Trends in Lung Cancer<br>Morbidity and Mortality

American Lung Association
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## Trends in Lung Cancer Morbidity and Mortality

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## Introduction'

The incidence and mortality attributed to lung cancer rose steadily since the 1930's, primarily due to the popularity of cigarette smoking pre and post World Wars I and II, before plateauing and possibly starting to decrease in recent years. Lung cancer has been the leading cause of cancer deaths among men since the early 1950's and, in 1987, surpassed breast cancer to become the leading cause of cancer deaths among women in the United States. Lung cancer was estimated to cause 159,260 deaths in 2014, accounting for 27 percent of all cancer deaths. ${ }^{1}$ The following report delineates data available from national surveys on lung cancer mortality, prevalence, incidence, hospitalizations and survival rates.

## Mortality Trends

Beginning with 1999 mortality data, the population standard used for calculating age-adjusted death rates was changed from the 1940 population to the 2000 population. ${ }^{11}$ In addition, starting with 1999 data, the tenth revision of international classification of diseases (ICD-10) replaced ninth revision (ICD-9) in coding and classifying mortality data from death certificates. ${ }^{\text {II }}$ Due to decennial revisions of the International Classification of Diseases (ICD) coding system and the change in ageadjusted standard population, the number and rate of lung cancer deaths for 1999-2012 are not directly comparable to those reported between 1978 and 1998.

Lung cancer causes more deaths than the next three leading causes of cancer death combined (colorectal, breast and pancreatic). Death rate trends differ between the sexes. Death rates in men have continued to decline since 1991, and after several decades of continuous increases, have plateaued among females. ${ }^{2}$

Table 1 documents the number of deaths due to lung cancer by race and sex between 1979 and 2012. The number of deaths due to lung cancer has increased approximately 3.5 percent from 152,156 in 1999 to 157,499 in 2012. In 2012, the greatest number of lung cancer deaths were among white males and the fewest among black females. ${ }^{3}$

Table 2 displays the age-adjusted death rate per 100,000 population by race and sex for the same years. In 2012, the age-adjusted death rate was 44.9 per 100,000 persons. The age-adjusted death rate was 54.1 percent greater in males ( 56.1 per 100,000 ) than in females ( 36.4 per 100,000). The age-adjusted death rate in the black population ( 48.3 per 100,000) was 5.9 percent greater than the

[^0]rate in the white population ( 45.6 per 100,000). The age-adjusted death rate in black males ( 68.6 per 100,000 ) was 22.5 percent higher than that of white males ( 56.0 per 100,000). In contrast, white women had an age-adjusted death rate that was 8.4 percent higher than black women ( 37.6 versus 34.7 per 100,000, respectively). Overall, age-adjusted death rates have decreased by 19.8\% between 1999 and $2012 .{ }^{4}$

Figure 1 depicts the 2007-2011 age-adjusted death rates for selected cancer sites by sex.
Figure 2 depicts age-adjusted death rates by race/ethnicity and sex for 2007-2011. Age-adjusted lung cancer death rates among Hispanics, American Indians/Alaska Natives and Asians/Pacific Islanders were considerably lower than rates among whites and blacks. ${ }^{5}$

Tables 3 and 4 show the number of deaths and the age-specific death rates due to lung cancer by race/ethnicity and sex for 10-year age groups from 2005 through 2012. Deaths attributed to lung cancer increase with age and are greatest among those over 65 years of age. In 2012, age-specific death rates were highest in non-Hispanic black males for all age groups. Age-specific death rates were lower among non-Hispanic black females compared to non-Hispanic white females for those aged 85 and older, 75-84, and 65-74, but similar for those aged 55-64, 45-54, and 35-44.6

Table 5 delineates state-specific age-adjusted lung cancer death rates by sex from 2003 to 2012. Kentucky experienced the highest lung cancer death rates overall ( 68.8 per 100,000), among males (110.7 per 100,000 ) and among females ( 55.3 per 100,000 ). Utah had the lowest lung cancer death rate overall ( 20.3 per 100,000 ), among males ( 26.5 per 100,000 ) and among females (15.3 per 100,000 ). ${ }^{7}$

Table 6 displays state-specific age-adjusted lung cancer death rates by race from 1999 to 2008. Among whites, the highest death rate was reported in Kentucky ( 74.0 per 100,000) while the lowest was reported in Utah ( 23.1 per 100,000). When examining the death rate in blacks, the small number of deaths in some states makes the corresponding data unreliable. Among the states with more than 20 deaths, the highest death rate in blacks was reported in Kentucky ( 91.4 per 100,000) while the lowest was reported in New York (37.2 per 100,000). ${ }^{8}$

## Morbidity Trends

The American Cancer Society estimates that there will be 224,210 new cases of lung cancer in 2014. These new cases will account for almost 14 percent of all cancer diagnoses. ${ }^{9}$ There are two national cancer registries that collect data on cancer prevalence and incidence: the Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute and the National Program of Cancer Registries (NPCR) program of the Centers for Disease Control and Prevention.

Table 7 presents lung cancer prevalence counts by race, sex and years since diagnosis. In 2011, 402,326 Americans were living with lung cancer. The majority (57\%) of lung cancer patients living have been diagnosed within the last 5 years. ${ }^{10}$

Tables 8 through 11 delineate age-adjusted cancer incidence rates for respiratory cancers by site, sex and race between 1975 and 2011. Lung cancer incidence increased by 6.3 percent from 52.2 per 100,000 in 1975 to 55.5 per 100,000 in 2011. The lung cancer incidence rate peaked at 69.6 per 100,000 in 1992, a $33.3 \%$ increase since 1975, and has decreased 20.3 percent since this high point (Figure 3).

The 2011 incidence rates for lung cancer in men and women were 64.8 per 100,000 and 48.6 per 100,000 , respectively. Over the past 37 years, the lung cancer age-adjusted incidence rate has decreased 27.5 percent in males compared to an increase of 98.4 percent in females. Rates peaked for men at 102.1 per 100,000 in 1984, and for women at 52.8 per 100,000 in 1998. These peaks were 14.2 percent and 53.6 percent higher than the rates in 1975 , and current rates are 36.5 percent and 8.0 percent lower, respectively. ${ }^{11}$

Between 1975 and 2011, the age-adjusted lung cancer incidence rate in both white and black males decreased a similar amount at 27.2 percent and 25.8 percent, respectively. However, the 2011 incidence rate in black men was 32.5 percent higher than that of white men ( 85.3 vs. 64.4 per 100,000 , respectively). Lung cancer in both white and black women has more than doubled since 1975, increasing by 103.6 percent and 106.5 percent, respectively. Unlike males, the incidence rates of lung cancer in white women ( 50.7 per 100,000) and black women ( 51.0 per 100,000) were similar in 2011. ${ }^{12}$

Malignant mesothelioma is an uncommon, but no longer rare, cancer that is difficult to diagnose and poorly responsive to therapy. Malignant mesothelioma is the most serious of all asbestosrelated diseases. In 2011, the age-adjusted mesothelioma cancer incidence rate was 1.0 per 100,000 persons (Table 9). Although the incidence rate remains low, it has increased 67 percent between 1977 and $2011 .{ }^{13}$ The majority of mesothelioma cases are seen in males that have had occupational exposure to asbestos.

Age-adjusted oral cavity and pharynx incidence rates have decreased in both whites and blacks between 1975 and 2011 (Table 10). In 2011, the age-adjusted oral cancer incidence rate was 11.2 per 100,000 persons overall, 11.8 per 100,000 persons in whites and 9.0 per 100,000 in blacks. ${ }^{14}$

The overall incidence rate for cancer of the larynx has decreased 42.0 percent between 1975 and 2011 (Table 11). The 2011 incidence rate in black females ( 1.3 per 100,000) was 18.2 percent higher than white females ( 1.1 per 100,000). Black males had an incidence rate that was 59.6 percent higher than that of white males ( 8.3 vs. 5.2 per 100,000, respectively). ${ }^{15}$

Table 12 displays lung cancer age-adjusted incidence rates by race, ethnicity and sex for 2007 through 2011. Over this 5-year period, Hispanics, Asians/Pacific Islanders, and American Indians/Alaska Natives were less likely to develop lung cancer than non-Hispanic blacks or whites. ${ }^{16}$

Table 13 delineates state-specific lung cancer counts and rates by sex. In 2011, Kentucky had the highest age-adjusted incidence rate in males ( 112.2 per 100,000 ) and in females ( 79.3 per 100,000 ). Utah had the lowest at 34.5 per 100,000 in males and 25.0 per 100,000 in females. ${ }^{17}$ These rates are consistent with state-specific smoking prevalence rates. ${ }^{18}$

## Hospitalization Trends

Table 11 delineates age-specific hospital discharge data derived from the National Hospital Discharge Survey. In 2010, the total number of discharges reported for lung cancer was 177,000. This represents a discharge rate of 5.8 per 10,000 and was a 40.2 percent decrease from the discharge rate of 9.7 per 10,000 reported in 1988. The greatest number of discharges occurred in the population over age $65 .{ }^{19}$

Table 12 displays the race-specific number of discharges and discharge rate between 1988 and 2010. The 2010 discharge rate for lung cancer was slightly higher for whites ( 5.5 per 10,000) than blacks ( 5.2 per 10,000 ). These rates should be interpreted with caution due to the large percentage of discharges ( 14.4 percent) for which race was not reported. ${ }^{20}$

## Lung Cancer Types

There are two major types of lung cancer: small cell lung cancer (SCLC) and non-small cell lung cancer (NSCLC). Sometimes a lung cancer may have characteristics of both types, which is known as mixed small cell/large cell carcinoma.

Small cell lung cancer is less common, accounting for approximately 14 percent of all lung cancer cases. ${ }^{21}$ This type of lung cancer grows more quickly and is more likely to spread to other organs in the body. Small cell lung cancer often starts in the bronchi and towards the center of the lungs. Smoking is the main cause.

Non-small cell lung cancer accounts for the remaining 86 percent of lung cancer cases. ${ }^{22}$ It generally grows and spreads more slowly than small cell lung cancer. There are three main types of nonsmall cell lung cancer. They are named for the type of cells in which the cancer develops: squamous cell carcinoma, adenocarcinoma, and large cell carcinoma. Adenocarcinoma is the most frequent form of lung cancer in the United States.

Figure 4 delineates the stage distribution for the most common lung cancer types. Staging is used to determine whether the cancer has spread and, if so, to what parts of the body. Stages include localized (within lungs), regional (spread to lymph nodes) and distant (spread to other organs). Between 2004 and 2010, 72 percent of all small cell lung cancer cases were diagnosed during the distant stage and only 5 percent were diagnosed at the localized stage. This compares to 55 percent of non-small cell lung cancer diagnosed in the distant stage and 18 percent of cases diagnosed in the localized stage. ${ }^{23}$

## Trends in Survival Rates

Table 13 depicts trends in survival rates for lung and other types of cancer by race from 1960 through 2010 (except 1964-1969). Survival rates for lung cancer tend to be much lower than other common cancers. The expected five-year survival rate for all patients in whom lung cancer is diagnosed is 17.8 percent compared to 65.4 percent for colon, 90.5 percent for breast and 99.6 percent for prostate cancer. Survival rates for all cancers listed have experienced significant increases since 1975-1977. ${ }^{24}$

Compared to whites, blacks experienced lower five-year survival rates for each type of cancer listed. The five-year survival rate for lung cancer in blacks during the period spanning 2004-2010 was 14.9 percent. The survival rate for lung cancer in Whites was better at 18.2 percent. ${ }^{25}$

Table 14 displays trends in the five-year survival rates by lung cancer type, race and sex. Survival rates for non-small cell lung cancer are greater than those seen for small cell lung cancer. Between 2004 and 2010 the survival rate for non-small cell lung cancer was 21.7 percent compared to 6.6 percent for small cell lung cancer. ${ }^{26}$

The prognosis (outlook for survival) for a patient with lung cancer depends, to a large extent, on the cancer's stage. Figure 5 displays the five-year survival rates for all stages by type of lung cancer.

The average five-year survival rate from 2004 through 2010 for localized lung cancer was 54.0 percent compared to 16.8 percent overall and 4.0 percent for a distant tumor. Unfortunately, only 15 percent of people with lung cancer are diagnosed at an early, localized stage. ${ }^{27}$

## Smoking-Attributable Lung Cancer Deaths

The most important cause of lung cancer in the United States is cigarette smoking. It is estimated that 80 percent of lung cancer deaths in women and 90 percent in men, respectively, are caused by smoking. Compared to non-smokers, men who smoke are 23 times more likely to develop lung cancer, while women are 13 times more likely. The risk increases with the duration of smoking and amount smoked per day. ${ }^{28}$ Between 2005 and 2009, an average of 130,659 Americans (74,300 males and 56,359 females) died of smoking-attributable lung cancer annually. ${ }^{29}$

## Lifetime Risk of Being Diagnosed With and Dying From Lung Cancer

Using data from the SEER registry, the National Cancer Institute has calculated the lifetime risk of being diagnosed with lung cancer, as well as the lifetime risk of dying from lung cancer. This risk is calculated for the entire population and includes smokers and non-smokers. These data are displayed in Table 18 by race and sex for 2009 through 2011. Overall, 7.43 percent of males and 6.47 percent of females will be diagnosed with lung cancer at some point during their lives. The lifetime risk of being diagnosed with and dying from lung cancer is highest in males. ${ }^{30}$

## International Lung Cancer Data

Lung cancer is the most common cancer and cancer cause of death in the world, accounting for 1.8 million new cases ( $12.9 \%$ of all new cancer cases) and 1.6 million deaths ( $19.4 \%$ of all cancer deaths) in 2012.31 Lung cancer death rates vary by country and mimic the development of the smoking epidemic within that country, such that men have higher rates earlier, but women take on more of the lung cancer burden as they begin smoking more.

## Summary

Lung cancer is the leading cause of cancer mortality in both men and women in the United States. An estimated 224,210 new cases are expected to be diagnosed in 2014, accounting for almost 14 percent of all cancer diagnoses. ${ }^{32}$ It has been shown that rises and declines in lung cancer incidence and mortality rates parallel past trends of cigarette smoking. It has been estimated that active smoking is responsible for close to 90 percent of lung cancer cases; radon causes 10 percent, occupational exposures to carcinogens account for approximately 9 to 15 percent and outdoor air pollution 1 to 2 percent. Because of the interactions between exposures, the combined attributable risk for lung cancer can exceed 100 percent. ${ }^{33}$ Five-year survival rates are low compared to other common cancers at 16.8 percent. ${ }^{34}$

## Glossary

Mortality is the term used to refer to deaths. Mortality rates are per 100,000 population and are usually age-adjusted to the 2000 U.S. standard population.

Age-Adjusted Mortality Rate is a figure that is statistically adjusted to remove the distorting effect of age when comparing populations with different age structures. Most rates are age-adjusted to the 2000 U.S. standard population.

Morbidity is defined as illness and is the term used to refer to measures of illness, such as hospitalizations or emergency room visits.

Prevalence is the number of existing cases of a particular condition, disease or other occurrence (e.g. persons smoking) at a given time. Prevalence rates are the number of existing cases in a particular population quantity at a given time (e.g. 10 cases per 100,000). Chronic disease prevalence is reported per 1,000 population.

Incidence is the number of new cases occurring in a population during a particular period of time (e.g. 100 cases of tuberculosis from 1998 to 2002). Incidence rates are reported per 100 or 100,000 population.

## Sources:

${ }^{1}$ American Cancer Society. Cancer Facts and Figures, 2014.
${ }^{2}$ Centers for Disease Control and Prevention, National Center for Health Statistics. CDC WONDER On-line Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.
${ }^{3}$ Ibid.
${ }^{4}$ Ibid.
${ }^{5}$ U.S. National Institutes of Health. National Cancer Institute: SEER Cancer Statistics Review, 1973-2011.
${ }^{6}$ Centers for Disease Control and Prevention. National Center for Health Statistics. CDC WONDER On-line Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.
${ }^{7}$ Ibid.
${ }^{8}$ Ibid.
${ }^{9}$ American Cancer Society. Cancer Facts and Figures, 2014.
${ }^{10}$ U.S. National Institutes of Health. National Cancer Institute: SEER Cancer Statistics Review, 1973-2011.
${ }^{11}$ Ibid.
${ }^{12}$ Ibid.
${ }^{13}$ Ibid.
${ }^{14}$ Ibid.
${ }^{15}$ Ibid.
${ }^{16}$ Ibid.
${ }^{17}$ U.S. National Institutes of Health. National Cancer Institute: State Cancer Profiles web tool, accessed October 6, 2014.
${ }^{18}$ Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. 2013 raw data analyzed by American Lung Association using SPSS and SUDAAN software.
${ }^{19}$ National Center for Health Statistics: National Hospital Discharge Survey. 2010 raw data analyzed by American Lung Association using SPSS software.
${ }_{20}$ Ibid.
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22 Ibid.
${ }^{23}$ Ibid.
${ }^{24}$ Ibid.
${ }^{25}$ Ibid.
${ }_{26}$ Ibid.
${ }^{27}$ Ibid.
${ }^{28}$ U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. 2004.
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${ }^{31}$ World Health Organization. International Agency for Research on Cancer. GLOBOCAN 2012: Estimated Cancer
Incidence, Mortality and Prevalence Worldwide in 2012. Lung Cancer. Accessed November 10, 2014.
${ }^{32}$ American Cancer Society. Cancer Facts and Figures, 2014.
${ }^{33}$ Alberg AJ and Samet J. Epidemiology of Lung Cancer. Chest, January 2003; 123:21S-49S.
${ }^{34}$ U.S. National Institutes of Health. National Cancer Institute: SEER Cancer Statistics Review, 1973-2011.

