

## Deaths: Final Data for 2008

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### 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 is 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*.

**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 years. The age-specific death rates remained unchanged for age groups: 1–4, 45–54, 55–64, and 75–84 years. 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 birthweight, 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 well-being 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 the Centers for Disease Control and Prevention's National Center for Health Statistics (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, and 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 (NHOPI) persons. Under the prior OMB standards issued in 1977, data for Asian or Pacific Islander (API) 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 NHOPI 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 NHOPI persons as a combined category, API, 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 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

**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 <sup>1</sup>			Black <sup>1</sup>			American Indian or Alaska Native <sup>1,2,3</sup>			Asian or Pacific Islander <sup>1,4</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	Percent change														
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 <sup>5</sup> . . . . .	-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

<sup>1</sup>Multiple-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.”

<sup>2</sup>Death 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.”

<sup>3</sup>Includes Aleuts and Eskimos.

<sup>4</sup>Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

<sup>5</sup>Death rates for “Under 1 year” (based on population estimates) differ from infant mortality rates (based on live births).

0.0 Quantity more than zero but less than 0.05.

(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 (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).

**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 the Hispanic population 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.

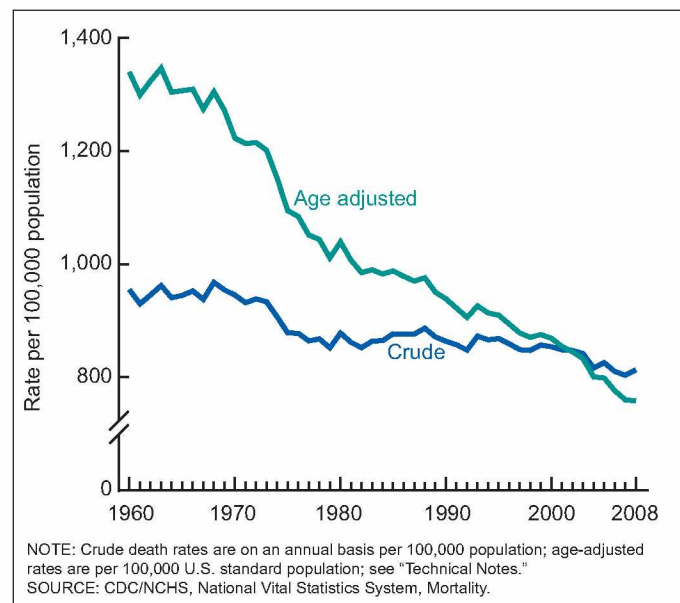


Figure 1. Crude and age-adjusted death rates: United States, 1960–2008

**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"]

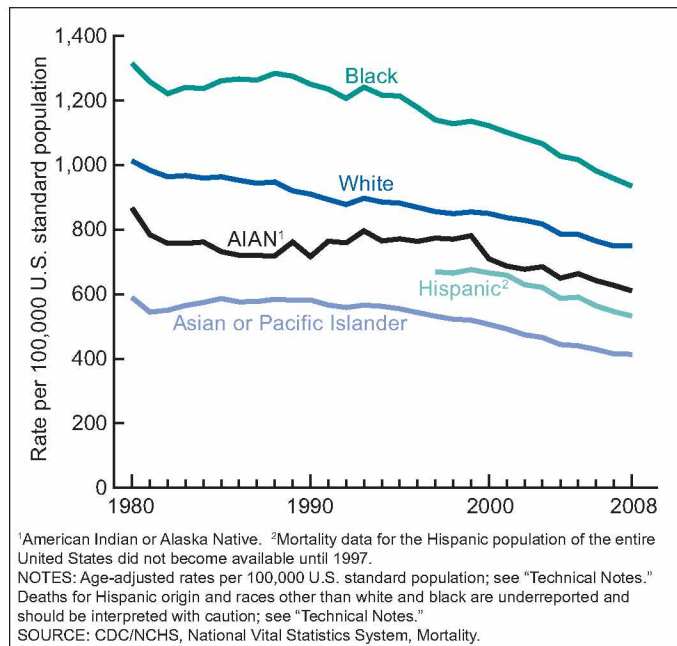
Rank <sup>1</sup>	Cause of death (based on ICD-10, 2004)	Number	Percent of total deaths	2008 crude death rate	Age-adjusted death rate			
					2008	Percent change to 2008	Ratio	
							Male to female	Black <sup>2</sup> to white
...	All causes	2,471,984	100.0	813.0	758.3	-0.2	1.4	1.2
1	Diseases of heart . . . . . (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) <sup>3</sup>	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.

<sup>1</sup>Rank based on number of deaths; see "Technical Notes."

<sup>2</sup>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."

<sup>3</sup>New ICD-10 code J09 (Influenza due to identified avian influenza virus) was added to the category in 2007.



**Figure 2. Age-adjusted death rates, by race and Hispanic origin: United States, 1980-2008**

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

**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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			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
All ages	Percent change														
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 <sup>3</sup>	-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

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Figures for origin not stated are included in "all origins" but not distributed among specified origins.

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>Death rates for "Under 1 year" (based on population estimates) differ from infant mortality rates (based on live births).

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

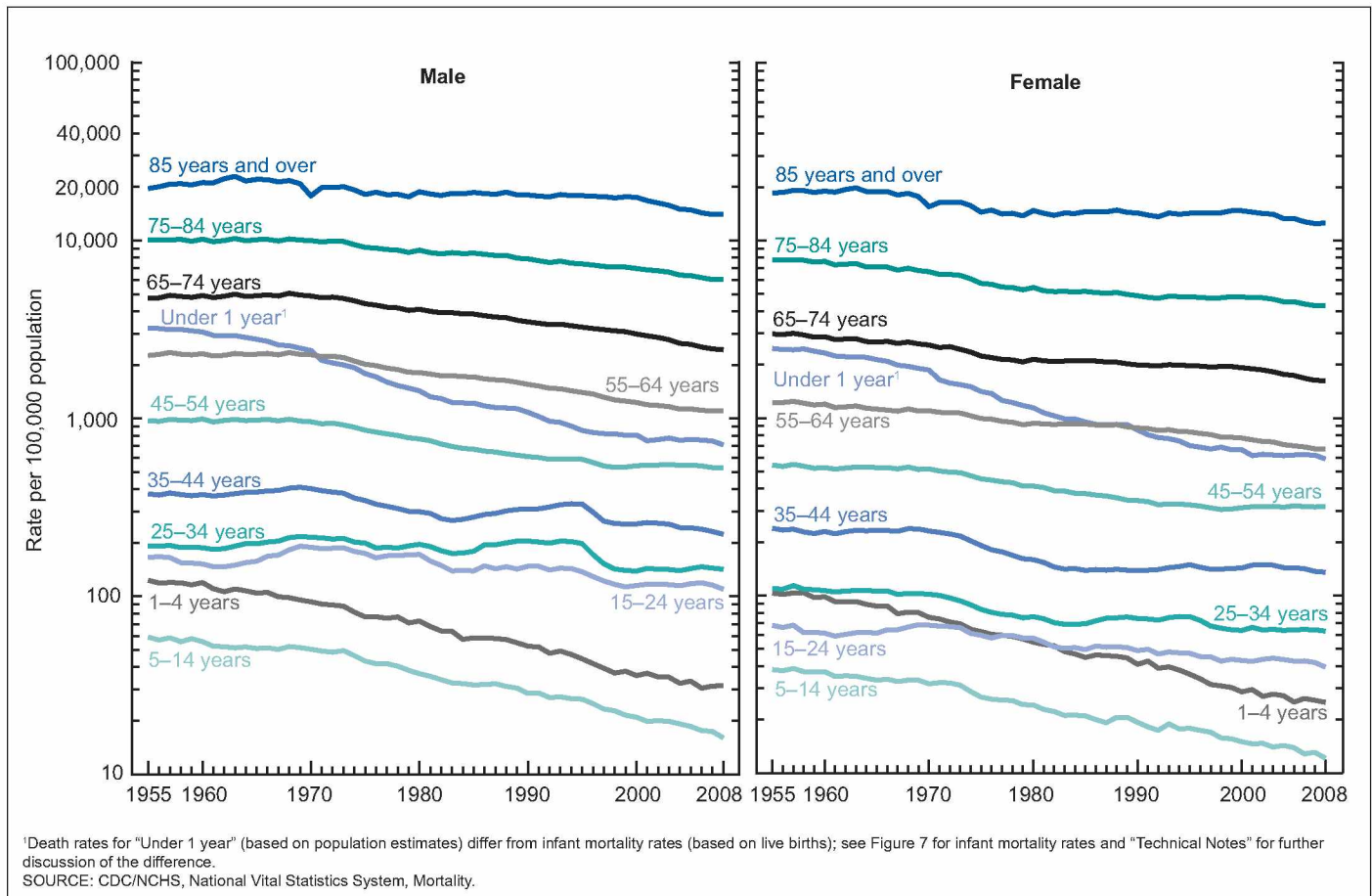
A statistically significant increase in the age-specific death rate was observed from 2007 to 2008 in the age group 85 years and over. On the other hand, age-specific rates decreased for age groups less than 1 year, 5-14, 15-24, 25-34, 35-44, and 65-74 years (Tables A, 11, 14, and 15; Figure 3).

