 | 37.6 | 33.0 | 1,413 | 16.3 | 14.1 | 3,280 | 37.8 | 34.0 | 707 | 8.1 | 7.3 |
| New Mexico | 760 | 38.3 | 35.6 | 351 | 17.7 | 16.4 | 1,001 | 50.4 | 47.4 | 392 | 19.8 | 19.3 |
| New York | 6,123 | 31.4 | 27.4 | 4,609 | 23.6 | 20.4 | 6,919 | 35.5 | 31.8 | 1,369 | 7.0 | 6.3 |
| North Carolina | 4,637 | 50.3 | 50.2 | 1,737 | 18.8 | 18.8 | 4,572 | 49.6 | 49.6 | 961 | 10.4 | 9.7 |
| North Dakota | 325 | 50.7 | 36.6 | 148 | 23.1 | 16.7 | 355 | 55.3 | 43.8 | 58 | 9.0 | 8.5 |
| Ohio | 5,951 | 51.8 | 45.1 | 2,085 | 18.2 | 15.7 | 6,928 | 60.3 | 53.7 | 1,198 | 10.4 | 9.3 |
| Oklahoma | 2,079 | 57.1 | 51.5 | 938 | 25.8 | 23.0 | 2,694 | 74.0 | 67.9 | 463 | 12.7 | 11.8 |
| Oregon | 1,899 | 50.1 | 43.8 | 517 | 13.6 | 11.9 | 1,951 | 51.5 | 46.6 | 466 | 12.3 | 10.9 |
| Pennsylvania | 6,942 | 55.8 | 41.5 | 2,705 | 21.7 | 16.0 | 6,767 | 54.4 | 42.0 | 1,113 | 8.9 | 7.5 |
| Rhode Island | 462 | 44.0 | 34.4 | 257 | 24.5 | 18.3 | 478 | 45.5 | 37.8 | 113 | 10.8 | 9.5 |
| South Carolina | 2,394 | 53.4 | 50.0 | 727 | 16.2 | 15.3 | 2,266 | 50.6 | 47.2 | 470 | 10.5 | 9.5 |
| South Dakota | 396 | 49.2 | 37.6 | 177 | 22.0 | 16.0 | 491 | 61.1 | 49.3 | 101 | 12.6 | 11.7 |
| Tennessee | 3,356 | 54.0 | 51.0 | 1,424 | 22.9 | 21.7 | 3,545 | 57.0 | 53.7 | 665 | 10.7 | 9.6 |
| Texas | 9,629 | 39.6 | 46.7 | 3,554 | 14.6 | 17.2 | 8,874 | 36.5 | 43.8 | 2,646 | 10.9 | 11.6 |
| Utah | 748 | 27.3 | 36.8 | 343 | 12.5 | 16.6 | 638 | 23.3 | 31.5 | 127 | 4.6 | 5.8 |
| Vermont | 281 | 45.2 | 38.3 | 74 | 11.9 | 10.2 | 341 | 54.9 | 47.7 | 46 | 7.4 | 6.3 |
| Virginia | 3,301 | 42.5 | 43.3 | 1,324 | 17.0 | 17.3 | 3,023 | 38.9 | 39.9 | 640 | 8.2 | 7.6 |
| Washington | 2,773 | 42.3 | 41.4 | 771 | 11.8 | 11.3 | 2,930 | 44.7 | 44.9 | 678 | 10.4 | 9.6 |
| West Virginia | 1,096 | 60.4 | 47.2 | 448 | 24.7 | 19.5 | 1,590 | 87.6 | 69.1 | 221 | 12.2 | 10.1 |
| Wisconsin | 2,638 | 46.9 | 40.0 | 1,116 | 19.8 | 16.6 | 2,538 | 45.1 | 40.1 | 474 | 8.4 | 7.6 |
| Wyoming | 234 | 43.9 | 43.3 | 123 | 23.1 | 22.4 | 311 | 58.4 | 58.3 | 77 | 14.5 | 13.4 |
| Puerto Rico ³ | 1,529 | 38.7 | 37.4 | 946 | 23.9 | 23.2 | 1,199 | 30.3 | 29.4 | 263 | 6.7 | 6.0 |
| Virgin Islands ³ | 44 | 40.1 | 45.7 | 10 | * | * | 8 | * | * | 8 | * | * |
| Guam ³ | 66 | 37.5 | 67.1 | 20 | 11.4 | 17.8 | 29 | 16.5 | 26.4 | 19 | * | * |
| American Samoa ³ | 29 | 44.7 | 130.3 | 3 | * | * | 8 | * | * | 1 | * | * |
| Northern Marianas ³ | 15 | * | * | 4 | * | * | 5 | * | * | 2 | * | * |

Table 19. Number of deaths, death rates, and age-adjusted death rates for major causes of death: United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, 2008

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census estimated as of July 1, 2008; see "Technical Notes." Numbers after causes of death are categories of the *International Classification of Diseases, Tenth Revision* (ICD-10). The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the ICD-10; see "Technical Notes." For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

| Area | Nephritis, nephrotic syndrome, and nephrosis (N00-N07, N17-N19, N25-N27) | | | Accidents (V01-X59, Y85-Y86) | | | Motor vehicle accidents ⁴ | | | Intentional self-harm (suicide) (*U03, X60-X84, Y87.0) | | |
|--------------------------------|--|------|--------------------------------|------------------------------|------|--------------------------------|--------------------------------------|------|--------------------------------|--|------|--------------------------------|
| | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ |
| United States ² | 48,237 | 15.9 | 14.8 | 121,902 | 40.1 | 38.8 | 39,790 | 13.1 | 12.9 | 36,035 | 11.9 | 11.6 |
| Alabama | 1,107 | 23.7 | 21.5 | 2,509 | 53.8 | 52.5 | 1,085 | 23.3 | 23.1 | 604 | 13.0 | 12.7 |
| Alaska | 50 | 7.3 | 13.0 | 332 | 48.4 | 53.5 | 73 | 10.6 | 11.3 | 169 | 24.6 | 24.2 |
| Arizona | 503 | 7.7 | 7.2 | 2,956 | 45.5 | 44.4 | 965 | 14.8 | 14.9 | 972 | 15.0 | 15.0 |
| Arkansas | 638 | 22.3 | 19.2 | 1,477 | 51.7 | 50.3 | 641 | 22.4 | 22.3 | 447 | 15.7 | 15.6 |
| California | 2,854 | 7.8 | 8.1 | 10,761 | 29.3 | 29.2 | 3,619 | 9.8 | 9.7 | 3,775 | 10.3 | 10.3 |
| Colorado | 483 | 9.8 | 11.4 | 2,172 | 44.0 | 45.7 | 588 | 11.9 | 12.1 | 803 | 16.3 | 16.0 |
| Connecticut | 589 | 16.8 | 13.9 | 1,386 | 39.6 | 36.4 | 330 | 9.4 | 9.3 | 315 | 9.0 | 8.6 |
| Delaware | 189 | 21.6 | 19.2 | 352 | 40.3 | 39.7 | 127 | 14.5 | 14.7 | 109 | 12.5 | 12.1 |
| District of Columbia | 78 | 13.2 | 13.0 | 160 | 27.0 | 26.2 | 48 | 8.1 | 7.8 | 43 | 7.3 | 7.1 |
| Florida | 2,946 | 16.1 | 11.3 | 8,939 | 48.8 | 45.0 | 3,040 | 16.6 | 16.3 | 2,740 | 14.9 | 14.0 |
| Georgia | 1,668 | 17.2 | 20.5 | 3,774 | 39.0 | 40.9 | 1,510 | 15.6 | 15.8 | 981 | 10.1 | 10.2 |
| Hawaii | 197 | 15.3 | 11.9 | 406 | 31.5 | 28.3 | 108 | 8.4 | 8.0 | 133 | 10.3 | 10.1 |
| Idaho | 173 | 11.4 | 11.4 | 649 | 42.6 | 42.9 | 250 | 16.4 | 16.8 | 252 | 16.5 | 16.7 |
| Illinois | 2,576 | 20.0 | 19.3 | 4,218 | 32.7 | 32.1 | 1,159 | 9.0 | 8.9 | 1,198 | 9.3 | 9.2 |
| Indiana | 1,363 | 21.4 | 19.9 | 2,558 | 40.1 | 39.3 | 870 | 13.6 | 13.6 | 809 | 12.7 | 12.6 |
| Iowa | 304 | 10.1 | 7.7 | 1,266 | 42.2 | 37.6 | 440 | 14.7 | 14.2 | 380 | 12.7 | 12.6 |
| Kansas | 620 | 22.1 | 19.4 | 1,174 | 41.9 | 39.7 | 421 | 15.0 | 14.9 | 337 | 12.0 | 12.0 |
| Kentucky | 993 | 23.3 | 21.8 | 2,379 | 55.7 | 54.7 | 871 | 20.4 | 20.3 | 612 | 14.3 | 14.0 |
| Louisiana | 1,195 | 27.1 | 26.9 | 2,409 | 54.6 | 54.7 | 926 | 21.0 | 20.9 | 532 | 12.1 | 12.1 |
| Maine | 263 | 20.0 | 15.7 | 628 | 47.7 | 43.5 | 175 | 13.3 | 12.7 | 181 | 13.7 | 12.8 |
| Maryland | 775 | 13.8 | 13.7 | 1,465 | 26.0 | 25.7 | 646 | 11.5 | 11.4 | 507 | 9.0 | 8.8 |
| Massachusetts | 1,377 | 21.2 | 17.9 | 2,040 | 31.4 | 28.8 | 383 | 5.9 | 5.6 | 509 | 7.8 | 7.5 |
| Michigan | 1,663 | 16.6 | 15.2 | 3,685 | 36.8 | 35.3 | 1,100 | 11.0 | 10.8 | 1,180 | 11.8 | 11.6 |
| Minnesota | 813 | 15.6 | 14.1 | 2,010 | 38.5 | 36.1 | 528 | 10.1 | 9.9 | 596 | 11.4 | 11.1 |
| Mississippi | 723 | 24.6 | 23.7 | 1,693 | 57.6 | 57.5 | 780 | 26.5 | 26.8 | 409 | 13.9 | 14.0 |
| Missouri | 1,274 | 21.6 | 18.6 | 2,997 | 50.7 | 48.5 | 992 | 16.8 | 16.6 | 779 | 13.2 | 13.0 |
| Montana | 151 | 15.6 | 12.9 | 592 | 61.2 | 59.0 | 220 | 22.7 | 22.9 | 203 | 21.0 | 20.6 |
| Nebraska | 270 | 15.1 | 12.5 | 714 | 40.0 | 36.9 | 244 | 13.7 | 13.3 | 191 | 10.7 | 10.7 |
| Nevada | 456 | 17.5 | 19.5 | 1,134 | 43.6 | 44.3 | 341 | 13.1 | 13.2 | 528 | 20.3 | 20.2 |
| New Hampshire | 174 | 13.2 | 12.3 | 488 | 37.1 | 35.2 | 149 | 11.3 | 11.1 | 179 | 13.6 | 13.1 |
| New Jersey | 1,715 | 19.8 | 17.5 | 2,436 | 28.1 | 26.7 | 585 | 6.7 | 6.7 | 615 | 7.1 | 6.8 |
| New Mexico | 287 | 14.5 | 13.4 | 1,366 | 68.8 | 68.1 | 373 | 18.8 | 18.9 | 419 | 21.1 | 21.2 |
| New York | 2,394 | 12.3 | 10.7 | 5,042 | 25.9 | 24.3 | 1,284 | 6.6 | 6.4 | 1,409 | 7.2 | 7.0 |
| North Carolina | 1,729 | 18.7 | 18.5 | 4,313 | 46.8 | 46.5 | 1,563 | 16.9 | 16.8 | 1,162 | 12.6 | 12.4 |
| North Dakota | 98 | 15.3 | 11.8 | 342 | 53.3 | 47.7 | 121 | 18.9 | 18.5 | 86 | 13.4 | 13.5 |
| Ohio | 1,865 | 16.2 | 14.3 | 5,093 | 44.3 | 42.1 | 1,301 | 11.3 | 11.1 | 1,412 | 12.3 | 12.1 |
| Oklahoma | 664 | 18.2 | 16.4 | 2,119 | 58.2 | 56.8 | 766 | 21.0 | 20.9 | 575 | 15.8 | 15.8 |
| Oregon | 397 | 10.5 | 9.3 | 1,674 | 44.2 | 41.3 | 443 | 11.7 | 11.4 | 572 | 15.1 | 14.4 |
| Pennsylvania | 3,138 | 25.2 | 19.0 | 5,787 | 46.5 | 42.3 | 1,584 | 12.7 | 12.3 | 1,539 | 12.4 | 11.9 |
| Rhode Island | 163 | 15.5 | 12.1 | 480 | 45.7 | 40.6 | 72 | 6.9 | 6.5 | 110 | 10.5 | 9.9 |
| South Carolina | 945 | 21.1 | 19.5 | 2,285 | 51.0 | 50.3 | 957 | 21.4 | 21.3 | 565 | 12.6 | 12.1 |
| South Dakota | 89 | 11.1 | 8.7 | 381 | 47.4 | 42.4 | 131 | 16.3 | 15.8 | 124 | 15.4 | 15.6 |
| Tennessee | 908 | 14.6 | 13.8 | 3,250 | 52.3 | 50.9 | 1,164 | 18.7 | 18.6 | 973 | 15.7 | 15.1 |
| Texas | 3,536 | 14.5 | 17.0 | 9,189 | 37.8 | 39.8 | 3,780 | 15.5 | 15.7 | 2,552 | 10.5 | 10.8 |
| Utah | 212 | 7.7 | 10.3 | 881 | 32.2 | 36.2 | 302 | 11.0 | 11.6 | 390 | 14.3 | 15.4 |
| Vermont | 39 | 6.3 | 5.4 | 306 | 49.3 | 44.4 | 76 | 12.2 | 11.7 | 94 | 15.1 | 14.0 |
| Virginia | 1,537 | 19.8 | 20.1 | 2,820 | 36.3 | 36.1 | 884 | 11.4 | 11.2 | 948 | 12.2 | 11.9 |
| Washington | 471 | 7.2 | 7.0 | 2,727 | 41.6 | 40.5 | 620 | 9.5 | 9.3 | 889 | 13.6 | 13.1 |
| West Virginia | 522 | 28.8 | 22.8 | 1,253 | 69.1 | 65.8 | 372 | 20.5 | 20.2 | 261 | 14.4 | 13.8 |
| Wisconsin | 1,007 | 17.9 | 15.5 | 2,484 | 44.1 | 40.7 | 642 | 11.4 | 11.2 | 743 | 13.2 | 12.8 |
| Wyoming | 56 | 10.5 | 10.5 | 351 | 65.9 | 65.1 | 141 | 26.5 | 25.8 | 124 | 23.3 | 23.1 |
| Puerto Rico ³ | 1,057 | 26.7 | 25.5 | 1,107 | 28.0 | 27.6 | 383 | 9.7 | 9.6 | 303 | 7.7 | 7.6 |
| Virgin Islands ³ | 10 | * | * | 37 | 33.7 | 33.9 | 18 | * | * | 7 | * | * |
| Guam ³ | 15 | * | * | 39 | 22.2 | 24.8 | 11 | * | * | 29 | 16.5 | 16.0 |
| American Samoa ³ | 9 | * | * | 9 | * | * | - | * | * | - | * | * |
| Northern Marianas ³ | 7 | * | * | 18 | * | * | 8 | * | * | 3 | * | * |

Table 19. Number of deaths, death rates, and age-adjusted death rates for major causes of death: United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, 2008