Table 1: Number of Deaths by Race and Sex, 1979-1998, 1999-2012

| Year | All Races |  |  | White |  |  | All Other Races ${ }^{1}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Total | Black |  |  |
|  | Total | Male | Female |  |  |  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $1979{ }^{2}$ | 98,541 | 72,803 | 25,648 | 87,532 | 64,338 | 23,194 | 11,009 | 8,465 | 2,454 | 10,247 | 7,991 | 2,256 |
| 1980 | 103,844 | 75,535 | 28,309 | 92,182 | 66,651 | 25,531 | 11,662 | 8,884 | 2,778 | 10,957 | 8,382 | 2,575 |
| 1981 | 106,561 | 76,764 | 29,797 | 94,441 | 67,525 | 26,916 | 12,120 | 9,239 | 2,881 | 11,372 | 8,697 | 2,675 |
| 1982 | 111,393 | 79,228 | 32,165 | 98,780 | 69,686 | 29,094 | 12,613 | 9,542 | 3,071 | 11,857 | 9,003 | 2,854 |
| 1983 | 115,023 | 80,338 | 34,685 | 101,857 | 70,598 | 31,259 | 13,166 | 9,740 | 3,426 | 12,282 | 9,117 | 3,165 |
| 1984 | 118,730 | 82,491 | 36,239 | 105,027 | 72,239 | 32,788 | 13,703 | 10,252 | 3,451 | 12,708 | 9,569 | 3,139 |
| 1985 | 122,566 | 83,854 | 38,702 | 108,529 | 73,519 | 35,010 | 14,037 | 10,335 | 3,692 | 13,009 | 9,615 | 3,394 |
| 1986 | 125,522 | 85,057 | 40,465 | 111,049 | 74,517 | 36,532 | 14,473 | 10,540 | 3,933 | 13,354 | 9,773 | 3,581 |
| 1987 | 130,009 | 87,261 | 42,748 | 114,888 | 76,398 | 38,490 | 15,121 | 10,863 | 4,258 | 13,886 | 10,065 | 3,821 |
| 1988 | 133,284 | 88,059 | 45,225 | 117,826 | 77,063 | 40,763 | 15,458 | 10,996 | 4,462 | 14,131 | 10,112 | 4,019 |
| 1989 | 137,150 | 89,052 | 48,098 | 121,023 | 77,659 | 43,364 | 16,127 | 11,393 | 4,734 | 14,703 | 10,457 | 4,246 |
| 1990 | 141,285 | 91,091 | 50,194 | 124,650 | 79,488 | 45,162 | 16,635 | 11,603 | 5,032 | 15,144 | 10,632 | 4,512 |
| 1991 | 143,758 | 91,690 | 52,068 | 126,872 | 80,028 | 46,844 | 16,886 | 11,662 | 5,224 | 15,201 | 10,545 | 4,656 |
| 1992 | 145,943 | 91,405 | 54,538 | 128,719 | 79,728 | 48,991 | 17,224 | 11,677 | 5,547 | 15,472 | 10,530 | 4,942 |
| 1993 | 148,855 | 92,564 | 56,291 | 131,337 | 80,620 | 50,717 | 17,518 | 11,944 | 5,574 | 15,641 | 10,733 | 4,908 |
| 1994 | 149,482 | 91,893 | 57,589 | 131,871 | 80,096 | 51,775 | 17,611 | 11,797 | 5,814 | 15,670 | 10,555 | 5,115 |
| 1995 | 151,200 | 91,856 | 59,344 | 133,366 | 80,088 | 53278 | 17,834 | 11,768 | 6,066 | 15,790 | 10,537 | 5,253 |
| 1996 | 152,015 | 91,620 | 60,395 | 134,055 | 79,809 | 54246 | 17,960 | 11,811 | 6,149 | 15,835 | 10,463 | 5,372 |
| 1997 | 153,310 | 91,352 | 61,958 | 135,060 | 79,624 | 55436 | 18,250 | 11,728 | 6,522 | 16,014 | 10,336 | 5,678 |
| 1998 | 154,561 | 91,447 | 63,114 | 136,026 | 79,649 | 56377 | 18,535 | 11,798 | 6,737 | 16,105 | 10,288 | 5,817 |
| $1999{ }^{3}$ | 152,156 | 89,453 | 62,703 | 133,752 | 77,846 | 55,906 | 18,404 | 11,607 | 6,797 | 15,963 | 10,135 | 5,828 |
| 2000 | 155,521 | 90,469 | 65,052 | 136,912 | 78,747 | 58,165 | 18,609 | 11,722 | 6,887 | 16,066 | 10,153 | 5,913 |
| 2001 | 156,058 | 90,426 | 65,632 | 137,274 | 78,665 | 58,609 | 18,784 | 11,761 | 7,023 | 16,019 | 10,131 | 5,888 |
| 2002 | 157,713 | 90,171 | 67,542 | 138,661 | 78,465 | 60,196 | 19,052 | 11,706 | 7,346 | 16,316 | 10,075 | 6,241 |
| 2003 | 158,086 | 89,964 | 68,122 | 138,743 | 78,215 | 60,528 | 19,343 | 11,749 | 7,594 | 16,372 | 9,988 | 6,384 |
| 2004 | 158,091 | 89,630 | 68,461 | 138,425 | 77,730 | 60,695 | 19,666 | 11,900 | 7,766 | 16,472 | 9,995 | 6,477 |
| 2005 | 159,292 | 90,187 | 69,105 | 139,442 | 78,379 | 61,063 | 19,850 | 11,808 | 8,042 | 16,567 | 9,887 | 6,680 |
| 2006 | 158,664 | 89,279 | 69,385 | 138,814 | 77,476 | 61,338 | 19,850 | 11,803 | 8,047 | 16,493 | 9,823 | 6,670 |
| 2007 | 158,760 | 88,372 | 70,388 | 138,730 | 76,502 | 62,228 | 20,030 | 11,870 | 8,160 | 16,494 | 9,839 | 6,655 |
| 2008 | 158,656 | 88,586 | 70,070 | 138,715 | 76,761 | 61,954 | 19,941 | 11,825 | 8,116 | 16,250 | 9,638 | 6,612 |
| 2009 | 158,158 | 87,741 | 70,417 | 138,111 | 75,906 | 62,205 | 20,047 | 11,835 | 8,212 | 16,334 | 9,695 | 6,639 |
| 2010 | 158,318 | 87,740 | 70,578 | 137,698 | 75,675 | 62,023 | 20,620 | 12,065 | 8,555 | 16,688 | 9,793 | 6,895 |
| 2011 | 157,017 | 86,774 | 70,243 | 136,347 | 74,817 | 51,530 | 20,670 | 11,957 | 8,713 | 16,594 | 9,646 | 6,948 |
| 2012 | 157,499 | 86,740 | 70,759 | 136,465 | 74,547 | 61,918 | 21,034 | 12,193 | 8,841 | 16,792 | 9,779 | 7,013 |

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. WONDER Online Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.

## Notes:

(1) All races other than white.
(2) International Classification Of Diseases, 9th Revision (ICD-9) Code 162.
(3) International Classification Of Diseases, 10th Revision (ICD-10) Code C33-C34.

Table 2: Age-Adjusted Mortality Rates ${ }^{1,2}$ by Race And Sex, 1979-1998, 1999-2012

| Year | All Races |  |  | White |  |  | All Other Races ${ }^{2}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Total | Black |  |  |
|  | Total | Male | Female |  |  |  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $1979{ }^{4}$ | 33.6 | 55.7 | 16.3 | 33.0 | 54.3 | 16.4 | 38.4 | 67.4 | 15.7 | 41.6 | 74.2 | 16.6 |
| 1980 | 34.8 | 56.9 | 17.6 | 34.2 | 55.5 | 17.6 | 39.8 | 69.2 | 17.1 | 43.9 | 77.2 | 18.5 |
| 1981 | 35.1 | 56.9 | 18.2 | 34.4 | 55.3 | 18.2 | 40.2 | 70.0 | 17.2 | 44.7 | 79.0 | 18.9 |
| 1982 | 35.9 | 57.6 | 19.2 | 35.3 | 56.0 | 19.4 | 40.6 | 70.6 | 17.6 | 45.6 | 80.4 | 19.5 |
| 1983 | 36.4 | 57.3 | 20.3 | 35.8 | 55.7 | 20.5 | 41.3 | 70.6 | 19.1 | 46.5 | 80.4 | 21.2 |
| 1984 | 37.0 | 58.0 | 20.8 | 36.4 | 56.2 | 21.0 | 41.9 | 72.5 | 18.9 | 47.2 | 83.1 | 20.7 |
| 1985 | 37.6 | 58.1 | 21.8 | 37.0 | 56.4 | 22.1 | 41.9 | 71.6 | 19.5 | 47.6 | 82.6 | 21.8 |
| 1986 | 37.8 | 57.9 | 22.3 | 37.2 | 56.2 | 22.5 | 42.1 | 71.4 | 20.2 | 48.0 | 82.8 | 22.6 |
| 1987 | 38.5 | 58.5 | 23.1 | 37.9 | 56.8 | 23.3 | 42.8 | 71.9 | 21.3 | 49.0 | 84.0 | 23.7 |
| 1988 | 38.9 | 58.2 | 24.0 | 38.3 | 56.5 | 24.3 | 42.5 | 71.0 | 21.6 | 48.9 | 83.1 | 24.3 |
| 1989 | 39.3 | 57.9 | 24.9 | 38.6 | 56.0 | 25.3 | 43.4 | 72.3 | 22.1 | 50.2 | 85.3 | 25.0 |
| 1990 | 39.9 | 58.5 | 25.6 | 39.3 | 56.6 | 25.9 | 43.9 | 72.3 | 23.2 | 51.3 | 86.2 | 26.4 |
| 1991 | 39.6 | 57.5 | 25.8 | 39.1 | 55.8 | 26.1 | 42.7 | 70.0 | 22.8 | 49.9 | 83.2 | 26.1 |
| 1992 | 39.3 | 56.0 | 26.4 | 38.8 | 54.4 | 26.7 | 42.4 | 68.1 | 23.6 | 49.8 | 81.4 | 27.3 |
| 1993 | 39.3 | 55.7 | 26.6 | 38.9 | 54.0 | 27.0 | 41.7 | 67.7 | 22.9 | 48.9 | 80.8 | 26.2 |
| 1994 | 38.7 | 54.2 | 26.6 | 38.4 | 52.7 | 27.1 | 40.7 | 64.9 | 23.1 | 47.9 | 77.6 | 26.7 |
| 1995 | 38.3 | 53.0 | 26.9 | 38.0 | 51.6 | 27.4 | 40.1 | 63.0 | 23.5 | 47.3 | 75.8 | 26.9 |
| 1996 | 37.8 | 51.8 | 26.8 | 37.6 | 50.5 | 27.5 | 40.7 | 64.8 | 23.3 | 46.2 | 73.2 | 26.5 |
| 1997 | 37.4 | 50.5 | 27.0 | 37.1 | 49.3 | 27.5 | 39.4 | 61.4 | 23.8 | 45.3 | 70.6 | 27.4 |
| 1998 | 37.0 | 49.5 | 27.0 | 36.8 | 48.4 | 27.5 | 39.2 | 56.8 | 23.6 | 44.6 | 68.5 | 27.5 |
| $1999{ }^{5}$ | 56.0 | 77.0 | 40.8 | 56.0 | 75.8 | 41.5 | 55.7 | 84.9 | 35.4 | 65.2 | 101.8 | 40.5 |
| 2000 | 56.5 | 76.6 | 41.8 | 56.6 | 75.5 | 42.8 | 54.8 | 83.4 | 34.8 | 64.1 | 99.5 | 40.2 |
| 2001 | 55.3 | 75.2 | 41.0 | 55.6 | 74.2 | 42.1 | 52.8 | 81.1 | 33.8 | 62.5 | 99.1 | 38.7 |
| 2002 | 54.9 | 73.2 | 41.6 | 55.3 | 72.5 | 42.6 | 51.5 | 77.0 | 34.1 | 61.9 | 95.0 | 40.1 |
| 2003 | 54.1 | 71.7 | 41.3 | 54.5 | 71.1 | 42.3 | 50.8 | 75.1 | 34.2 | 60.8 | 92.4 | 40.2 |
| 2004 | 53.2 | 70.1 | 40.9 | 53.6 | 69.4 | 41.9 | 49.9 | 73.2 | 34.0 | 59.8 | 90.0 | 39.9 |
| 2005 | 52.6 | 69.0 | 40.5 | 53.1 | 68.7 | 41.5 | 48.6 | 69.9 | 33.9 | 58.4 | 86.4 | 40.0 |
| 2006 | 51.5 | 67.0 | 40.0 | 52.1 | 66.8 | 41.1 | 47.0 | 67.5 | 32.8 | 56.8 | 83.7 | 39.0 |
| 2007 | 50.6 | 65.1 | 40.0 | 51.2 | 64.8 | 41.2 | 46.1 | 66.3 | 32.4 | 55.6 | 82.2 | 38.1 |
| 2008 | 49.5 | 63.6 | 39.0 | 50.2 | 63.4 | 40.2 | 44.6 | 63.9 | 31.3 | 53.4 | 78.5 | 36.9 |
| 2009 | 48.5 | 61.8 | 38.5 | 49.1 | 61.7 | 39.8 | 42.9 | 61.3 | 30.5 | 52.0 | 76.9 | 35.9 |
| 2010 | 47.6 | 60.3 | 38.1 | 48.3 | 60.1 | 39.3 | 43.0 | 60.3 | 31.0 | 51.4 | 73.7 | 36.5 |
| 2011 | 46.0 | 57.7 | 37.1 | 46.7 | 57.7 | 38.3 | 41.2 | 57.0 | 30.1 | 49.2 | 69.6 | 35.4 |
| 2012 | 44.9 | 56.1 | 36.4 | 45.6 | 56.0 | 37.6 | 40.3 | 56.0 | 29.4 | 48.3 | 68.6 | 34.7 |

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. WONDER Online Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.

Notes:
(1) Rates for 1979-1998 are per 100,000 persons and age-adjusted to the 1940 U.S. standard population.
(2) Rates for 1999-2011 are per 100,000 persons and age-adjusted to the 2000 U.S. standard population.
(3) All races other than white.
(4) International Classification of Diseases, 9th Revision (ICD-9) Code 162.
(5) International Classification of Diseases, 10th Revision (ICD-10) Code C33-C34.

Figure 1: Age-Adjusted Mortality Rates ${ }^{1}$ by Sex and Site, 2007-2011


Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011

Notes:
(1) Rates are per 100,000 persons, age-adjusted to the 2000 U.S. standard population and coded by ICD-10.
--- Number of deaths is too small to calculate a rate.

Figure 2: Lung Cancer Age-Adjusted Mortality Rates ${ }^{1}$ by Race/Ethnicity ${ }^{2}$ and Sex, 2007-2011


[^1]
## Notes:

(1) Rates are per 100,000 persons, age-adjusted to the 2000 U.S. standard population and coded by ICD-10.
(2) Hispanics are not mutually exclusive from whites, blacks, Asian/Pacific Islanders and American Indians/Alaska Natives.

Table 3: Number of Deaths ${ }^{1}$ by Race/Ethnicity, Sex and 10-Year Age Groups, 2005-2012

| Year/Age | Total |  |  | Hispanic |  |  | Non-Hispanic White |  |  | Non-Hispanic Black |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 157,499 | 86,740 | 70,759 | 5,231 | 3,139 | 2,092 | 131,045 | 71,288 | 59,757 | 16,640 | 9,683 | 6,957 |
| <1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-14 | 6 | 3 | 3 | 2 | 1 | 1 | 4 | 2 | 2 | 0 | 0 | 0 |
| 15-24 | 25 | 18 | 7 | 5 | 4 | 1 | 15 | 9 | 6 | 5 | 5 | 0 |
| 25-34 | 174 | 101 | 73 | 29 | 16 | 13 | 103 | 55 | 48 | 30 | 23 | 7 |
| 35-44 | 1,174 | 585 | 589 | 83 | 41 | 42 | 823 | 402 | 421 | 185 | 98 | 87 |
| 45-54 | 11,110 | 6,038 | 5,072 | 428 | 253 | 175 | 8,413 | 4,490 | 3,923 | 1,867 | 1,082 | 785 |
| 55-64 | 31,460 | 18,283 | 13,177 | 1,009 | 622 | 387 | 25,057 | 14,344 | 10,713 | 4,470 | 2,764 | 1,706 |
| 65-74 | 49,422 | 28,012 | 21,410 | 1,510 | 978 | 532 | 41,522 | 23,229 | 18,293 | 5,078 | 3,032 | 2,046 |
| 75-84 | 45,070 | 24,402 | 20,668 | 1,541 | 924 | 617 | 38,488 | 20,669 | 17,819 | 3,768 | 2,085 | 1,683 |
| 85+ | 19,055 | 9,297 | 9,758 | 624 | 300 | 324 | 16,618 | 8,088 | 8,530 | 1,237 | 594 | 643 |
| 2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 157,017 | 86,774 | 70,243 | 5,093 | 3,160 | 1,933 | 131,219 | 71,631 | 59,588 | 16,452 | 9,566 | 6,886 |
| <1 | 3 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| 1-14 | 3 | 2 | 1 | 1 | 1 | 0 | 2 | 1 | 1 | 0 | 0 | 0 |
| 15-24 | 30 | 17 | 13 | 7 | 3 | 4 | 18 | 10 | 8 | 4 | 4 | 0 |
| 25-34 | 122 | 62 | 60 | 20 | 13 | 7 | 63 | 29 | 34 | 27 | 13 | 14 |
| 35-44 | 1,259 | 632 | 627 | 88 | 53 | 35 | 910 | 447 | 463 | 173 | 85 | 88 |
| 45-54 | 11,494 | 6,195 | 5,299 | 400 | 238 | 162 | 8,850 | 4,683 | 4,167 | 1,904 | 1,088 | 816 |
| 55-64 | 31,773 | 18,824 | 12,949 | 986 | 653 | 333 | 25,410 | 14,866 | 10,544 | 4,507 | 2,807 | 1,700 |
| 65-74 | 48,178 | 27,535 | 20,643 | 1,470 | 945 | 525 | 40,495 | 22,793 | 17,702 | 4,970 | 3,053 | 1,917 |
| 75-84 | 45,579 | 24,653 | 20,926 | 1,481 | 899 | 582 | 39,265 | 21,101 | 18,164 | 3,639 | 1,978 | 1,661 |
| 85+ | 18,572 | 8,851 | 9,721 | 638 | 353 | 285 | 16,205 | 7,701 | 8,504 | 1,224 | 537 | 687 |
| 2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 158,318 | 87,740 | 70,578 | 4,953 | 3,046 | 1,907 | 132,658 | 72,584 | 60,074 | 16,536 | 9,711 | 6,825 |
| <1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-14 | 7 | 3 | 4 | 1 | 1 | 0 | 4 | 2 | 2 | 1 | 0 | 1 |
| 15-24 | 31 | 15 | 16 | 4 | 3 | 1 | 15 | 7 | 8 | 10 | 4 | 6 |
| 25-34 | 162 | 90 | 72 | 35 | 16 | 19 | 98 | 55 | 43 | 24 | 17 | 7 |
| 35-44 | 1,351 | 663 | 688 | 88 | 43 | 45 | 1,037 | 505 | 532 | 161 | 86 | 75 |
| 45-54 | 12,093 | 6,645 | 5,448 | 440 | 245 | 195 | 9,229 | 4,968 | 4,261 | 2,053 | 1,215 | 838 |
| 55-64 | 31,147 | 18,457 | 12,690 | 940 | 616 | 324 | 24,882 | 14,482 | 10,400 | 4,434 | 2,824 | 1,610 |
| 65-74 | 48,606 | 27,759 | 20,847 | 1,400 | 927 | 473 | 41,074 | 23,117 | 17,957 | 4,928 | 2,999 | 1,929 |
| 75-84 | 46,658 | 25,296 | 21,362 | 1,501 | 903 | 598 | 40,300 | 21,738 | 18,562 | 3,657 | 1,993 | 1,664 |
| 85+ | 18,262 | 8,811 | 9,451 | 544 | 292 | 252 | 16,018 | 7,709 | 8,309 | 1,268 | 573 | 695 |
| 2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 158,157 | 87,740 | 70,417 | 4,780 | 2,962 | 1,818 | 133,268 | 72,911 | 60,357 | 16,188 | 9,592 | 6,596 |
| <1 | 4 | 3 | 1 | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 2 | 0 |
| 1-14 | 8 | 4 | 4 | 4 | 1 | 3 | 2 | 1 | 1 | 2 | 2 | 0 |
| 15-24 | 25 | 17 | 8 | 3 | 2 | 1 | 11 | 7 | 4 | 8 | 6 | 2 |
| 25-34 | 146 | 85 | 61 | 26 | 16 | 10 | 86 | 47 | 39 | 22 | 17 | 5 |
| 35-44 | 1,517 | 766 | 751 | 99 | 49 | 50 | 1,135 | 562 | 573 | 212 | 112 | 100 |
| 45-54 | 12,488 | 6,852 | 5,636 | 428 | 273 | 155 | 9,661 | 5,202 | 4,459 | 2,062 | 1,191 | 871 |
| 55-64 | 30,964 | 18,419 | 12,545 | 889 | 561 | 328 | 24,906 | 14,614 | 10,292 | 4,341 | 2,744 | 1,597 |
| 65-74 | 48,536 | 27,545 | 20,991 | 1,423 | 907 | 516 | 41,183 | 23,013 | 18,170 | 4,841 | 2,979 | 1,862 |
| 75-84 | 46,860 | 25,559 | 21,301 | 1,406 | 893 | 513 | 40,722 | 22,038 | 18,684 | 3,600 | 1,980 | 1,620 |
| 85+ | 17,605 | 8,488 | 9,117 | 502 | 260 | 242 | 15,557 | 7,425 | 8,132 | 1,096 | 557 | 539 |