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 years. 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 years (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 years. 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 years.

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 years. 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 years. 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



**Figure 3. Death rates, by age and sex: United States, 1955–2008**

years 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 years 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 under age 1 year and those aged 75–84 years. The largest decrease occurred for those under age 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.

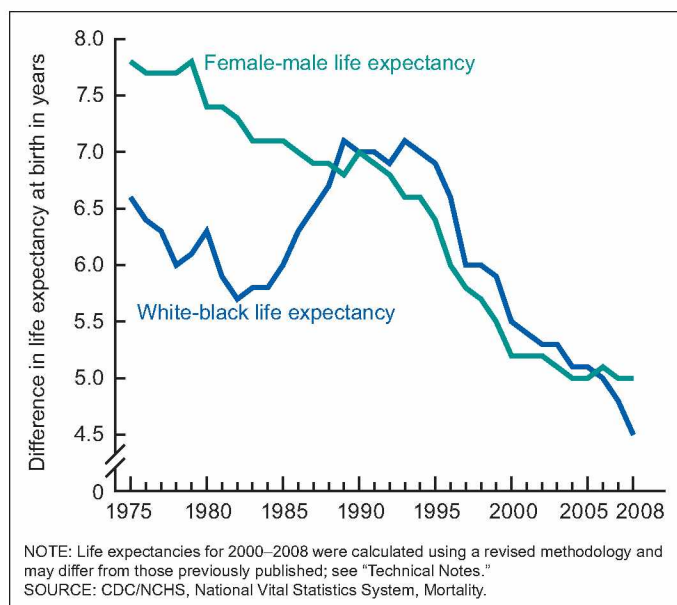
Life table data shown in this report for data years 2000–2007 are based on a methodology similar to that of the 1999–2001 decennial life tables. Beginning with final data reported for 2008, the life table methodology was revised by changing the smoothing technique used to estimate the life table functions 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

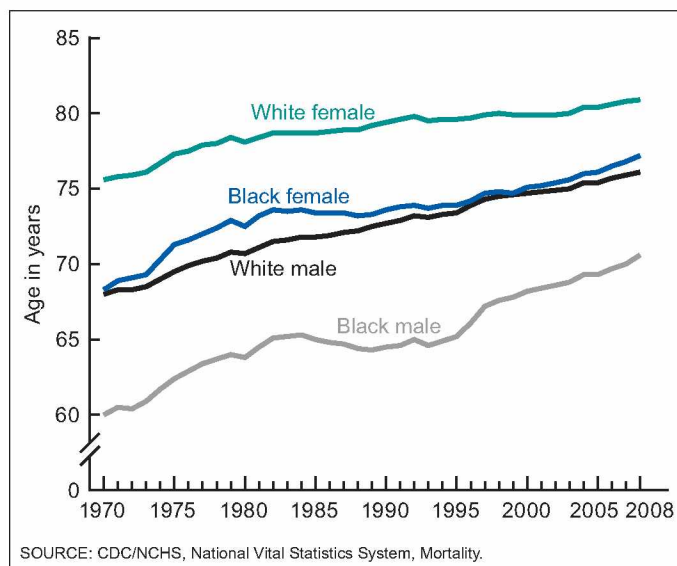
In 2008, life expectancy at birth for the U.S. population was 78.1 years, an increase of 0.2 year from 77.9 in 2007 (Tables 6–8). This figure revises upward the life expectancy shown on an earlier, preliminary report on mortality for 2008 (2). The trend in U.S. life expectancy since 1900 has been one 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



**Figure 4. Differences in female-male and white-black life expectancy: United States, 1975–2008**

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 and Figure 5). 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.



**Figure 5. Life expectancy, by race and sex: United States, 1970–2008**

Life expectancy for the Hispanic population increased 0.1 year in 2008 to 81.0 years compared with 2007 (Tables 7 and 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 and 8), Hispanic females have the highest life expectancy at birth (83.3 years), followed by non-Hispanic white females (80.7 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 2.6 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)

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, however, needs to be interpreted with caution. 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. 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 make 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 show suicide in the 11th position among the leading causes of death.) The surge in numbers of suicides in the final file compared with 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).

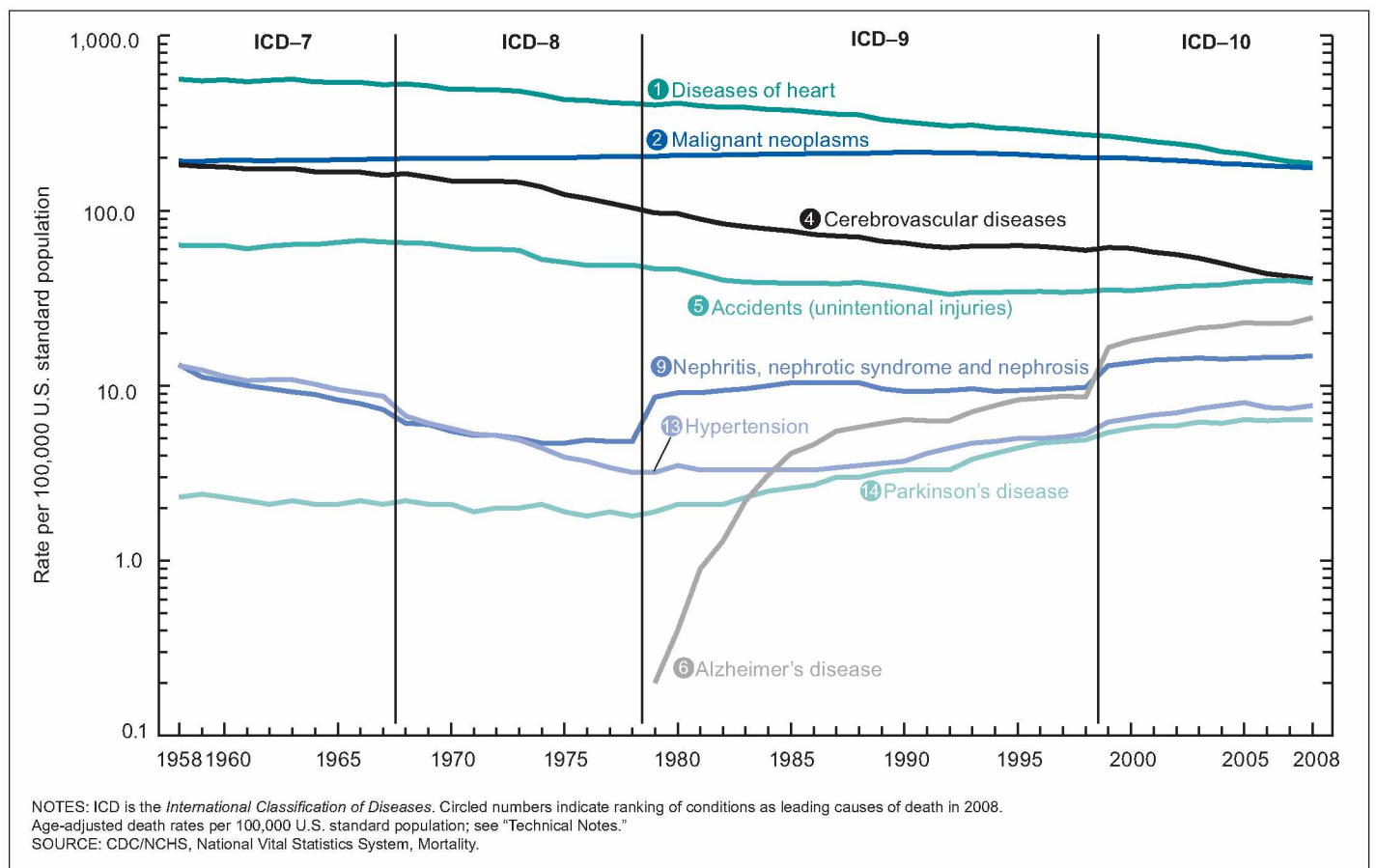


Figure 6. Age-adjusted death rates for selected leading causes of death: United States, 1958–2008

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 over (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) and 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.