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Populations used for computing death rates are postcensal estimates based on the 2000 census estimated as of July 1, 2008; see "Technical Notes." Numbers after causes of death are categories of the *International Classification of Diseases, Tenth Revision* (ICD-10). The asterisks (*) preceding the cause-of-death codes indicate that they are not part of the ICD-10; see "Technical Notes." For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

| Area | Assault (homicide) (*U01-*U02,X85-Y09,Y87.1) | | | Alcohol-induced causes ⁵ | | | Drug-induced causes ⁶ | | | Injury by firearms ⁷ | | |
|--------------------------------|---|------|--------------------------------|-------------------------------------|------|--------------------------------|----------------------------------|------|--------------------------------|---------------------------------|------|--------------------------------|
| | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ | Number | Rate | Age-adjusted rate ¹ |
| United States ² | 17,826 | 5.9 | 5.9 | 24,189 | 8.0 | 7.4 | 38,649 | 12.7 | 12.6 | 31,593 | 10.4 | 10.3 |
| Alabama | 454 | 9.7 | 10.0 | 250 | 5.4 | 4.9 | 646 | 13.9 | 13.9 | 820 | 17.6 | 17.6 |
| Alaska | 29 | 4.2 | 4.4 | 147 | 21.4 | 21.8 | 132 | 19.2 | 18.9 | 142 | 20.7 | 20.9 |
| Arizona | 474 | 7.3 | 7.4 | 784 | 12.1 | 12.0 | 853 | 13.1 | 13.5 | 907 | 14.0 | 14.0 |
| Arkansas | 214 | 7.5 | 7.7 | 200 | 7.0 | 6.6 | 390 | 13.7 | 14.1 | 444 | 15.5 | 15.6 |
| California | 2,280 | 6.2 | 6.0 | 4,167 | 11.3 | 11.3 | 4,147 | 11.3 | 11.1 | 3,171 | 8.6 | 8.5 |
| Colorado | 194 | 3.9 | 3.8 | 676 | 13.7 | 12.8 | 760 | 15.4 | 14.8 | 513 | 10.4 | 10.3 |
| Connecticut | 127 | 3.6 | 3.8 | 229 | 6.5 | 5.9 | 397 | 11.3 | 11.1 | 200 | 5.7 | 5.6 |
| Delaware | 65 | 7.4 | 7.8 | 75 | 8.6 | 7.7 | 125 | 14.3 | 14.6 | 95 | 10.9 | 10.9 |
| District of Columbia | 164 | 27.7 | 25.6 | 73 | 12.3 | 11.7 | 77 | 13.0 | 12.9 | 137 | 23.1 | 20.4 |
| Florida | 1,300 | 7.1 | 7.5 | 1,765 | 9.6 | 8.4 | 3,097 | 16.9 | 17.2 | 2,334 | 12.7 | 12.4 |
| Georgia | 712 | 7.4 | 7.3 | 481 | 5.0 | 4.8 | 977 | 10.1 | 9.9 | 1,177 | 12.2 | 12.3 |
| Hawaii | 28 | 2.2 | 2.2 | 75 | 5.8 | 5.3 | 129 | 10.0 | 9.9 | 41 | 3.2 | 3.1 |
| Idaho | 25 | 1.6 | 1.6 | 173 | 11.4 | 11.1 | 152 | 10.0 | 10.1 | 175 | 11.5 | 11.5 |
| Illinois | 872 | 6.8 | 6.7 | 707 | 5.5 | 5.3 | 1,412 | 10.9 | 10.9 | 1,105 | 8.6 | 8.4 |
| Indiana | 323 | 5.1 | 5.2 | 376 | 5.9 | 5.5 | 869 | 13.6 | 13.8 | 723 | 11.3 | 11.3 |
| Iowa | 81 | 2.7 | 2.8 | 205 | 6.8 | 6.2 | 214 | 7.1 | 7.3 | 224 | 7.5 | 7.3 |
| Kansas | 112 | 4.0 | 3.9 | 205 | 7.3 | 7.0 | 241 | 8.6 | 8.7 | 277 | 9.9 | 9.7 |
| Kentucky | 240 | 5.6 | 5.7 | 237 | 5.6 | 5.0 | 779 | 18.2 | 18.3 | 576 | 13.5 | 13.3 |
| Louisiana | 541 | 12.3 | 12.2 | 210 | 4.8 | 4.5 | 686 | 15.6 | 15.9 | 822 | 18.6 | 18.5 |
| Maine | 34 | 2.6 | 2.7 | 99 | 7.5 | 6.1 | 162 | 12.3 | 12.3 | 122 | 9.3 | 8.5 |
| Maryland | 523 | 9.3 | 9.3 | 269 | 4.8 | 4.5 | 731 | 13.0 | 12.5 | 665 | 11.8 | 11.8 |
| Massachusetts | 167 | 2.6 | 2.6 | 431 | 6.6 | 6.0 | 885 | 13.6 | 13.3 | 224 | 3.4 | 3.4 |
| Michigan | 644 | 6.4 | 6.5 | 780 | 7.8 | 7.0 | 1,575 | 15.7 | 15.5 | 1,081 | 10.8 | 10.8 |
| Minnesota | 128 | 2.5 | 2.5 | 408 | 7.8 | 7.3 | 398 | 7.6 | 7.4 | 371 | 7.1 | 7.0 |
| Mississippi | 330 | 11.2 | 11.3 | 172 | 5.9 | 5.7 | 321 | 10.9 | 11.3 | 568 | 19.3 | 19.4 |
| Missouri | 482 | 8.2 | 8.3 | 397 | 6.7 | 6.3 | 779 | 13.2 | 13.3 | 818 | 13.8 | 13.8 |
| Montana | 40 | 4.1 | 4.2 | 162 | 16.7 | 15.2 | 141 | 14.6 | 14.8 | 155 | 16.0 | 15.7 |
| Nebraska | 78 | 4.4 | 4.4 | 137 | 7.7 | 7.3 | 113 | 6.3 | 6.5 | 150 | 8.4 | 8.4 |
| Nevada | 161 | 6.2 | 6.2 | 281 | 10.8 | 10.2 | 529 | 20.3 | 20.0 | 404 | 15.5 | 15.6 |
| New Hampshire | 22 | 1.7 | 1.6 | 125 | 9.5 | 7.9 | 129 | 9.8 | 9.5 | 93 | 7.1 | 6.7 |
| New Jersey | 377 | 4.3 | 4.5 | 504 | 5.8 | 5.2 | 808 | 9.3 | 9.1 | 429 | 4.9 | 5.0 |
| New Mexico | 151 | 7.6 | 7.8 | 435 | 21.9 | 21.6 | 534 | 26.9 | 27.8 | 294 | 14.8 | 14.8 |
| New York | 882 | 4.5 | 4.5 | 1,249 | 6.4 | 5.8 | 1,856 | 9.5 | 9.2 | 963 | 4.9 | 4.9 |
| North Carolina | 668 | 7.2 | 7.3 | 723 | 7.8 | 7.3 | 1,217 | 13.2 | 13.1 | 1,160 | 12.6 | 12.5 |
| North Dakota | 3 | * | * | 80 | 12.5 | 12.1 | 48 | 7.5 | 7.9 | 59 | 9.2 | 8.8 |
| Ohio | 598 | 5.2 | 5.4 | 834 | 7.3 | 6.5 | 1,811 | 15.8 | 15.7 | 1,115 | 9.7 | 9.7 |
| Oklahoma | 230 | 6.3 | 6.5 | 421 | 11.6 | 10.8 | 585 | 16.1 | 16.3 | 513 | 14.1 | 14.1 |
| Oregon | 103 | 2.7 | 2.7 | 544 | 14.4 | 12.8 | 521 | 13.7 | 13.3 | 385 | 10.2 | 9.7 |
| Pennsylvania | 697 | 5.6 | 5.9 | 631 | 5.1 | 4.5 | 1,898 | 15.2 | 15.4 | 1,345 | 10.8 | 10.7 |
| Rhode Island | 29 | 2.8 | 2.7 | 86 | 8.2 | 7.5 | 193 | 18.4 | 18.0 | 44 | 4.2 | 3.9 |
| South Carolina | 354 | 7.9 | 8.0 | 325 | 7.3 | 6.6 | 588 | 13.1 | 13.1 | 615 | 13.7 | 13.4 |
| South Dakota | 20 | 2.5 | 2.5 | 103 | 12.8 | 12.3 | 57 | 7.1 | 7.7 | 83 | 10.3 | 10.5 |
| Tennessee | 479 | 7.7 | 7.8 | 458 | 7.4 | 6.7 | 977 | 15.7 | 15.4 | 985 | 15.8 | 15.6 |
| Texas | 1,487 | 6.1 | 6.1 | 1,344 | 5.5 | 5.7 | 2,199 | 9.0 | 9.2 | 2,598 | 10.7 | 10.9 |
| Utah | 46 | 1.7 | 1.7 | 170 | 6.2 | 7.3 | 483 | 17.7 | 19.1 | 238 | 8.7 | 9.4 |
| Vermont | 17 | * | * | 62 | 10.0 | 8.8 | 76 | 12.2 | 11.2 | 54 | 8.7 | 8.1 |
| Virginia | 376 | 4.8 | 4.8 | 460 | 5.9 | 5.4 | 730 | 9.4 | 9.2 | 817 | 10.5 | 10.3 |
| Washington | 224 | 3.4 | 3.4 | 780 | 11.9 | 11.0 | 1,058 | 16.2 | 15.4 | 587 | 9.0 | 8.7 |
| West Virginia | 70 | 3.9 | 4.0 | 132 | 7.3 | 6.4 | 468 | 25.8 | 26.3 | 239 | 13.2 | 12.7 |
| Wisconsin | 153 | 2.7 | 2.8 | 463 | 8.2 | 7.4 | 622 | 11.1 | 10.8 | 443 | 7.9 | 7.7 |
| Wyoming | 18 | * | * | 89 | 16.7 | 15.7 | 74 | 13.9 | 14.4 | 93 | 17.5 | 17.1 |
| Puerto Rico ³ | 818 | 20.7 | 20.5 | 195 | 4.9 | 4.5 | 251 | 6.3 | 6.6 | 781 | 19.8 | 19.6 |
| Virgin Islands ³ | 47 | 42.8 | 47.4 | 11 | * | * | 1 | * | * | 45 | 41.0 | 45.1 |
| Guam ³ | 1 | * | * | 2 | * | * | - | * | * | 3 | * | * |
| American Samoa ³ | - | * | * | 2 | * | * | 2 | * | * | - | * | * |
| Northern Marianas ³ | 1 | * | * | 3 | * | * | - | * | * | - | * | * |

- Quantity zero.

* Figure does not meet standards of reliability or precision; see "Technical Notes."

¹Death rates are affected by the population composition of the area. Age-adjusted death rates should be used for comparisons between areas; for method of computation, see "Technical Notes."

²Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa and Northern Marianas.

³Age-adjusted death rates for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas are calculated using different age groups in the weighting procedure; see "Technical Notes."

⁴ICD-10 codes for Motor vehicle accidents are V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V29,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0, and V89.2; see "Technical Notes."

⁵Causes of death attributable to alcohol-induced mortality include ICD-10 codes E24.4,F10,G31.2,G62.1,G72.1,I42.6,K29.2,K70,K85.2,K86.0,R78.0,X45,X65, and Y15; see "Technical Notes."

⁶Causes of death attributable to drug-induced mortality include ICD-10 codes D52.1,D59.0,D59.2,D61.1,D64.2,E06.4,E16.0,E23.1,E24.2,E27.3,E66.1,F11.0-F11.5,F11.7-F11.9,F12.0-F12.5,F12.7-F12.9,F13.0-F13.5,F13.7-F13.9,F14.0-F14.5,F14.7-F14.9,F15.0-F15.5,F15.7-F15.9,F16.0-F16.5,F16.7-F16.9,F17.0-F17.3-F17.5,F17.7-F17.9,F18.0-F18.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9,G21.1,G24.0,G25.1,G25.4,G25.6,G44.4,G62.0,G72.0,I95.2,J70.2-J70.4,K85.3,L10.5,L27.0-L27.1,M10.2,M32.0,M80.4,M81.4,M83.5,M87.1,F50.2,R78.1-R78.5,X40-X44,X60-X64,X85, and Y10-Y14; see "Technical Notes."

⁷ICD-10 codes for Injury by firearms are *U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24, and Y35.0; see "Technical Notes."

Table 20. Infant, neonatal, and postneonatal mortality rates by race and sex: United States, 1940, 1950, 1960, 1970, and 1975-2008

[Rates are infant (under 1 year), neonatal (under 28 days), and postneonatal (28 days-11 months) deaths per 1,000 live births in specified group. Beginning in 1980, race for live births is tabulated according to race of mother; see "Technical Notes." Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards]