Table 3 continued: Number of Deaths ${ }^{1}$ by Race/Ethnicity, Sex and 10-Year Age Groups, 2005-2012

|  | Total |  |  | Hispanic |  |  | Non-Hispanic White |  |  | Non-Hispanic Black |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year/Age | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 158,656 | 88,586 | 70,070 | 4,804 | 3,007 | 1,797 | 133,866 | 73,732 | 60,134 | 16,101 | 9,542 | 6,559 |
| <1 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 0 |
| 1-14 | 8 | 4 | 4 | 5 | 2 | 3 | 2 | 2 | 0 | 1 | 0 | 1 |
| 15-24 | 29 | 22 | 7 | 4 | 3 | 1 | 20 | 14 | 6 | 4 | 4 | 0 |
| 25-34 | 145 | 85 | 60 | 14 | 12 | 2 | 103 | 57 | 46 | 20 | 9 | 11 |
| 35-44 | 1,604 | 834 | 770 | 87 | 49 | 38 | 1,170 | 603 | 567 | 265 | 140 | 125 |
| 45-54 | 12,532 | 7,051 | 5,481 | 422 | 245 | 177 | 9,658 | 5,332 | 4,326 | 2,093 | 1,260 | 833 |
| 55-64 | 30,796 | 18,296 | 12,500 | 909 | 595 | 314 | 25,024 | 14,613 | 10,411 | 4,104 | 2,627 | 1,477 |
| 65-74 | 48,293 | 27,672 | 20,621 | 1,438 | 919 | 519 | 40,955 | 22,193 | 17,762 | 4,740 | 2,852 | 1,888 |
| 75-84 | 47,948 | 26,121 | 21,827 | 1,433 | 905 | 528 | 41,718 | 22,521 | 19,197 | 3,696 | 2,059 | 1,637 |
| 85+ | 17,297 | 8,497 | 8,800 | 492 | 277 | 215 | 15,215 | 7,396 | 7,819 | 1,176 | 589 | 587 |
| 2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 158,760 | 88,372 | 70,388 | 4,622 | 2,822 | 1,800 | 134,134 | 73,717 | 60,417 | 16,360 | 9,744 | 6,616 |
| <1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| 1-14 | 5 | 5 | 0 | 1 | 1 | 0 | 2 | 2 | 0 | 2 | 2 | 0 |
| 15-24 | 25 | 17 | 8 | 4 | 4 | 0 | 16 | 9 | 7 | 4 | 3 | 1 |
| 25-34 | 135 | 79 | 56 | 20 | 9 | 11 | 91 | 52 | 39 | 18 | 14 | 4 |
| 35-44 | 1,852 | 911 | 941 | 93 | 44 | 49 | 1,391 | 681 | 710 | 288 | 145 | 143 |
| 45-54 | 12,480 | 6,939 | 5,541 | 404 | 248 | 156 | 9,502 | 5,179 | 4,323 | 2,231 | 1,311 | 920 |
| 55-64 | 31,216 | 18,326 | 12,890 | 855 | 545 | 310 | 25,518 | 14,727 | 10,791 | 4,112 | 2,654 | 1,458 |
| 65-74 | 48,157 | 27,568 | 20,589 | 1,430 | 905 | 525 | 40,732 | 23,038 | 17,694 | 4,933 | 3,006 | 1,927 |
| 75-84 | 48,358 | 26,475 | 21,883 | 1,340 | 814 | 526 | 42,343 | 23,038 | 19,305 | 3,643 | 2,017 | 1,626 |
| 85+ | 16,528 | 8,049 | 8,479 | 475 | 252 | 223 | 4,538 | 6,990 | 7,548 | 1,126 | 590 | 536 |
| 2006 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 158,664 | 89,279 | 69,385 | 4,355 | 2,746 | 1,609 | 134,408 | 74,685 | 59,723 | 16,360 | 9,738 | 6,622 |
| <1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| 1-14 | 3 | 2 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| 15-24 | 27 | 10 | 17 | 5 | 1 | 4 | 13 | 5 | 8 | 8 | 4 | 4 |
| 25-34 | 155 | 85 | 70 | 13 | 5 | 8 | 99 | 56 | 43 | 32 | 19 | 13 |
| 35-44 | 2,023 | 1,034 | 989 | 100 | 53 | 47 | 1,492 | 762 | 730 | 344 | 175 | 169 |
| 45-54 | 12,608 | 7,196 | 5,412 | 381 | 240 | 141 | 9,563 | 5,387 | 4,176 | 2,316 | 1,352 | 964 |
| 55-64 | 31,317 | 18,514 | 12,803 | 796 | 545 | 251 | 25,677 | 14,875 | 10,802 | 4,098 | 2,637 | 1,461 |
| 65-74 | 47,882 | 27,695 | 20,187 | 1,359 | 864 | 495 | 40,622 | 23,210 | 17,412 | 4,865 | 2,994 | 1,871 |
| 75-84 | 48,732 | 27,015 | 21,717 | 1,290 | 804 | 486 | 42,805 | 23,579 | 19,226 | 3,684 | 2,066 | 1,618 |
| 85+ | 15,915 | 7,727 | 8,188 | 411 | 234 | 177 | 14,135 | 6,810 | 7,325 | 1,011 | 489 | 522 |
| 2005 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 159,292 | 90,187 | 69,105 | 4,490 | 2,878 | 1,612 | 134,924 | 75,500 | 59,424 | 16,437 | 9,794 | 6,643 |
| $<1$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-14 | 4 | 3 | 1 | 1 | 1 | 0 | 3 | 2 | 1 | 0 | 0 | 0 |
| 15-24 | 16 | 9 | 7 | 2 | 0 | 2 | 12 | 8 | 4 | 1 | 1 | 0 |
| 25-34 | 133 | 77 | 56 | 15 | 9 | 6 | 82 | 49 | 33 | 19 | 11 | 8 |
| 35-44 | 2,323 | 1,197 | 1,126 | 111 | 64 | 47 | 1,743 | 882 | 861 | 384 | 202 | 182 |
| 45-54 | 12,624 | 7,327 | 5,297 | 407 | 257 | 150 | 9,647 | 5,565 | 4,082 | 2,228 | 1,316 | 912 |
| 55-64 | 31,363 | 18,663 | 12,700 | 848 | 594 | 254 | 25,619 | 14,922 | 10,697 | 4,176 | 2,694 | 1,482 |
| 65-74 | 48,390 | 28,207 | 20,183 | 1,355 | 894 | 461 | 41,162 | 23,737 | 17,425 | 4,869 | 2,987 | 1,882 |
| 75-84 | 49,032 | 27,196 | 21,836 | 1,337 | 843 | 494 | 43,076 | 23,761 | 19,315 | 3,682 | 2,053 | 1,629 |
| 85+ | 15,404 | 7,506 | 7,898 | 414 | 216 | 198 | 13,578 | 6,573 | 7,005 | 1,077 | 529 | 548 |

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. WONDER Online Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.

Notes:
(1) International Classification Of Diseases, 10th Revision (ICD-10) Code C33-C34.

Table 4: Age-Adjusted and Age-Specific Mortality Rates ${ }^{1,2}$ by Race and Ethnic Origin and Sex, 2005-2012

| Year/Age | Total |  |  | Hispanic |  |  | Non-Hispanic White |  |  | Non-Hispanic Black |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 44.9 | 56.1 | 36.4 | 19.2 | 26.8 | 13.6 | 48.0 | 58.5 | 40.0 | 49.6 | 70.5 | 35.6 |
| <1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 1-14 | ** | ** | ** | ** | ** | * | ** | ** | ** | ** | ** | ** |
| 15-24 | 0.1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 25-34 | 0.4 | 0.5 | 0.3 | 0.3 | ** | ** | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | ** |
| 35-44 | 2.9 | 2.9 | 2.9 | 1.1 | 1.0 | 1.1 | 3.4 | 3.3 | 3.4 | 3.6 | 4.0 | 3.2 |
| 45-54 | 25.1 | 27.7 | 22.6 | 7.3 | 8.5 | 6.0 | 27.8 | 29.9 | 25.8 | 34.0 | 41.9 | 26.9 |
| 55-64 | 81.5 | 98.3 | 65.9 | 27.8 | 35.6 | 20.5 | 87.7 | 102.8 | 73.3 | 104.5 | 142.1 | 73.1 |
| 65-74 | 206.1 | 250.0 | 167.5 | 80.8 | 116.4 | 51.7 | 221.4 | 261.3 | 185.5 | 230.2 | 320.9 | 162.3 |
| 75-84 | 339.6 | 432.0 | 271.1 | 162.8 | 237.3 | 110.8 | 360.7 | 448.1 | 294.2 | 344.4 | 508.5 | 246.0 |
| 85+ | 323.7 | 473.4 | 248.7 | 189.7 | 258.0 | 152.4 | 336.2 | 488.3 | 259.6 | 295.4 | 496.2 | 215.0 |
| 2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 46.0 | 57.7 | 37.1 | 19.8 | 28.7 | 13.3 | 49.2 | 60.3 | 40.7 | 50.5 | 71.6 | 36.3 |
| <1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 1-14 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 15-24 | 0.1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 25-34 | 0.3 | 0.3 | 0.3 | 0.2 | ** | ** | 0.3 | 0.2 | 0.3 | 0.5 | ** | ** |
| 35-44 | 3.1 | 3.1 | 3.1 | 1.2 | 1.4 | 1.0 | 3.7 | 3.6 | 3.7 | 3.3 | 3.5 | 3.2 |
| 45-54 | 25.7 | 28.1 | 23.3 | 7.0 | 8.3 | 5.7 | 28.7 | 30.6 | 26.8 | 34.5 | 41.9 | 27.9 |
| 55-64 | 83.5 | 102.5 | 65.7 | 28.5 | 39.4 | 18.5 | 89.3 | 106.9 | 72.4 | 109.3 | 149.7 | 75.6 |
| 65-74 | 214.3 | 262.8 | 171.9 | 83.7 | 120.2 | 54.2 | 230.6 | 274.4 | 191.3 | 237.9 | 342.0 | 160.2 |
| 75-84 | 345.9 | 442.4 | 275.3 | 162.8 | 240.6 | 108.6 | 368.4 | 461.0 | 298.7 | 338.2 | 493.2 | 246.1 |
| 85+ | 323.7 | 467.3 | 252.9 | 210.1 | 330.3 | 144.8 | 333.6 | 478.2 | 261.9 | 309.5 | 484.3 | 241.4 |
| 2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 47.6 | 60.3 | 38.1 | 20.4 | 29.6 | 13.8 | 50.8 | 62.7 | 41.7 | 52.6 | 75.6 | 37.3 |
| $<1$ | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 1-14 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 15-24 | 0.1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 25-34 | 0.4 | 0.4 | 0.4 | 0.4 | ** | ** | 0.4 | 0.5 | 0.4 | 0.4 | ** | ** |
| 35-44 | 3.3 | 3.2 | 3.3 | 1.2 | 1.2 | 1.3 | 4.1 | 3.9 | 4.2 | 3.1 | 3.5 | 2.7 |
| 45-54 | 26.9 | 30.0 | 23.8 | 8.1 | 9.0 | 7.1 | 29.3 | 31.8 | 26.9 | 37.2 | 46.9 | 28.6 |
| 55-64 | 85.4 | 104.9 | 67.2 | 29.2 | 40.1 | 19.3 | 90.5 | 107.8 | 74.0 | 114.0 | 159.8 | 75.9 |
| 65-74 | 223.9 | 274.9 | 179.5 | 84.9 | 126.2 | 51.7 | 241.0 | 287.3 | 199.5 | 245.0 | 350.0 | 167.1 |
| 75-84 | 357.2 | 461.9 | 281.7 | 174.1 | 256.3 | 117.3 | 378.0 | 479.3 | 303.0 | 351.8 | 519.4 | 253.7 |
| 85+ | 332.4 | 492.3 | 255.2 | 201.0 | 307.9 | 143.4 | 342.4 | 504.4 | 263.8 | 331.2 | 534.4 | 252.2 |
| 2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 48.4 | 61.4 | 38.6 | 20.4 | 29.8 | 13.6 | 51.6 | 63.9 | 42.3 | 52.6 | 76.7 | 36.7 |
| <1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 1-14 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 15-24 | 0.1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 25-34 | 0.4 | 0.4 | 0.3 | 0.3 | ** | ** | 0.4 | 0.4 | 0.3 | 0.4 | ** | ** |
| 35-44 | 3.7 | 3.7 | 3.6 | 1.4 | 1.3 | 1.4 | 4.4 | 4.3 | 4.4 | 4.0 | 4.5 | 3.5 |
| 45-54 | 27.8 | 31.0 | 24.7 | 8.1 | 10.3 | 5.9 | 30.6 | 33.2 | 28.0 | 37.8 | 46.5 | 30.1 |
| 55-64 | 87.5 | 107.9 | 68.4 | 29.1 | 38.5 | 20.5 | 92.9 | 111.6 | 75.1 | 116.4 | 162.1 | 78.4 |
| 65-74 | 228.6 | 279.4 | 184.5 | 89.7 | 128.6 | 58.5 | 246.4 | 292.3 | 205.6 | 246.3 | 356.2 | 164.9 |
| 75-84 | 359.8 | 470.5 | 280.6 | 168.9 | 263.3 | 104.0 | 381.2 | 487.7 | 303.1 | 351.0 | 525.5 | 249.6 |
| 85+ | 328.0 | 489.1 | 251.0 | 195.8 | 290.7 | 144.9 | 339.2 | 499.5 | 262.3 | 295.8 | 540.1 | 201.6 |
|  |  |  |  |  | Contin | d on nex | e |  |  |  |  |  |

Table 4 continued: Age-Adjusted and Age-Specific Mortality Rates ${ }^{1,2}$ by Race and Ethnic Origin and Sex, 2005-2012

|  | Total |  |  | Hispanic |  |  | Non-Hispanic White |  |  | Non-Hispanic Black |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year/Age | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 49.5 | 63.6 | 39.0 | 20.5 | 29.7 | 13.7 | 52.8 | 66.3 | 42.6 | 54.6 | 80.3 | 37.7 |
| <1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 1-14 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 15-24 | 0.1 | 0.1 | ** | ** | ** | ** | 0.1 | ** | ** | ** | ** | ** |
| 25-34 | 0.4 | 0.4 | 0.3 | ** | ** | ** | 0.4 | 0.5 | 0.4 | 0.4 | ** | ** |
| 35-44 | 3.8 | 3.9 | 3.6 | 1.2 | 1.3 | 1.2 | 4.3 | 4.4 | 4.2 | 5.0 | 5.6 | 4.4 |
| 45-54 | 28.2 | 32.3 | 24.3 | 8.5 | 9.6 | 7.3 | 30.4 | 33.8 | 27.0 | 40.2 | 52.4 | 29.7 |
| 55-64 | 91.4 | 112.6 | 71.7 | 31.8 | 43.2 | 21.3 | 97.1 | 116.1 | 79.0 | 120.6 | 173.2 | 78.2 |
| 65-74 | 240.0 | 298.7 | 189.9 | 95.5 | 135.2 | 62.9 | 257.9 | 313.1 | 209.7 | 257.9 | 372.4 | 176.1 |
| 75-84 | 368.1 | 489.5 | 283.9 | 170.1 | 259.8 | 106.9 | 390.7 | 509.7 | 306.8 | 363.2 | 556.6 | 252.7 |
| 85+ | 302.3 | 456.0 | 228.1 | 157.1 | 247.1 | 106.9 | 315.4 | 472.4 | 239.9 | 289.4 | 489.4 | 205.2 |
| 2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 50.6 | 65.1 | 40.0 | 20.9 | 29.6 | 14.4 | 53.9 | 67.7 | 43.5 | 56.8 | 84.0 | 39.0 |
| <1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | 0.2 | 0.3 | ** |
| 1-14 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 15-24 | 0.1 | 0.1 | ** | 0.1 | 0.1 | ** | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | ** |
| 25-34 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.1 |
| 35-44 | 4.3 | 4.2 | 4.4 | 1.4 | 1.2 | 1.5 | 5.0 | 4.8 | 5.1 | 5.3 | 5.7 | 5.0 |
| 45-54 | 28.4 | 32.1 | 24.9 | 8.5 | 10.3 | 6.7 | 30.0 | 33.0 | 27.1 | 43.6 | 55.5 | 33.4 |
| 55-64 | 95.4 | 116.2 | 76.1 | 31.8 | 42.1 | 22.2 | 101.4 | 119.8 | 83.8 | 126.0 | 182.5 | 80.6 |
| 65-74 | 248.8 | 310.2 | 196.7 | 100.0 | 140.7 | 66.7 | 266.7 | 324.2 | 216.7 | 276.0 | 403.9 | 184.8 |
| 75-84 | 371.3 | 498.3 | 283.8 | 167.1 | 246.1 | 111.7 | 393.8 | 520.4 | 305.2 | 363.2 | 554.8 | 254.3 |
| 85+ | 299.8 | 453.0 | 227.0 | 169.8 | 256.1 | 123.0 | 310.7 | 467.7 | 237.7 | 287.9 | 514.8 | 193.9 |
| 2006 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 51.5 | 67.0 | 40.0 | 20.7 | 30.3 | 13.6 | 54.7 | 69.7 | 43.5 | 57.9 | 85.4 | 39.8 |
| $<1$ | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 1-14 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 15-24 | 0.1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 25-34 | 0.4 | 0.4 | 0.4 | ** | ** | ** | 0.4 | 0.5 | 0.4 | 0.6 | ** | ** |
| 35-44 | 4.6 | 4.7 | 4.5 | 1.5 | 1.5 | 1.5 | 5.2 | 5.3 | 5.1 | 6.3 | 6.8 | 5.9 |
| 45-54 | 29.1 | 33.8 | 24.6 | 8.4 | 10.5 | 6.3 | 30.4 | 34.5 | 26.3 | 46.2 | 58.5 | 35.7 |
| 55-64 | 99.1 | 121.6 | 78.2 | 31.3 | 44.8 | 19.0 | 105.1 | 124.8 | 86.4 | 131.3 | 189.5 | 84.5 |
| 65-74 | 253.1 | 319.4 | 197.0 | 98.8 | 140.1 | 65.2 | 271.5 | 334.0 | 217.3 | 277.8 | 410.3 | 183.1 |
| 75-84 | 373.5 | 509.9 | 280.3 | 167.9 | 254.2 | 107.6 | 395.0 | 531.2 | 300.5 | 370.8 | 574.5 | 255.3 |
| 85+ | 300.5 | 457.7 | 226.9 | 160.8 | 263.9 | 106.0 | 313.0 | 474.2 | 237.8 | 268.4 | 448.1 | 195.1 |
| 2005 |  |  |  |  |  |  |  |  |  |  |  |  |
| All Ages | 52.6 | 69.0 | 40.5 | 22.4 | 33.3 | 14.3 | 55.5 | 71.4 | 43.7 | 59.6 | 88.1 | 40.9 |
| <1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 1-14 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 15-24 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 25-34 | 0.3 | 0.4 | 0.3 | ** | ** | ** | 0.3 | 0.4 | 0.3 | ** | ** | ** |
| 35-44 | 5.3 | 5.5 | 5.1 | 1.7 | 1.9 | 1.6 | 5.9 | 6.0 | 5.9 | 7.0 | 7.9 | 6.3 |
| 45-54 | 29.7 | 35.1 | 24.5 | 9.5 | 11.9 | 7.1 | 31.0 | 36.0 | 26.0 | 45.5 | 58.2 | 34.6 |
| 55-64 | 103.3 | 127.6 | 80.7 | 35.7 | 52.3 | 20.4 | 108.6 | 129.7 | 88.5 | 140.7 | 203.5 | 90.1 |
| 65-74 | 259.6 | 330.7 | 199.6 | 102.6 | 151.4 | 63.1 | 277.8 | 345.6 | 219.3 | 283.5 | 417.3 | 187.9 |
| 75-84 | 375.6 | 515.1 | 280.9 | 183.3 | 281.6 | 114.9 | 394.7 | 534.1 | 298.7 | 373.4 | 575.5 | 258.8 |
| 85+ | 302.3 | 468.0 | 226.2 | 177.1 | 269.0 | 129.0 | 311.3 | 480.2 | 234.1 | 294.1 | 503.4 | 209.9 |

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. WONDER Online Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.