Life table partitioning analysis indicates that the difference of 2.6 years in life expectancy between the Hispanic population and non-Hispanic white population 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 Reports* on leading causes by age, race, Hispanic origin, and sex (4).

## 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 with 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 the non-Hispanic white population was 14.8 percent lower than the rate for the Hispanic population. The rate for the non-Hispanic black population was 27.3 percent lower than the rate for the Hispanic population. 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 the non-Hispanic white population (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.

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

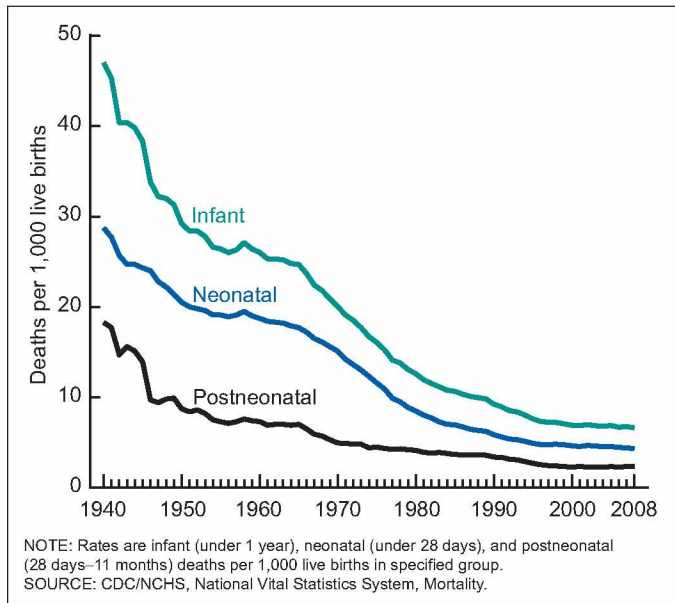
1. Congenital malformations, deformations and chromosomal abnormalities

**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 <sup>1</sup> from 2007 to 2008
	Number	Rate	Number	Rate	
<b>Infant</b>					
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
<b>Neonatal</b>					
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
<b>Postneonatal</b>					
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

<sup>1</sup>Based on a comparison of the 2008 and 2007 mortality rates.



**Figure 7. Infant, neonatal, and postneonatal mortality rates: United States, 1940–2008**

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).

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 Reports* that use data from the linked file of live births and infant deaths provide 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 infants, 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 infants 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

**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 <sup>1</sup>	Cause of death (based on ICD–10, 2004)	Number	Percent of total deaths	Rate	Percent change <sup>2</sup> 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.

<sup>1</sup>Based on number of deaths; see “Technical Notes.”

<sup>2</sup>Based on a comparison of the 2007 infant mortality rate with the 2008 infant mortality rate.

NOTE: ICD–10 is *International Classification of Diseases, Tenth Revision*.

as supplemental tables located on 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.

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[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 <sup>1</sup>			White <sup>2</sup>			Black <sup>2</sup>			American Indian or Alaska Native <sup>2,3</sup>			Asian or Pacific Islander <sup>2,4</sup>		
	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	---	---	---

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>			White <sup>2</sup>			Black <sup>2</sup>			American Indian or Alaska Native <sup>2,3</sup>			Asian or Pacific Islander <sup>2,4</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Death rate														
2008	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
2007	803.6	809.9	797.4	851.5	848.1	854.9	723.4	775.6	675.7	444.0	488.2	400.0	308.7	331.4	287.2
2006	810.4	814.8	806.1	858.1	852.3	863.9	733.0	786.7	684.0	438.5	477.1	399.9	307.4	330.6	285.6
2005	825.9	827.2	824.6	873.7	864.5	882.8	749.4	799.2	703.9	440.3	481.9	398.8	307.7	333.9	282.8
2004	816.5	817.6	815.4	863.2	854.2	871.9	744.3	792.6	700.3	416.8	453.8	380.0	297.2	321.1	274.6
2003	841.9	840.3	843.4	890.1	877.6	902.3	763.6	813.7	717.9	422.6	457.6	387.7	303.9	330.0	279.2
2002	847.3	846.6	848.0	895.7	884.0	907.0	768.4	816.7	724.4	403.6	439.6	367.7	299.5	331.4	269.7
2001	848.5	846.4	850.4	895.1	881.9	907.9	773.5	823.9	727.7	392.1	424.2	360.2	303.8	335.0	274.4
2000	854.0	853.0	855.0	900.2	887.8	912.3	781.1	834.1	733.0	380.8	415.6	346.1	296.6	332.9	262.3
1999	857.0	859.2	854.9	901.4	892.1	910.4	788.1	847.4	734.3	399.3	431.8	367.1	296.8	333.2	262.5
1998	847.3	856.4	838.5	889.5	887.3	891.6	782.3	848.2	722.6	397.8	441.9	354.2	293.8	335.4	254.9
1997	848.8	864.6	833.6	889.1	893.3	885.0	789.9	867.1	720.1	402.7	458.2	347.7	294.1	336.8	253.9
1996	859.2	882.8	836.7	896.0	907.1	885.3	819.7	915.3	733.3	399.5	441.5	358.0	294.4	340.2	251.1
1995	868.3	900.8	837.2	901.8	921.0	883.2	846.2	960.2	743.2	409.4	459.4	360.1	294.6	341.4	250.4
1994	866.1	904.2	829.7	897.8	922.6	873.8	849.0	970.2	739.7	408.2	468.8	348.3	294.6	344.0	247.7
1993	872.8	915.0	832.5	902.7	931.8	874.6	864.6	992.2	749.6	419.8	479.6	360.7	288.0	338.1	240.3
1992	848.1	896.1	802.4	875.8	912.2	840.8	841.8	967.6	728.6	406.6	474.1	340.0	282.1	331.1	235.3
1991	857.6	908.8	808.7	883.2	922.7	845.2	861.4	994.8	741.4	405.3	468.9	342.7	278.7	326.9	232.4
1990	863.8	918.4	812.0	888.0	930.9	846.9	871.0	1,008.0	747.9	402.8	476.4	330.4	283.3	334.3	234.3
1989	871.3	926.3	818.9	893.2	936.5	851.8	887.9	1,026.7	763.2	430.5	510.7	351.3	280.9	334.5	229.4
1988	886.7	945.1	831.2	910.5	957.9	865.3	888.3	1,026.1	764.6	411.7	485.0	339.9	282.0	339.0	227.4
1987	876.4	939.3	816.7	900.1	952.7	849.8	868.9	1,006.2	745.7	410.7	483.8	339.0	278.9	338.3	222.0
1986	876.7	944.7	812.3	900.1	958.6	844.3	864.9	1,002.6	741.5	409.5	494.9	325.9	276.2	335.1	219.9
1985	876.9	948.6	809.1	900.4	963.6	840.1	854.8	989.3	734.2	416.4	492.5	342.5	283.4	344.6	224.9
1984	864.8	938.8	794.7	887.8	954.1	824.6	836.1	968.5	717.4	419.6	502.7	338.4	275.9	336.5	218.1
1983	863.7	943.2	788.4	885.4	957.7	816.4	836.6	971.2	715.9	428.5	515.1	343.9	276.1	339.1	216.1
1982	852.4	938.4	771.2	873.1	951.8	798.2	823.4	966.2	695.5	434.5	522.9	348.1	271.3	338.3	207.4
1981	862.0	954.0	775.0	880.4	965.2	799.8	842.4	992.6	707.7	445.6	547.9	345.6	272.3	336.2	211.5
1980	878.3	976.9	785.3	892.5	983.3	806.1	875.4	1,034.1	733.3	487.4	597.1	380.1	296.9	375.3	222.5
1970	945.3	1,090.3	807.8	946.3	1,086.7	812.6	999.3	1,186.6	829.2	---	---	---	---	---	---
1960	954.7	1,104.5	809.2	947.8	1,098.5	800.9	1,038.6	1,181.7	905.0	---	---	---	---	---	---
1950	963.8	1,106.1	823.5	945.7	1,089.5	803.3	---	---	---	---	---	---	---	---	---
1940	1,076.4	1,197.4	954.6	1,041.5	1,162.2	919.4	---	---	---	---	---	---	---	---	---

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>			White <sup>2</sup>			Black <sup>2</sup>			American Indian or Alaska Native <sup>2,3</sup>			Asian or Pacific Islander <sup>2,4</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Age-adjusted death rate <sup>5</sup>														
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.