| Year | All races | | | White ¹ | | | All other ¹ | | | | | |
|-----------------------------|------------|--------|--------|--------------------|--------|--------|------------------------|-------|--------|--------------------|-------|--------|
| | Both sexes | | Female | Both sexes | | Female | Total ¹ | | | Black ¹ | | |
| | Male | Female | | Male | Female | | Both sexes | Male | Female | Both sexes | Male | Female |
| Infant mortality rate | | | | | | | | | | | | |
| Race of mother ² | | | | | | | | | | | | |
| 2008 | 6.61 | 7.21 | 5.97 | 5.55 | 6.05 | 5.02 | 10.16 | 11.11 | 9.18 | 12.74 | 13.93 | 11.50 |
| 2007 | 6.75 | 7.38 | 6.09 | 5.64 | 6.17 | 5.08 | 10.55 | 11.51 | 9.54 | 13.24 | 14.49 | 11.94 |
| 2006 | 6.69 | 7.32 | 6.03 | 5.56 | 6.10 | 4.99 | 10.60 | 11.54 | 9.61 | 13.29 | 14.38 | 12.16 |
| 2005 | 6.87 | 7.56 | 6.15 | 5.73 | 6.32 | 5.11 | 10.92 | 11.98 | 9.82 | 13.73 | 15.15 | 12.27 |
| 2004 | 6.79 | 7.47 | 6.09 | 5.66 | 6.22 | 5.07 | 10.92 | 12.01 | 9.77 | 13.79 | 15.19 | 12.33 |
| 2003 | 6.85 | 7.60 | 6.07 | 5.72 | 6.36 | 5.05 | 11.09 | 12.24 | 9.90 | 14.01 | 15.53 | 12.43 |
| 2002 | 6.97 | 7.64 | 6.27 | 5.79 | 6.42 | 5.13 | 11.41 | 12.24 | 10.55 | 14.36 | 15.43 | 13.25 |
| 2001 | 6.85 | 7.52 | 6.14 | 5.65 | 6.21 | 5.06 | 11.33 | 12.44 | 10.18 | 14.02 | 15.48 | 12.52 |
| 2000 | 6.91 | 7.57 | 6.21 | 5.68 | 6.22 | 5.11 | 11.44 | 12.57 | 10.26 | 14.09 | 15.50 | 12.63 |
| 1999 | 7.06 | 7.72 | 6.36 | 5.77 | 6.35 | 5.15 | 11.94 | 12.94 | 10.90 | 14.56 | 15.92 | 13.16 |
| 1998 | 7.20 | 7.83 | 6.54 | 5.95 | 6.47 | 5.41 | 11.92 | 13.01 | 10.79 | 14.31 | 15.75 | 12.82 |
| 1997 | 7.23 | 7.95 | 6.47 | 6.03 | 6.67 | 5.36 | 11.76 | 12.83 | 10.65 | 14.16 | 15.47 | 12.82 |
| 1996 | 7.32 | 8.02 | 6.59 | 6.07 | 6.67 | 5.44 | 12.18 | 13.31 | 11.01 | 14.68 | 16.04 | 13.27 |
| 1995 | 7.59 | 8.33 | 6.81 | 6.29 | 6.99 | 5.55 | 12.61 | 13.53 | 11.65 | 15.12 | 16.34 | 13.86 |
| 1994 | 8.02 | 8.81 | 7.20 | 6.57 | 7.22 | 5.89 | 13.47 | 14.82 | 12.08 | 15.83 | 17.49 | 14.12 |
| 1993 | 8.37 | 9.25 | 7.43 | 6.82 | 7.56 | 6.05 | 14.07 | 15.58 | 12.52 | 16.52 | 18.33 | 14.67 |
| 1992 | 8.52 | 9.39 | 7.61 | 6.92 | 7.69 | 6.12 | 14.44 | 15.72 | 13.10 | 16.85 | 18.38 | 15.26 |
| 1991 | 8.94 | 10.00 | 7.84 | 7.30 | 8.26 | 6.30 | 15.07 | 16.53 | 13.57 | 17.57 | 19.38 | 15.71 |
| 1990 | 9.22 | 10.26 | 8.13 | 7.56 | 8.51 | 6.56 | 15.52 | 16.96 | 14.03 | 17.96 | 19.62 | 16.25 |
| 1989 | 9.81 | 10.81 | 8.77 | 8.08 | 9.01 | 7.10 | 16.33 | 17.60 | 15.02 | 18.61 | 20.02 | 17.15 |
| 1988 | 9.95 | 10.99 | 8.86 | 8.36 | 9.35 | 7.31 | 16.08 | 17.33 | 14.79 | 18.54 | 20.04 | 16.99 |
| 1987 | 10.08 | 11.17 | 8.94 | 8.48 | 9.45 | 7.45 | 16.46 | 18.06 | 14.80 | 18.75 | 20.63 | 16.83 |
| 1986 | 10.35 | 11.55 | 9.10 | 8.80 | 9.87 | 7.67 | 16.72 | 18.45 | 14.91 | 18.90 | 20.91 | 16.81 |
| 1985 | 10.64 | 11.91 | 9.32 | 9.17 | 10.39 | 7.88 | 16.84 | 18.33 | 15.28 | 19.01 | 20.76 | 17.22 |
| 1984 | 10.79 | 11.90 | 9.62 | 9.30 | 10.38 | 8.17 | 17.05 | 18.37 | 15.69 | 19.15 | 20.67 | 17.58 |
| 1983 | 11.16 | 12.31 | 9.96 | 9.61 | 10.66 | 8.49 | 17.80 | 19.44 | 16.11 | 19.98 | 21.95 | 17.96 |
| 1982 | 11.52 | 12.77 | 10.21 | 9.94 | 11.08 | 8.73 | 18.31 | 20.07 | 16.49 | 20.48 | 22.45 | 18.44 |
| 1981 | 11.93 | 13.14 | 10.66 | 10.34 | 11.50 | 9.12 | 18.82 | 20.36 | 17.24 | 20.81 | 22.54 | 19.03 |
| 1980 | 12.60 | 13.93 | 11.21 | 10.86 | 12.12 | 9.52 | 20.19 | 21.89 | 18.43 | 22.19 | 24.16 | 20.15 |
| Race of child ³ | | | | | | | | | | | | |
| 1980 | 12.60 | 13.93 | 11.21 | 11.00 | 12.27 | 9.65 | 19.12 | 20.73 | 17.47 | 21.37 | 23.27 | 19.43 |
| 1979 | 13.07 | 14.50 | 11.56 | 11.42 | 12.82 | 9.94 | 19.81 | 21.47 | 18.09 | 21.78 | 23.66 | 19.85 |
| 1978 | 13.78 | 15.26 | 12.23 | 12.01 | 13.37 | 10.58 | 21.06 | 23.15 | 18.90 | 23.11 | 25.39 | 20.77 |
| 1977 | 14.12 | 15.75 | 12.40 | 12.34 | 13.90 | 10.68 | 21.68 | 23.71 | 19.58 | 23.64 | 25.91 | 21.30 |
| 1976 | 15.24 | 16.82 | 13.57 | 13.31 | 14.81 | 11.71 | 23.50 | 25.51 | 21.42 | 25.54 | 27.83 | 23.19 |
| 1975 | 16.07 | 17.86 | 14.18 | 14.17 | 15.94 | 12.30 | 24.23 | 26.24 | 22.17 | 26.21 | 28.32 | 24.03 |
| 1970 | 20.01 | 22.37 | 17.52 | 17.75 | 19.95 | 15.42 | 30.92 | 34.20 | 27.53 | 32.65 | 36.18 | 29.01 |
| 1960 | 26.04 | 29.33 | 22.59 | 22.91 | 26.01 | 19.64 | 43.21 | 47.88 | 38.46 | 44.32 | 49.12 | 39.43 |
| 1950 | 29.21 | 32.75 | 25.48 | 26.77 | 30.21 | 23.13 | 44.46 | 48.87 | 39.93 | 43.91 | 48.27 | 39.44 |
| 1940 | 47.02 | 52.45 | 41.29 | 43.23 | 48.32 | 37.84 | 73.78 | 82.21 | 65.19 | 72.94 | 81.07 | 64.61 |

Table 20. Infant, neonatal, and postneonatal mortality rates by race and sex: United States, 1940, 1950, 1960, 1970, and 1975-2008

[Rates are infant (under 1 year), neonatal (under 28 days), and postneonatal (28 days-11 months) deaths per 1,000 live births in specified group. Beginning in 1980, race for live births is tabulated according to race of mother; see "Technical Notes." Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards]

| Year | All races | | | White ¹ | | | All other ¹ | | | | | |
|-----------------------------|------------|--------|--------|--------------------|--------|--------|------------------------|-------|--------|--------------------|-------|--------|
| | Both sexes | | Female | Both sexes | | Female | Total ¹ | | | Black ¹ | | |
| | Male | Female | | Male | Female | | Both sexes | Male | Female | Both sexes | Male | Female |
| Neonatal mortality rate | | | | | | | | | | | | |
| Race of mother ² | | | | | | | | | | | | |
| 2008 | 4.29 | 4.67 | 3.89 | 3.62 | 3.94 | 3.28 | 6.54 | 7.14 | 5.92 | 8.23 | 8.99 | 7.45 |
| 2007 | 4.42 | 4.79 | 4.02 | 3.70 | 4.01 | 3.37 | 6.86 | 7.49 | 6.22 | 8.65 | 9.48 | 7.78 |
| 2006 | 4.45 | 4.84 | 4.05 | 3.72 | 4.05 | 3.37 | 7.00 | 7.58 | 6.40 | 8.82 | 9.49 | 8.12 |
| 2005 | 4.54 | 4.93 | 4.12 | 3.79 | 4.10 | 3.46 | 7.18 | 7.88 | 6.47 | 9.07 | 9.96 | 8.14 |
| 2004 | 4.52 | 4.94 | 4.09 | 3.78 | 4.14 | 3.41 | 7.19 | 7.82 | 6.54 | 9.13 | 9.95 | 8.27 |
| 2003 | 4.62 | 5.08 | 4.14 | 3.87 | 4.26 | 3.46 | 7.40 | 8.14 | 6.64 | 9.40 | 10.40 | 8.37 |
| 2002 | 4.66 | 5.06 | 4.25 | 3.89 | 4.27 | 3.50 | 7.55 | 8.03 | 7.05 | 9.51 | 10.13 | 8.87 |
| 2001 | 4.54 | 4.97 | 4.08 | 3.78 | 4.15 | 3.39 | 7.37 | 8.06 | 6.65 | 9.21 | 10.15 | 8.25 |
| 2000 | 4.63 | 5.06 | 4.17 | 3.82 | 4.16 | 3.46 | 7.60 | 8.39 | 6.79 | 9.38 | 10.39 | 8.35 |
| 1999 | 4.73 | 5.11 | 4.33 | 3.88 | 4.19 | 3.56 | 7.94 | 8.60 | 7.25 | 9.77 | 10.72 | 8.79 |
| 1998 | 4.80 | 5.21 | 4.37 | 3.98 | 4.31 | 3.63 | 7.91 | 8.63 | 7.17 | 9.55 | 10.51 | 8.56 |
| 1997 | 4.77 | 5.20 | 4.32 | 3.99 | 4.37 | 3.59 | 7.74 | 8.36 | 7.09 | 9.40 | 10.12 | 8.65 |
| 1996 | 4.77 | 5.18 | 4.34 | 3.97 | 4.31 | 3.62 | 7.86 | 8.59 | 7.12 | 9.56 | 10.45 | 8.65 |
| 1995 | 4.91 | 5.36 | 4.44 | 4.08 | 4.50 | 3.64 | 8.13 | 8.71 | 7.53 | 9.85 | 10.63 | 9.05 |
| 1994 | 5.12 | 5.58 | 4.64 | 4.20 | 4.55 | 3.83 | 8.60 | 9.51 | 7.65 | 10.21 | 11.32 | 9.07 |
| 1993 | 5.29 | 5.75 | 4.81 | 4.29 | 4.64 | 3.92 | 9.02 | 9.90 | 8.11 | 10.69 | 11.76 | 9.59 |
| 1992 | 5.37 | 5.84 | 4.89 | 4.35 | 4.72 | 3.96 | 9.19 | 10.02 | 8.32 | 10.83 | 11.83 | 9.79 |
| 1991 | 5.59 | 6.17 | 4.98 | 4.53 | 5.01 | 4.04 | 9.52 | 10.54 | 8.47 | 11.25 | 12.56 | 9.89 |
| 1990 | 5.85 | 6.50 | 5.16 | 4.79 | 5.38 | 4.17 | 9.86 | 10.79 | 8.89 | 11.55 | 12.69 | 10.38 |
| 1989 | 6.23 | 6.79 | 5.63 | 5.15 | 5.66 | 4.60 | 10.30 | 11.08 | 9.49 | 11.92 | 12.84 | 10.97 |
| 1988 | 6.32 | 6.95 | 5.65 | 5.27 | 5.84 | 4.67 | 10.33 | 11.22 | 9.42 | 12.05 | 13.14 | 10.93 |
| 1987 | 6.46 | 7.11 | 5.79 | 5.40 | 5.96 | 4.82 | 10.68 | 11.72 | 9.61 | 12.30 | 13.52 | 11.05 |
| 1986 | 6.71 | 7.42 | 5.97 | 5.72 | 6.34 | 5.05 | 10.79 | 11.83 | 9.70 | 12.31 | 13.59 | 10.98 |
| 1985 | 6.96 | 7.75 | 6.13 | 6.00 | 6.75 | 5.21 | 11.00 | 12.00 | 9.95 | 12.62 | 13.81 | 11.39 |
| 1984 | 7.00 | 7.66 | 6.31 | 6.09 | 6.72 | 5.41 | 10.87 | 11.66 | 10.06 | 12.32 | 13.22 | 11.40 |
| 1983 | 7.28 | 8.01 | 6.52 | 6.31 | 6.98 | 5.61 | 11.41 | 12.46 | 10.33 | 12.93 | 14.20 | 11.63 |
| 1982 | 7.70 | 8.48 | 6.88 | 6.69 | 7.39 | 5.94 | 12.04 | 13.15 | 10.88 | 13.62 | 14.86 | 12.34 |
| 1981 | 8.02 | 8.81 | 7.20 | 6.99 | 7.73 | 6.20 | 12.51 | 13.52 | 11.48 | 13.98 | 15.16 | 12.77 |
| 1980 | 8.48 | 9.31 | 7.60 | 7.39 | 8.19 | 6.54 | 13.21 | 14.27 | 12.13 | 14.62 | 15.91 | 13.29 |
| Race of child ³ | | | | | | | | | | | | |
| 1980 | 8.48 | 9.31 | 7.60 | 7.48 | 8.29 | 6.62 | 12.52 | 13.51 | 11.49 | 14.08 | 15.32 | 12.81 |
| 1979 | 8.87 | 9.79 | 7.89 | 7.88 | 8.80 | 6.92 | 12.89 | 13.91 | 11.83 | 14.31 | 15.45 | 13.14 |
| 1978 | 9.49 | 10.54 | 8.38 | 8.39 | 9.34 | 7.38 | 14.01 | 15.54 | 12.43 | 15.47 | 17.17 | 13.72 |
| 1977 | 9.88 | 11.00 | 8.70 | 8.75 | 9.83 | 7.60 | 14.66 | 16.02 | 13.27 | 16.08 | 17.60 | 14.52 |
| 1976 | 10.92 | 12.03 | 9.75 | 9.66 | 10.73 | 8.52 | 16.31 | 17.68 | 14.90 | 17.92 | 19.47 | 16.32 |
| 1975 | 11.58 | 12.91 | 10.18 | 10.38 | 11.70 | 8.98 | 16.78 | 18.21 | 15.31 | 18.32 | 19.78 | 16.81 |
| 1970 | 15.08 | 16.96 | 13.10 | 13.77 | 15.55 | 11.88 | 21.43 | 23.87 | 18.91 | 22.76 | 25.37 | 20.07 |
| 1960 | 18.73 | 21.24 | 16.09 | 17.24 | 19.66 | 14.70 | 26.86 | 30.04 | 23.62 | 27.83 | 31.13 | 24.49 |
| 1950 | 20.50 | 23.34 | 17.50 | 19.37 | 22.18 | 16.40 | 27.54 | 30.76 | 24.23 | 27.80 | 31.09 | 24.44 |
| 1940 | 28.75 | 32.56 | 24.74 | 27.20 | 30.85 | 23.33 | 39.71 | 44.87 | 34.45 | 39.90 | 44.78 | 34.89 |

Table 20. Infant, neonatal, and postneonatal mortality rates by race and sex: United States, 1940, 1950, 1960, 1970, and 1975-2008