## Notes:

(1) Rates are per 100,000 population
(2) International Classification Of Diseases, 10th Revision (ICD-10) Code C33-C34
** Number of deaths is too small to calculate a rate

Table 5: Age-Adjusted Mortality Rates ${ }^{1}$ by State and Sex, 2003-2012
(Continued on next page)

|  | 2003 |  |  | 2004 |  |  | 2005 |  |  | 2006 |  |  | 2007 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Alabama | 64.9 | 96.9 | 42.3 | 62.7 | 91.6 | 42.4 | 63.8 | 92.8 | 42.9 | 60.2 | 88.5 | 39.9 | 61.6 | 90.3 | 40.9 |
| Alaska | 55.7 | 77.4 | 37.5 | 57.4 | 65.9 | 50.2 | 51.0 | 58.4 | 44.7 | 46.2 | 49.4 | 43.7 | 55.2 | 68.4 | 43.4 |
| Arizona | 48.3 | 61.6 | 37.9 | 46.2 | 57.8 | 37.1 | 43.3 | 53.6 | 34.8 | 43.0 | 53.1 | 34.7 | 39.4 | 48.5 | 31.8 |
| Arkansas | 67.4 | 96.2 | 46.1 | 68.9 | 95.8 | 49.3 | 70.4 | 98.1 | 49.6 | 65.4 | 92.6 | 45.0 | 63.7 | 84.5 | 47.6 |
| California | 43.8 | 54.2 | 36.3 | 42.3 | 52.2 | 34.9 | 41.5 | 50.9 | 34.6 | 40.3 | 49.8 | 33.2 | 39.4 | 48.3 | 32.8 |
| Colorado | 41.4 | 53.6 | 32.7 | 39.1 | 47.7 | 33.3 | 38.5 | 46.2 | 33.2 | 37.9 | 45.4 | 32.8 | 45.9 | 44.8 | 32.1 |
| Connecticut | 49.1 | 61.0 | 40.9 | 49.8 | 64.7 | 39.1 | 47.2 | 58.8 | 39.0 | 47.1 | 56.8 | 40.6 | 57.0 | 54.2 | 40.3 |
| Delaware | 62.4 | 81.3 | 48.5 | 65.9 | 85.5 | 51.3 | 62.4 | 79.7 | 49.6 | 59.7 | 70.1 | 52.0 | 63.8 | 66.0 | 50.4 |
| D.C. | 51.3 | 73.3 | 36.9 | 50.7 | 72.0 | 35.8 | 49.4 | 69.6 | 36.6 | 47.1 | 70.6 | 30.6 | 45.9 | 60.2 | 37.6 |
| Florida | 54.6 | 70.2 | 42.3 | 54.1 | 68.7 | 42.5 | 52.7 | 68.5 | 40.0 | 51.3 | 65.8 | 39.4 | 64.4 | 60.6 | 39.3 |
| Georgia | 59.1 | 83.7 | 42.3 | 58.4 | 85.6 | 39.1 | 56.3 | 80.4 | 39.3 | 55.8 | 79.6 | 38.9 | 47.0 | 76.2 | 39.6 |
| Hawaii | 37.1 | 50.1 | 27.2 | 37.5 | 51.0 | 27.1 | 40.0 | 52.5 | 29.7 | 38.7 | 51.9 | 27.9 | 36.1 | 49.8 | 25.4 |
| Idaho | 46.2 | 55.0 | 40.0 | 40.8 | 50.8 | 32.8 | 45.3 | 58.2 | 35.4 | 42.0 | 51.0 | 34.7 | 41.4 | 51.2 | 33.8 |
| Illinois | 55.7 | 73.9 | 42.7 | 54.6 | 72.8 | 41.7 | 52.6 | 68.8 | 41.2 | 52.5 | 69.1 | 41.1 | 53.8 | 68.2 | 43.7 |
| Indiana | 65.6 | 87.4 | 50.0 | 60.8 | 82.2 | 45.3 | 63.0 | 83.6 | 48.2 | 61.8 | 82.4 | 47.4 | 61.0 | 80.8 | 46.7 |
| lowa | 52.4 | 71.0 | 38.6 | 53.7 | 72.8 | 39.8 | 54.0 | 73.5 | 40.1 | 49.4 | 67.1 | 36.3 | 52.4 | 67.6 | 41.1 |
| Kansas | 53.7 | 72.7 | 39.8 | 54.1 | 72.4 | 40.3 | 57.0 | 72.7 | 46.1 | 54.8 | 71.1 | 42.8 | 51.3 | 70.0 | 37.6 |
| Kentucky | 78.5 | 110.7 | 55.3 | 77.0 | 105.6 | 56.8 | 77.2 | 106.7 | 56.0 | 74.4 | 101.0 | 55.6 | 74.4 | 100.4 | 55.6 |
| Louisiana | 66.2 | 94.2 | 46.6 | 66.7 | 95.0 | 46.2 | 64.3 | 90.2 | 45.6 | 61.5 | 84.8 | 44.3 | 58.9 | 80.4 | 43.3 |
| Maine | 62.2 | 79.2 | 50.0 | 61.0 | 77.8 | 48.9 | 60.0 | 77.3 | 47.4 | 61.2 | 77.4 | 49.5 | 56.4 | 70.2 | 46.7 |
| Maryland | 57.1 | 74.4 | 44.7 | 52.9 | 67.6 | 42.3 | 54.9 | 71.0 | 43.4 | 52.7 | 66.6 | 42.7 | 50.1 | 62.9 | 41.1 |
| Massachusetts | 54.7 | 67.0 | 45.8 | 52.1 | 65.0 | 43.5 | 52.1 | 64.4 | 43.8 | 52.7 | 66.3 | 43.4 | 50.7 | 62.4 | 42.8 |
| Michigan | 56.3 | 73.0 | 44.1 | 56.6 | 74.2 | 44.0 | 55.7 | 72.6 | 43.2 | 55.2 | 70.6 | 44.0 | 55.4 | 70.1 | 45.0 |
| Minnesota | 46.0 | 59.1 | 36.8 | 46.8 | 59.0 | 37.9 | 44.5 | 57.0 | 35.6 | 45.0 | 56.3 | 37.1 | 45.6 | 57.7 | 36.7 |
| Mississippi | 66.8 | 101.7 | 42.1 | 68.1 | 99.6 | 45.3 | 64.2 | 94.3 | 42.8 | 67.6 | 100.0 | 44.2 | 64.3 | 97.8 | 40.4 |
| Missouri | 61.9 | 84.0 | 45.9 | 65.2 | 89.7 | 47.6 | 62.2 | 85.2 | 45.3 | 62.0 | 81.6 | 47.7 | 60.1 | 78.8 | 46.3 |
| Montana | 52.6 | 65.6 | 42.6 | 48.9 | 56.0 | 43.3 | 52.7 | 64.0 | 44.2 | 48.2 | 58.0 | 40.3 | 51.3 | 58.9 | 45.8 |
| Nebraska | 47.8 | 64.5 | 35.5 | 47.4 | 66.1 | 33.4 | 48.5 | 63.7 | 37.3 | 47.7 | 65.9 | 34.5 | 48.8 | 65.5 | 36.2 |
| Nevada | 63.6 | 75.0 | 54.0 | 57.2 | 61.2 | 53.3 | 57.6 | 66.4 | 50.4 | 56.0 | 64.8 | 48.4 | 53.7 | 59.7 | 48.4 |
| New Hampshire | 52.1 | 66.7 | 41.2 | 55.1 | 67.9 | 45.4 | 53.7 | 67.8 | 43.4 | 51.4 | 61.9 | 44.2 | 52.9 | 59.9 | 47.8 |
| New Jersey | 50.9 | 65.5 | 40.9 | 48.5 | 60.7 | 40.1 | 48.0 | 61.1 | 39.0 | 47.1 | 58.7 | 39.0 | 47.0 | 58.9 | 38.9 |
| New Mexico | 39.6 | 51.6 | 30.5 | 35.8 | 44.5 | 28.9 | 36.5 | 45.5 | 29.5 | 35.0 | 43.2 | 28.4 | 37.8 | 46.1 | 31.1 |
| New York | 46.9 | 60.6 | 37.4 | 45.9 | 58.4 | 37.2 | 45.3 | 57.6 | 36.7 | 44.1 | 56.3 | 35.6 | 44.2 | 54.9 | 36.8 |
| North Carolina | 58.1 | 81.9 | 41.2 | 59.1 | 83.9 | 41.2 | 59.6 | 82.6 | 43.1 | 59.6 | 82.7 | 43.1 | 56.4 | 79.7 | 41.9 |
| North Dakota | 43.7 | 54.0 | 36.4 | 48.6 | 66.5 | 35.7 | 43.1 | 55.0 | 34.1 | 48.2 | 64.2 | 36.1 | 40.9 | 52.4 | 32.3 |
| Ohio | 60.6 | 82.5 | 44.9 | 60.2 | 79.6 | 46.3 | 59.3 | 79.2 | 44.9 | 59.3 | 80.0 | 44.8 | 58.9 | 77.7 | 45.5 |
| Oklahoma | 62.4 | 85.3 | 45.5 | 63.0 | 84.7 | 46.6 | 62.6 | 85.6 | 45.4 | 63.5 | 82.2 | 49.3 | 63.9 | 85.4 | 48.2 |
| Oregon | 55.5 | 67.3 | 46.7 | 54.8 | 65.5 | 46.6 | 54.0 | 66.2 | 44.9 | 53.2 | 62.4 | 46.4 | 49.8 | 58.8 | 42.9 |
| Pennsylvania | 53.4 | 72.8 | 39.7 | 53.2 | 70.4 | 40.9 | 54.2 | 73.3 | 40.8 | 52.7 | 70.0 | 40.5 | 52.0 | 68.4 | 40.3 |
| Rhode Island | 54.0 | 73.0 | 40.7 | 55.2 | 74.2 | 42.0 | 50.4 | 62.0 | 43.0 | 49.8 | 64.2 | 40.2 | 54.6 | 71.4 | 43.8 |
| South Carolina | 62.0 | 89.4 | 41.7 | 57.8 | 84.5 | 38.6 | 60.5 | 85.9 | 41.9 | 58.5 | 81.9 | 41.4 | 56.4 | 78.6 | 39.9 |
| South Dakota | 47.7 | 66.5 | 33.9 | 49.5 | 68.4 | 34.8 | 53.2 | 67.9 | 42.1 | 48.2 | 62.2 | 38.1 | 46.4 | 63.4 | 33.8 |
| Tennessee | 67.5 | 96.6 | 47.1 | 68.1 | 97.6 | 47.0 | 69.8 | 97.7 | 49.5 | 67.7 | 95.1 | 47.9 | 65.7 | 91.1 | 47.3 |
| Texas | 53.4 | 73.2 | 38.9 | 51.9 | 69.8 | 38.7 | 50.3 | 68.5 | 36.9 | 49.2 | 65.5 | 37.0 | 47.4 | 63.0 | 35.9 |
| Utah | 24.3 | 33.2 | 17.2 | 26.1 | 35.4 | 18.5 | 23.8 | 33.4 | 15.8 | 23.3 | 29.6 | 18.1 | 21.9 | 26.2 | 18.4 |
| Vermont | 48.3 | 58.2 | 40.7 | 47.4 | 63.9 | 35.0 | 49.0 | 58.3 | 42.7 | 49.8 | 57.0 | 44.6 | 56.2 | 67.4 | 48.3 |
| Virginia | 57.3 | 76.8 | 43.0 | 55.8 | 74.6 | 42.2 | 56.5 | 76.1 | 42.1 | 54.3 | 71.8 | 41.5 | 52.9 | 69.7 | 41.2 |
| Washington | 55.2 | 66.1 | 47.5 | 51.8 | 63.0 | 43.5 | 51.2 | 61.4 | 43.8 | 49.3 | 59.1 | 41.9 | 49.5 | 56.3 | 44.4 |
| West Virginia | 66.6 | 90.4 | 49.1 | 65.8 | 90.8 | 48.3 | 66.7 | 89.8 | 50.0 | 70.7 | 93.3 | 53.6 | 66.3 | 87.2 | 50.7 |
| Wisconsin | 47.5 | 63.7 | 36.2 | 50.0 | 66.2 | 38.2 | 48.5 | 61.0 | 39.7 | 47.8 | 58.8 | 39.8 | 48.3 | 61.0 | 38.8 |
| Wyoming | 49.0 | 65.1 | 36.7 | 39.8 | 50.1 | 31.7 | 48.0 | 53.9 | 42.5 | 44.7 | 54.3 | 38.5 | 46.0 | 52.0 | 41.7 |
| U.S. Total | 54.1 | 71.6 | 41.2 | 53.2 | 70.0 | 40.9 | 52.6 | 69.0 | 40.5 | 51.5 | 67.1 | 40.0 | 50.6 | 65.1 | 40.0 |

[^2]Notes:
(1) Rates are per 100,000 persons, age-adjusted to the 2000 U.S. population and coded by ICD-10 revision.