<sup>1</sup>For 1940–1991, data include 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."

<sup>2</sup>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."

<sup>3</sup>Includes Aleuts and Eskimos.

<sup>4</sup>Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

<sup>5</sup>For 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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	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 <sup>4</sup>														
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

<sup>1</sup>Figures for origin not stated are included in “All origins” but are not distributed among specified origins.

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>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.”

<sup>4</sup>For 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 <sup>1</sup>			Black <sup>1</sup>			American Indian or Alaska Native <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>			
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
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	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	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	
								Number								
All ages <sup>4</sup>	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 <sup>5</sup>	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."

<sup>1</sup>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."

<sup>2</sup>Includes Aleuts and Eskimos. <sup>3</sup>Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

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

<sup>5</sup>Death 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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	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 <sup>4</sup> . . . . .	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 <sup>5</sup> . . . . .	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. <sup>1</sup>Figures for origin not stated are included in "All origins" but not distributed among specified origins. <sup>2</sup>Includes races other than white and black. <sup>3</sup>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." <sup>4</sup>Figures for age not stated are included in "All ages" but not distributed among age groups. <sup>5</sup>Death 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 <sup>1</sup>	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 <sup>2</sup>
	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 <sup>3</sup>	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 <sup>4</sup>	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 <sup>4</sup>	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 <sup>5</sup>	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	...

See footnotes at end of table.





**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 $x$
	$nq_x$	$l_x$	$n^d_x$	$nL_x$	$T_x$	$e_x$
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 (OMB) 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 <sup>1</sup>			White <sup>2</sup>			Black <sup>2</sup>			Hispanic			Non-Hispanic white <sup>2</sup>			Non-Hispanic black <sup>2</sup>		
	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	80.7	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

<sup>1</sup>Includes races other than white and black.

<sup>2</sup>Race categories are consistent with the 1977 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 (OMB) 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 <sup>1</sup>			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 <sup>2</sup>	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	80.7	73.7	70.2	76.9
2007 <sup>2</sup>	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 <sup>2</sup>	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 <sup>2</sup>	77.4	74.9	79.9	77.9	75.4	80.4	72.8	69.3	76.1	---	---	---	---	---	---	---	---	---
2004 <sup>2</sup>	77.5	74.9	79.9	77.9	75.4	80.4	72.8	69.3	76.0	---	---	---	---	---	---	---	---	---
2003 <sup>2</sup>	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.

<sup>1</sup>Includes races other than white and black.

<sup>2</sup>Race categories are consistent with the 1977 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 <sup>9</sup>
	All ages <sup>1</sup>	Under 1 year <sup>2</sup>	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	
<b>All causes</b>													
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
<b>Diseases of heart (I00-I09,I11,I13,I20-I51)</b>													
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
<b>Malignant neoplasms (C00-C97)</b>													
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
<b>Chronic lower respiratory diseases (J40-J47)</b>													
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

See footnotes at end of table.

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

[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 <sup>9</sup>
	All ages <sup>1</sup>	Under 1 year <sup>2</sup>	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	
<b>Cerebrovascular diseases (I60-I69)</b>													
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
<b>Accidents (unintentional injuries) (V01-X59, Y85-Y86)</b>													
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
<b>Alzheimer's disease (G30)</b>													
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
<b>Diabetes mellitus (E10-14)</b>													
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

See footnotes at end of table.

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

[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 <sup>9</sup>
	All ages <sup>1</sup>	Under 1 year <sup>2</sup>	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	
<b>Influenza and pneumonia (J09–J18)</b>													
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
<b>Nephritis, nephrotic syndrome and nephrosis (N00–N07,N17–N19,N25–N27)</b>													
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
<b>Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)</b>													
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 <sup>4</sup>	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
<b>Septicemia (A40–A41)</b>													
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

See footnotes at end of table.

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

[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 <sup>9</sup>
	All ages <sup>1</sup>	Under 1 year <sup>2</sup>	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	
<b>Chronic liver disease and cirrhosis (K70,K73-K74)</b>													
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
<b>Essential hypertension and hypertensive renal disease (I10,I12,I15)</b>													
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
<b>Parkinson's disease (G20-G21)</b>													
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
<b>Assault (homicide) (*U01-*U02,X85-Y09,Y87.1)</b>													
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 <sup>4</sup>	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.

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

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

<sup>3</sup>For method of computation, see "Technical Notes."

<sup>4</sup>Figures 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

See footnotes at end of table.

**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—Con.**

[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
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
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	380	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	—

See footnotes at end of table.

**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—Con.**

[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
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
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	—
Hernia . . . . . (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-O99)	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-O99)	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	—

See footnotes at end of table.

**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—Con.**

[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
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	-

See footnotes at end of table.

**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—Con.**

[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
Enterocolitis due to <i>Clostridium difficile</i> . . . . . (A04.7) <sup>1</sup>	7,476	3	1	–	3	12	35	128	411	968	2,673	3,241	1
Drug-induced deaths <sup>2,3</sup> . . . . .	38,649	21	55	56	3,592	7,002	9,377	11,921	4,774	1,068	518	261	4
Alcohol-induced deaths <sup>2,4</sup> . . . . .	24,189	1	–	2	189	811	3,207	8,254	7,080	3,144	1,230	269	2
Injury by firearms <sup>2,5</sup> . . . . .	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.

<sup>1</sup>Included 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.”

<sup>2</sup>Included in selected categories above.

<sup>3</sup>Includes 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>.

<sup>4</sup>Includes 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>.

<sup>5</sup>Includes 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 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 <sup>1</sup>	Under 1 year <sup>2</sup>	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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>	Under 1 year <sup>2</sup>	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
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	*	*	*	*	*	*	*	*	*	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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>	Under 1 year <sup>2</sup>	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
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
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	*	*	*	*	*	*	*

See footnotes at end of table.



**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—Con.**

[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 <sup>1</sup>	Under 1 year <sup>2</sup>	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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>	Under 1 year <sup>2</sup>	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
Enterocolitis due to <i>Clostridium difficile</i> . . . . . (A04.7) <sup>3</sup>	2.5	*	*	*	*	*	0.1	0.3	1.2	4.8	20.5	56.6
Drug-induced deaths <sup>4,5</sup> . . . . .	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 <sup>4,6</sup> . . . . .	8.0	*	*	*	0.4	2.0	7.5	18.6	21.0	15.6	9.4	4.7
Injury by firearms <sup>4,7</sup> . . . . .	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.

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

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

<sup>3</sup>Included 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."

<sup>4</sup>Included in selected categories above.

<sup>5</sup>Includes 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>.

<sup>6</sup>Includes 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>.

<sup>7</sup>Includes 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 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; "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 <sup>1</sup>			Black <sup>1</sup>		
	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

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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	603
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 . . . . . (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

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	7,476	2,847	4,629	6,899	2,619	4,280	445	165	280
Drug-induced deaths <sup>5,6</sup> . . . . .	38,649	23,928	14,721	34,237	21,093	13,144	3,662	2,381	1,281
Alcohol-induced deaths <sup>5,7</sup> . . . . .	24,189	18,152	6,037	20,783	15,689	5,094	2,279	1,692	587
Injury by firearms <sup>5,8</sup> . . . . .	31,593	27,336	4,257	23,065	19,679	3,386	7,847	7,088	759

See footnotes at end of table.

**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—Con.**

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Cause of death (based on ICD-10, 2004)	American Indian or Alaska Native <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	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

See footnotes at end of table.