| [Rates are infant (under 1 year), neonatal (under 28 days), and postneonatal (28 days-11 months) deaths per 1,000 live births in specified group. Beginning in 1980, race for live births is tabulated according to race of mother; see "Technical Notes." Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards] | | | | | | | | | | | | |
|--|------------|-------|--------|--------------------|-------|--------|------------------------|-------|--------|--------------------|-------|--------|
| Year | All races | | | White ¹ | | | All other ¹ | | | | | |
| | Both sexes | Male | Female | Both sexes | Male | Female | Total ¹ | | | Black ¹ | | |
| | | | | | | | Both sexes | Male | Female | Both sexes | Male | Female |
| Postneonatal mortality rate | | | | | | | | | | | | |
| Race of mother ² | | | | | | | | | | | | |
| 2008 | 2.32 | 2.54 | 2.08 | 1.93 | 2.12 | 1.73 | 3.62 | 3.97 | 3.26 | 4.50 | 4.93 | 4.06 |
| 2007 | 2.34 | 2.58 | 2.07 | 1.94 | 2.16 | 1.71 | 3.68 | 4.02 | 3.32 | 4.59 | 5.01 | 4.16 |
| 2006 | 2.24 | 2.48 | 1.98 | 1.84 | 2.05 | 1.62 | 3.60 | 3.96 | 3.22 | 4.47 | 4.89 | 4.04 |
| 2005 | 2.34 | 2.63 | 2.03 | 1.94 | 2.22 | 1.65 | 3.73 | 4.10 | 3.36 | 4.67 | 5.19 | 4.13 |
| 2004 | 2.27 | 2.53 | 2.00 | 1.87 | 2.07 | 1.66 | 3.72 | 4.19 | 3.23 | 4.66 | 5.24 | 4.06 |
| 2003 | 2.23 | 2.52 | 1.94 | 1.84 | 2.09 | 1.58 | 3.69 | 4.10 | 3.26 | 4.60 | 5.13 | 4.06 |
| 2002 | 2.31 | 2.58 | 2.03 | 1.89 | 2.15 | 1.63 | 3.86 | 4.21 | 3.50 | 4.85 | 5.30 | 4.38 |
| 2001 | 2.31 | 2.55 | 2.06 | 1.87 | 2.06 | 1.67 | 3.96 | 4.37 | 3.53 | 4.81 | 5.32 | 4.27 |
| 2000 | 2.28 | 2.51 | 2.04 | 1.86 | 2.06 | 1.66 | 3.83 | 4.18 | 3.47 | 4.70 | 5.11 | 4.28 |
| 1999 | 2.33 | 2.61 | 2.03 | 1.88 | 2.16 | 1.60 | 4.00 | 4.34 | 3.64 | 4.79 | 5.20 | 4.36 |
| 1998 | 2.40 | 2.62 | 2.16 | 1.97 | 2.16 | 1.78 | 4.01 | 4.38 | 3.62 | 4.76 | 5.24 | 4.26 |
| 1997 | 2.45 | 2.75 | 2.14 | 2.04 | 2.30 | 1.77 | 4.02 | 4.47 | 3.56 | 4.77 | 5.34 | 4.17 |
| 1996 | 2.55 | 2.84 | 2.24 | 2.09 | 2.36 | 1.81 | 4.32 | 4.72 | 3.90 | 5.11 | 5.60 | 4.62 |
| 1995 | 2.67 | 2.97 | 2.37 | 2.21 | 2.49 | 1.91 | 4.47 | 4.82 | 4.11 | 5.27 | 5.71 | 4.81 |
| 1994 | 2.90 | 3.22 | 2.56 | 2.37 | 2.67 | 2.06 | 4.88 | 5.32 | 4.42 | 5.61 | 6.17 | 5.04 |
| 1993 | 3.07 | 3.50 | 2.62 | 2.54 | 2.92 | 2.13 | 5.06 | 5.68 | 4.42 | 5.83 | 6.57 | 5.08 |
| 1992 | 3.14 | 3.55 | 2.72 | 2.58 | 2.97 | 2.16 | 5.25 | 5.69 | 4.78 | 6.02 | 6.54 | 5.47 |
| 1991 | 3.35 | 3.82 | 2.86 | 2.76 | 3.25 | 2.26 | 5.55 | 5.99 | 5.10 | 6.32 | 6.82 | 5.81 |
| 1990 | 3.38 | 3.76 | 2.97 | 2.78 | 3.14 | 2.39 | 5.66 | 6.16 | 5.13 | 6.41 | 6.93 | 5.87 |
| 1989 | 3.59 | 4.01 | 3.14 | 2.93 | 3.35 | 2.49 | 6.03 | 6.52 | 5.53 | 6.69 | 7.18 | 6.19 |
| 1988 | 3.64 | 4.04 | 3.21 | 3.09 | 3.51 | 2.65 | 5.75 | 6.11 | 5.37 | 6.49 | 6.90 | 6.07 |
| 1987 | 3.62 | 4.06 | 3.15 | 3.08 | 3.49 | 2.64 | 5.77 | 6.34 | 5.18 | 6.45 | 7.10 | 5.77 |
| 1986 | 3.64 | 4.13 | 3.13 | 3.08 | 3.53 | 2.62 | 5.93 | 6.62 | 5.21 | 6.59 | 7.33 | 5.83 |
| 1985 | 3.68 | 4.15 | 3.19 | 3.17 | 3.64 | 2.67 | 5.84 | 6.33 | 5.33 | 6.40 | 6.95 | 5.83 |
| 1984 | 3.79 | 4.23 | 3.31 | 3.22 | 3.65 | 2.76 | 6.18 | 6.71 | 5.63 | 6.83 | 7.46 | 6.18 |
| 1983 | 3.88 | 4.30 | 3.44 | 3.29 | 3.68 | 2.88 | 6.39 | 6.98 | 5.78 | 7.05 | 7.75 | 6.32 |
| 1982 | 3.82 | 4.29 | 3.33 | 3.25 | 3.68 | 2.79 | 6.28 | 6.92 | 5.61 | 6.86 | 7.59 | 6.10 |
| 1981 | 3.91 | 4.34 | 3.46 | 3.35 | 3.77 | 2.92 | 6.31 | 6.84 | 5.76 | 6.83 | 7.38 | 6.26 |
| 1980 | 4.13 | 4.62 | 3.61 | 3.47 | 3.93 | 2.98 | 6.97 | 7.62 | 6.30 | 7.57 | 8.25 | 6.87 |
| Race of child ³ | | | | | | | | | | | | |
| 1980 | 4.13 | 4.62 | 3.61 | 3.52 | 3.98 | 3.02 | 6.61 | 7.22 | 5.97 | 7.29 | 7.95 | 6.62 |
| 1979 | 4.20 | 4.71 | 3.67 | 3.54 | 4.02 | 3.03 | 6.92 | 7.57 | 6.25 | 7.47 | 8.21 | 6.71 |
| 1978 | 4.30 | 4.72 | 3.85 | 3.63 | 4.03 | 3.20 | 7.05 | 7.60 | 6.48 | 7.64 | 8.22 | 7.05 |
| 1977 | 4.24 | 4.75 | 3.71 | 3.59 | 4.07 | 3.08 | 7.01 | 7.69 | 6.31 | 7.56 | 8.32 | 6.78 |
| 1976 | 4.32 | 4.79 | 3.83 | 3.65 | 4.08 | 3.19 | 7.19 | 7.83 | 6.52 | 7.63 | 8.36 | 6.88 |
| 1975 | 4.49 | 4.95 | 4.00 | 3.80 | 4.24 | 3.33 | 7.45 | 8.03 | 6.86 | 7.89 | 8.54 | 7.22 |
| 1970 | 4.93 | 5.41 | 4.42 | 3.98 | 4.40 | 3.54 | 9.49 | 10.33 | 8.62 | 9.89 | 10.81 | 8.94 |
| 1960 | 7.31 | 8.10 | 6.49 | 5.66 | 6.35 | 4.94 | 16.35 | 17.84 | 14.84 | 16.48 | 17.99 | 14.95 |
| 1950 | 8.71 | 9.41 | 7.98 | 7.40 | 8.04 | 6.73 | 16.92 | 18.11 | 15.70 | 16.10 | 17.18 | 15.00 |
| 1940 | 18.27 | 19.89 | 16.55 | 16.03 | 17.47 | 14.50 | 34.07 | 37.35 | 30.74 | 33.05 | 36.29 | 29.72 |

¹Multiple-race data were reported for deaths by 34 states and the District of Columbia in 2008, by 27 states and the District of Columbia in 2007, by 25 states and the District of Columbia in 2006, by 21 states and the District of Columbia in 2005, by 15 states in 2004, and by 7 states in 2003; see "Technical Notes." Multiple-race data were reported for births by 30 areas in 2008, by 27 areas in 2007, by 23 areas in 2006, by 19 areas in 2005, by 15 areas in 2004, and by 6 areas in 2003; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."

²Infant deaths are based on race of child as stated on the death certificate; live births are based on race of mother as stated on the birth certificate; see "Technical Notes."

³Infant deaths are based on race of child as stated on the death certificate; live births are based on race of parents as stated on the birth certificate; see "Technical Notes."

Table 21. Number of infant deaths and infant mortality rates for 130 selected causes by race: United States, 2008

| Cause of death (based on ICD-10, 2004) | Number | | | Rate | | |
|---|------------------------|--------------------|--------------------|------------------------|--------------------|--------------------|
| | All races ¹ | White ² | Black ² | All races ¹ | White ² | Black ² |
| | All causes | 28,059 | 18,164 | 8,543 | 660.6 | 554.8 |
| Certain infectious and parasitic diseases (A00-B99) | 478 | 306 | 151 | 11.3 | 9.3 | 22.5 |
| Certain intestinal infectious diseases (A00-A08) | 12 | 8 | 3 | * | * | * |
| Diarrhea and gastroenteritis of infectious origin (A09) | - | - | - | * | * | * |
| Tuberculosis (A16-A19) | - | - | - | * | * | * |
| Tetanus (A33,A35) | - | - | - | * | * | * |
| Diphtheria (A36) | - | - | - | * | * | * |
| Whooping cough (A37) | 18 | 16 | - | * | * | * |
| Meningococcal infection (A39) | 9 | 9 | - | * | * | * |
| Septicemia (A40-A41) | 289 | 170 | 108 | 6.8 | 5.2 | 16.1 |
| Congenital syphilis (A50) | - | - | - | * | * | * |
| Gonococcal infection (A54) | - | - | - | * | * | * |
| Viral diseases (A80-B34) | 102 | 77 | 20 | 2.4 | 2.4 | 3.0 |
| Acute poliomyelitis (A80) | - | - | - | * | * | * |
| Varicella (chickenpox) (B01) | - | - | - | * | * | * |
| Measles (B05) | - | - | - | * | * | * |
| Human immunodeficiency virus (HIV) disease (B20-B24) | - | - | - | * | * | * |
| Mumps (B26) | - | - | - | * | * | * |
| Other and unspecified viral diseases (A81-B00,B02-B04,B06-B19,B25,B27-B34) | 102 | 77 | 20 | 2.4 | 2.4 | 3.0 |
| Candidiasis (B37) | 7 | 4 | 2 | * | * | * |
| Malaria (B50-B54) | - | - | - | * | * | * |
| Pneumocystosis (B59) | 3 | 3 | - | * | * | * |
| All other and unspecified infectious and parasitic diseases (A20-A32,A38,A42-A49,A51-A53,A55-A79,B35-B36,B38-B49,B55-B58,B60-B99) | 38 | 19 | 18 | 0.9 | * | * |
| Neoplasms (C00-D48) | 131 | 99 | 23 | 3.1 | 3.0 | 3.4 |
| Malignant neoplasms (C00-C97) | 70 | 51 | 15 | 1.6 | 1.6 | * |
| Hodgkin's disease and non-Hodgkin's lymphomas (C81-C85) | 1 | - | 1 | * | * | * |
| Leukemia (C91-C95) | 27 | 21 | 4 | 0.6 | 0.6 | * |
| Other and unspecified malignant neoplasms (C00-C80,C88,C90,C96-C97) | 42 | 30 | 10 | 1.0 | 0.9 | * |
| In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) | 61 | 48 | 8 | 1.4 | 1.5 | * |
| Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89) | 80 | 52 | 22 | 1.9 | 1.6 | 3.3 |
| Anemias (D50-D64) | 15 | 7 | 5 | * | * | * |
| Hemorrhagic conditions and other diseases of blood and blood-forming organs (D65-D76) | 56 | 41 | 13 | 1.3 | 1.3 | * |
| Certain disorders involving the immune mechanism (D80-D89) | 9 | 4 | 4 | * | * | * |
| Endocrine, nutritional and metabolic diseases (E00-E88) | 248 | 165 | 62 | 5.8 | 5.0 | 9.2 |
| Short stature, not elsewhere classified (E34.3) | 9 | 7 | 1 | * | * | * |
| Nutritional deficiencies (E40-E64) | 10 | 4 | 5 | * | * | * |
| Cystic fibrosis (E84) | 4 | 3 | 1 | * | * | * |
| Volume depletion, disorders of fluid, electrolyte and acid-base balance (E86-E87) | 78 | 50 | 28 | 1.8 | 1.5 | 4.2 |
| All other endocrine, nutritional and metabolic diseases (E00-E32,E34.0-E34.2,E34.4-E34.9,E65-E83,E85,E88) | 147 | 101 | 27 | 3.5 | 3.1 | 4.0 |
| Diseases of the nervous system (G00-G98) | 415 | 296 | 89 | 9.8 | 9.0 | 13.3 |
| Meningitis (G00,G03) | 68 | 49 | 13 | 1.6 | 1.5 | * |
| Infantile spinal muscular atrophy, type I (Werdnig-Hoffman) (G12.0) | 5 | 5 | - | * | * | * |
| Infantile cerebral palsy (G80) | 8 | 3 | 4 | * | * | * |
| Anoxic brain damage, not elsewhere classified (G93.1) | 56 | 28 | 24 | 1.3 | 0.9 | 3.6 |
| Other diseases of nervous system (G04,G06-G11,G12.1-G12.9,G20-G72,G81-G92,G93.0,G93.2-G93.9,G95-G98) | 278 | 211 | 48 | 6.5 | 6.4 | 7.2 |
| Diseases of the ear and mastoid process (H60-H93) | 6 | 4 | 2 | * | * | * |
| Diseases of the circulatory system (I00-I99) | 594 | 385 | 169 | 14.0 | 11.8 | 25.2 |
| Pulmonary heart disease and diseases of pulmonary circulation (I26-I28) | 88 | 48 | 36 | 2.1 | 1.5 | 5.4 |
| Pericarditis, endocarditis and myocarditis (I30,I33,I40) | 18 | 11 | 5 | * | * | * |
| Cardiomyopathy (I42) | 115 | 80 | 24 | 2.7 | 2.4 | 3.6 |
| Cardiac arrest (I46) | 25 | 14 | 11 | 0.6 | * | * |
| Cerebrovascular diseases (I60-I69) | 141 | 95 | 38 | 3.3 | 2.9 | 5.7 |
| All other diseases of circulatory system (I00-I25,I31,I34-I38,I44-I45,I47-I51,I70-I99) | 207 | 137 | 55 | 4.9 | 4.2 | 8.2 |
| Diseases of the respiratory system (J00-J98,U04) | 578 | 342 | 196 | 13.6 | 10.4 | 29.2 |
| Acute upper respiratory infections (J00-J06) | 12 | 7 | 4 | * | * | * |
| Influenza and pneumonia (J09-J18) | 226 | 147 | 64 | 5.3 | 4.5 | 9.5 |
| Influenza (J09-J11) | 16 | 13 | 2 | * | * | * |
| Pneumonia (J12-J18) | 210 | 134 | 62 | 4.9 | 4.1 | 9.2 |
| Acute bronchitis and acute bronchiolitis (J20-J21) | 43 | 27 | 10 | 1.0 | 0.8 | * |
| Bronchitis, chronic and unspecified (J40-J42) | 23 | 13 | 8 | 0.5 | * | * |
| Asthma (J45-J46) | 6 | 4 | 2 | * | * | * |
| Pneumonitis due to solids and liquids (J69) | 11 | 8 | 3 | * | * | * |
| Other and unspecified diseases of respiratory system (J22,J30-J39,J43-J44,J47-J68,J70-J98,U04) | 257 | 136 | 105 | 6.1 | 4.2 | 15.7 |
| Diseases of the digestive system (K00-K92) | 579 | 331 | 207 | 13.6 | 10.1 | 30.9 |
| Gastritis, duodenitis, and noninfective enteritis and colitis (K29,K50-K55) | 354 | 192 | 141 | 8.3 | 5.9 | 21.0 |
| Hernia of abdominal cavity and intestinal obstruction without hernia (K40-K46,K56) | 46 | 28 | 16 | 1.1 | 0.9 | * |
| All other and unspecified diseases of digestive system (K00-K28,K30-K38,K57-K92) | 179 | 111 | 50 | 4.2 | 3.4 | 7.5 |
| Diseases of the genitourinary system (N00-N95) | 169 | 100 | 61 | 4.0 | 3.1 | 9.1 |
| Renal failure and other disorders of kidney (N17-N19,N25,N27) | 139 | 84 | 51 | 3.3 | 2.6 | 7.6 |
| Other and unspecified diseases of genitourinary system (N00-N15,N20-N23,N26,N28-N95) | 30 | 16 | 10 | 0.7 | * | * |