|  | 2008 |  |  | 2009 |  |  | 2010 |  |  | 2011 |  |  | 2012 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Alabama | 58.8 | 85.9 | 38.8 | 61.6 | 87.3 | 42.9 | 60.0 | 85.3 | 41.1 | 57.0 | 79.9 | 39.9 | 54.1 | 75.5 | 38.4 |
| Alaska | 53.0 | 60.5 | 47.2 | 55.3 | 67.9 | 45.7 | 49.4 | 55.2 | 45.2 | 49.4 | 57.1 | 42.5 | 50.0 | 60.3 | 41.4 |
| Arizona | 38.6 | 47.6 | 31.3 | 39.9 | 48.3 | 33.3 | 39.0 | 47.2 | 32.3 | 36.8 | 44.5 | 30.5 | 37.1 | 44.4 | 31.1 |
| Arkansas | 67.8 | 95.5 | 46.3 | 64.7 | 91.1 | 44.2 | 63.0 | 87.4 | 44.7 | 61.3 | 83.3 | 44.4 | 60.8 | 84.4 | 41.9 |
| California | 38.1 | 46.4 | 31.9 | 37.8 | 46.4 | 31.4 | 36.6 | 43.9 | 31.1 | 34.8 | 41.9 | 29.5 | 33.2 | 39.3 | 28.5 |
| Colorado | 36.5 | 44.7 | 30.5 | 36.2 | 42.9 | 31.3 | 35.2 | 42.4 | 29.9 | 32.7 | 38.6 | 28.1 | 31.4 | 35.0 | 28.5 |
| Connecticut | 43.8 | 54.5 | 36.3 | 43.0 | 51.1 | 37.2 | 44.3 | 51.6 | 39.0 | 40.7 | 49.0 | 34.9 | 37.6 | 45.0 | 32.3 |
| Delaware | 58.0 | 69.2 | 49.5 | 51.9 | 63.8 | 42.8 | 58.3 | 73.5 | 46.8 | 52.1 | 64.6 | 42.3 | 52.4 | 61.6 | 46.5 |
| D.C. | 49.6 | 67.5 | 37.1 | 41.5 | 52.5 | 33.9 | 38.5 | 50.1 | 30.5 | 40.0 | 47.9 | 34.3 | 40.3 | 51.3 | 32.5 |
| Florida | 48.9 | 61.4 | 38.6 | 48.0 | 59.6 | 38.5 | 47.5 | 59.1 | 38.3 | 45.3 | 56.0 | 36.5 | 44.5 | 55.6 | 35.4 |
| Georgia | 50.9 | 69.9 | 37.5 | 51.7 | 70.1 | 38.7 | 49.4 | 66.9 | 36.8 | 48.5 | 65.0 | 36.5 | 48.7 | 66.0 | 36.0 |
| Hawaii | 35.8 | 49.6 | 25.1 | 34.4 | 46.1 | 25.3 | 34.1 | 45.0 | 25.5 | 32.8 | 41.2 | 26.1 | 29.5 | 39.0 | 22.6 |
| Idaho | 41.9 | 48.0 | 37.0 | 41.4 | 47.8 | 36.0 | 38.8 | 48.1 | 30.9 | 37.6 | 44.9 | 32.0 | 36.4 | 40.9 | 32.5 |
| Illinois | 52.1 | 66.9 | 41.7 | 50.3 | 62.8 | 41.4 | 49.9 | 62.1 | 41.2 | 48.6 | 60.9 | 39.6 | 47.9 | 59.3 | 39.7 |
| Indiana | 62.1 | 81.9 | 48.0 | 59.3 | 78.2 | 45.3 | 58.7 | 75.2 | 46.2 | 54.5 | 71.8 | 41.7 | 54.7 | 70.6 | 42.7 |
| lowa | 50.5 | 66.1 | 39.1 | 48.7 | 60.1 | 40.3 | 47.8 | 62.5 | 36.4 | 46.8 | 61.8 | 35.3 | 46.2 | 57.8 | 37.5 |
| Kansas | 51.8 | 69.5 | 38.1 | 51.3 | 65.7 | 40.4 | 48.3 | 60.9 | 38.7 | 47.5 | 58.0 | 39.5 | 46.4 | 55.6 | 39.4 |
| Kentucky | 74.2 | 98.9 | 55.6 | 68.8 | 89.0 | 54.2 | 74.1 | 96.9 | 57.4 | 69.2 | 88.6 | 54.8 | 68.8 | 88.6 | 54.1 |
| Louisiana | 60.1 | 83.1 | 43.7 | 58.6 | 79.1 | 42.8 | 58.0 | 77.8 | 43.2 | 56.5 | 75.3 | 42.3 | 55.5 | 72.5 | 42.3 |
| Maine | 56.7 | 73.4 | 44.4 | 53.6 | 65.6 | 44.2 | 55.7 | 66.9 | 47.3 | 52.1 | 65.0 | 41.9 | 53.3 | 64.4 | 44.4 |
| Maryland | 50.1 | 64.1 | 40.2 | 48.6 | 59.1 | 40.9 | 46.1 | 56.4 | 38.3 | 43.8 | 52.4 | 37.4 | 43.5 | 53.7 | 36.1 |
| Massachusetts | 49.3 | 61.0 | 41.4 | 48.7 | 58.2 | 42.3 | 47.4 | 56.7 | 41.0 | 44.9 | 53.3 | 38.9 | 44.4 | 52.6 | 38.7 |
| Michigan | 54.4 | 68.5 | 44.2 | 54.0 | 68.1 | 43.6 | 52.3 | 64.9 | 43.0 | 51.0 | 62.2 | 42.5 | 49.6 | 60.6 | 41.1 |
| Minnesota | 45.3 | 53.7 | 39.1 | 42.8 | 50.2 | 37.5 | 41.7 | 50.7 | 35.3 | 39.7 | 48.7 | 32.9 | 38.9 | 45.7 | 34.0 |
| Mississippi | 65.3 | 96.9 | 42.8 | 62.4 | 92.0 | 40.9 | 62.0 | 89.6 | 41.3 | 59.4 | 83.9 | 41.2 | 58.0 | 81.1 | 40.8 |
| Missouri | 60.1 | 79.4 | 45.7 | 57.1 | 73.4 | 45.4 | 57.3 | 72.5 | 46.0 | 55.1 | 69.3 | 44.4 | 55.9 | 70.6 | 44.8 |
| Montana | 48.1 | 59.6 | 39.0 | 40.3 | 43.9 | 37.5 | 40.0 | 44.0 | 36.7 | 47.6 | 57.8 | 39.2 | 39.1 | 44.4 | 34.7 |
| Nebraska | 45.3 | 56.9 | 36.4 | 44.4 | 57.2 | 34.4 | 46.1 | 58.9 | 36.2 | 42.2 | 52.9 | 34.0 | 43.2 | 52.2 | 36.4 |
| Nevada | 53.5 | 60.0 | 48.1 | 51.9 | 59.2 | 46.2 | 47.4 | 53.6 | 42.0 | 48.6 | 56.4 | 42.3 | 46.1 | 50.5 | 42.7 |
| New Hampshire | 47.5 | 59.4 | 38.7 | 50.4 | 61.9 | 42.5 | 46.1 | 52.7 | 41.5 | 51.6 | 62.2 | 43.7 | 46.8 | 52.3 | 43.0 |
| New Jersey | 45.1 | 55.9 | 37.7 | 42.8 | 52.1 | 36.4 | 42.4 | 53.5 | 34.7 | 41.3 | 49.4 | 35.7 | 39.5 | 49.2 | 32.4 |
| New Mexico | 36.2 | 46.0 | 28.2 | 32.5 | 39.3 | 27.3 | 34.3 | 41.9 | 28.2 | 30.9 | 37.8 | 25.4 | 32.7 | 39.4 | 27.4 |
| New York | 43.1 | 53.7 | 35.7 | 42.2 | 52.6 | 34.9 | 42.3 | 51.4 | 35.9 | 41.1 | 50.1 | 34.7 | 41.1 | 51.1 | 34.0 |
| North Carolina | 56.3 | 77.0 | 41.4 | 53.8 | 73.7 | 39.5 | 54.0 | 73.5 | 39.7 | 52.4 | 70.7 | 38.9 | 49.8 | 66.7 | 37.2 |
| North Dakota | 45.2 | 56.6 | 37.5 | 39.4 | 51.4 | 30.4 | 37.5 | 49.9 | 27.7 | 41.2 | 55.3 | 31.0 | 42.3 | 54.5 | 33.5 |
| Ohio | 57.2 | 75.1 | 44.3 | 56.8 | 73.7 | 44.1 | 54.9 | 71.2 | 42.9 | 54.6 | 69.1 | 43.6 | 54.3 | 67.4 | 44.7 |
| Oklahoma | 60.0 | 80.5 | 44.6 | 60.0 | 77.1 | 46.9 | 58.1 | 76.1 | 44.4 | 59.6 | 75.9 | 47.3 | 55.4 | 70.5 | 44.1 |
| Oregon | 49.8 | 59.9 | 41.6 | 48.2 | 56.2 | 42.4 | 47.2 | 54.9 | 41.4 | 45.9 | 52.1 | 41.2 | 45.3 | 52.6 | 39.7 |
| Pennsylvania | 51.6 | 67.3 | 40.6 | 49.4 | 63.4 | 39.3 | 49.1 | 63.6 | 38.5 | 47.6 | 59.8 | 38.8 | 46.9 | 60.1 | 37.3 |
| Rhode Island | 56.7 | 69.5 | 48.1 | 49.1 | 61.9 | 40.7 | 49.0 | 59.9 | 41.8 | 47.7 | 58.9 | 40.0 | 48.3 | 63.0 | 37.8 |
| South Carolina | 55.8 | 78.7 | 38.8 | 54.8 | 75.1 | 39.6 | 52.8 | 70.6 | 39.8 | 52.0 | 71.5 | 37.4 | 51.7 | 68.1 | 39.3 |
| South Dakota | 47.3 | 65.6 | 33.1 | 41.1 | 53.2 | 31.5 | 45.3 | 61.8 | 33.3 | 47.2 | 53.3 | 43.0 | 43.7 | 56.2 | 34.3 |
| Tennessee | 63.3 | 87.9 | 45.5 | 63.4 | 85.7 | 47.0 | 62.7 | 86.8 | 45.3 | 59.4 | 80.4 | 43.4 | 58.4 | 76.9 | 44.4 |
| Texas | 46.0 | 60.0 | 35.4 | 44.6 | 58.2 | 34.2 | 43.5 | 56.3 | 33.8 | 42.5 | 55.1 | 32.7 | 40.8 | 52.1 | 32.3 |
| Utah | 17.9 | 23.0 | 13.8 | 20.9 | 28.6 | 14.6 | 21.7 | 27.2 | 17.2 | 20.1 | 25.1 | 15.9 | 20.3 | 26.5 | 15.3 |
| Vermont | 52.4 | 62.5 | 44.6 | 50.4 | 60.9 | 42.3 | 53.9 | 64.3 | 45.6 | 49.3 | 52.9 | 46.5 | 42.4 | 46.9 | 39.9 |
| Virginia | 50.7 | 67.8 | 38.4 | 49.7 | 62.9 | 39.8 | 48.7 | 62.9 | 38.2 | 47.4 | 60.3 | 37.6 | 46.0 | 58.2 | 36.7 |
| Washington | 47.9 | 56.6 | 41.6 | 47.3 | 55.0 | 41.7 | 47.0 | 56.3 | 39.6 | 43.8 | 52.6 | 36.9 | 42.3 | 48.2 | 38.1 |
| West Virginia | 64.0 | 81.6 | 50.8 | 65.5 | 82.8 | 52.5 | 65.1 | 84.2 | 50.2 | 62.0 | 80.9 | 47.6 | 59.8 | 76.3 | 47.2 |
| Wisconsin | 47.0 | 57.9 | 39.1 | 45.4 | 58.3 | 35.8 | 46.3 | 56.8 | 38.5 | 47.4 | 56.1 | 40.8 | 43.5 | 53.2 | 36.5 |
| Wyoming | 41.3 | 48.0 | 35.6 | 42.1 | 51.9 | 33.7 | 40.0 | 46.1 | 34.6 | 38.4 | 49.1 | 29.4 | 37.3 | 39.0 | 35.5 |
| U.S. Total | 49.5 | 63.6 | 39.0 | 48.4 | 61.4 | 38.6 | 47.6 | 60.3 | 38.1 | 46.0 | 57.8 | 37.1 | 44.9 | 56.1 | 36.4 |

[^3]Notes:
(1) Rates are per 100,000 persons, age-adjusted to the 2000 U.S. population and coded by ICD-10 revision.

Table 6: Age-Adjusted Mortality Rates ${ }^{1}$ by State and Race, 2003-2012

| (Continued on next page) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | 2003 |  |  | 2004 |  |  | 2005 |  |  | 2006 |  |  | 2007 |  |  |
|  | White | Black | Other ${ }^{2}$ | White | Black | Other ${ }^{2}$ | White | Black | Other ${ }^{2}$ | White | Black | Other ${ }^{2}$ | White | Black | Other ${ }^{2}$ |
| Alabama | 67.3 | 56.5 | ** | 64.7 | 57.5 | ** | 65.0 | 61.3 | ** | 61.5 | 54.7 | 27.6 * | 62.9 | 57.3 | ** |
| Alaska | 56.7 | ** | 55.1 | 55.6 | ** | 63.5 | 47.8 | ** | 64.2 | 45.7 | ** | 50.6 | 50.4 | ** | 75.3 |
| Arizona | 49.5 | 55.4 | 15.4 | 47.3 | 54.2 | 18.1 | 45.2 | 43.3 | 9.1 | 45.2 | 47.0 | 9.6 | 41.7 | 46.7 | 15.1 |
| Arkansas | 67.3 | 67.8 | ** | 69.8 | 64.7 | ** | 70.3 | 74.4 | ** | 65.2 | 66.9 | ** | 63.9 | 61.2 | ** |
| California | 45.4 | 57.6 | 29.8 | 44.1 | 53.9 | 27.8 | 43.1 | 55.9 | 27.1 | 42.0 | 55.9 | 26.6 | 41.2 | 52.7 | 26.6 |
| Colorado | 41.2 | 57.0 | 29.8 | 39.6 | 45.7 | 17.7* | 38.7 | 40.3 | 33.9 | 37.9 | 47.7 | 29.0 | 37.8 | 43.1 | 18.5 |
| Connecticut | 49.8 | 43.4 | ** | 50.5 | 48.3 | 13.6* | 47.6 | 36.9 | 20.0* | 47.1 | 42.9 | 11.4* | 45.7 | 39.1 | 21.5* |
| Delaware | 61.6 | 72.4 | ** | 66.6 | 62.4 | ** | 61.3 | 73.0 | ** | 58.8 | 63.5 | ** | 58.0 | 49.3 | ** |
| D.C. | 36.2 | 60.3 | ** | 36.1 | 59.6 | ** | 28.5 | 64.7 | ** | 33.1 | 57.4 | ** | 39.8 | 55.4 | ** |
| Florida | 55.5 | 46.5 | 18.9 | 54.8 | 47.7 | 22.5 | 53.9 | 43.5 | 24.4 | 52.5 | 44.7 | 21.7 | 50.4 | 42.3 | 20.4 |
| Georgia | 60.9 | 56.1 | 24.3 | 60.7 | 53.9 | 21.1 | 59.4 | 52.7 | 17.2 | 59.4 | 48.1 | 17.6 | 57.2 | 51.0 | 25.2 |
| Hawaii | 44.5 | ** | 34.8 | 38.1 | ** | 37.9 | 52.4 | ** | 35.8 | 40.7 | ** | 38.3 | 42.8 | ** | 34.1 |
| Idaho | 46.3 | ** | ** | 41.3 | ** | ** | 45.5 | ** | 43.2* | 41.9 | ** | 40.0* | 41.9 | ** | ** |
| Illinois | 55.1 | 68.9 | 19.6 | 54.1 | 67.3 | 22.1 | 51.9 | 67.0 | 19.3 | 51.8 | 65.4 | 25.7 | 53.0 | 68.8 | 21.7 |
| Indiana | 64.8 | 79.1 | 25.2* | 60.6 | 68.0 | ** | 63.0 | 67.9 | ** | 61.1 | 73.0 | ** | 60.3 | 71.9 | ** |
| lowa | 52.2 | 71.4 | ** | 53.5 | 86.9 | ** | 53.6 | 76.3 | 65.1* | 48.9 | 74.2 | ** | 51.7 | 77.8 |  |
| Kansas | 54.0 | 51.6 | 41.4* | 53.4 | 70.0 | 57.2 | 56.4 | 74.7 | 47.4 | 53.6 | 75.1 | 52.6 | 50.8 | 46.4 | 64.3 |
| Kentucky | 78.4 | 86.3 | ** | 77.2 | 82.6 | ** | 77.6 | 73.9 | ** | 73.7 | 90.9 | ** | 74.7 | 75.1 | ** |
| Louisiana | 64.8 | 69.9 | 29.3* | 64.7 | 72.8 | 18.5* | 62.2 | 68.5 | 32.7* | 61.2 | 62.6 | 16.7* | 58.3 | 64.1 | 25.0* |
| Maine | 62.5 | ** | ** | 61.7 | ** | ** | 60.1 | ** | ** | 60.6 | ** | ** | 55.8 | ** | ** |
| Maryland | 56.7 | 64.5 | 26.1 | 53.4 | 57.5 | 16.4 | 56.0 | 55.5 | 28.4 | 53.9 | 53.0 | 22.0 | 51.6 | 51.0 | 18.9 |
| Massachusetts | 55.4 | 51.1 | 35.8 | 53.2 | 45.3 | 23.2 | 53.3 | 49.9 | 24.1 | 54.0 | 43.9 | 29.6 | 52.0 | 40.0 | 23.0 |
| Michigan | 55.1 | 68.2 | 42.9 | 55.5 | 67.3 | 35.1 | 55.2 | 60.2 | 38.9 | 53.8 | 67.8 | 30.9 | 54.6 | 61.1 | 30.9 |
| Minnesota | 45.8 | 56.5 | 43.5 | 46.7 | 49.7 | 43.0 | 44.1 | 67.5 | 36.2 | 44.7 | 49.1 | 37.8 | 45.1 | 51.0 | 39.7 |
| Mississippi | 67.4 | 65.9 | ** | 67.6 | 70.3 | ** | 64.3 | 63.8 | 57.9* | 66.0 | 70.8 | ** | 65.7 | 60.0 | ** |
| Missouri | 61.5 | 72.4 | 21.1* | 64.3 | 81.1 | 32.8* | 61.7 | 70.0 | 20.6* | 61.3 | 69.4 | 24.3* | 59.4 | 64.6 | 29.5 |
| Montana | 52.3 | ** | 79.0 | 48.5 | ** | 50.8* | 52.3 | ** | 50.6* | 46.8 | ** | 74.1 | 49.8 | ** | 82.2 |
| Nebraska | 46.1 | 123.3 | ** | 46.8 | 71.1 | ** | 48.1 | 65.9 | ** | 47.1 | 59.3 | ** | 48.3 | 58.7 | ** |
| Nevada | 65.7 | 49.9 | 24.2 | 59.0 | 42.2 | 28.8 | 60.0 | 55.0 | 28.6 | 58.5 | 52.9 | 27.3 | 57.0 | 40.2 | 22.1 |
| New Hampshire | 53.1 | ** | ** | 56.5 | ** | ** | 54.7 | ** | ** | 52.2 | ** | ** | 53.3 | ** | ** |
| New Jersey | 51.7 | 58.0 | 21.2 | 49.5 | 56.0 | 21.2 | 49.4 | 51.6 | 14.3 | 48.4 | 49.5 | 18.1 | 49.1 | 43.5 | 15.9 |
| New Mexico | 41.5 | 55.1* | 9.8* | 37.3 | 37.1* | 14.9 | 38.3 | ** | 10.8* | 36.0 | 38.9* | 14.8 | 39.4 | 46.2* | 14.9 |
| New York | 49.4 | 41.2 | 23.9 | 48.5 | 39.9 | 26.0 | 47.8 | 40.1 | 23.3 | 47.3 | 37.0 | 22.6 | 47.6 | 37.7 | 24.6 |
| North Carolina | 58.5 | 54.8 | 25.6 | 58.9 | 56.5 | 48.0 | 60.3 | 55.9 | 44.3 | 59.5 | 57.8 | 28.2 | 57.1 | 55.4 | 39.3 |
| North Dakota | 42.9 | ** | 70.9* | 46.7 | ** | 114.1 | 40.4 | ** | 108.1 | 46.2 | ** | 93.3* | 38.6 | ** | 94.9* |
| Ohio | 59.9 | 72.2 | 22.6 | 59.2 | 74.1 | 12.4* | 58.4 | 71.6 | 16.3 | 58.7 | 66.4 | 20.0 | 57.6 | 69.0 | 19.3 |
| Oklahoma | 63.2 | 78.3 | 41.3 | 63.9 | 66.0 | 51.6 | 62.5 | 66.5 | 59.5 | 64.2 | 63.9 | 46.8 | 64.6 | 63.9 | 50.3 |
| Oregon | 55.8 | 77.2 | 33.3 | 54.8 | 70.4 | 32.1 | 55.0 | 51.5 | 24.0 | 53.6 | 54.9 | 34.1 | 50.3 | 53.1 | 29.5 |
| Pennsylvania | 52.8 | 66.8 | 20.1 | 52.1 | 72.4 | 24.3 | 53.4 | 67.9 | 23.3 | 51.6 | 66.9 | 16.5 | 50.6 | 66.6 | 20.2 |
| Rhode Island | 54.9 | 48.3* | ** | 56.4 | 48.9* | ** | 50.6 | 61.3 | ** | 50.1 | 52.0* | ** | 54.3 | 50.2 | 51.6* |
| South Carolina | 62.1 | 62.2 | ** | 60.0 | 50.9 | ** | 62.9 | 54.1 | 49.1* | 59.4 | 55.1 | 32.2* | 57.1 | 54.7 | ** |
| South Dakota | 47.9 | ** | 61.5* | 47.7 | ** | 80.6 | 53.2 | ** | 73.1 | 47.6 | ** | 84.5 | 46.2 | ** | 70.8 |
| Tennessee | 67.2 | 71.0 | ** | 67.6 | 72.9 | 35.0* | 69.0 | 78.4 | 23.4* | 67.3 | 73.6 | 27.1* | 66.1 | 66.4 | 25.5* |
| Texas | 52.7 | 69.7 | 22.7 | 51.1 | 69.0 | 22.2 | 49.9 | 67.1 | 21.5 | 49.1 | 58.5 | 20.5 | 47.0 | 59.3 | 25.6 |
| Utah | 24.4 | ** | 23.4* | 26.3 | ** | 28.4* | 24.2 | ** | 29.7* | 23.5 | ** | 30.2* | 22.3 | ** | 29.6* |
| Vermont | 49.1 | ** | ** | 48.6 | ** | ** | 49.8 | ** | ** | 50.1 | ** | ** | 56.7 | ** | ** |
| Virginia | 57.3 | 64.7 | 22.3 | 55.6 | 65.0 | 24.6 | 57.0 | 62.4 | 23.7 | 55.2 | 56.7 | 21.0 | 52.3 | 63.4 | 29.9 |
| Washington | 56.7 | 61.1 | 35.6 | 53.4 | 45.1 | 32.3 | 53.0 | 52.9 | 33.8 | 50.4 | 57.4 | 32.3 | 50.8 | 57.3 | 31.6 |
| West Virginia | 67.0 | 55.1 | ** | 66.4 | 52.8 | ** | 66.5 | 54.0 | ** | 69.6 | 60.5 | ** | 65.4 | 53.8 | ** |
| Wisconsin | 46.5 | 87.3 | 30.0* | 48.5 | 84.2 | 52.6 | 47.3 | 74.4 | 36.6 | 46.9 | 68.9 | 33.8 | 47.2 | 67.0 | 47.3 |
| Wyoming | 49.1 | ** | ** | 40.2 | ** | ** | 47.7 | ** | ** | 43.9 | ** | ** | 45.2 | ** | ** |
| U.S. Total ${ }^{3}$ | 54.5 | 60.6 | 28.3 | 53.6 | 59.5 | 28.4 | 53.2 | 58.1 | 27.7 | 52.1 | 56.3 | 26.9 | 51.2 | 55.0 | 27.2 |

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. CDC Wonder On-line Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.