**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—Con.**

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Cause of death (based on ICD-10, 2004)	American Indian or Alaska Native <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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
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 . . . . . (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

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**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—Con.**

[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; "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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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
Peptic ulcer . . . . . (K25-K28)	25	14	11	93	44	49
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 allbladder . . . . . (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
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

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	28	14	14	104	49	55
Drug-induced deaths <sup>5,6</sup> . . . . .	451	273	178	299	181	118
Alcohol-induced deaths <sup>5,7</sup> . . . . .	853	542	311	274	229	45
Injury by firearms <sup>5,8</sup> . . . . .	279	233	46	402	336	66

– Quantity zero.

. . . Category not applicable.

<sup>1</sup>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."

<sup>2</sup>Includes Aleuts and Eskimos.

<sup>3</sup>Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

<sup>4</sup>Included 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."

<sup>5</sup>Included in selected categories above.

<sup>6</sup>Includes 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>.

<sup>7</sup>Includes 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>.

<sup>8</sup>Includes 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 <sup>1</sup>		
	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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	7,476	2,847	4,629	351	142	209	7,115	2,700	4,415
Drug-induced deaths <sup>5,61</sup> . . . . .	38,649	23,928	14,721	2,761	2,033	728	35,735	21,791	13,944
Alcohol-induced deaths <sup>5,7</sup> . . . . .	24,189	18,152	6,037	3,021	2,522	499	21,085	15,561	5,524
Injury by firearms <sup>5,8</sup> . . . . .	31,593	27,336	4,257	3,256	2,912	344	28,252	24,351	3,901

See footnotes at end of table.

**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—Con.**

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Cause of death (based on ICD-10, 2004)	Non-Hispanic white <sup>2</sup>			Non-Hispanic black <sup>2</sup>			Origin not stated <sup>3</sup>		
	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

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Cause of death (based on ICD-10, 2004)	Non-Hispanic white <sup>2</sup>			Non-Hispanic black <sup>2</sup>			Origin not stated <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.



**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—Con.**

[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 <sup>2</sup>			Non-Hispanic black <sup>2</sup>			Origin not stated <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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
Accidents (unintentional injuries) . . . . . (V01-X59, Y85-Y86)	94,722	59,173	35,549	12,215	8,282	3,933	346	244	102
Transport accidents . . . . . (V01-V99,Y85)	30,440	21,597	8,843	5,117	3,723	1,394	106	80	26
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)	28,272	19,855	8,417	4,788	3,458	1,330	95	71	24
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)	736	578	158	168	134	34	8	7	1
Water, air and space, and other and unspecified transport accidents and their sequelae . . . . . (V90-V99,Y85)	1,432	1,164	268	161	131	30	3	2	1
Nontransport accidents . . . . . (W00-X59,Y86)	64,282	37,576	26,706	7,098	4,559	2,539	240	164	76
Falls . . . . . (W00-W19)	21,084	10,517	10,567	1,015	587	428	39	19	20

See footnotes at end of table.

**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—Con.**

[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 <sup>2</sup>			Non-Hispanic black <sup>2</sup>			Origin not stated <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Accidental discharge of firearms. . . . (W32-W34)	441	378	63	93	84	9	2	2	—
Accidental drowning and submersion . . . . . (W65-W74)	2,317	1,759	558	534	420	114	15	12	3
Accidental exposure to smoke, fire and flames . . . . . (X00-X09)	2,037	1,181	856	603	356	247	16	11	5
Accidental poisoning and exposure to noxious substances . . . . . (X40-X49)	24,855	16,047	8,808	2,938	1,948	990	120	87	33
Other and unspecified nontransport accidents and their sequelae. . . . (W20- W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86)	13,548	7,694	5,854	1,915	1,164	751	48	33	15
Intentional self-harm (suicide) . . . . . (*U03, X60-X84, Y87.0)	30,281	23,835	6,446	2,063	1,721	342	101	78	23
Intentional self-harm (suicide) by discharge of firearms . . . . . (X72-X74)	15,968	13,891	2,077	1,034	938	96	42	36	6
Intentional self-harm (suicide) by other and unspecified means and their sequelae . . . . . (*U03, X60-X71, X75-X84, Y87.0)	14,313	9,944	4,369	1,029	783	246	59	42	17
Assault (homicide) . . . . . (*U01-*U02, X85-Y09, Y87.1)	5,656	3,855	1,801	8,206	7,047	1,159	68	53	15
Assault (homicide) by discharge of firearms . . . . . (*U01.4, X93-X95)	3,117	2,256	861	6,481	5,851	630	37	31	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)	2,539	1,599	940	1,725	1,196	529	31	22	9
Legal intervention . . . . . (Y35, Y89.0)	167	160	7	120	118	2	—	—	—
Events of undetermined intent. . . . . (Y10-Y34, Y87.2, Y89.9)	3,909	2,343	1,566	664	449	215	18	14	4
Discharge of firearms, undetermined intent . . . . . (Y22-Y24)	202	159	43	39	32	7	4	4	—
Other and unspecified events of undetermined intent and their sequelae . . . . . (Y10-Y21, Y25-Y34, Y87.2, Y89.9)	3,707	2,184	1,523	625	417	208	14	10	4
Operations of war and their sequelae . . . . (Y36, Y89.1)	25	25	—	3	3	—	—	—	—
Complications of medical and surgical care . . . . . (Y40-Y84, Y88)	1,997	904	1,093	396	191	205	4	2	2
Enterocolitis due to <i>Clostridium difficile</i> . . . . (A04.7) <sup>4</sup>	6,543	2,473	4,070	442	164	278	10	5	5
Drug-induced deaths <sup>5,6</sup> . . . . .	31,448	19,044	12,404	3,589	2,326	1,263	153	104	49
Alcohol-induced deaths <sup>5,7</sup> . . . . .	17,759	13,160	4,599	2,240	1,660	580	83	69	14
Injury by firearms <sup>5,8</sup> . . . . .	19,873	16,822	3,051	7,741	6,997	744	85	73	12

— Quantity zero.

. . . Category not applicable.

<sup>1</sup>Includes races other than white and black.

<sup>2</sup>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."

<sup>3</sup>Includes deaths for which Hispanic origin was not reported on the death certificate.

<sup>4</sup>Included 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."

<sup>5</sup>Included in selected categories above.

<sup>6</sup>Includes 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>.

<sup>7</sup>Includes 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>.

<sup>8</sup>Includes 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 <sup>1</sup>			Black <sup>1</sup>		
	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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
Peptic ulcer . . . . . (K25–K28)	1.0	1.0	1.0	1.1	1.1	1.1	0.8	1.0	0.6
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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	2.5	1.9	3.0	2.8	2.2	3.5	1.1	0.9	1.3
Drug-induced deaths <sup>5,6</sup> . . . . .	12.7	16.0	9.6	14.0	17.3	10.6	9.1	12.3	6.1
Alcohol-induced deaths <sup>5,7</sup> . . . . .	8.0	12.1	3.9	8.5	12.9	4.1	5.6	8.8	2.8
Injury by firearms <sup>5,8</sup> . . . . .	10.4	18.2	2.8	9.4	16.2	2.7	19.4	36.7	3.6

See footnotes at end of table.

**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—Con.**

[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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	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)	*	*	*	*	*	*

See footnotes at end of table.

**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—Con.**

[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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.



**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—Con.**

[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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
Other diseases of respiratory system . . . . . (J00–J06,J30–J39,J67,J70–J98)	6.1	6.5	5.7	3.7	4.0	3.5
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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	0.8	*	*	0.7	0.7	0.7
Drug-induced deaths <sup>5,6</sup> . . . . .	13.2	16.0	10.4	2.0	2.5	1.5
Alcohol-induced deaths <sup>5,7</sup> . . . . .	24.9	31.7	18.2	1.8	3.1	0.6
Injury by firearms <sup>5,8</sup> . . . . .	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.

<sup>1</sup>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."

<sup>2</sup>Includes Aleuts and Eskimos.

<sup>3</sup>Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

<sup>4</sup>Included 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."

<sup>5</sup>Included in selected categories above.

<sup>6</sup>Includes 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>.

<sup>7</sup>Includes 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>.