Table 21. Number of infant deaths and infant mortality rates for 130 selected causes by race: United States, 2008

| Cause of death (based on ICD-10, 2004) | Number | | | Rate | | |
|---|--|--------------------|--------------------|------------------------|--------------------|--------------------|
| | All races ¹ | White ² | Black ² | All races ¹ | White ² | Black ² |
| | Certain conditions originating in the perinatal period (P00-P96) | 13,800 | 8,359 | 4,811 | 324.9 | 255.3 |
| Newborn affected by maternal factors and by complications of pregnancy, labor and delivery (P00-P04) | 3,168 | 2,027 | 1,002 | 74.6 | 61.9 | 149.4 |
| Newborn affected by maternal hypertensive disorders (P00.0) | 85 | 51 | 29 | 2.0 | 1.6 | 4.3 |
| Newborn affected by other maternal conditions which may be unrelated to present pregnancy (P00.1-P00.9) | 88 | 58 | 24 | 2.1 | 1.8 | 3.6 |
| Newborn affected by maternal complications of pregnancy (P01) | 1,765 | 1,124 | 574 | 41.6 | 34.3 | 85.6 |
| Newborn affected by incompetent cervix (P01.0) | 446 | 287 | 140 | 10.5 | 8.8 | 20.9 |
| Newborn affected by premature rupture of membranes (P01.1) | 841 | 512 | 292 | 19.8 | 15.6 | 43.5 |
| Newborn affected by multiple pregnancy (P01.5) | 257 | 170 | 79 | 6.1 | 5.2 | 11.8 |
| Newborn affected by other maternal complications of pregnancy (P01.2-P01.4, P01.6-P01.9) | 221 | 155 | 63 | 5.2 | 4.7 | 9.4 |
| Newborn affected by complications of placenta, cord and membranes (P02) | 1,080 | 697 | 330 | 25.4 | 21.3 | 49.2 |
| Newborn affected by complications involving placenta (P02.0-P02.3) | 539 | 364 | 145 | 12.7 | 11.1 | 21.6 |
| Newborn affected by complications involving cord (P02.4-P02.6) | 55 | 41 | 12 | 1.3 | 1.3 | * |
| Newborn affected by chorioamnionitis (P02.7) | 485 | 291 | 173 | 11.4 | 8.9 | 25.8 |
| Newborn affected by other and unspecified abnormalities of membranes (P02.8-P02.9) | 1 | 1 | - | * | * | * |
| Newborn affected by other complications of labor and delivery (P03) | 99 | 69 | 25 | 2.3 | 2.1 | 3.7 |
| Newborn affected by noxious influences transmitted via placenta or breast milk (P04) | 51 | 28 | 20 | 1.2 | 0.9 | 3.0 |
| Disorders related to length of gestation and fetal malnutrition (P05-P08) | 4,836 | 2,703 | 1,910 | 113.9 | 82.6 | 284.7 |
| Slow fetal growth and fetal malnutrition (P05) | 82 | 47 | 29 | 1.9 | 1.4 | 4.3 |
| Disorders related to short gestation and low birth weight, not elsewhere classified (P07) | 4,754 | 2,656 | 1,881 | 111.9 | 81.1 | 280.4 |
| Extremely low birth weight or extreme immaturity (P07.0, P07.2) | 3,645 | 2,034 | 1,444 | 85.8 | 62.1 | 215.3 |
| Other low birth weight or preterm (P07.1, P07.3) | 1,109 | 622 | 437 | 26.1 | 19.0 | 65.1 |
| Disorders related to long gestation and high birth weight (P08) | - | - | - | * | * | * |
| Birth trauma (P10-P15) | 18 | 11 | 6 | * | * | * |
| Intrauterine hypoxia and birth asphyxia (P20-P21) | 385 | 258 | 106 | 9.1 | 7.9 | 15.8 |
| Intrauterine hypoxia (P20) | 143 | 99 | 38 | 3.4 | 3.0 | 5.7 |
| Birth asphyxia (P21) | 242 | 159 | 68 | 5.7 | 4.9 | 10.1 |
| Respiratory distress of newborn (P22) | 630 | 391 | 221 | 14.8 | 11.9 | 32.9 |
| Other respiratory conditions originating in the perinatal period (P23-P28) | 1,099 | 672 | 376 | 25.9 | 20.5 | 56.1 |
| Congenital pneumonia (P23) | 73 | 49 | 21 | 1.7 | 1.5 | 3.1 |
| Neonatal aspiration syndromes (P24) | 58 | 42 | 12 | 1.4 | 1.3 | * |
| Interstitial emphysema and related conditions originating in the perinatal period (P25) | 122 | 81 | 32 | 2.9 | 2.5 | 4.8 |
| Pulmonary hemorrhage originating in the perinatal period (P26) | 196 | 110 | 79 | 4.6 | 3.4 | 11.8 |
| Chronic respiratory disease originating in the perinatal period (P27) | 237 | 122 | 105 | 5.6 | 3.7 | 15.7 |
| Atelectasis (P28.0-P28.1) | 334 | 222 | 102 | 7.9 | 6.8 | 15.2 |
| All other respiratory conditions originating in the perinatal period (P28.2-P28.9) | 79 | 46 | 25 | 1.9 | 1.4 | 3.7 |
| Infections specific to the perinatal period (P35-P39) | 903 | 567 | 287 | 21.3 | 17.3 | 42.8 |
| Bacterial sepsis of newborn (P36) | 700 | 433 | 226 | 16.5 | 13.2 | 33.7 |
| Omphalitis of newborn with or without mild hemorrhage (P38) | 2 | 1 | 1 | * | * | * |
| All other infections specific to the perinatal period (P35, P37, P39) | 201 | 133 | 60 | 4.7 | 4.1 | 8.9 |
| Hemorrhagic and hematological disorders of newborn (P50-P61) | 648 | 432 | 188 | 15.3 | 13.2 | 28.0 |
| Neonatal hemorrhage (P50-P52, P54) | 556 | 365 | 166 | 13.1 | 11.1 | 24.7 |
| Hemorrhagic disease of newborn (P53) | 2 | 1 | 1 | * | * | * |
| Hemolytic disease of newborn due to isoimmunization and other perinatal jaundice (P55-P59) | 10 | 8 | 2 | * | * | * |
| Hematological disorders (P60-P61) | 80 | 58 | 19 | 1.9 | 1.8 | * |
| Syndrome of infant of a diabetic mother and neonatal diabetes mellitus (P70.0-P70.2) | 11 | 9 | 2 | * | * | * |
| Necrotizing enterocolitis of newborn (P77) | 549 | 307 | 221 | 12.9 | 9.4 | 32.9 |
| Hydrops fetalis not due to hemolytic disease (P83.2) | 169 | 131 | 26 | 4.0 | 4.0 | 3.9 |
| Other perinatal conditions (P29, P70.3-P70.9, P71-P76, P78-P81, P83.0-P83.1, P83.3-P83.9, P90-P96) | 1,384 | 851 | 466 | 32.6 | 26.0 | 69.5 |
| Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) | 5,638 | 4,291 | 1,069 | 132.7 | 131.1 | 159.4 |
| Anencephaly and similar malformations (Q00) | 338 | 286 | 41 | 8.0 | 8.7 | 6.1 |
| Congenital hydrocephalus (Q03) | 106 | 70 | 28 | 2.5 | 2.1 | 4.2 |
| Spina bifida (Q05) | 23 | 19 | 4 | 0.5 | * | * |
| Other congenital malformations of nervous system (Q01-Q02, Q04, Q06-Q07) | 355 | 273 | 64 | 8.4 | 8.3 | 9.5 |
| Congenital malformations of heart (Q20-Q24) | 1,305 | 982 | 260 | 30.7 | 30.0 | 38.8 |
| Other congenital malformations of circulatory system (Q25-Q28) | 222 | 161 | 52 | 5.2 | 4.9 | 7.8 |
| Congenital malformations of respiratory system (Q30-Q34) | 371 | 284 | 64 | 8.7 | 8.7 | 9.5 |
| Congenital malformations of digestive system (Q35-Q45) | 83 | 57 | 20 | 2.0 | 1.7 | 3.0 |
| Congenital malformations of genitourinary system (Q50-Q64) | 515 | 401 | 93 | 12.1 | 12.2 | 13.9 |
| Congenital malformations and deformations of musculoskeletal system, limbs and integument (Q65-Q85) | 664 | 499 | 128 | 15.6 | 15.2 | 19.1 |
| Down's syndrome (Q90) | 88 | 66 | 17 | 2.1 | 2.0 | * |
| Edward's syndrome (Q91.0-Q91.3) | 554 | 430 | 91 | 13.0 | 13.1 | 13.6 |
| Patau's syndrome (Q91.4-Q91.7) | 275 | 210 | 55 | 6.5 | 6.4 | 8.2 |
| Other congenital malformations and deformations (Q10-Q18, Q86-Q89) | 538 | 393 | 117 | 12.7 | 12.0 | 17.4 |
| Other chromosomal abnormalities, not elsewhere classified (Q92-Q99) | 201 | 160 | 35 | 4.7 | 4.9 | 5.2 |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) | 3,546 | 2,280 | 1,117 | 83.5 | 69.6 | 166.5 |
| Sudden infant death syndrome (R95) | 2,353 | 1,497 | 758 | 55.4 | 45.7 | 113.0 |
| Other symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R53, R55-R94, R96-R99) | 1,193 | 783 | 359 | 28.1 | 23.9 | 53.5 |
| All other diseases (Residual) | 24 | 21 | 3 | 0.6 | 0.6 | * |

Table 21. Number of infant deaths and infant mortality rates for 130 selected causes by race: United States, 2008

| Cause of death (based on ICD-10, 2004) | Number | | | Rate | | |
|--|---|--------------------|--------------------|------------------------|--------------------|--------------------|
| | All races ¹ | White ² | Black ² | All races ¹ | White ² | Black ² |
| | External causes of mortality (*U01,V01-Y84) | 1,773 | 1,133 | 561 | 41.7 | 34.6 |
| Accidents (unintentional injuries) (V01-X59) | 1,315 | 846 | 409 | 31.0 | 25.8 | 61.0 |
| Transport accidents (V01-V99) | 104 | 73 | 18 | 2.4 | 2.2 | * |
| Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) | 103 | 73 | 18 | 2.4 | 2.2 | * |
| Other and unspecified transport accidents (V01,V05-V06,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9,V90-V99) | 1 | - | - | * | * | * |
| Falls (W00-W19) | 13 | 10 | 3 | * | * | * |
| Accidental discharge of firearms (W32-W34) | - | - | - | * | * | * |
| Accidental drowning and submersion (W65-W74) | 41 | 29 | 8 | 1.0 | 0.9 | * |
| Accidental suffocation and strangulation in bed (W75) | 736 | 455 | 252 | 17.3 | 13.9 | 37.6 |
| Other accidental suffocation and strangulation (W76-W77,W81-W84) | 260 | 175 | 79 | 6.1 | 5.3 | 11.8 |
| Accidental inhalation and ingestion of food or other objects causing obstruction of respiratory tract (W78-W80) | 62 | 38 | 19 | 1.5 | 1.2 | * |
| Accidents caused by exposure to smoke, fire and flames (X00-X09) | 20 | 13 | 7 | 0.5 | * | * |
| Accidental poisoning and exposure to noxious substances (X40-X49) | 11 | 8 | 3 | * | * | * |
| Other and unspecified accidents (W20-W31,W35-W64,W85-W99,X10-X39,X50-X59) | 68 | 45 | 20 | 1.6 | 1.4 | 3.0 |
| Assault (homicide) (*U01,X85-Y09) | 340 | 208 | 115 | 8.0 | 6.4 | 17.1 |
| Assault (homicide) by hanging, strangulation and suffocation (X91) | 32 | 22 | 10 | 0.8 | 0.7 | * |
| Assault (homicide) by discharge of firearms (*U01.4,X93-X95) | 9 | 2 | 7 | * | * | * |
| Neglect, abandonment and other maltreatment syndromes (Y06-Y07) | 98 | 56 | 36 | 2.3 | 1.7 | 5.4 |
| Assault (homicide) by other and unspecified means (*U01.0-*U01.3,*U01.5-*U01.9,X85-X90,X92,X96-X99,Y00-Y05,Y08-Y09) | 201 | 128 | 62 | 4.7 | 3.9 | 9.2 |
| Complications of medical and surgical care (Y40-Y84) | 24 | 17 | 7 | 0.6 | * | * |
| Other external causes (Y10-Y36) | 94 | 62 | 30 | 2.2 | 1.9 | 4.5 |
| * Figure does not meet standards of reliability or precision; see "Technical Notes." | | | | | | |
| - Quantity zero. | | | | | | |
| ¹ Includes races other than white and black. | | | | | | |
| ² Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported for deaths by 34 states and the District of Columbia and, for births, by 30 areas; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes." | | | | | | |
| NOTE: Confirmation of deaths from selected causes of death, considered to be of public health concern, were not provided by the following states--Massachusetts, North Carolina, and West Virginia; see "Technical Notes." | | | | | | |

Table 22. Number of infant and neonatal deaths and mortality rates, by race for the United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, and by sex for the United States, 2008

[Rates are infant (under 1 year) and neonatal (under 28 days) deaths per 1,000 live births in specified group. Infant deaths are based on race of decedent; live births are based on race of mother. See "Technical Notes"]

| Sex and area | Infant deaths | | | | | | Neonatal deaths | | | | | |
|----------------------------|------------------------|-------|--------------------|------|--------------------|-------|------------------------|------|--------------------|------|--------------------|-------|
| | All races ¹ | | White ² | | Black ² | | All races ¹ | | White ² | | Black ² | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| United States ³ | 28,059 | 6.61 | 18,164 | 5.55 | 8,543 | 12.74 | 18,211 | 4.29 | 11,843 | 3.62 | 5,523 | 8.23 |
| Male | 15,669 | 7.21 | 10,151 | 6.05 | 4,748 | 13.93 | 10,144 | 4.67 | 6,598 | 3.94 | 3,066 | 8.99 |
| Female | 12,390 | 5.97 | 8,013 | 5.02 | 3,795 | 11.50 | 8,067 | 3.89 | 5,245 | 3.28 | 2,457 | 7.45 |
| Alabama | 612 | 9.48 | 328 | 7.55 | 279 | 13.98 | 377 | 5.84 | 202 | 4.65 | 171 | 8.57 |
| Alaska | 67 | 5.86 | 24 | 3.35 | 3 | * | 26 | 2.27 | 12 | * | 1 | * |
| Arizona | 635 | 6.39 | 478 | 5.63 | 77 | 17.14 | 426 | 4.28 | 323 | 3.80 | 52 | 11.58 |
| Arkansas | 300 | 7.38 | 190 | 6.01 | 107 | 13.22 | 178 | 4.38 | 112 | 3.54 | 65 | 8.03 |
| California | 2,814 | 5.10 | 2,112 | 4.80 | 417 | 12.06 | 1,909 | 3.46 | 1,450 | 3.29 | 269 | 7.78 |
| Colorado | 437 | 6.24 | 365 | 5.76 | 52 | 14.93 | 314 | 4.48 | 263 | 4.15 | 38 | 10.91 |
| Connecticut | 242 | 5.99 | 154 | 4.78 | 70 | 12.40 | 180 | 4.46 | 115 | 3.57 | 51 | 9.04 |
| Delaware | 101 | 8.35 | 50 | 6.06 | 51 | 15.50 | 68 | 5.62 | 33 | 4.00 | 35 | 10.64 |
| District of Columbia | 99 | 10.84 | 14 | * | 83 | 15.60 | 75 | 8.21 | 13 | * | 60 | 11.28 |
| Florida | 1,669 | 7.21 | 953 | 5.76 | 686 | 11.94 | 1,061 | 4.58 | 615 | 3.72 | 425 | 7.40 |
| Georgia | 1,182 | 8.06 | 485 | 5.57 | 674 | 12.64 | 767 | 5.23 | 304 | 3.49 | 449 | 8.42 |
| Hawaii | 108 | 5.54 | 25 | 4.26 | 5 | * | 71 | 3.64 | 20 | 3.40 | 4 | * |
| Idaho | 149 | 5.92 | 143 | 5.95 | 5 | * | 102 | 4.06 | 98 | 4.08 | 4 | * |
| Illinois | 1,256 | 7.10 | 773 | 5.71 | 439 | 14.08 | 820 | 4.64 | 514 | 3.79 | 271 | 8.69 |
| Indiana | 614 | 6.92 | 451 | 5.93 | 157 | 14.70 | 380 | 4.28 | 280 | 3.68 | 97 | 9.08 |
| Iowa | 228 | 5.67 | 197 | 5.32 | 27 | 14.16 | 141 | 3.51 | 125 | 3.37 | 12 | * |
| Kansas | 304 | 7.27 | 243 | 6.62 | 46 | 13.73 | 195 | 4.66 | 150 | 4.09 | 32 | 9.55 |
| Kentucky | 402 | 6.89 | 334 | 6.48 | 62 | 10.91 | 246 | 4.21 | 208 | 4.03 | 33 | 5.80 |
| Louisiana | 591 | 9.05 | 252 | 6.66 | 331 | 12.85 | 317 | 4.86 | 125 | 3.30 | 189 | 7.34 |
| Maine | 75 | 5.51 | 70 | 5.44 | 3 | * | 51 | 3.75 | 47 | 3.65 | 3 | * |
| Maryland | 619 | 8.01 | 246 | 5.42 | 352 | 13.17 | 453 | 5.86 | 174 | 3.84 | 260 | 9.73 |
| Massachusetts | 391 | 5.08 | 283 | 4.62 | 89 | 9.43 | 298 | 3.87 | 222 | 3.62 | 65 | 6.89 |
| Michigan | 894 | 7.38 | 537 | 5.76 | 333 | 14.51 | 609 | 5.03 | 373 | 4.00 | 220 | 9.59 |
| Minnesota | 434 | 5.99 | 296 | 5.09 | 82 | 11.59 | 275 | 3.80 | 193 | 3.32 | 52 | 7.35 |
| Mississippi | 448 | 9.97 | 182 | 7.48 | 261 | 13.15 | 257 | 5.72 | 97 | 3.99 | 158 | 7.96 |
| Missouri | 585 | 7.23 | 392 | 5.95 | 189 | 15.01 | 358 | 4.42 | 234 | 3.55 | 121 | 9.61 |
| Montana | 86 | 6.83 | 71 | 6.59 | - | * | 48 | 3.81 | 40 | 3.71 | - | * |
| Nebraska | 146 | 5.41 | 113 | 4.77 | 29 | 14.55 | 90 | 3.33 | 75 | 3.17 | 13 | * |
| Nevada | 211 | 5.34 | 155 | 4.86 | 48 | 12.65 | 128 | 3.24 | 99 | 3.11 | 26 | 6.85 |
| New Hampshire | 54 | 3.95 | 53 | 4.13 | - | * | 39 | 2.85 | 38 | 2.96 | - | * |
| New Jersey | 626 | 5.55 | 357 | 4.48 | 248 | 11.98 | 401 | 3.56 | 237 | 2.97 | 151 | 7.30 |
| New Mexico | 169 | 5.60 | 146 | 5.84 | 5 | * | 99 | 3.28 | 88 | 3.52 | 3 | * |
| New York | 1,374 | 5.49 | 787 | 4.45 | 521 | 10.50 | 929 | 3.71 | 545 | 3.08 | 339 | 6.83 |
| North Carolina | 1,073 | 8.20 | 567 | 6.06 | 462 | 14.71 | 685 | 5.24 | 365 | 3.90 | 295 | 9.39 |
| North Dakota | 52 | 5.82 | 38 | 5.01 | 1 | * | 41 | 4.59 | 33 | 4.35 | 1 | * |
| Ohio | 1,144 | 7.69 | 716 | 6.03 | 422 | 16.29 | 754 | 5.07 | 463 | 3.90 | 287 | 11.08 |
| Oklahoma | 397 | 7.25 | 270 | 6.43 | 75 | 14.95 | 249 | 4.55 | 166 | 3.95 | 49 | 9.77 |
| Oregon | 253 | 5.15 | 212 | 4.82 | 19 | * | 155 | 3.16 | 137 | 3.12 | 10 | * |
| Pennsylvania | 1,100 | 7.37 | 749 | 6.45 | 325 | 12.25 | 783 | 5.25 | 530 | 4.57 | 233 | 8.78 |
| Rhode Island | 71 | 5.89 | 53 | 5.28 | 15 | * | 53 | 4.40 | 38 | 3.79 | 12 | * |
| South Carolina | 507 | 8.04 | 254 | 6.36 | 245 | 11.39 | 310 | 4.92 | 154 | 3.85 | 150 | 6.97 |
| South Dakota | 101 | 8.37 | 63 | 6.56 | 3 | * | 61 | 5.05 | 41 | 4.27 | 3 | * |
| Tennessee | 693 | 8.10 | 410 | 6.38 | 279 | 14.71 | 425 | 4.97 | 239 | 3.72 | 184 | 9.70 |
| Texas | 2,504 | 6.17 | 1,962 | 5.80 | 483 | 9.77 | 1,563 | 3.85 | 1,211 | 3.58 | 317 | 6.41 |
| Utah | 266 | 4.78 | 243 | 4.63 | 7 | * | 177 | 3.18 | 163 | 3.11 | 5 | * |
| Vermont | 29 | 4.57 | 27 | 4.42 | 1 | * | 21 | 3.31 | 19 | * | 1 | * |
| Virginia | 732 | 6.86 | 411 | 5.46 | 288 | 12.17 | 485 | 4.55 | 265 | 3.52 | 197 | 8.32 |
| Washington | 491 | 5.44 | 377 | 5.12 | 50 | 10.29 | 301 | 3.33 | 244 | 3.31 | 22 | 4.53 |
| West Virginia | 165 | 7.67 | 148 | 7.23 | 17 | * | 95 | 4.42 | 83 | 4.05 | 12 | * |
| Wisconsin | 503 | 6.96 | 358 | 5.90 | 116 | 15.77 | 330 | 4.57 | 239 | 3.94 | 73 | 9.92 |
| Wyoming | 56 | 6.97 | 47 | 6.24 | 4 | * | 35 | 4.35 | 29 | 3.85 | 3 | * |
| Puerto Rico | 388 | 8.51 | 377 | 9.20 | 11 | * | 278 | 6.09 | 274 | 6.69 | 4 | * |
| Virgin Islands | 9 | * | 1 | * | 8 | * | 8 | * | 1 | * | 7 | * |
| Guam | 30 | 8.68 | 1 | * | - | * | 14 | * | - | * | - | * |
| American Samoa | 13 | * | - | * | - | * | 6 | * | - | * | - | * |
| Northern Marianas | 5 | * | - | * | - | * | 4 | * | - | * | - | * |