Notes:
(1) Rates are per 100,000 persons, age-adjusted to the 2000 U.S. population and coded by ICD-10 revision.
(2) Includes races other than white and black.
(3) Due to rounding, U.S. total rates presented in this table may differ from those in Table 2.

* These rates should be interpreted with caution as they represent 20 or fewer deaths.
** Rates have been suppressed due to confidentiality constraints.

Table 6 continued: Age-Adjusted Mortality Rates ${ }^{1}$ by State and Race, 2003-2012

|  | 2008 |  |  | 2009 |  |  | 2010 |  |  | 2011 |  |  | 2012 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | White | Black | Other ${ }^{2}$ | White | Black | Other ${ }^{2}$ | White | Black | Other ${ }^{2}$ | White | Black | Other ${ }^{2}$ | White | Black | Other ${ }^{2}$ |
| Alabama | 61.4 | 49.3 | 23.0* | 63.7 | 54.4 | 18.7* | 61.5 | 54.1 | 34.0* | 58.1 | 54.1 | 35.9 | 55.8 | 48.5 | 15.7* |
| Alaska | 51.2 | ** | 61.3 | 56.4 | ** | 53.5 | 47.8 | ** | 53.8 | 46.5 | ** | 61.2 | 45.8 | ** | 66.5 |
| Arizona | 41.2 | 39.3 | 18.6 | 41.1 | 42.9 | 15.0 | 40.3 | 34.5 | 13.9 | 38.2 | 33.4 | 14.6 | 38.2 | 37.6 | 14.9 |
| Arkansas | 67.6 | 70.7 | ** | 65.0 | 66.6 | ** | 63.5 | 62.6 | ** | 61.7 | 58.6 | 39.7* | 61.8 | 59.3 | ** |
| California | 40.0 | 47.3 | 26.6 | 39.2 | 49.7 | 26.1 | 37.8 | 48.4 | 25.3 | 35.8 | 46.3 | 25.5 | 34.3 | 42.1 | 23.8 |
| Colorado | 37.0 | 29.7 | 23.2 | 36.4 | 44.0 | 24.6 | 35.1 | 53.1 | 21.6 | 32.5 | 43.7 | 27.1 | 31.3 | 39.1 | 27.1 |
| Connecticut | 43.1 | 39.9 | 21.5* | 43.2 | 43.4 | 24.6 | 45.1 | 43.2 | 20.2* | 41.5 | 36.8 | 13.6* | 38.5 | 30.7 | 22.5 |
| Delaware | 59.5 | 48.0 | ** | 51.5 | 57.6 | ** | 60.9 | 48.0 | ** | 54.0 | 45.9 | ** | 52.6 | 51.5 | 47.6* |
| D.C. | 34.9 | 62.5 | ** | 25.1 | 52.1 | ** | 23.2 | 48.9 | ** | 24.1 | 51.1 | ** | 20.9 | 51.9 | ** |
| Florida | 50.4 | 42.7 | 21.5 | 49.5 | 38.1 | 21.2 | 48.9 | 38.2 | 24.8 | 46.7 | 36.6 | 19.8 | 46.2 | 35.1 | 16.2 |
| Georgia | 53.4 | 48.5 | 13.4 | 53.9 | 48.0 | 10.1 | 51.8 | 44.4 | 21.2 | 51.7 | 40.9 | 19.9 | 51.2 | 42.8 | 20.4 |
| Hawaii | 40.2 | ** | 35.3 | 36.8 | ** | 33.6 | 37.8 | ** | 33.0 | 36.3 | ** | 31.1 | 29.3 | ** | 29.4 |
| Idaho | 42.1 | ** | ** | 41.9 | ** | ** | 38.9 | ** | ** | 38.1 | ** | ** | 36.8 | ** | ** |
| Illinois | 51.9 | 62.9 | 21.4 | 50.5 | 57.2 | 19.0 | 49.5 | 61.3 | 22.8 | 48.6 | 57.7 | 18.5 | 48.0 | 57.0 | 18.7 |
| Indiana | 61.9 | 62.2 | 31.3* | 59.3 | 67.6 | ** | 58.7 | 64.3 | 20.3* | 54.3 | 64.8 | 24.4* | 54.6 | 64.9 | 13.0* |
| lowa | 50.0 | 64.7 | 35.7* | 48.7 | 65.5 | ** | 47.6 | 77.2 | ** | 46.7 | 64.9 | 49.7* | 46.7 | 30.0* | ** |
| Kansas | 51.1 | 62.6 | 43.5 | 50.9 | 64.3 | 39.0 | 47.3 | 69.5 | 56.4 | 47.2 | 63.6 | 34.6 | 45.7 | 62.3 | 50.8 |
| Kentucky | 74.0 | 88.5 | ** | 69.2 | 69.6 | 43.2* | 74.4 | 77.1 | ** | 69.4 | 74.1 | ** | 69.7 | 63.6 | 24.1* |
| Louisiana | 60.1 | 61.8 | 17.2* | 56.7 | 64.7 | 35.0 | 56.3 | 65.0 | 23.1* | 55.8 | 59.1 | 34.5 | 54.8 | 58.0 | 34.0 |
| Maine | 55.7 | ** | ** | 53.6 | ** | ** | 56.0 | ** | ** | 52.5 | ** | ** | 53.8 | ** | ** |
| Maryland | 51.3 | 51.3 | 19.4 | 50.6 | 45.8 | 22.7 | 46.7 | 48.7 | 21.9 | 44.3 | 47.1 | 16.5 | 44.7 | 44.4 | 22.8 |
| Massachusetts | 50.3 | 33.9 | 26.0 | 50.8 | 27.1 | 21.4 | 48.9 | 32.1 | 28.1 | 46.2 | 37.0 | 24.2 | 45.7 | 32.6 | 28.6 |
| Michigan | 53.0 | 62.9 | 31.2 | 53.5 | 60.9 | 30.1 | 51.9 | 58.8 | 30.1 | 50.7 | 57.1 | 32.4 | 49.0 | 58.7 | 24.3 |
| Minnesota | 44.6 | 48.5 | 40.5 | 43.1 | 38.4 | 35.8 | 41.9 | 40.3 | 38.4 | 39.8 | 32.5 | 42.2 | 38.9 | 37.7 | 35.9 |
| Mississippi | 65.4 | 63.7 | ** | 64.1 | 59.3 | ** | 61.8 | 62.5 | ** | 61.2 | 54.4 | 44.7* | 57.0 | 61.7 | ** |
| Missouri | 60.2 | 58.0 | 20.9* | 57.6 | 58.1 | 10.2* | 57.2 | 64.0 | 26.4 | 55.3 | 58.1 | 19.6* | 55.7 | 60.1 | 32.6 |
| Montana | 46.6 | ** | 62.2 | 40.1 | ** | 45.3* | 39.6 | ** | 43.7 | 47.0 | ** | 63.3 | 38.5 | ** | 54.9 |
| Nebraska | 44.6 | 64.6 | 41.4* | 44.4 | 54.0 | ** | 45.6 | 68.5 | 46.0* | 41.8 | 64.6 | ** | 42.6 | 67.5 | 32.5* |
| Nevada | 56.2 | 46.2 | 25.9 | 55.4 | 40.5 | 23.6 | 50.0 | 41.6 | 24.4 | 50.9 | 50.5 | 25.0 | 48.2 | 52.9 | 21.4 |
| New Hampshire | 47.6 | ** | ** | 50.9 | ** | ** | 46.5 | ** | ** | 52.3 | ** | ** | 47.3 | ** | ** |
| New Jersey | 45.9 | 49.6 | 18.9 | 44.0 | 46.4 | 15.4 | 44.2 | 41.2 | 18.2 | 42.6 | 42.7 | 20.9 | 41.2 | 39.7 | 16.4 |
| New Mexico | 38.5 | 41.8* | 8.6* | 34.0 | 47.0* | 9.2* | 35.3 | 64.6 | 14.4 | 32.7 | 41.3* | 6.4* | 34.6 | ** | 13.3 |
| New York | 46.7 | 35.1 | 22.4 | 44.9 | 34.6 | 22.3 | 44.6 | 36.9 | 22.7 | 43.5 | 36.3 | 21.1 | 43.6 | 35.1 | 23.1 |
| North Carolina | 56.5 | 50.8 | 28.3 | 54.7 | 50.9 | 37.0 | 54.2 | 54.9 | 37.4 | 52.6 | 53.2 | 34.7 | 49.9 | 49.8 | 41.0 |
| North Dakota | 43.5 | ** | 76.0* | 38.5 | ** | 78.6* | 35.6 | ** | 101.6 | 40.7 | ** | 48.1* | 40.8 | ** | 99.5 |
| Ohio | 55.9 | 66.1 | 29.4 | 56.2 | 65.4 | 27.7 | 54.4 | 64.5 | 30.1 | 54.5 | 59.6 | 21.3 | 54.2 | 60.3 | 22.8 |
| Oklahoma | 60.0 | 55.0 | 62.4 | 60.7 | 56.5 | 52.4 | 58.1 | 54.5 | 59.6 | 59.9 | 67.0 | 52.5 | 55.6 | 60.8 | 51.9 |
| Oregon | 50.0 | 68.9 | 34.6 | 48.5 | 56.4 | 38.5 | 47.8 | 63.0 | 29.9 | 46.7 | 46.5 | 26.7 | 45.7 | 47.7 | 37.1 |
| Pennsylvania | 50.8 | 59.4 | 15.4 | 48.7 | 62.4 | 25.8 | 48.6 | 61.0 | 18.6 | 47.1 | 58.1 | 24.9 | 46.4 | 58.0 | 26.5 |
| Rhode Island | 56.9 | 53.1 | ** | 50.2 | 34.5* | ** | 50.4 | 30.4* | ** | 48.7 | 32.3* | ** | 50.0 | 24.4* | ** |
| South Carolina | 57.9 | 49.6 | 27.9* | 55.8 | 51.7 | 38.0* | 55.0 | 45.6 | 20.1* | 52.9 | 48.9 | 37.7 | 52.6 | 49.8 | 24.0* |
| South Dakota | 47.9 | ** | 66.8* | 40.6 | ** | 54.0 | 44.2 | ** | 67.3 | 46.5 | ** | 73.6 | 42.3 | ** | 87.0 |
| Tennessee | 63.4 | 66.7 | 22.8* | 64.1 | 60.4 | 29.7 | 63.2 | 62.6 | 24.5* | 60.0 | 58.0 | 21.1 | 58.2 | 63.7 | 28.7 |
| Texas | 45.4 | 61.3 | 21.4 | 44.3 | 55.7 | 21.3 | 43.2 | 54.7 | 17.9 | 42.4 | 51.8 | 18.4 | 40.8 | 50.4 | 17.0 |
| Utah | 18.5 | ** | 22.9* | 21.0 | ** | ** | 21.8 | ** | ** | 20.2 | ** | 19.1* | 20.5 | ** | ** |
| Vermont | 52.5 | ** | ** | 50.9 | ** | ** | 53.9 | ** | ** | 49.5 | ** | ** | 42.7 | ** | ** |
| Virginia | 51.4 | 53.4 | 27.5 | 50.4 | 52.7 | 22.8 | 49.2 | 52.7 | 22.7 | 48.4 | 49.0 | 19.8 | 46.2 | 50.7 | 24.0 |
| Washington | 49.1 | 60.2 | 34.3 | 48.7 | 44.2 | 30.0 | 48.1 | 45.0 | 33.5 | 44.9 | 45.4 | 31.0 | 43.5 | 35.3 | 31.4 |
| West Virginia | 62.7 | 68.3 | ** | 65.6 | 68.9 | ** | 65.6 | 58.7 | ** | 62.5 | 57.3 | ** | 60.3 | 50.1 | ** |
| Wisconsin | 45.7 | 72.6 | 46.2 | 44.4 | 71.6 | 36.7 | 45.5 | 70.1 | 42.7 | 46.7 | 65.9 | 39.1 | 42.3 | 70.0 | 46.6 |
| Wyoming | 41.2 | ** | ** | 42.5 | ** | ** | 40.7 | ** | ** | 37.6 | ** | ** | 37.6 | ** | ** |
| U.S. Total ${ }^{3}$ | 50.2 | 52.9 | 27.0 | 49.1 | 51.3 | 25.9 | 48.3 | 51.4 | 26.1 | 46.8 | 49.2 | 25.4 | 45.6 | 48.2 | 24.9 |

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. CDC Wonder On-line Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.

## Notes:

(1) Rates are per 100,000 persons, age-adjusted to the 2000 U.S. population and coded by ICD-10 revision.
(2) Includes races other than white and black.
(3) Due to rounding, U.S. total rates presented in this table may differ from those in Table 2.

* These rates should be interpreted with caution as they represent 20 or fewer deaths.
** Rates have been suppressed due to confidentiality constraints.

Table 7: Prevalence Counts ${ }^{1,2}$ by Race, Sex and Years Since Diagnosis, 2006-2011