<sup>8</sup>Includes 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 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; "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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>		
	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

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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
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

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	2.5	1.9	3.0	0.7	0.6	0.9	2.8	2.1	3.4
Drug-induced deaths <sup>5,6</sup> . . . . .	12.7	16.0	9.6	5.9	8.4	3.2	13.9	17.3	10.6
Alcohol-induced deaths <sup>5,7</sup> . . . . .	8.0	12.1	3.9	6.4	10.4	2.2	8.2	12.4	4.2
Injury by firearms <sup>5,8</sup> . . . . .	10.4	18.2	2.8	6.9	12.0	1.5	11.0	19.4	3.0

See footnotes at end of table.

**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—Con.**

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Cause of death (based on ICD-10, 2004)	Non-Hispanic white <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	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

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.



**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—Con.**

[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; "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 <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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
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
Accidents (unintentional injuries) . . . . . (V01-X59,Y85-Y86)	47.0	59.7	34.6	31.9	45.3	19.6
Transport accidents . . . . . (V01-V99,Y85)	15.1	21.8	8.6	13.4	20.4	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)	14.0	20.0	8.2	12.5	18.9	6.6
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	0.2
Water, air and space, and other and unspecified transport accidents and their sequelae . . . . . (V90-V99,Y85)	0.7	1.2	0.3	0.4	0.7	0.1

See footnotes at end of table.

**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—Con.**

[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; "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 <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
Nontransport accidents . . . . . (W00–X59,Y86)	31.9	37.9	26.0	18.5	24.9	12.7
Falls . . . . . (W00–W19)	10.5	10.6	10.3	2.6	3.2	2.1
Accidental discharge of firearms . . . . . (W32–W34)	0.2	0.4	0.1	0.2	0.5	*
Accidental drowning and submersion . . . . . (W65–W74)	1.1	1.8	0.5	1.4	2.3	0.6
Accidental exposure to smoke, fire and flames . . . . . (X00–X09)	1.0	1.2	0.8	1.6	1.9	1.2
Accidental poisoning and exposure to noxious substances . . . . . (X40–X49)	12.3	16.2	8.6	7.7	10.7	4.9
Other and unspecified nontransport accidents and their sequelae . . . . . (W20–W31, W35–W64, W75–W99, X10–X39, X50–X59, Y86)	6.7	7.8	5.7	5.0	6.4	3.7
Intentional self-harm (suicide) . . . . . (*U03,X60–X84, Y87.0)	15.0	24.1	6.3	5.4	9.4	1.7
Intentional self-harm (suicide) by discharge of firearms . . . . . (X72–X74)	7.9	14.0	2.0	2.7	5.1	0.5
Intentional self-harm (suicide) by other and unspecified means and their sequelae . . . . . (*U03,X60–X71, X75–X84, Y87.0)	7.1	10.0	4.3	2.7	4.3	1.2
Assault (homicide) . . . . . (*U01–*U02, X85–Y09, Y87.1)	2.8	3.9	1.8	21.4	38.6	5.8
Assault (homicide) by discharge of firearms . . . . . (*U01.4, X93–X95)	1.5	2.3	0.8	16.9	32.0	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)	1.3	1.6	0.9	4.5	6.5	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	2.4	1.5	1.7	2.5	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	1.6	2.3	1.0
Operations of war and their sequelae . . . . . (Y36, Y89.1)	0.0	0.0	*	*	*	*
Complications of medical and surgical care . . . . . (Y40–Y84, Y88)	1.0	0.9	1.1	1.0	1.0	1.0
Enterocolitis due to <i>Clostridium difficile</i> . . . . . (A04.7) <sup>4</sup>	3.2	2.5	4.0	1.2	0.9	1.4
Drug-induced deaths <sup>5,6</sup> . . . . .	15.6	19.2	12.1	9.4	12.7	6.3
Alcohol-induced deaths <sup>5,7</sup> . . . . .	8.8	13.3	4.5	5.8	9.1	2.9
Injury by firearms <sup>5,8</sup> . . . . .	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.

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

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>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."

<sup>4</sup>Included 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."

<sup>5</sup>Included in selected categories above.

<sup>6</sup>Includes 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>.

<sup>7</sup>Includes 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>.

<sup>8</sup>Includes ICD10 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 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 <sup>1</sup>			Black <sup>1</sup>		
	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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	2.3	2.3	2.3	2.4	2.3	2.4	1.6	1.6	1.6
Drug-induced deaths <sup>5,6</sup> . . . . .	12.6	15.7	9.4	13.8	17.1	10.5	9.5	13.4	6.2
Alcohol-induced deaths <sup>5,7</sup> . . . . .	7.4	11.6	3.6	7.7	11.9	3.7	6.2	10.6	2.9
Injury by firearms <sup>5,8</sup> . . . . .	10.3	18.2	2.7	9.1	15.9	2.7	18.4	34.4	3.5

See footnotes at end of table.

**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—Con.**

[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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	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)	*	*	*	*	*	*

See footnotes at end of table.

**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—Con.**

[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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.



**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—Con.**

[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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
Other diseases of respiratory system . . . . . (J00–J06, J30–J39, J67, J70–J98)	9.2	11.3	7.7	5.1	6.2	4.2
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
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

See footnotes at end of table.

**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—Con.**

[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 <sup>1,2</sup>			Asian or Pacific Islander <sup>1,3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	1.3	*	*	1.0	1.1	0.9
Drug-induced deaths <sup>5,6</sup> . . . . .	13.7	16.5	10.9	1.9	2.4	1.5
Alcohol-induced deaths <sup>5,7</sup> . . . . .	28.5	37.2	20.4	1.8	3.3	0.6
Injury by firearms <sup>5,8</sup> . . . . .	8.0	13.3	2.7	2.6	4.5	0.8

<sup>1</sup>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."

<sup>2</sup>Includes Aleuts and Eskimos.

<sup>3</sup>Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

<sup>4</sup>Included 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."

<sup>5</sup>Included in selected categories above.

<sup>6</sup>Includes 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>.

<sup>7</sup>Includes 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>.

<sup>8</sup>Includes 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 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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>		
	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

See footnotes at end of table.

**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—Con.**

[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." 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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.

**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—Con.**

[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." 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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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
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
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

See footnotes at end of table.

**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—Con.**

[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." 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 <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	2.3	2.3	2.3	1.6	1.6	1.7	2.3	2.3	2.3
Drug-induced deaths <sup>5,6</sup> . . . . .	12.6	15.7	9.4	6.5	9.1	3.7	13.6	16.9	10.3
Alcohol-induced deaths <sup>5,7</sup> . . . . .	7.4	11.6	3.6	8.8	15.1	2.9	7.2	11.1	3.7
Injury by firearms <sup>5,8</sup> . . . . .	10.3	18.2	2.7	6.8	11.8	1.5	10.7	19.0	2.9

See footnotes at end of table.

**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—Con.**

[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." 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 <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	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

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Cause of death (based on ICD-10, 2004)	Non-Hispanic white <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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
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

See footnotes at end of table.



**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—Con.**

[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." 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 <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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
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
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

See footnotes at end of table.

**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—Con.**

[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." 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 <sup>3</sup>			Non-Hispanic black <sup>3</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female
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) <sup>4</sup>	2.4	2.4	2.5	1.6	1.7	1.6
Drug-induced deaths <sup>5,6</sup> . . . . .	15.4	18.9	11.7	9.7	13.7	6.4
Alcohol-induced deaths <sup>5,7</sup> . . . . .	7.5	11.4	3.8	6.4	10.8	3.0
Injury by firearms <sup>5,8</sup> . . . . .	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.

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

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>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."

<sup>4</sup>Included 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."

<sup>5</sup>Included in selected categories above.

<sup>6</sup>Includes 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>.

<sup>7</sup>Includes 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>.

<sup>8</sup>Includes 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 <sup>1</sup>
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/flame . . . . . (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
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

See footnotes at end of table.

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

[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</i> , Second Edition, 2004)	Number	Rate	Age-adjusted rate <sup>1</sup>
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) <sup>2</sup>	1,409	0.5	0.4
Overexertion . . . . . (X50) <sup>3</sup>	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 standards of reliability or precision; see "Technical Notes."

<sup>1</sup>For method of computation, see "Technical Notes."

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

<sup>3</sup>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 <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>
United States <sup>2</sup>	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	162.2	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 <sup>3</sup>	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 <sup>3</sup>	749	681.9	729.0	11	*	*	124	112.9	112.5	47	42.8	45.4
Guam <sup>3</sup>	783	444.9	699.7	2	*	*	134	76.1	122.2	47	26.7	46.8
American Samoa <sup>3</sup>	241	371.8	958.9	-	*	*	40	61.7	158.2	33	50.9	134.8
Northern Marianas <sup>3</sup>	178	322.2	877.5	-	*	*	25	45.3	110.3	23	41.6	140.9

See footnotes at end of table.