- Quantity zero.

* Figure does not meet standards of reliability or precision; see "Technical Notes."

¹Includes races other than white and black.²Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Multiple-race data were reported for deaths by 34 states and the District of Columbia and, for births, by 30 areas; see "Technical Notes." The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."³Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas.

Technical Notes Tables

Table I. Year state started reporting multiple race and year state began using the revised standard certificate of death: Each state, 2003-2008

| State | Year ¹ state began reporting multiple race | Year state began using the 2003 standard certificate |
|----------------------|--|--|
| Alabama | ... | ... |
| Alaska | ... | ... |
| Arizona | ... | ... |
| Arkansas | 2008 | 2008 |
| California | 2003 | 2003 |
| Colorado | ... | ... |
| Connecticut | 2005 | 2005 |
| Delaware | 2007 | 2007 |
| District of Columbia | 2005 ² | 2005 ² |
| Florida | 2005 | 2005 |
| Georgia | 2008 | 2008 |
| Hawaii | 2003 | ... |
| Idaho | 2003 | 2003 |
| Illinois | 2008 | 2008 |
| Indiana | 2008 | 2008 |
| Iowa | ... | ... |
| Kansas | 2005 | 2005 |
| Kentucky | ... | ... |
| Louisiana | ... | ... |
| Maine | 2003 | ... |
| Maryland | ... | ... |
| Massachusetts | ... | ... |
| Michigan | 2004 | 2004 |
| Minnesota | 2004 | ... |
| Mississippi | ... | ... |
| Missouri | ... | ... |
| Montana | 2003 | 2003 |
| Nebraska | 2005 | 2005 |
| Nevada | 2008 | 2008 |
| New Hampshire | 2004 ³ | 2004 ³ |
| New Jersey | 2004 | 2004 |
| New Mexico | 2006 | 2006 |
| New York | 2003 | 2003 |
| North Carolina | ... | ... |
| North Dakota | 2008 | 2008 |
| Ohio | 2007 | 2007 |
| Oklahoma | 2004 | 2004 |
| Oregon | 2006 | 2006 |
| Pennsylvania | ... | ... |
| Rhode Island | 2006 | 2006 |
| South Carolina | 2005 | 2005 |
| South Dakota | 2004 | 2004 |
| Tennessee | ... | ... |
| Texas | 2006 | 2006 |
| Utah | 2005 | 2005 |
| Vermont | 2008 ⁴ | 2008 ⁴ |
| Virginia | ... | ... |
| Washington | 2004 | 2004 |
| West Virginia | ... | ... |
| Wisconsin | 2003 | ... |
| Wyoming | 2004 | 2004 |

... Not applicable.

¹Indicates year in which NCHS first received multiple race data from the state, although the state may have begun collecting such data at an earlier date.

²Began reporting multiple race in March upon implementing the revised certificate.

³Began reporting multiple race in mid-April upon implementing the revised certificate.

⁴Began reporting multiple race in July upon implementing the revised certificate.

Table II. Deaths by race: Arkansas, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas, Maine, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Utah, Washington, Wisconsin, and Wyoming, 2008

| [By state of occurrence] | | |
|---|-----------|-------------------|
| Race | Deaths | Percent of deaths |
| Total | 1,694,862 | 100.0 |
| One race | 1,688,684 | 99.6 |
| White | 1,442,984 | 85.1 |
| Black | 180,640 | 10.7 |
| Asian | 38,249 | 2.3 |
| Other ¹ | 15,055 | 0.9 |
| AIAN ² | 9,762 | 0.6 |
| NHOPi ³ | 1,994 | 0.1 |
| Two or more races | 6,178 | 0.4 |
| Two races | 5,635 | 0.3 |
| AIAN ² and white | 2,289 | 0.1 |
| Asian and white | 961 | 0.1 |
| Black and white | 712 | 0.0 |
| Asian and NHOPi ³ | 588 | 0.0 |
| NHOPi ³ and white | 578 | 0.0 |
| Black and Asian | 207 | 0.0 |
| Black and AIAN ² | 207 | 0.0 |
| Black and NHOPi ³ | 49 | 0.0 |
| AIAN ² and Asian | 32 | 0.0 |
| AIAN ² and NHOPi ³ | 12 | 0.0 |
| Three races | 530 | 0.0 |
| Asian, NHOPi ³ , and white | 384 | 0.0 |
| Black, AIAN ² , and white | 85 | 0.0 |
| AIAN ² , Asian, and white | 17 | 0.0 |
| Black, Asian, and white | 15 | 0.0 |
| Black, Asian, and NHOPi ³ | 6 | 0.0 |
| Black, NHOPi ³ , and white | 6 | 0.0 |
| AIAN ² , NHOPi ³ , and white | 6 | 0.0 |
| Black, AIAN ² , and Asian | 5 | 0.0 |
| AIAN ² , Asian, and NHOPi ³ | 5 | 0.0 |
| Black, AIAN ² , and NHOPi ³ | 1 | 0.0 |
| Four races | 13 | 0.0 |
| AIAN ² , Asian, NHOPi ³ , and white | 11 | 0.0 |
| Black, Asian, AIAN ² , and NHOPi ³ | 1 | 0.0 |
| Black, Asian, AIAN ² , and white | 1 | 0.0 |

0.0 Quantity more than zero but less than 0.05.

¹Includes records for which race was reported as "other." Future processing assigns "other" race to one of the recognized categories. "Other" race comprises a wide variety of responses; however, the most common is to check "other" and not provide future specification or to report a Hispanic group as a race.

²AIAN is American Indian or Alaska Native.

³NHOPi is Native Hawaiian or Other Pacific Islander.

Table III. Percent distribution of deaths by education items: Arkansas, California, Connecticut, Delaware, District of Columbia, Florida, Idaho, Illinois, Indiana, Kansas, Michigan, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, Texas, Utah, Washington, and Wyoming, 2002 and 2008

[By state of occurrence. Excludes nonresidents of the United States. Because of rounding, the sum of the subgroups may not add to the total]

| 2002 | | 2008 | |
|---------------------------|----------------------|---|----------------------|
| Years of school completed | Percent distribution | Educational attainment | Percent distribution |
| Total..... | 100.0 | Total | 100.0 |
| Under 12 years | 28.7 | Less than high school diploma or GED... | 26.0 |
| 12 years..... | 41.3 | High school diploma or GED..... | 41.4 |
| 13 years or more..... | 26.8 | Some college or collegiate degree..... | 30.4 |
| Not stated | 3.2 | Not stated..... | 2.2 |

Note: GED is General Education Development high school equivalency diploma.

Table IV. Estimated population by 5-year age groups, specified race and sex: United States, 2008

[Populations are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; see "Technical Notes"]

| Age | All races | | | White | | | Black | | | American Indian or Alaska Native | | | Asian or Pacific Islander | | |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|----------------------------------|-----------|-----------|---------------------------|-----------|-----------|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Total..... | 304,059,724 | 149,924,604 | 154,135,120 | 245,240,252 | 121,605,170 | 123,635,082 | 40,366,208 | 19,292,523 | 21,073,685 | 3,421,898 | 1,709,310 | 1,712,588 | 15,031,366 | 7,317,601 | 7,713,765 |
| Under 1 year..... | 4,313,132 | 2,207,690 | 2,105,442 | 3,303,657 | 1,691,150 | 1,612,507 | 714,935 | 365,598 | 349,337 | 69,589 | 35,470 | 34,119 | 224,951 | 115,472 | 109,479 |
| 1-4 years..... | 16,692,720 | 8,540,168 | 8,152,552 | 12,869,936 | 6,590,971 | 6,278,965 | 2,687,827 | 1,368,244 | 1,319,583 | 256,864 | 130,335 | 126,529 | 878,093 | 450,618 | 427,475 |
| 5-9 years..... | 20,065,249 | 10,259,114 | 9,806,135 | 15,632,076 | 8,006,377 | 7,625,699 | 3,156,812 | 1,603,424 | 1,553,388 | 281,965 | 142,924 | 139,041 | 994,396 | 506,389 | 488,007 |
| 10-14 years..... | 20,054,627 | 10,262,469 | 9,792,158 | 15,574,533 | 7,988,740 | 7,585,793 | 3,253,351 | 1,652,701 | 1,600,650 | 272,130 | 138,302 | 133,828 | 954,613 | 482,726 | 471,887 |
| 15-19 years..... | 21,514,358 | 11,027,264 | 10,487,094 | 16,662,559 | 8,559,130 | 8,103,429 | 3,586,485 | 1,819,323 | 1,767,162 | 305,291 | 154,438 | 150,853 | 960,023 | 494,373 | 465,650 |
| 20-24 years..... | 21,058,981 | 10,845,428 | 10,213,553 | 16,524,874 | 8,544,406 | 7,980,468 | 3,250,780 | 1,644,797 | 1,605,983 | 297,384 | 152,033 | 145,351 | 985,943 | 504,192 | 481,751 |
| 25-29 years..... | 21,333,743 | 10,940,956 | 10,392,787 | 16,753,497 | 8,664,474 | 8,089,023 | 3,120,570 | 1,543,699 | 1,576,871 | 278,983 | 144,967 | 134,016 | 1,180,693 | 587,816 | 592,877 |
| 30-34 years..... | 19,597,822 | 9,959,083 | 9,638,739 | 15,352,078 | 7,904,989 | 7,447,089 | 2,690,189 | 1,285,678 | 1,404,511 | 233,691 | 121,373 | 112,318 | 1,321,864 | 647,043 | 674,821 |
| 35-39 years..... | 20,993,781 | 10,568,801 | 10,424,980 | 16,576,405 | 8,451,119 | 8,125,286 | 2,794,711 | 1,319,515 | 1,475,196 | 227,800 | 116,490 | 111,310 | 1,394,865 | 681,677 | 713,188 |
| 40-44 years..... | 21,507,349 | 10,745,556 | 10,761,793 | 17,246,349 | 8,719,406 | 8,526,943 | 2,824,503 | 1,324,628 | 1,499,875 | 227,038 | 113,652 | 113,386 | 1,209,459 | 587,870 | 621,589 |
| 45-49 years..... | 22,879,874 | 11,314,075 | 11,565,799 | 18,677,571 | 9,340,038 | 9,337,533 | 2,862,168 | 1,329,428 | 1,532,740 | 232,226 | 113,583 | 118,643 | 1,107,909 | 531,026 | 576,883 |
| 50-54 years..... | 21,492,191 | 10,538,558 | 10,953,633 | 17,750,352 | 8,804,094 | 8,946,258 | 2,547,253 | 1,170,296 | 1,376,957 | 205,896 | 99,585 | 106,311 | 988,690 | 464,583 | 524,107 |
| 55-59 years..... | 18,583,445 | 9,014,715 | 9,568,730 | 15,527,381 | 7,624,064 | 7,903,317 | 2,055,485 | 925,575 | 1,129,910 | 165,926 | 79,812 | 86,114 | 834,653 | 385,264 | 449,389 |
| 60-64 years..... | 15,102,736 | 7,235,924 | 7,866,812 | 12,899,118 | 6,247,669 | 6,651,449 | 1,462,763 | 643,980 | 818,783 | 122,872 | 58,749 | 64,123 | 617,983 | 285,526 | 332,457 |
| 65-69 years..... | 11,348,682 | 5,306,217 | 6,042,465 | 9,747,450 | 4,605,625 | 5,141,825 | 1,069,338 | 453,366 | 615,972 | 84,558 | 39,932 | 44,626 | 447,336 | 207,294 | 240,042 |
| 70-74 years..... | 8,774,259 | 3,958,711 | 4,815,548 | 7,546,544 | 3,441,486 | 4,105,058 | 825,421 | 337,299 | 488,122 | 60,069 | 27,539 | 32,530 | 342,225 | 152,387 | 189,838 |
| 75-79 years..... | 7,275,163 | 3,096,817 | 4,178,346 | 6,364,850 | 2,741,210 | 3,623,640 | 611,044 | 231,214 | 379,830 | 42,553 | 18,797 | 23,756 | 256,716 | 105,596 | 151,120 |
| 80-84 years..... | 5,749,844 | 2,239,493 | 3,510,351 | 5,109,136 | 2,008,003 | 3,101,133 | 435,754 | 149,990 | 285,764 | 28,438 | 11,780 | 16,658 | 176,516 | 69,720 | 106,796 |
| 85 years and over..... | 5,721,768 | 1,863,565 | 3,858,203 | 5,121,886 | 1,672,219 | 3,449,667 | 416,819 | 123,768 | 293,051 | 28,625 | 9,549 | 19,076 | 154,438 | 58,029 | 96,409 |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics. Estimates of the July 1, 2008, U.S. resident population by age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau, 2009.