| Since | All Races |  |  | White ${ }^{3}$ |  |  | Black ${ }^{3}$ |  |  | Hispanics ${ }^{4}$ |  |  | Asian/Pacific Islander ${ }^{5}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diagnosis | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 402,326 | 183,215 | 219,111 | 342,459 | 153,615 | 188,844 | 40,459 | 19,151 | 21,308 | NA | NA | NA | NA | NA | NA |
| 2010 | 399,431 | 183,410 | 216,021 | 340,206 | 153,595 | 186,611 | 40,171 | 19,508 | 20,663 | NA | NA | NA | NA | NA | NA |
| 2009 | 387,762 | 178,490 | 209,272 | 331,327 | 149,762 | 181,565 | 38,285 | 18,807 | 19,478 | NA | NA | NA | NA | NA | NA |
| 2008 | 373,489 | 173,428 | 200,061 | 320,145 | 145,820 | 174,325 | 35,947 | 17,801 | 18,146 | NA | NA | NA | NA | NA | NA |
| 2007 | 370,617 | 172,739 | 197,878 | 317,797 | 145,246 | 172,551 | 35,685 | 17,728 | 17,957 | NA | NA | NA | NA | NA | NA |
| 2006 | 364,996 | 171,522 | 193,474 | 312,993 | 144,370 | 168,623 | 35,285 | 17,524 | 17,761 | NA | NA | NA | NA | NA | NA |
| 0 to <5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 231,126 | 107,276 | 123,850 | 196,046 | 90,417 | 105,629 | 24,928 | 11,660 | 13,268 | 8,687 | 4,093 | 4,594 | 7,365 | 3,791 | 3,574 |
| 2010 | 231,996 | 108,211 | 123,785 | 197,163 | 91,187 | 105,976 | 25,150 | 12,105 | 13,045 | 8,530 | 4,159 | 4,371 | 7,002 | 3,589 | 3,413 |
| 2009 | 224,508 | 104,519 | 119,989 | 191,522 | 88,141 | 103,381 | 23,966 | 11,723 | 12,243 | 7,956 | 3,986 | 3,970 | 6,612 | 3,473 | 3,139 |
| 2008 | 214,402 | 101,209 | 113,193 | 184,129 | 85,874 | 98,255 | 22,189 | 11,030 | 11,159 | 6,635 | 3,432 | 3,203 | 6,278 | 3,349 | 2,929 |
| 2007 | 213,542 | 100,425 | 113,117 | 183,440 | 85,221 | 98,219 | 22,255 | 11,033 | 11,222 | 6,506 | 3,341 | 3,165 | 5,962 | 3,109 | 2,853 |
| 2006 | 209,050 | 98,835 | 110,215 | 179,953 | 84,397 | 95,556 | 21,763 | 10,526 | 11,237 | 6,284 | 3,314 | 2,970 | 5,727 | 3,052 | 2,675 |
| 5 to <10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 77,607 | 34,010 | 43,597 | 67,584 | 29,237 | 38,347 | 7,416 | 3,506 | 3,910 | 2,559 | 1,156 | 1,403 | 2,011 | 964 | 1,047 |
| 2010 | 75,108 | 33,462 | 41,646 | 65,648 | 28,787 | 36,861 | 6,834 | 3,399 | 3,435 | 2,434 | 1,083 | 1,351 | 1,951 | 942 | 1,009 |
| 2009 | 73,096 | 32,530 | 40,566 | 64,113 | 28,202 | 35,911 | 6,652 | 3,226 | 3,426 | 2,206 | 1,069 | 1,137 | 1,700 | 809 | 891 |
| 2008 | 69,655 | 31,015 | 38,640 | 61,258 | 26,864 | 34,394 | 6,066 | 2,881 | 3,185 | 1,939 | 993 | 946 | 1,603 | 789 | 814 |
| 2007 | 69,437 | 30,787 | 38,650 | 61,075 | 26,665 | 34,410 | 6,098 | 2,890 | 3,208 | 1,898 | 929 | 969 | 1,642 | 854 | 788 |
| 2006 | 69,333 | 31,266 | 38,067 | 60,907 | 26,889 | 34,018 | 6,180 | 3,132 | 3,048 | 1,751 | 906 | 845 | 1,557 | 859 | 698 |
| 10 to <15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 41,694 | 17,823 | 23,871 | 36,611 | 15,323 | 21,288 | 3,703 | 1,755 | 1,948 | 1,275 | 606 | 669 | 1,020 | 548 | 472 |
| 2010 | 41,458 | 17,795 | 23,663 | 36,169 | 15,084 | 21,085 | 3,960 | 1,952 | 2,008 | 1,169 | 578 | 591 | 979 | 536 | 443 |
| 2009 | 40,029 | 17,506 | 22,523 | 35,002 | 14,846 | 20,156 | 3,723 | 1,905 | 1,818 | 1,171 | 578 | 593 | 916 | 521 | 395 |
| 2008 | 38,971 | 17,928 | 21,043 | 34,230 | 15,432 | 18,798 | 3,553 | 1,816 | 1,737 | 1,233 | 584 | 649 | 864 | 492 | 372 |
| 2007 | 38,895 | 17,826 | 21,069 | 34,181 | 15,348 | 18,833 | 3,559 | 1,817 | 1,742 | 1,016 | 508 | 508 | 760 | 428 | 332 |
| 2006 | 38,216 | 17,584 | 20,632 | 33,688 | 15,254 | 18,434 | 3,492 | 1,745 | 1,747 | 965 | 457 | 508 | 660 | 379 | 281 |
| 15 to <20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 22,634 | 10,198 | 12,436 | 19,757 | 8,775 | 10,982 | 2,194 | 1,068 | 1,126 | NA | NA | NA | NA | NA | NA |
| 2010 | 22,038 | 9,916 | 12,122 | 19,441 | 8,691 | 10,750 | 2,047 | 942 | 1,105 | NA | NA | NA | NA | NA | NA |
| 2009 | 21,696 | 10,024 | 11,672 | 19,420 | 8,931 | 10,489 | 1,787 | 853 | 934 | NA | NA | NA | NA | NA | NA |
| 2008 | 20,535 | 9,571 | 10,964 | 18,320 | 8,397 | 9,923 | 1,696 | 920 | 776 | NA | NA | NA | NA | NA | NA |
| 2007 | 20,533 | 9,540 | 10,993 | 18,319 | 8,367 | 9,952 | 1,711 | 927 | 784 | NA | NA | NA | NA | NA | NA |
| 2006 | 20,390 | 9,575 | 10,815 | 18,225 | 8,362 | 9,863 | 1,697 | 974 | 723 | NA | NA | NA | NA | NA | NA |
| 20 to <25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 12,124 | 5,209 | 6,915 | 10,797 | 4,505 | 6,292 | 998 | 548 | 450 | NA | NA | NA | NA | NA | NA |
| 2010 | 11,527 | 5,160 | 6,367 | 10,233 | 4,482 | 5,751 | 971 | 518 | 453 | NA | NA | NA | NA | NA | NA |
| 2009 | 11,093 | 4,915 | 6,178 | 9,843 | 4,264 | 5,579 | 967 | 496 | 471 | NA | NA | NA | NA | NA | NA |
| 2008 | 10,970 | 4,964 | 6,006 | 9,683 | 4,353 | 5,330 | 1,003 | 454 | 549 | NA | NA | NA | NA | NA | NA |
| 2007 | 10,999 | 4,966 | 6,033 | 9,701 | 4,347 | 5,354 | 1,022 | 466 | 556 | NA | NA | NA | NA | NA | NA |
| 2006 | 10,614 | 4,868 | 5,746 | 9,281 | 4,190 | 5,091 | 1,076 | 524 | 552 | NA | NA | NA | NA | NA | NA |
| $\geq 25$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 17,141 | 8,699 | 8,442 | 11,664 | 5,358 | 6,306 | 1,220 | 614 | 606 | NA | NA | NA | NA | NA | NA |
| 2010 | 17,304 | 8,866 | 8,438 | 11,552 | 5,364 | 6,188 | 1,209 | 592 | 617 | NA | NA | NA | NA | NA | NA |
| 2009 | 17,340 | 8,996 | 8,344 | 11,427 | 5,378 | 6,049 | 1,190 | 604 | 586 | NA | NA | NA | NA | NA | NA |
| 2008 | 18,956 | 8,741 | 10,215 | 12,525 | 4,900 | 7,625 | 1,440 | 700 | 740 | NA | NA | NA | NA | NA | NA |
| 2007 | 17,211 | 9,195 | 8,016 | 11,081 | 5,298 | 5,783 | 1,040 | 595 | 445 | NA | NA | NA | NA | NA | NA |
| 2006 | 17,393 | 9,394 | 7,999 | 10,939 | 5,278 | 5,661 | 1,077 | 623 | 454 | NA | NA | NA | NA | NA | NA |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011 .
Notes:
(1) Prevalence proportions were calculated using only the First Malignant Tumor Ever for a person.
(2) Total prevalence counts are based on 2011 cancer prevalence proportions from the SEER registries and 1/1/2011 U.S. population estimates based on the average of 2010 and 2011 population estimates from the U.S. Bureau of the Census, respectively.
(3) Statistics based on SEER 9 areas.
(4) Statistics based on NHIA for Hispanic for SEER 11 areas and Rural Georgia.
(5) Statistics based on SEER 11 areas and Rural Georgia.

NA - Not Available.

Table 8: Lung Cancer Age-Adjusted Incidence Rates ${ }^{1}$ by Site, Race and Sex, 1975-2011

| Year/Site | All Races |  |  | Whites |  |  | Blacks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| 1975 | 52.2 | 89.4 | 24.5 | 51.9 | 89.1 | 24.9 | 64.7 | 114.9 | 24.7 |
| 1976 | 55.4 | 93.8 | 27.3 | 54.6 | 92.7 | 27.3 | 72.3 | 131.0 | 28.6 |
| 1977 | 56.7 | 95.5 | 28.3 | 55.9 | 94.7 | 28.1 | 73.5 | 124.7 | 33.9 |
| 1978 | 57.9 | 96.7 | 29.7 | 57.3 | 95.9 | 29.9 | 74.6 | 130.7 | 31.6 |
| 1979 | 58.6 | 95.7 | 31.6 | 58.0 | 95.1 | 31.6 | 74.3 | 127.4 | 34.0 |
| 1980 | 60.6 | 99.9 | 32.2 | 59.4 | 97.6 | 32.4 | 86.6 | 151.5 | 38.3 |
| 1981 | 62.0 | 99.4 | 35.1 | 61.5 | 98.5 | 35.5 | 82.2 | 143.0 | 37.2 |
| 1982 | 63.3 | 100.7 | 36.8 | 63.1 | 99.7 | 37.7 | 80.4 | 141.1 | 35.7 |
| 1983 | 63.4 | 99.4 | 37.8 | 63.0 | 97.6 | 39.0 | 86.7 | 151.3 | 39.5 |
| 1984 | 65.5 | 102.1 | 39.5 | 64.4 | 100.0 | 39.7 | 93.0 | 159.2 | 44.8 |
| 1985 | 64.7 | 98.8 | 40.2 | 64.0 | 97.0 | 40.8 | 89.7 | 149.6 | 46.1 |
| 1986 | 65.8 | 99.1 | 42.3 | 65.2 | 97.5 | 42.9 | 92.9 | 156.1 | 48.7 |
| 1987 | 68.0 | 101.6 | 44.2 | 68.1 | 100.7 | 45.5 | 84.8 | 143.7 | 43.2 |
| 1988 | 68.1 | 98.9 | 46.3 | 68.3 | 98.0 | 47.8 | 88.2 | 145.1 | 48.0 |
| 1989 | 67.7 | 98.2 | 46.2 | 67.8 | 97.3 | 47.4 | 89.1 | 142.6 | 51.4 |
| 1990 | 68.2 | 97.3 | 47.8 | 68.4 | 96.5 | 48.9 | 86.9 | 137.1 | 52.1 |
| 1991 | 69.4 | 97.6 | 49.6 | 69.1 | 96.3 | 50.6 | 93.3 | 145.0 | 56.9 |
| 1992 | 69.6 | 97.4 | 49.9 | 69.0 | 95.2 | 51.0 | 94.1 | 149.3 | 55.7 |
| 1993 | 67.8 | 94.1 | 49.2 | 67.9 | 92.7 | 50.8 | 86.3 | 135.3 | 52.2 |
| 1994 | 67.3 | 91.1 | 50.6 | 67.0 | 90.3 | 51.7 | 87.2 | 131.3 | 56.2 |
| 1995 | 66.9 | 87.9 | 50.4 | 67.1 | 88.0 | 52.3 | 86.2 | 138.7 | 50.2 |
| 1996 | 66.4 | 87.9 | 51.2 | 66.7 | 86.6 | 52.9 | 84.0 | 127.3 | 54.8 |
| 1997 | 66.6 | 86.3 | 52.5 | 67.2 | 84.9 | 54.9 | 82.0 | 129.3 | 50.4 |
| 1998 | 67.4 | 87.9 | 52.8 | 68.0 | 86.6 | 54.9 | 86.8 | 130.2 | 57.5 |
| 1999 | 65.6 | 84.4 | 52.3 | 66.1 | 83.0 | 54.2 | 83.8 | 121.4 | 58.3 |
| 2000 | 63.7 | 81.4 | 51.0 | 64.3 | 80.2 | 53.0 | 79.3 | 113.3 | 56.4 |
| 2001 | 62.7 | 79.5 | 50.4 | 63.7 | 79.3 | 52.4 | 78.5 | 112.2 | 55.8 |
| 2002 | 62.1 | 77.8 | 50.8 | 62.7 | 77.1 | 52.4 | 80.1 | 110.4 | 59.9 |
| 2003 | 62.7 | 78.5 | 51.3 | 63.6 | 77.1 | 53.9 | 78.5 | 115.5 | 53.5 |
| 2004 | 60.0 | 73.6 | 50.2 | 60.6 | 72.7 | 52.0 | 73.0 | 100.0 | 54.9 |
| 2005 | 61.0 | 73.2 | 52.2 | 61.9 | 73.0 | 54.0 | 72.2 | 94.2 | 57.6 |
| 2006 | 60.0 | 71.3 | 51.6 | 60.5 | 70.1 | 53.5 | 73.0 | 95.7 | 57.2 |
| 2007 | 59.3 | 69.9 | 51.6 | 60.4 | 69.1 | 54.1 | 69.5 | 93.5 | 53.4 |
| 2008 | 58.8 | 70.2 | 50.5 | 59.3 | 68.7 | 52.7 | 73.4 | 101.2 | 54.8 |
| 2009 | 58.8 | 69.3 | 51.3 | 59.2 | 68.3 | 52.8 | 72.5 | 95.1 | 57.5 |
| 2010 | 56.7 | 66.8 | 49.2 | 57.8 | 66.6 | 51.2 | 65.4 | 84.0 | 53.2 |
| 2011 | 55.5 | 64.8 | 48.6 | 56.5 | 64.4 | 50.7 | 64.6 | 85.3 | 51.0 |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.
Notes:
(1) Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population.
-- Rates based on less than 25 cases for the time interval.

Figure 3: Lung Cancer Age-Adjusted Incidence Rates ${ }^{1}$ by Sex, 19752011


Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-20011

Notes:
(1) Rates are per 100,000 persons, age-adjusted to the 2000 U.S. standard population and coded by ICD-10.

Table 9: Mesothelioma Age-Adjusted Incidence Rates ${ }^{1}$ by Site, Race and Sex, 1977-2011

| Year/Site | All Races |  |  | Whites |  |  | Blacks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| 1977 | 0.6 | 1.0 | 0.3 | 0.6 | 1.1 | 0.3 | 0.2 | 0.3 | 0.1 |
| 1978 | 0.7 | 1.4 | 0.2 | 0.8 | 1.5 | 0.2 | 0.3 | 0.3 | 0.3 |
| 1979 | 0.8 | 1.5 | 0.3 | 0.8 | 1.6 | 0.3 | 0.6 | 0.9 | 0.4 |
| 1980 | 1.0 | 1.8 | 0.4 | 1.0 | 2.0 | 0.4 | 0.2 | 0.7 | 0.0 |
| 1981 | 0.8 | 1.4 | 0.3 | 0.8 | 1.5 | 0.3 | 0.3 | 0.8 | 0.0 |
| 1982 | 0.8 | 1.4 | 0.4 | 0.9 | 1.5 | 0.4 | 0.3 | 0.9 | 0.0 |
| 1983 | 1.0 | 1.9 | 0.5 | 1.1 | 2.0 | 0.5 | 0.9 | 1.6 | 0.5 |
| 1984 | 1.1 | 2.0 | 0.4 | 1.2 | 2.2 | 0.4 | 0.3 | 0.8 | 0.0 |
| 1985 | 0.9 | 1.7 | 0.4 | 1.0 | 1.7 | 0.4 | 0.8 | 1.8 | 0.2 |
| 1986 | 0.9 | 1.7 | 0.4 | 1.0 | 1.8 | 0.5 | 0.5 | 0.9 | 0.2 |
| 1987 | 1.0 | 1.7 | 0.4 | 1.0 | 1.8 | 0.5 | 0.7 | 1.1 | 0.4 |
| 1988 | 1.0 | 1.8 | 0.4 | 1.1 | 2.0 | 0.4 | 0.6 | 1.2 | 0.3 |
| 1989 | 1.1 | 2.2 | 0.4 | 1.2 | 2.3 | 0.4 | 0.7 | 1.0 | 0.4 |
| 1990 | 1.1 | 2.2 | 0.5 | 1.3 | 2.3 | 0.5 | 0.7 | 1.4 | 0.3 |
| 1991 | 1.1 | 2.1 | 0.4 | 1.2 | 2.2 | 0.5 | 0.7 | 1.6 | 0.2 |
| 1992 | 1.2 | 2.5 | 0.4 | 1.3 | 2.7 | 0.4 | 0.7 | 1.3 | 0.2 |
| 1993 | 1.1 | 2.0 | 0.4 | 1.1 | 2.2 | 0.4 | 0.7 | 1.2 | 0.3 |
| 1994 | 1.2 | 2.2 | 0.4 | 1.2 | 2.3 | 0.5 | 1.1 | 1.8 | 0.5 |
| 1995 | 1.2 | 2.2 | 0.5 | 1.2 | 2.3 | 0.5 | 0.8 | 1.7 | 0.3 |
| 1996 | 1.1 | 2.1 | 0.5 | 1.3 | 2.4 | 0.5 | 0.4 | 0.8 | 0.2 |
| 1997 | 1.0 | 1.9 | 0.4 | 1.1 | 2.0 | 0.4 | 0.9 | 1.4 | 0.6 |
| 1998 | 1.1 | 2.1 | 0.4 | 1.2 | 2.2 | 0.5 | 0.6 | 1.3 | 0.2 |
| 1999 | 1.1 | 2.2 | 0.4 | 1.2 | 2.3 | 0.4 | 0.7 | 1.3 | 0.2 |
| 2000 | 1.1 | 2.1 | 0.3 | 1.2 | 2.4 | 0.4 | 0.6 | 1.1 | 0.2 |
| 2001 | 1.0 | 1.9 | 0.4 | 1.1 | 2.1 | 0.5 | 0.4 | 0.9 | 0.2 |
| 2002 | 1.0 | 1.9 | 0.4 | 1.1 | 2.1 | 0.4 | -- | -- | -- |
| 2003 | 0.9 | 1.6 | 0.4 | 1.0 | 1.8 | 0.4 | -- | -- | -- |
| 2004 | 1.1 | 2.0 | 0.4 | 1.2 | 2.2 | 0.5 | -- | -- | -- |
| 2005 | 1.0 | 1.9 | 0.4 | 1.2 | 2.1 | 0.5 | -- | -- | -- |
| 2006 | 0.9 | 1.6 | 0.4 | 1.0 | 1.7 | 0.5 | -- | -- | -- |
| 2007 | 1.0 | 1.7 | 0.4 | 1.1 | 1.9 | 0.5 | -- | -- | -- |
| 2008 | 0.9 | 1.7 | 0.3 | 1.0 | 1.9 | 0.4 | -- | -- | -- |
| 2009 | 1.0 | 1.8 | 0.4 | 1.1 | 2.1 | 0.5 | -- | -- | -- |
| 2010 | 1.0 | 1.8 | 0.4 | 1.1 | 2.0 | 0.4 | -- | -- | -- |
| 2011 | 1.0 | 1.7 | 0.4 | 1.1 | 1.9 | 0.5 | -- | -- | -- |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.

## Notes:

(1) Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population.
-- Rates based on less than 25 cases for the time interval.

Table 10: Oral Cavity \& Pharynx Cancer Age-Adjusted Incidence Rates ${ }^{1}$ by Site, Race and Sex, 1975-2011

| Year/Site | All Races |  |  | Whites |  |  | Blacks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| 1975 | 13.2 | 21.2 | 7.1 | 13.3 | 21.7 | 6.9 | 13.4 | 20.2 | 8.2 |
| 1976 | 13.3 | 21.0 | 7.4 | 13.2 | 21.0 | 7.4 | 15.1 | 23.8 | 8.3 |
| 1977 | 12.7 | 20.1 | 7.0 | 12.6 | 19.8 | 7.0 | 14.5 | 23.9 | 6.8 |
| 1978 | 13.4 | 20.9 | 7.7 | 13.2 | 20.8 | 7.6 | 15.8 | 25.8 | 8.1 |
| 1979 | 14.0 | 21.9 | 8.0 | 13.7 | 21.6 | 7.7 | 18.4 | 28.2 | 10.6 |
| 1980 | 13.3 | 20.3 | 7.9 | 13.0 | 20.0 | 7.6 | 16.8 | 25.4 | 9.6 |
| 1981 | 13.6 | 20.8 | 7.9 | 13.4 | 20.5 | 7.9 | 16.7 | 28.2 | 7.5 |
| 1982 | 13.3 | 20.3 | 7.9 | 13.1 | 19.9 | 7.8 | 17.1 | 27.4 | 8.9 |
| 1983 | 13.3 | 21.2 | 7.2 | 13.3 | 21.2 | 7.3 | 16.1 | 26.0 | 8.3 |
| 1984 | 13.5 | 20.8 | 7.9 | 13.0 | 20.1 | 7.6 | 18.9 | 30.0 | 10.1 |
| 1985 | 13.3 | 19.8 | 8.2 | 13.2 | 19.6 | 8.3 | 16.0 | 25.7 | 8.5 |
| 1986 | 12.5 | 19.1 | 7.2 | 12.3 | 18.8 | 7.3 | 16.1 | 28.0 | 7.0 |
| 1987 | 13.2 | 20.5 | 7.5 | 13.1 | 20.1 | 7.7 | 16.8 | 30.0 | 6.9 |
| 1988 | 12.1 | 18.1 | 7.3 | 11.7 | 17.6 | 7.1 | 16.4 | 25.6 | 9.1 |
| 1989 | 12.1 | 18.2 | 7.3 | 11.8 | 17.6 | 7.3 | 15.7 | 27.0 | 7.0 |
| 1990 | 12.6 | 19.4 | 7.3 | 12.4 | 18.8 | 7.4 | 16.1 | 28.0 | 6.9 |
| 1991 | 12.2 | 18.3 | 7.2 | 12.1 | 18.1 | 7.3 | 14.5 | 23.7 | 7.4 |
| 1992 | 12.0 | 18.3 | 6.9 | 11.8 | 18.0 | 6.9 | 14.8 | 25.1 | 6.9 |
| 1993 | 12.4 | 18.7 | 7.3 | 12.2 | 18.4 | 7.2 | 15.5 | 25.0 | 8.0 |
| 1994 | 11.7 | 17.7 | 6.8 | 11.4 | 16.8 | 6.9 | 15.8 | 26.8 | 7.1 |
| 1995 | 11.5 | 16.9 | 7.2 | 11.5 | 16.7 | 7.3 | 13.5 | 22.5 | 6.7 |
| 1996 | 11.7 | 17.7 | 7.0 | 11.4 | 17.1 | 6.9 | 14.8 | 24.2 | 7.5 |
| 1997 | 11.5 | 17.3 | 6.8 | 11.5 | 17.1 | 6.9 | 11.5 | 18.4 | 6.2 |
| 1998 | 11.2 | 16.6 | 6.7 | 11.2 | 16.3 | 6.9 | 12.9 | 22.3 | 6.2 |
| 1999 | 10.5 | 15.5 | 6.4 | 10.4 | 15.3 | 6.3 | 11.5 | 19.5 | 5.6 |
| 2000 | 10.7 | 16.0 | 6.3 | 10.7 | 15.6 | 6.4 | 11.6 | 20.5 | 4.9 |
| 2001 | 10.6 | 15.2 | 6.8 | 10.7 | 15.2 | 6.8 | 11.9 | 18.7 | 6.9 |
| 2002 | 10.8 | 15.9 | 6.5 | 11.0 | 16.0 | 6.6 | 10.9 | 16.7 | 6.4 |
| 2003 | 10.2 | 15.2 | 6.0 | 10.2 | 15.2 | 5.8 | 11.5 | 16.2 | 7.7 |
| 2004 | 10.4 | 15.5 | 6.0 | 10.6 | 15.7 | 6.0 | 9.9 | 15.7 | 5.6 |
| 2005 | 10.4 | 15.1 | 6.3 | 10.4 | 15.4 | 6.1 | 10.6 | 16.1 | 6.7 |
| 2006 | 10.3 | 15.0 | 6.2 | 10.4 | 15.0 | 6.4 | 9.6 | 15.9 | 5.0 |
| 2007 | 10.3 | 15.3 | 6.2 | 10.6 | 15.6 | 6.1 | 9.4 | 14.8 | 5.3 |
| 2008 | 10.8 | 16.0 | 6.3 | 11.1 | 16.4 | 6.4 | 8.8 | 13.7 | 5.0 |
| 2009 | 10.9 | 16.1 | 6.3 | 11.0 | 16.3 | 6.3 | 10.4 | 15.7 | 6.3 |
| 2010 | 10.8 | 16.1 | 6.2 | 11.2 | 16.5 | 6.3 | 8.7 | 13.3 | 5.0 |
| 2011 | 11.2 | 16.6 | 6.5 | 11.8 | 17.4 | 6.7 | 9.0 | 14.1 | 5.1 |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.
Notes:
(1) Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population.
-- Rates based on less than 25 cases for the time interval.