**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—Con.**

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 <sup>1</sup>	Number	Rate	Age- adjusted rate <sup>1</sup>	Number	Rate	Age- adjusted rate <sup>1</sup>	Number	Rate	Age- adjusted rate <sup>1</sup>
United States <sup>2</sup> . . . . .	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 <sup>3</sup> . . . . .	118	3.0	2.9	1,589	40.2	39.8	5,351	135.3	129.2	518	13.1	12.7
Virgin Islands <sup>3</sup> . . . . .	4	*	*	17	*	*	238	216.7	234.5	11	*	*
Guam <sup>3</sup> . . . . .	4	*	*	11	*	*	194	110.2	193.1	9	*	*
American Samoa <sup>3</sup> . . . . .	—	*	*	1	*	*	31	47.8	124.3	6	*	*
Northern Marianas <sup>3</sup> . . . . .	—	*	*	—	*	*	26	47.1	147.4	1	*	*

See footnotes at end of table.

**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—Con.**

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) <sup>4</sup>			Chronic lower respiratory diseases (J40-J47)			Chronic liver disease and cirrhosis (K70,K73-K74)		
	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>
United States <sup>2</sup>	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 <sup>3</sup>	1,529	38.7	37.4	946	23.9	23.2	1,199	30.3	29.4	263	6.7	6.0
Virgin Islands <sup>3</sup>	44	40.1	45.7	10	*	*	8	*	*	8	*	*
Guam <sup>3</sup>	66	37.5	67.1	20	11.4	17.8	29	16.5	26.4	19	*	*
American Samoa <sup>3</sup>	29	44.7	130.3	3	*	*	8	*	*	1	*	*
Northern Marianas <sup>3</sup>	15	*	*	4	*	*	5	*	*	2	*	*

See footnotes at end of table.

**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—Con.**

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 <sup>4</sup>			Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)		
	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>
United States <sup>2</sup> . . . . .	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 <sup>3</sup> . . . . .	1,057	26.7	25.5	1,107	28.0	27.6	383	9.7	9.6	303	7.7	7.6
Virgin Islands <sup>3</sup> . . . . .	10	*	*	37	33.7	33.9	18	*	*	7	*	*
Guam <sup>3</sup> . . . . .	15	*	*	39	22.2	24.8	11	*	*	29	16.5	16.0
American Samoa <sup>3</sup> . . . . .	9	*	*	9	*	*	—	*	*	—	*	*
Northern Marianas <sup>3</sup> . . . . .	7	*	*	18	*	*	8	*	*	3	*	*

See footnotes at end of table.



**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—Con.**

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 <sup>5</sup>			Drug-induced causes <sup>6</sup>			Injury by firearms <sup>7</sup>		
	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>
United States <sup>2</sup>	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

See footnotes at end of table.

**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—Con.**

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 <sup>5</sup>			Drug-induced causes <sup>6</sup>			Injury by firearms <sup>7</sup>		
	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>	Number	Rate	Age-adjusted rate <sup>1</sup>
Puerto Rico <sup>3</sup> . . . . .	818	20.7	20.5	195	4.9	4.5	251	6.3	6.6	781	19.8	19.6
Virgin Islands <sup>3</sup> . . . . .	47	42.8	47.4	11	*	*	1	*	*	45	41.0	45.1
Guam <sup>3</sup> . . . . .	1	*	*	2	*	*	—	*	*	3	*	*
American Samoa <sup>3</sup> . . . . .	—	*	*	2	*	*	2	*	*	—	*	*
Northern Marianas <sup>3</sup> . . . . .	1	*	*	3	*	*	—	*	*	—	*	*

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

<sup>1</sup>Death 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."

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

<sup>3</sup>Age-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."

<sup>4</sup>ICD-10 codes for 9.6,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, and V89.2; see "Technical Notes."

<sup>5</sup>Causes 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."

<sup>6</sup>Causes 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,R50.2,R78.1-R78.5,X40-X44,X60-X64,X85, and Y10-Y14; see "Technical Notes."

<sup>7</sup>ICD-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 post neonatal (28 days–11 months) deaths per 1,000 live births in specified group. Beginning in 1980, race for live births in 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 other <sup>1</sup>											
	All races			White <sup>1</sup>			Total <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Race of mother <sup>2</sup>												
Infant mortality rate												
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 <sup>3</sup>												
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
Race of mother <sup>2</sup>												
Neonatal mortality rate												
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

See footnotes at end of table.

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

[Rates are infant (under 1 year), neonatal (under 28 days), and post neonatal (28 days–11 months) deaths per 1,000 live births in specified group. Beginning in 1980, race for live births in 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 other <sup>1</sup>											
	All races			White <sup>1</sup>			Total <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Race of mother <sup>2</sup> —Con.												
Neonatal mortality rate												
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 <sup>3</sup>												
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
Race of mother <sup>2</sup>												
Postneonatal mortality rate												
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	6.11	6.57	5.53	6.69	7.18	6.19
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

See footnotes at end of table.

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

[Rates are infant (under 1 year), neonatal (under 28 days), and post neonatal (28 days–11 months) deaths per 1,000 live births in specified group. Beginning in 1980, race for live births in 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 other <sup>1</sup>											
	All races			White <sup>1</sup>			Total <sup>1</sup>			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Race of child <sup>3</sup>												
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

<sup>1</sup>Multiple-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."

<sup>2</sup>Infant 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."

<sup>3</sup>Infant 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**

[Rates are infant deaths (under 1 year) per 100,000 live births in specified group. Infant deaths are based on race of decedent; live births are based on race of mother. 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)	Number			Rate		
	All races <sup>1</sup>	White <sup>2</sup>	Black <sup>2</sup>	All races <sup>1</sup>	White <sup>2</sup>	Black <sup>2</sup>
All causes . . . . .	28,059	18,164	8,543	660.6	554.8	1,273.5
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,I04)	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

See footnotes at end of table.

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

[Rates are infant deaths (under 1 year) per 100,000 live births in specified group. Infant deaths are based on race of decedent; live births are based on race of mother. 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)	Number			Rate		
	All races <sup>1</sup>	White <sup>2</sup>	Black <sup>2</sup>	All races <sup>1</sup>	White <sup>2</sup>	Black <sup>2</sup>
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	*	*
Certain conditions originating in the perinatal period . . . . . (P00-P96)	13,800	8,359	4,811	324.9	255.3	717.2
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

See footnotes at end of table.

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

[Rates are infant deaths (under 1 year) per 100,000 live births in specified group. Infant deaths are based on race of decedent; live births are based on race of mother. 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)	Number			Rate		
	All races <sup>1</sup>	White <sup>2</sup>	Black <sup>2</sup>	All races <sup>1</sup>	White <sup>2</sup>	Black <sup>2</sup>
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	*
External causes of mortality . . . . . (*U01,V01–Y84)	1,773	1,133	561	41.7	34.6	83.6
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

See footnotes at end of table.



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

[Rates are infant deaths (under 1 year) per 100,000 live births in specified group. Infant deaths are based on race of decedent; live births are based on race of mother. 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)	Number			Rate		
	All races <sup>1</sup>	White <sup>2</sup>	Black <sup>2</sup>	All races <sup>1</sup>	White <sup>2</sup>	Black <sup>2</sup>
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.

<sup>1</sup>Includes races other than white and black.

<sup>2</sup>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 <sup>1</sup>		White <sup>2</sup>		Black <sup>2</sup>		All races <sup>1</sup>		White <sup>2</sup>		Black <sup>2</sup>	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
United States <sup>3</sup> . . . . .	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	*

See footnotes at end of table.

**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—Con.**

[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 <sup>1</sup>		White <sup>2</sup>		Black <sup>2</sup>		All races <sup>1</sup>		White <sup>2</sup>		Black <sup>2</sup>	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
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	*	—	*	—	*

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

— Quantity zero.

<sup>1</sup>Includes races other than white and black.

<sup>2</sup>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."

<sup>3</sup>Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas.