Table V. Estimated population by 5-year age groups, according to specified Hispanic origin, race for non-Hispanic population, and sex: United States, 2008

[Populations for all origins, Hispanic, non-Hispanic white, and non-Hispanic black are postcensal estimates based on the 2000 census, estimated as of July 1, 2008; populations for Mexican, Puerto Rican, Cuban, Central and South American and other and unknown Hispanic are based on the Current Population Survey adjusted to resident population control totals. Due to rounding, population estimates for Hispanic subgroups may not add to Hispanic control totals. The control totals are 2000-based population estimates for the United States for July 1, 2008; see "Technical Notes"]

| Hispanic origin, race for non-Hispanic population, and sex | Total | Under | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85 years and over |
|--|-------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|-------------------|
| | | 1 year | years | years | years | years | years | years | years | years | years | years | years | years | years | years | years | years | years | years |
| All origins..... | 304,059,724 | 4,313,132 | 16,692,720 | 20,065,249 | 20,054,627 | 21,514,358 | 21,058,981 | 21,333,743 | 19,597,822 | 20,993,781 | 21,507,349 | 22,879,874 | 21,492,191 | 18,583,445 | 15,102,736 | 11,348,682 | 8,774,259 | 7,275,163 | 5,749,844 | 5,721,768 |
| Male..... | 149,924,604 | 2,207,690 | 8,540,168 | 10,259,114 | 10,262,469 | 11,027,264 | 10,845,428 | 10,940,956 | 9,959,083 | 10,568,801 | 10,745,556 | 11,314,075 | 10,538,558 | 9,014,715 | 7,235,924 | 5,306,217 | 3,958,711 | 3,096,817 | 2,239,493 | 1,863,565 |
| Female..... | 154,135,120 | 2,105,442 | 8,152,552 | 9,806,135 | 9,792,158 | 10,487,094 | 10,213,553 | 10,392,787 | 9,638,739 | 10,424,980 | 10,761,793 | 11,565,799 | 10,953,633 | 9,568,730 | 7,866,812 | 6,042,465 | 4,815,548 | 4,178,346 | 3,510,351 | 3,858,203 |
| Hispanic..... | 46,943,613 | 1,108,343 | 4,179,653 | 4,464,342 | 3,989,401 | 3,850,233 | 3,662,998 | 4,140,612 | 4,041,496 | 3,730,114 | 3,278,693 | 2,795,163 | 2,187,215 | 1,650,456 | 1,203,583 | 853,027 | 652,616 | 496,370 | 346,067 | 313,231 |
| Male..... | 24,254,397 | 566,826 | 2,135,043 | 2,280,560 | 2,041,595 | 1,980,860 | 1,945,788 | 2,297,006 | 2,216,848 | 1,996,915 | 1,732,238 | 1,441,187 | 1,100,612 | 807,321 | 571,296 | 391,312 | 288,585 | 209,660 | 138,632 | 112,113 |
| Female..... | 22,689,216 | 541,517 | 2,044,610 | 2,183,782 | 1,947,806 | 1,869,373 | 1,717,210 | 1,843,606 | 1,824,648 | 1,733,199 | 1,546,455 | 1,353,976 | 1,086,603 | 843,135 | 632,287 | 461,715 | 364,031 | 286,710 | 207,435 | 201,118 |
| Mexican..... | 30,979,148 | 801,323 | 3,058,104 | 3,211,338 | 2,766,021 | 2,584,496 | 2,473,773 | 2,792,294 | 2,704,723 | 2,482,807 | 2,048,215 | 1,679,763 | 1,330,088 | 953,809 | 683,320 | 480,029 | 375,090 | 256,992 | 159,045 | 137,918 |
| Male..... | 16,209,679 | 414,941 | 1,562,812 | 1,609,296 | 1,415,094 | 1,318,897 | 1,322,689 | 1,546,238 | 1,495,569 | 1,351,788 | 1,125,414 | 888,273 | 702,889 | 483,431 | 337,109 | 230,699 | 171,499 | 114,560 | 69,722 | 48,759 |
| Female..... | 14,769,469 | 386,382 | 1,495,292 | 1,602,042 | 1,350,927 | 1,265,599 | 1,151,084 | 1,246,056 | 1,209,154 | 1,131,019 | 922,801 | 791,490 | 627,199 | 470,378 | 346,211 | 249,330 | 203,591 | 142,432 | 89,323 | 89,159 |
| Puerto Rican..... | 4,130,041 | 89,915 | 311,851 | 371,114 | 370,636 | 397,569 | 314,450 | 318,762 | 306,841 | 270,914 | 310,961 | 278,930 | 199,897 | 169,385 | 132,435 | 90,044 | 68,937 | 41,350 | 36,644 | 49,406 |
| Male..... | 2,028,623 | 41,200 | 169,421 | 206,242 | 180,749 | 206,492 | 151,700 | 175,028 | 141,775 | 130,783 | 148,759 | 131,638 | 93,460 | 72,367 | 57,478 | 36,142 | 36,917 | 17,789 | 11,047 | 13,636 |
| Female..... | 2,101,418 | 48,715 | 142,430 | 164,872 | 189,887 | 191,077 | 162,750 | 143,734 | 165,066 | 140,131 | 162,202 | 147,292 | 106,437 | 97,018 | 74,957 | 53,902 | 32,020 | 23,561 | 25,597 | 29,770 |
| Cuban..... | 1,644,455 | 18,172 | 73,355 | 98,370 | 87,942 | 89,638 | 104,037 | 106,086 | 110,409 | 129,093 | 124,140 | 119,679 | 100,316 | 89,428 | 81,825 | 71,940 | 73,835 | 69,302 | 54,089 | 42,799 |
| Male..... | 834,046 | 9,813 | 36,097 | 50,414 | 44,991 | 40,890 | 54,850 | 55,798 | 58,202 | 67,453 | 68,433 | 68,888 | 63,751 | 43,072 | 47,012 | 40,725 | 29,214 | 31,517 | 16,105 | 22,821 |
| Female..... | 810,409 | 8,359 | 37,258 | 47,956 | 42,951 | 48,748 | 49,187 | 46,288 | 52,207 | 61,640 | 55,707 | 50,791 | 56,565 | 46,356 | 34,813 | 31,215 | 44,621 | 37,785 | 37,984 | 19,978 |
| Central and South American..... | 7,952,183 | 148,975 | 561,373 | 584,850 | 586,015 | 600,021 | 600,888 | 770,365 | 771,948 | 683,184 | 643,288 | 561,915 | 438,376 | 323,237 | 230,501 | 156,171 | 90,391 | 84,783 | 63,221 | 52,681 |
| Male..... | 4,068,678 | 78,351 | 271,997 | 295,306 | 314,898 | 322,631 | 329,890 | 436,104 | 446,556 | 367,392 | 312,638 | 279,774 | 209,220 | 150,158 | 95,201 | 59,013 | 29,878 | 28,728 | 27,439 | 13,564 |
| Female..... | 3,883,505 | 70,624 | 289,376 | 289,544 | 271,117 | 277,390 | 270,998 | 334,261 | 325,392 | 315,792 | 330,650 | 282,141 | 229,156 | 173,079 | 135,300 | 97,158 | 60,513 | 56,055 | 35,782 | 39,177 |
| Other Hispanic..... | 2,237,866 | 49,959 | 174,989 | 198,670 | 178,796 | 178,502 | 169,857 | 153,120 | 147,576 | 164,109 | 152,081 | 154,881 | 118,561 | 114,613 | 75,512 | 54,838 | 44,368 | 43,947 | 33,068 | 30,419 |
| Male..... | 1,113,428 | 22,531 | 94,724 | 119,308 | 85,870 | 91,943 | 86,662 | 79,845 | 74,751 | 79,489 | 76,995 | 72,618 | 51,300 | 58,303 | 34,499 | 24,729 | 21,080 | 17,069 | 14,321 | 7,391 |
| Female..... | 1,124,438 | 27,428 | 80,265 | 79,362 | 92,926 | 86,559 | 83,195 | 73,275 | 72,825 | 84,620 | 75,086 | 82,263 | 67,261 | 56,310 | 41,013 | 30,109 | 23,288 | 26,878 | 18,747 | 23,028 |
| Non-Hispanic 1/..... | 257,116,111 | 3,204,789 | 12,513,067 | 15,600,907 | 16,065,226 | 17,664,125 | 17,395,983 | 17,193,131 | 15,556,326 | 17,263,667 | 18,228,656 | 20,084,711 | 19,304,976 | 16,932,989 | 13,899,153 | 10,495,655 | 8,121,643 | 6,778,793 | 5,403,777 | 5,408,537 |
| Male..... | 125,670,207 | 1,640,864 | 6,405,125 | 7,978,554 | 8,220,874 | 9,046,404 | 8,899,640 | 8,643,950 | 7,742,235 | 8,751,886 | 9,013,318 | 9,872,888 | 9,437,946 | 8,207,394 | 6,664,628 | 4,914,905 | 3,670,126 | 2,887,157 | 2,100,861 | 1,751,452 |
| Female..... | 131,445,904 | 1,563,925 | 6,107,942 | 7,622,353 | 7,844,352 | 8,617,721 | 8,496,343 | 8,549,181 | 7,814,091 | 8,691,781 | 9,215,338 | 10,211,823 | 9,967,030 | 8,725,595 | 7,234,525 | 5,580,750 | 4,451,517 | 3,891,636 | 3,302,916 | 3,657,085 |
| White..... | 201,743,519 | 2,306,276 | 9,094,587 | 11,515,225 | 11,901,243 | 13,116,171 | 13,133,162 | 12,897,665 | 11,574,250 | 13,090,788 | 14,186,938 | 16,071,537 | 15,714,323 | 13,989,593 | 11,772,589 | 8,946,033 | 6,932,164 | 5,895,571 | 4,760,864 | 4,824,520 |
| Male..... | 99,084,508 | 1,181,261 | 4,662,799 | 5,902,815 | 6,108,166 | 6,733,047 | 6,739,696 | 6,517,805 | 5,823,967 | 6,576,300 | 7,096,297 | 7,991,386 | 7,771,141 | 6,870,802 | 5,716,539 | 4,237,677 | 3,169,386 | 2,542,645 | 1,876,077 | 1,565,672 |
| Female..... | 102,659,011 | 1,125,015 | 4,431,788 | 5,612,410 | 5,793,077 | 6,383,124 | 6,394,466 | 6,379,860 | 5,750,253 | 6,514,488 | 7,090,641 | 8,080,151 | 7,937,182 | 7,118,791 | 6,060,050 | 4,708,356 | 3,762,778 | 3,352,926 | 2,904,787 | 3,258,848 |
| Black..... | 38,312,684 | 644,230 | 2,431,957 | 2,954,676 | 3,065,453 | 3,407,815 | 3,096,171 | 2,957,337 | 2,535,847 | 2,649,570 | 2,694,305 | 2,751,562 | 2,457,849 | 1,987,956 | 1,416,122 | 1,036,954 | 800,796 | 593,589 | 424,106 | 406,389 |
| Male..... | 18,275,573 | 329,246 | 1,237,180 | 1,500,176 | 1,556,981 | 1,728,334 | 1,456,581 | 1,209,615 | 1,050,116 | 1,261,819 | 1,276,807 | 1,127,984 | 893,839 | 622,633 | 438,993 | 326,817 | 224,208 | 145,726 | 120,352 | |
| Female..... | 20,037,111 | 314,984 | 1,194,777 | 1,454,500 | 1,508,472 | 1,679,481 | 1,531,005 | 1,497,756 | 1,326,232 | 1,399,454 | 1,432,486 | 1,474,755 | 1,329,855 | 1,094,117 | 793,489 | 597,961 | 473,979 | 369,381 | 278,380 | 286,037 |

1/ Includes races other than white and black.
SOURCE: Population estimates for specified Hispanic subgroups based on unpublished tabulations prepared by the Housing and Household Economic Statistics Division, U.S. Bureau of the Census, 2010. Population estimates for All origins, Hispanic, non-Hispanic, non-Hispanic white, and non-Hispanic black were prepared under a collaborative arrangement with the U.S. Census Bureau, 2009.

Table VI. Estimated population for ages 15 years and over by marital status, 10-year age groups and sex: 2008

[Population estimates are based on the Current Population Survey adjusted to resident population controls for the United States. The control totals used are 2000-based population estimates for the United States for July 1, 2008]

| Marital status and sex | 15 years and over | 15-24 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | 65-74 years | 75 years and over |
|------------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|
| | All races..... | 242,933,998 | 42,573,339 | 40,931,558 | 42,501,146 | 44,372,069 | 33,686,181 | 20,122,914 |
| Never married..... | 72,915,892 | 38,464,637 | 17,247,994 | 7,629,505 | 5,524,181 | 2,454,929 | 874,394 | 720,252 |
| Ever married..... | 170,018,106 | 4,108,702 | 23,683,564 | 34,871,641 | 38,847,888 | 31,231,252 | 19,248,520 | 18,026,539 |
| Married..... | 131,103,168 | 3,802,946 | 21,330,922 | 29,491,129 | 30,802,267 | 23,928,404 | 13,492,017 | 8,255,483 |
| Widowed..... | 15,330,383 | 40,577 | 123,652 | 339,161 | 976,621 | 1,856,883 | 3,315,396 | 8,678,093 |
| Divorced..... | 23,584,555 | 265,179 | 2,228,990 | 5,041,351 | 7,069,000 | 5,445,965 | 2,441,107 | 1,092,963 |
| All races, male..... | 118,655,149 | 21,872,697 | 20,900,031 | 21,314,359 | 21,852,627 | 16,250,648 | 9,264,912 | 7,199,875 |
| Never married..... | 39,883,393 | 20,296,208 | 9,974,816 | 4,500,964 | 3,170,871 | 1,244,566 | 420,802 | 275,166 |
| Ever married..... | 78,771,756 | 1,576,489 | 10,925,215 | 16,813,395 | 18,681,756 | 15,006,082 | 8,844,110 | 6,924,709 |
| Married..... | 65,715,796 | 1,469,553 | 9,948,543 | 14,465,064 | 15,288,310 | 12,353,084 | 7,335,264 | 4,855,978 |
| Widowed..... | 3,053,714 | 11,865 | 24,077 | 77,812 | 233,025 | 393,924 | 610,577 | 1,702,434 |
| Divorced..... | 10,002,246 | 95,071 | 952,595 | 2,270,519 | 3,160,421 | 2,259,074 | 898,269 | 366,297 |
| All races, female..... | 124,278,849 | 20,700,642 | 20,031,527 | 21,186,787 | 22,519,442 | 17,435,533 | 10,858,002 | 11,546,916 |
| Never married..... | 33,032,499 | 18,168,429 | 7,273,178 | 3,128,541 | 2,353,310 | 1,210,363 | 453,592 | 445,086 |
| Ever married..... | 91,246,350 | 2,532,213 | 12,758,349 | 18,058,246 | 20,166,132 | 16,225,170 | 10,404,410 | 11,101,830 |
| Married..... | 65,387,372 | 2,333,393 | 11,382,379 | 15,026,065 | 15,513,957 | 11,575,320 | 6,156,753 | 3,399,505 |
| Widowed..... | 12,276,669 | 28,712 | 99,575 | 261,349 | 743,596 | 1,462,959 | 2,704,819 | 6,975,659 |
| Divorced..... | 13,582,309 | 170,108 | 1,276,395 | 2,770,832 | | | | |

Table VII. Estimated population for ages 25-64, by educational attainment and sex: Total of 27 reporting states and the District of Columbia using the 2003 version of the U.S. Standard Certificate of Death and total of 20 reporting states using the 1989 version of the U.S. Standard Certificate of Death, 2008

[Population estimates based on the Current Population Survey adjusted to resident population controls. The control totals used are 2000-based population estimates for reporting states for July 1, 2008; See "Technical Notes"]

| 27 Reporting states and the District of Columbia ¹ using the 2003 Version of the Standard Certificate of Death | | | | | | 20 Reporting states ² using the 1989 Version of the Standard Certificate of Death | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|---|-------------|-------------|-------------|-------------|-------------|
| Education level and sex | 25-64 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years | Years of school completed and sex | 25-64 years | 25-34 years | 35-44 years | 45-54 years | 55-64 years |
| All races | | | | | | All Races | | | | | |
| Both sexes..... | 101,833,643 | 26,090,920 | 26,978,699 | 27,905,770 | 20,858,254 | Both sexes..... | 53,416,596 | 13,203,957 | 13,830,091 | 14,812,266 | 11,570,282 |
| Less than high school diploma or GED..... | 12,200,336 | 3,337,480 | 3,350,154 | 3,198,565 | 2,314,137 | Under 12 years..... | 5,427,006 | 1,324,936 | 1,347,486 | 1,466,263 | 1,288,321 |
| High school diploma or GED..... | 29,514,331 | 7,202,349 | 7,594,524 | 8,609,797 | 6,107,661 | 12 years..... | 16,815,715 | 3,851,616 | 4,067,320 | 5,100,471 | 3,796,308 |
| Some college or collegiate degree..... | 60,118,976 | 15,551,091 | 16,034,021 | 16,097,408 | 12,436,456 | 13 years or more..... | 31,173,875 | 8,027,405 | 8,415,285 | 8,245,532 | 6,485,653 |
| Male..... | 50,762,520 | 13,442,104 | 13,511,465 | 13,842,636 | 9,966,315 | Male..... | 26,484,580 | 6,618,668 | 6,941,396 | 7,229,449 | 5,695,067 |
| Less than high school diploma or GED..... | 6,575,594 | 1,949,640 | 1,822,416 | 1,706,030 | 1,097,508 | Under 12 years..... | 3,039,306 | 753,455 | 778,836 | 823,092 | 683,923 |
| High school diploma or GED..... | 15,304,734 | 4,143,793 | 4,038,326 | 4,453,064 | 2,669,551 | 12 years..... | 8,753,896 | 2,163,885 | 2,242,767 | 2,627,671 | 1,719,573 |
| Some college or collegiate degree..... | 28,882,192 | 7,348,671 | 7,650,723 | 7,683,542 | 6,199,256 | 13 years or more..... | 14,691,378 | 3,701,328 | 3,919,793 | 3,778,686 | 3,291,571 |
| Female..... | 51,071,123 | 12,648,816 | 13,467,234 | 14,063,134 | 10,891,939 | Female..... | 26,932,016 | 6,585,289 | 6,888,695 | 7,582,817 | 5,875,215 |
| Less than high school diploma or GED..... | 5,624,742 | 1,387,840 | 1,527,738 | 1,492,535 | 1,216,629 | Under 12 years..... | 2,387,700 | 571,481 | 568,650 | 643,171 | 604,398 |
| High school diploma or GED..... | 14,209,597 | 3,058,556 | 3,556,198 | 4,156,733 | 3,438,110 | 12 years..... | 8,061,819 | 1,687,731 | 1,824,553 | 2,472,800 | 2,076,735 |
| Some college or collegiate degree..... | 31,236,784 | 8,202,420 | 8,383,298 | 8,413,866 | 6,237,200 | 13 years or more..... | 16,482,497 | 4,326,077 | 4,495,492 | 4,466,846 | 3,194,082 |

¹Includes data for Arkansas, California, Connecticut, Delaware, District of Columbia, Florida, Idaho, Illinois, Indiana, Kansas, Michigan, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Texas, Utah, Washington, and Wyoming; see "Technical Notes."

²Includes data for Alabama, Alaska, Arizona, Colorado, Hawaii, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, North Carolina, Pennsylvania, Tennessee, Virginia, Wisconsin, and West Virginia; see "Technical Notes."

SOURCE: Population estimates based on unpublished tabulations prepared by the Housing and Household Economic Statistics Division, U.S. Bureau of the Census. 2010.

Table VIII. Estimated population for the United States, each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas, 2008

[Populations for the United States are postcensal estimates produced in 2009 based on the 2000 census estimated as of July 1, 2008. Populations for each state, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas are postcensal estimates produced in 2009 based on the 2000 census estimated as of July 1, 2008]

| Area | Total | Area | Total |
|---------------------------|-------------|------------------------|------------|
| United States..... | 304,059,724 | Nevada..... | 2,600,167 |
| Alabama..... | 4,661,900 | New Hampshire..... | 1,315,809 |
| Alaska..... | 686,293 | New Jersey..... | 8,682,661 |
| Arizona..... | 6,500,180 | New Mexico..... | 1,984,356 |
| Arkansas..... | 2,855,390 | New York..... | 19,490,297 |
| California..... | 36,756,666 | North Carolina..... | 9,222,414 |
| Colorado..... | 4,939,456 | North Dakota..... | 641,481 |
| Connecticut..... | 3,501,252 | Ohio..... | 11,485,910 |
| Delaware..... | 873,092 | Oklahoma..... | 3,642,361 |
| District of Columbia..... | 591,833 | Oregon..... | 3,790,060 |
| Florida..... | 18,328,340 | Pennsylvania..... | 12,448,279 |
| Georgia..... | 9,685,744 | Rhode Island..... | 1,050,788 |
| Hawaii..... | 1,288,198 | South Carolina..... | 4,479,800 |
| Idaho..... | 1,523,816 | South Dakota..... | 804,194 |
| Illinois..... | 12,901,563 | Tennessee..... | 6,214,888 |
| Indiana..... | 6,376,792 | Texas..... | 24,326,974 |
| Iowa..... | 3,002,555 | Utah..... | 2,736,424 |
| Kansas..... | 2,802,134 | Vermont..... | 621,270 |
| Kentucky..... | 4,269,245 | Virginia..... | 7,769,089 |
| Louisiana..... | 4,410,796 | Washington..... | 6,549,224 |
| Maine..... | 1,316,456 | West Virginia..... | 1,814,468 |
| Maryland..... | 5,633,597 | Wisconsin..... | 5,627,967 |
| Massachusetts..... | 6,497,967 | Wyoming..... | 532,668 |
| Michigan..... | 10,003,422 | | |
| Minnesota..... | 5,220,393 | Puerto Rico..... | 3,954,037 |
| Mississippi..... | 2,938,618 | Virgin Islands..... | 109,840 |
| Missouri..... | 5,911,605 | Guam..... | 175,991 |
| Montana..... | 967,440 | American Samoa..... | 64,827 |
| Nebraska..... | 1,783,432 | Northern Marianas..... | 55,244 |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics. Estimates of the July 1, 2008, U.S. resident population by age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau. 2009.

Table IX. United States standard population

| Age | Population |
|------------------------|-------------|
| All ages..... | 274,633,642 |
| Under 1 year..... | 3,794,901 |
| 1-4 years..... | 15,191,619 |
| 5-14 years..... | 39,976,619 |
| 15-24 years..... | 38,076,743 |
| 25-34 years..... | 37,233,437 |
| 35-44 years..... | 44,659,185 |
| 45-54 years..... | 37,030,152 |
| 55-64 years..... | 23,961,506 |
| 65-74 years..... | 18,135,514 |
| 75-84 years..... | 12,314,793 |
| 85 years and over..... | 4,259,173 |

Table X. United States standard population for ages 25 years and over

| Age | Population |
|------------------------|-------------|
| 25 years and over..... | 177,593,760 |
| 25-34 years..... | 37,233,437 |
| 35-44 years..... | 44,659,185 |
| 45-54 years..... | 37,030,152 |
| 55-64 years..... | 23,961,506 |
| 65-74 years..... | 18,135,514 |
| 75 years and over..... | 16,573,966 |

Table XI. United States standard population for ages 25-64 years

| Age | Population |
|------------------|-------------|
| 25-64 years..... | 142,884,280 |
| 25-34 years..... | 37,233,437 |
| 35-44 years..... | 44,659,185 |
| 45-54 years..... | 37,030,152 |
| 55-64 years..... | 23,961,506 |

Table XII. United States standard population for ages 15 years and over

| Age | Population |
|------------------------|-------------|
| 15 years and over..... | 215,670,503 |
| 15-24 years..... | 38,076,743 |
| 25-34 years..... | 37,233,437 |
| 35-44 years..... | 44,659,185 |
| 45-54 years..... | 37,030,152 |
| 55-64 years..... | 23,961,506 |
| 65 years and over..... | 34,709,480 |

Table XIII. United States standard population for the territories

| Age | Population |
|------------------------|-------------|
| All ages..... | 274,633,642 |
| Under 1 year..... | 3,794,901 |
| 1-4 years..... | 15,191,619 |
| 5-14 years..... | 39,976,619 |
| 15-24 years..... | 38,076,743 |
| 25-34 years..... | 37,233,437 |
| 35-44 years..... | 44,659,185 |
| 45-54 years..... | 37,030,152 |
| 55-64 years..... | 23,961,506 |
| 65-74 years..... | 18,135,514 |
| 75 years and over..... | 16,573,966 |

Table XIV. Current Population Survey standard error parameters for death rates in tables 5, I-7, and I-8

| Characteristic | Total | | White, black, non-Hispanic white, or non-Hispanic black | | Hispanic | |
|--|-----------|-------|---|-----|-----------|-------|
| | a | b | a | b | a | b |
| Table 5 | | | | | | |
| All origins..... | 0.000000 | 0 | 0.000000 | 0 | 0.000000 | 0 |
| Hispanic subgroups (Mexican, Puerto Rican, Cuban, Central and South American, and Other Hispanic)..... | ... | ... | ... | ... | -0.000082 | 3,809 |
| Tables I-7 | | | | | | |
| All marital status groups combined.. | 0.000000 | 0 | ... | ... | ... | ... |
| Marital status subgroups (Never married, Ever married, Married, Widowed, Divorced)..... | -0.000009 | 2,652 | ... | ... | ... | ... |
| Table I-8 | | | | | | |
| All education groups..... | 0.000000 | 0 | ... | ... | ... | ... |
| Education subgroups (Under 12 years, 12 years, 13 years or more)..... | -0.000005 | 1,206 | ... | ... | ... | ... |
| ... Category not applicable. | | | | | | |

SOURCE: The a and b parameters are averages of the 2008 and 2009 Current Population Survey standard error parameters.

Table XV. Lower and upper 95 percent confidence limit factors for the number of deaths and death rate when the number of deaths is less than 100

| Number of deaths (D) | Lower confidence limit (L) | Upper confidence limit (U) | Number of deaths (D) | Lower confidence limit (L) | Upper confidence limit (U) |
|-------------------------|-------------------------------------|-------------------------------------|-------------------------|-------------------------------------|-------------------------------------|
| 1 | 0.025318 | 5.571643 | 51 | 0.744566 | 1.314815 |
| 2 | 0.121105 | 3.612344 | 52 | 0.746848 | 1.311367 |
| 3 | 0.206224 | 2.922424 | 53 | 0.749069 | 1.308025 |
| 4 | 0.272466 | 2.560397 | 54 | 0.751231 | 1.304783 |
| 5 | 0.324697 | 2.333666 | 55 | 0.753337 | 1.301637 |
| 6 | 0.366982 | 2.176579 | 56 | 0.755389 | 1.298583 |
| 7 | 0.402052 | 2.060382 | 57 | 0.757390 | 1.295616 |
| 8 | 0.431729 | 1.970399 | 58 | 0.759342 | 1.292732 |
| 9 | 0.457264 | 1.898311 | 59 | 0.761246 | 1.289927 |
| 10 | 0.479539 | 1.839036 | 60 | 0.763105 | 1.287198 |
| 11 | 0.499196 | 1.789276 | 61 | 0.764921 | 1.284542 |
| 12 | 0.516715 | 1.746799 | 62 | 0.766694 | 1.281955 |
| 13 | 0.532458 | 1.710030 | 63 | 0.768427 | 1.279434 |
| 14 | 0.546709 | 1.677830 | 64 | 0.770122 | 1.276978 |
| 15 | 0.559692 | 1.649348 | 65 | 0.771779 | 1.274582 |
| 16 | 0.571586 | 1.623937 | 66 | 0.773400 | 1.272245 |
| 17 | 0.582537 | 1.601097 | 67 | 0.774986 | 1.269965 |
| 18 | 0.592663 | 1.580431 | 68 | 0.776539 | 1.267738 |
| 19 | 0.602065 | 1.561624 | 69 | 0.778060 | 1.265564 |
| 20 | 0.610826 | 1.544419 | 70 | 0.779549 | 1.263440 |
| 21 | 0.619016 | 1.528606 | 71 | 0.781008 | 1.261364 |
| 22 | 0.626695 | 1.514012 | 72 | 0.782438 | 1.259335 |
| 23 | 0.633914 | 1.500491 | 73 | 0.783840 | 1.257350 |
| 24 | 0.640719 | 1.487921 | 74 | 0.785215 | 1.255408 |
| 25 | 0.647147 | 1.476197 | 75 | 0.786563 | 1.253509 |
| 26 | 0.653233 | 1.465232 | 76 | 0.787886 | 1.251649 |
| 27 | 0.659006 | 1.454947 | 77 | 0.789184 | 1.249828 |
| 28 | 0.664493 | 1.445278 | 78 | 0.790459 | 1.248045 |
| 29 | 0.669716 | 1.436167 | 79 | 0.791709 | 1.246298 |
| 30 | 0.674696 | 1.427562 | 80 | 0.792938 | 1.244587 |
| 31 | 0.679451 | 1.419420 | 81 | 0.794144 | 1.242909 |
| 32 | 0.683999 | 1.411702 | 82 | 0.795330 | 1.241264 |
| 33 | 0.688354 | 1.404372 | 83 | 0.796494 | 1.239650 |
| 34 | 0.692529 | 1.397400 | 84 | 0.797639 | 1.238068 |
| 35 | 0.696537 | 1.390758 | 85 | 0.798764 | 1.236515 |
| 36 | 0.700388 | 1.384422 | 86 | 0.799871 | 1.234992 |
| 37 | 0.704092 | 1.378368 | 87 | 0.800959 | 1.233496 |
| 38 | 0.707660 | 1.372578 | 88 | 0.802029 | 1.232028 |
| 39 | 0.711098 | 1.367033 | 89 | 0.803082 | 1.230586 |
| 40 | 0.714415 | 1.361716 | 90 | 0.804118 | 1.229170 |
| 41 | 0.717617 | 1.356613 | 91 | 0.805138 | 1.227778 |
| 42 | 0.720712 | 1.351709 | 92 | 0.806141 | 1.226411 |
| 43 | 0.723705 | 1.346993 | 93 | 0.807129 | 1.225068 |
| 44 | 0.726602 | 1.342453 | 94 | 0.808102 | 1.223747 |
| 45 | 0.729407 | 1.338079 | 95 | 0.809060 | 1.222448 |
| 46 | 0.732126 | 1.333860 | 96 | 0.810003 | 1.221171 |
| 47 | 0.734762 | 1.329788 | 97 | 0.810933 | 1.219915 |
| 48 | 0.737321 | 1.325855 | 98 | 0.811848 | 1.218680 |
| 49 | 0.739806 | 1.322053 | 99 | 0.812751 | 1.217464 |
| 50 | 0.742219 | 1.318375 | | | |