## 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 2008, so data for the first half of the year were 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 midrevision 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 3 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 report 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 imputed 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](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 one-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 that would have previously been assigned to Chronic obstructive pulmonary disease, unspecified (ICD–10 code J44.9); pneumonia (ICD–10 codes J12–J16, J18); and Other acute lower respiratory infections (ICD–10 codes J20–J22) are now being classified to J44.0. The NCHS 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 that 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](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 become 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](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

**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 <sup>1</sup> 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 <sup>2</sup>	2005 <sup>2</sup>
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 <sup>3</sup>	2004 <sup>3</sup>
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 <sup>4</sup>	2008 <sup>4</sup>
Virginia . . . . .	...	...
Washington . . . . .	2004	2004
West Virginia . . . . .	...	...
Wisconsin . . . . .	2003	...
Wyoming . . . . .	2004	2004

... Not applicable.

<sup>1</sup>Indicates 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.

<sup>2</sup>Began reporting multiple race in March upon implementing the revised certificate.

<sup>3</sup>Began reporting multiple race in mid-April upon implementing the revised certificate.

<sup>4</sup>Began reporting multiple race in July upon implementing the revised certificate.

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



**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 <sup>1</sup> . . . . .	15,055	0.9
AIAN <sup>2</sup> . . . . .	9,762	0.6
NHOPi <sup>3</sup> . . . . .	1,994	0.1
Two or more races . . . . .	6,178	0.4
Two races . . . . .	5,635	0.3
AIAN <sup>2</sup> and white . . . . .	2,289	0.1
Asian and white . . . . .	961	0.1
Black and white . . . . .	712	0.0
Asian and NHOPi <sup>3</sup> . . . . .	588	0.0
NHOPi <sup>3</sup> and white . . . . .	578	0.0
Black and Asian . . . . .	207	0.0
Black and AIAN <sup>2</sup> . . . . .	207	0.0
Black and NHOPi <sup>3</sup> . . . . .	49	0.0
AIAN <sup>2</sup> and Asian . . . . .	32	0.0
AIAN <sup>2</sup> and NHOPi <sup>3</sup> . . . . .	12	0.0
Three races . . . . .	530	0.0
Asian, NHOPi <sup>3</sup> , and white . . . . .	384	0.0
Black, AIAN <sup>2</sup> , and white . . . . .	85	0.0
AIAN <sup>2</sup> , Asian, and white . . . . .	17	0.0
Black, Asian, and white . . . . .	15	0.0
Black, Asian, and NHOPi <sup>3</sup> . . . . .	6	0.0
Black, NHOPi <sup>3</sup> , and white . . . . .	6	0.0
AIAN <sup>2</sup> , NHOPi <sup>3</sup> , and white . . . . .	6	0.0
Black, AIAN <sup>2</sup> , and Asian . . . . .	5	0.0
AIAN <sup>2</sup> , Asian, and NHOPi <sup>3</sup> . . . . .	5	0.0
Black, AIAN <sup>2</sup> , and NHOPi <sup>3</sup> . . . . .	1	0.0
Four races . . . . .	13	0.0
AIAN <sup>2</sup> , Asian, NHOPi <sup>3</sup> , and white . . . . .	11	0.0
Black, Asian, AIAN <sup>2</sup> , and NHOPi <sup>3</sup> . . . . .	1	0.0
Black, Asian, AIAN <sup>2</sup> , and white . . . . .	1	0.0

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Includes 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.

<sup>2</sup>American Indian or Alaska Native.

<sup>3</sup>Native Hawaiian or Other Pacific Islander.

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 re-tabulated 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 years 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 aged

66–100 years based on blended vital statistics and Medicare probabilities of dying (74). A more comprehensive description of this methodology was published in the *National Vital Statistics Reports* “United States Life Tables, 2005” Volume 58, Number 10, available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58\\_10.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_10.pdf).

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 aged 65 years and over. The methodology used to produce the life tables for 2008 does not model the probabilities of death beginning at aged 66, but rather at aged 85 years and over. (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 aged 66 years. The observed blended vital statistics and Medicare data for aged 66–85 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 differ 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 [Internet 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 one-half of Georgia’s records (see section on “Nature and sources of data”). Therefore, data for specified marital groups in [Internet Table I-7](#) should be interpreted with caution.

Age-adjusted death rates in [Internet Table I-7](#) were computed based on age-specific rates and the standard population for those aged 25 years and over. Although [Internet 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 years 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 [Internet 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 U.S. 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 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. **Internet 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 **Internet 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 III** 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 because data for educational attainment were 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 **Internet 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 **Internet 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 one 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

**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 Educational Development high school equivalency diploma.

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](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 (CPS) 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 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. Census Bureau 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 a 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 85 years 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

**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: CDC/NCHS, 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, 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
		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	19,636
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	59,798	58,202	67,453	68,433	68,888	43,751	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	13,504
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 <sup>1</sup> . . . .	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	8,571,886	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	9,867,030	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	13,133,182	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	4,780,864	4,824,520
Male . . . .	99,084,508	1,181,261	4,662,799	5,902,815	6,108,166	6,733,047	6,738,696	6,517,805	5,823,997	6,576,300	7,096,297	7,991,386	7,777,141	6,870,802	5,712,539	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	6,394,486	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	1,565,166	1,459,581	1,209,615	1,250,116	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	1,329,865	1,094,117	793,489	597,961	473,979	369,381	278,380	286,037

<sup>1</sup>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	18,746,791
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	3,908,579	3,186,891	1,542,838	726,666

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

**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 <sup>1</sup> using the 2003 version of the Standard Certificate of Death						20 Reporting states <sup>2</sup> 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

<sup>1</sup>Includes 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."

<sup>2</sup>Includes 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."

NOTE: GED is General Educational Development high school equivalency diploma.

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	Puerto Rico . . . . .	3,954,037
Minnesota . . . . .	5,220,393	Virgin Islands . . . . .	109,840
Mississippi . . . . .	2,938,618	Guam . . . . .	175,991
Missouri . . . . .	5,911,605	American Samoa . . . . .	64,827
Montana . . . . .	967,440	Northern Marianas . . . . .	55,244
Nebraska . . . . .	1,783,432		

SOURCE: CDC/NCHS, 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

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](#).

**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

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 SE 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 SE 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 SE 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<sub>i</sub>* is the age-specific rate for the *i*th age group
- *P<sub>si</sub>* is the age-specific standard population for the *i*th age group from the U.S. standard population age distribution (see [Table IX](#) and age-adjusted death rate under “Definition of terms”)
- *P<sub>s</sub>* is the total U.S. standard population (all ages combined)
- *D<sub>i</sub>* 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 SE assumes random variability in both the numerator and denominator. The SE for the infant mortality rate (*IMR*) is:

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

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 [Table 5](#), [Internet Tables I–7](#), and [I–8](#), which are calculated using population figures that are subject to sampling error.

[Table 5](#), [Internet Tables I–7](#), and [I–8](#)—Death rates for Mexican, Puerto Rican, Cuban, and Other Hispanic populations in [Table 5](#), by marital status in [Internet Table I–7](#), and by educational attainment in [Internet 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 SE 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 Table 5, Internet Tables I-7, and I-8.

In Table 5, Internet Tables 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 Table 5, Internet Tables 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:

$$L(186.6) = 186.6 - 1.96(.25) = 185.5 \text{ and} \\ U(186.6) = 186.6 + 1.96(.25) = 187.1$$

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,  $R_1$  and  $R_2$  (each based on 100 or more deaths), the normal approximation may be used to calculate a test statistic,  $z$ , such that:

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

**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
<b>Table 5</b>						
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
<b>Tables I-7</b>						
All marital status groups combined . . . . .	0.000000	0	...	...	...	...
Marital status subgroups (Never married, Ever married, Married, Widowed, Divorced) . . . . .	-0.000009	2,652	...	...	...	...
<b>Table I-8</b>						
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.

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  $R_1$  and  $R_2$  with  $D_1$  and  $D_2$ ,  $R'_1$  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 SE 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

**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			

$Var(X) = yz^2$ . For the number of deaths,  $D$ ,  $E(D) = D$  and  $Var(D) = D$ . It follows that  $y = D$  and  $z = 1$ , and thus:

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

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

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

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:

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

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: number of deaths,  $L(D)$  and  $U(D)$ , are estimated as:

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

where  $\Gamma^{-1}$  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:

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

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](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.

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