Table 11: Larynx Cancer Age-Adjusted Incidence Rates ${ }^{1}$ by Site, Race and Sex, 1975-2011

| Year/Site | All Races |  |  | Whites |  |  | Blacks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| 1975 | 5.0 | 9.5 | 1.5 | 5.0 | 9.4 | 1.5 | 7.0 | 13.2 | -- |
| 1976 | 5.2 | 10.0 | 1.4 | 5.2 | 9.9 | 1.4 | 7.3 | 14.6 | -- |
| 1977 | 5.0 | 9.7 | 1.4 | 5.0 | 9.7 | 1.3 | 7.5 | 13.9 | -- |
| 1978 | 5.3 | 9.8 | 1.8 | 5.3 | 9.8 | 1.9 | 6.9 | 13.2 | -- |
| 1979 | 5.4 | 10.1 | 1.7 | 5.4 | 10.2 | 1.7 | 7.5 | 13.2 | -- |
| 1980 | 5.2 | 10.0 | 1.6 | 5.2 | 9.9 | 1.5 | 7.3 | 14.3 | -- |
| 1981 | 5.4 | 9.8 | 1.9 | 5.3 | 9.6 | 2.0 | 8.1 | 16.3 | -- |
| 1982 | 5.3 | 9.7 | 1.8 | 5.3 | 9.8 | 1.8 | 7.9 | 14.4 | -- |
| 1983 | 5.3 | 9.9 | 1.7 | 5.4 | 10.1 | 1.7 | 6.8 | 12.2 | -- |
| 1984 | 5.1 | 9.6 | 1.6 | 5.0 | 9.6 | 1.5 | 8.5 | 14.9 | 3.4 |
| 1985 | 5.4 | 9.9 | 1.9 | 5.4 | 10.0 | 1.9 | 8.4 | 15.5 | 3.2 |
| 1986 | 5.0 | 9.4 | 1.6 | 4.9 | 9.2 | 1.7 | 7.8 | 15.5 | -- |
| 1987 | 5.2 | 9.4 | 1.9 | 5.1 | 9.4 | 1.9 | 8.2 | 15.0 | 3.1 |
| 1988 | 5.2 | 9.6 | 1.9 | 5.2 | 9.6 | 1.8 | 8.2 | 14.8 | 3.3 |
| 1989 | 5.0 | 8.9 | 2.0 | 5.0 | 8.9 | 1.9 | 7.9 | 14.3 | 3.3 |
| 1990 | 5.1 | 9.2 | 1.9 | 5.0 | 9.0 | 1.9 | 9.5 | 17.8 | 3.6 |
| 1991 | 4.7 | 8.5 | 1.8 | 4.8 | 8.5 | 1.9 | 6.7 | 12.6 | -- |
| 1992 | 5.0 | 9.1 | 1.8 | 4.9 | 8.9 | 1.7 | 8.7 | 15.8 | 3.4 |
| 1993 | 4.4 | 8.1 | 1.5 | 4.4 | 8.0 | 1.5 | 6.9 | 14.1 | -- |
| 1994 | 4.7 | 8.3 | 1.8 | 4.5 | 8.1 | 1.7 | 8.9 | 15.8 | 3.8 |
| 1995 | 4.4 | 7.9 | 1.6 | 4.4 | 7.8 | 1.6 | 6.7 | 13.0 | -- |
| 1996 | 4.3 | 7.5 | 1.7 | 4.3 | 7.5 | 1.6 | 6.4 | 11.4 | 2.8 |
| 1997 | 4.2 | 7.5 | 1.6 | 4.1 | 7.3 | 1.6 | 7.1 | 13.2 | 2.7 |
| 1998 | 3.8 | 6.7 | 1.6 | 3.7 | 6.5 | 1.6 | 6.5 | 11.8 | 2.8 |
| 1999 | 4.1 | 7.0 | 1.8 | 4.1 | 6.9 | 1.8 | 7.2 | 12.3 | 3.6 |
| 2000 | 4.0 | 7.2 | 1.4 | 4.0 | 7.1 | 1.5 | 6.1 | 11.3 | 2.3 |
| 2001 | 3.6 | 6.5 | 1.3 | 3.6 | 6.3 | 1.3 | 6.1 | 12.0 | 1.8 |
| 2002 | 3.5 | 6.2 | 1.3 | 3.4 | 6.0 | 1.3 | 6.2 | 11.1 | 2.6 |
| 2003 | 3.3 | 5.9 | 1.2 | 3.3 | 5.7 | 1.3 | 4.9 | 9.2 | 1.8 |
| 2004 | 3.4 | 6.0 | 1.3 | 3.4 | 5.9 | 1.3 | 5.8 | 10.9 | 2.3 |
| 2005 | 3.4 | 6.1 | 1.3 | 3.4 | 6.1 | 1.3 | 5.5 | 10.4 | 1.9 |
| 2006 | 3.2 | 5.7 | 1.2 | 3.3 | 5.7 | 1.3 | 5.2 | 10.2 | 1.5 |
| 2007 | 3.1 | 5.5 | 1.2 | 3.1 | 5.4 | 1.2 | 5.4 | 9.9 | 2.3 |
| 2008 | 3.1 | 5.4 | 1.1 | 3.1 | 5.5 | 1.1 | 4.5 | 8.3 | 1.9 |
| 2009 | 3.1 | 5.6 | 1.0 | 3.1 | 5.6 | 1.1 | 4.2 | 8.5 | 1.2 |
| 2010 | 3.2 | 5.7 | 1.1 | 3.2 | 5.5 | 1.2 | 5.0 | 9.4 | 1.8 |
| 2011 | 2.9 | 5.2 | 1.1 | 3.0 | 5.2 | 1.1 | 4.1 | 8.3 | 1.3 |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.
Notes:
(1) Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population.
-- Rates based on less than 25 cases for the time interval.

Table 12: Age-Adjusted Incidence Rates ${ }^{1}$ by Race/Ethnicity and Sex, 2007-2011

| Sex | Total | White | Black | Hispanic $^{2}$ | Asian/Pacific <br> Islander | American Indian/ <br> Alaska Native |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 72.2 | 72.4 | 93.0 | 39.6 | 49.4 | 49.5 |
| Females | 51.1 | 53.8 | 51.2 | 25.5 | 28.1 | 34.7 |
| Total | 60.1 | 61.7 | 68.0 | 31.3 | 37.0 | 40.9 |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.
Notes:
(1) Rates are per 100,000 age-adjusted to the 2000 U.S. standard population. Incidence rates obtained from 18 SEER areas.
(2) Hispanics are not mutually exclusive from whites, blacks, Asian/Pacific Islanders and American Indians/Alaska Natives.

Table 13: Incidence Counts and Age-Adjusted Rates by State and Sex, 2011

| State | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Incidence Counts | Age-Adjusted Incidence Rate ${ }^{1}$ | Incidence Counts | Age-Adjusted Incidence Rate ${ }^{1}$ |
| Alabama | 2,264 | 91.7 | 1,703 | 55.5 |
| Alaska | 185 | 68.0 | 157 | 59.3 |
| Arizona | 1,913 | 57.0 | 1,821 | 46.6 |
| Arkansas | 1,548 | 98.7 | 1,066 | 56.8 |
| California | 8,371 | 51.4 | 8,025 | 39.6 |
| Colorado | 1,099 | 49.7 | 1,103 | 41.4 |
| Connecticut | 1,335 | 72.7 | 1,271 | 54.7 |
| Delaware | 438 | 91.0 | 358 | 61.6 |
| District of Columbia | 176 | 69.9 | 153 | 45.6 |
| Florida | 8,440 | 71.3 | 7,425 | 52.6 |
| Georgia | 3,444 | 84.9 | 2,702 | 52.0 |
| Hawaii | 425 | 57.1 | 342 | 39.2 |
| Idaho | 428 | 56.0 | 408 | 47.2 |
| Illinois | 4,805 | 80.4 | 4,336 | 56.9 |
| Indiana | 2,816 | 89.0 | 2,364 | 60.4 |
| lowa | 1,309 | 78.8 | 1,017 | 50.5 |
| Kansas | 1,043 | 73.2 | 899 | 52.7 |
| Kentucky | 2,488 | 112.2 | 2,145 | 79.3 |
| Louisiana | 1947 | 91.1 | 1441 | 53.6 |
| Maine | 632 | 79.8 | 586 | 61.1 |
| Maryland | 1,739 | 63.9 | 1,775 | 51.4 |
| Massachusetts | 2,446 | 74.1 | 2,535 | 60.1 |
| Michigan* | 3,915 | 75.9 | 3,737 | 59.2 |
| Minnesota | 1,711 | 64.8 | 1,555 | 49.3 |
| Mississippi | 1,409 | 98.7 | 983 | 54.5 |
| Missouri | 2,692 | 86.8 | 2,311 | 60.9 |
| Montana | 396 | 70.3 | 334 | 50.9 |
| Nebraska | 615 | 67.6 | 521 | 46.7 |
| Nevada | -- | -- | -- | -- |
| New Hampshire | 502 | 71.3 | 532 | 64.1 |
| New Jersey | 2,849 | 66.3 | 2,998 | 53.3 |
| New Mexico | 506 | 47.8 | 436 | 35.0 |
| New York | 6,815 | 71.8 | 6,766 | 54.5 |
| North Carolina | 4,125 | 88.7 | 3,180 | 53.5 |
| North Dakota | 264 | 73.4 | 202 | 47.8 |
| Ohio | 5,051 | 83.9 | 4,262 | 57.3 |
| Oklahoma | 1,616 | 85.0 | 1,354 | 59.2 |
| Oregon | 1,343 | 65.8 | 1,389 | 57.3 |
| Pennsylvania | 5,637 | 80.2 | 4,942 | 56.0 |
| Rhode Island | 401 | 74.9 | 388 | 55.6 |
| South Carolina | 2,024 | 84.8 | 1,509 | 50.7 |
| South Dakota | 266 | 60.9 | 261 | 51.6 |
| Tennessee | 3,092 | 94.6 | 2,398 | 59.5 |
| Texas | 7,100 | 68.6 | 5,421 | 42.9 |
| Utah | 354 | 34.5 | 291 | 25.0 |
| Vermont | 245 | 67.6 | 267 | 65.2 |
| Virginia | 2,681 | 71.0 | 2,375 | 50.5 |
| Washington | 2,109 | 65.2 | 2,075 | 53.4 |
| West Virginia | 1,130 | 101.4 | 811 | 62.4 |
| Wisconsin | 2,035 | 68.1 | 1,935 | 54.8 |
| Wyoming | 148 | 52.0 | 136 | 43.8 |
| United States ${ }^{2}$ | 111,176 | 73.0 | 97,842 | 52.1 |

Source: National Cancer Institute. State Cancer Profiles web system, statecancerprofiles.cancer.gov, accessed October 6, 2014.
Notes:
(1) Rates are per 100,000 population. Age-adjusted incidence rates are adjusted to the 2000 U.S. standard population.
(2) Total may not equal sum of all states due to reliance on data submissions from differing dates.
-- Nevada data not available.

* Data do not include cases diagnosed in other states.

Table 14: Number of First-Listed Hospital Discharges ${ }^{1}$ and Rate per 10,000 Population by Age, 1979-2010

| Year | <15 |  | 15-44 |  | 45-64 |  | 65+ |  | Total ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| 1979 | --- | --- | 12,000 | 1.2 | 130,000 | 29.3 | 131,000 | 52.1 | 274,000 | 12.7 |
| 1980 | --- | --- | 12,000 | 1.2 | 123,000 | 27.8 | 142,000 | 55.3 | 277,000 | 12.4 |
| 1981 | --- | --- | 11,000 |  | 134,000 | 30.2 | 145,000 | 55.2 | 293,000 | 12.9 |
| 1982 | --- | --- | 15,000 | 1.4 | 147,000 | 33.2 | 155,000 | 58.0 | 319,000 | 13.9 |
| 1983 | --- | --- | 12,000 | 1.1 | 151,000 | 34.0 | 176,000 | 64.1 | 339,000 | 14.6 |
| 1984 | --- | --- | 13,000 | 1.2 | 155,000 | 34.1 | 172,000 | 61.2 | 340,000 | 14.5 |
| 1985 | --- | --- | 13,000 | 1.2 | 132,000 | 29.4 | 169,000 | 59.4 | 315,000 | 13.3 |
| 1986 | --- | --- | 15,000 | 1.3 | 120,000 | 26.7 | 155,000 | 53.3 | 290,000 | 12.1 |
| 1987 | --- | --- | 12,000 | 1.1 | 129,000 | 28.5 | 164,000 | 54.9 | 305,000 | 12.6 |
| $1988{ }^{3}$ | --- | --- | 8,000* | $0.7{ }^{*}$ | 102,000 | 22.2 | 125,000 | 41.2 | 236,000 | 9.7 |
| 1989 | --- | --- | 11,000 | 1.0 | 101,000 | 21.8 | 127,000 | 40.9 | 239,000 | 9.7 |
| 1990 | --- | --- | 12,000 | 1.0 | 101,000 | 21.4 | 119,000 | 37.7 | 231,000 | 9.3 |
| 1991 | --- | --- | 10,000 | 0.8 | 101,000 | 21.6 | 125,000 | 39.3 | 236,000 | 9.4 |
| 1992 | --- | --- | 7,000* | 0.6* | 86,000 | 17.8 | 122,000 | 37.8 | 215,000 | 8.5 |
| 1993 | --- | --- | 7,000* | 0.6 * | 75,000 | 15.1 | 111,000 | 33.9 | 194,000 | 7.6 |
| 1994 | --- | --- | 9,000* | $0.7{ }^{*}$ | 73,000 | 14.3 | 126,000 | 37.9 | 199,000 | 7.6 |
| 1995 | --- | --- | 8,000* | $0.7{ }^{*}$ | 75,000 | 14.4 | 110,000 | 32.8 | 197,000 | 7.5 |
| 1996 | --- | --- | 10,000 | 0.8 | 72,000 | 13.4 | 122,000 | 36.0 | 210,000 | 8.0 |
| 1997 | --- | --- | --- | --- | 60,000 | 10.9 | 123,000 | 36.4 | 192,000 | 7.1 |
| 1998 | --- | --- | 9,000* | 0.7* | 55,000 | 9.6 | 99,000 | 29.0 | 165,000 | 6.0 |
| 1999 | --- | --- | 5,000* | 0.4* | 54,000 | 9.2 | 104,000 | 30.5 | 164,000 | 6.0 |
| 2000 | --- | --- | 8,000* | 0.6* | 43,000 | 7.0 | 87,000 | 25.1 | 139,000 | 5.0 |
| 2001 | --- | --- | 6,000* | 0.5* | 56,000 | 8.7 | 90,000 | 25.6 | 153,000 | 5.4 |
| 2002 | --- | --- | 5,000* | 0.6 * | 55,000 | 8.3 | 100,000 | 28.0 | 160,000 | 5.6 |
| 2003 | --- | --- | 7,000* | 0.5* | 57,000 | 8.3 | 104,000 | 29.0 | 168,000 | 5.8 |
| 2004 | --- | --- | 12,000 | 1.0 | 54,000 | 7.6 | 97,000 | 26.8 | 164,000 | 5.6 |
| 2005 | --- | --- | 7,000* | 0.6* | 54,000 | 7.4 | 93,000 | 25.2 | 154,000 | 5.2 |
| 2006 | --- | --- | 5,000* | 0.4* | 51,000 | 6.8 | 109,000 | 29.3 | 166,000 | 5.6 |
| 2007 | --- | --- | --- | --- | 64,000 | 8.4 | 107,000 | 28.2 | 179,000 | 6.0 |
| 2008 | --- | --- | 10,000* | 0.8* | 62,000 | 8.0 | 104,000 | 26.6 | 176,000 | 5.8 |
| 2009 | --- | --- | --- | --- | 69,000 | 8.7 | 117,000 | 29.6 | 194,000 | 6.4 |
| 2010 | --- | --- | --- | --- | 57,000 | 7.1 | 116,000 | 17.5 | 177,000 | 5.8 |

Source: National Center for Health Statistics. National Hospital Discharge Survey, 1979-2010.
Notes:
(1) Hospital discharge estimates are coded by ICD-9 revisions (ICD-9 Code 162, 176.4, 197.0, 197.3).
(2) Due to rounding and the exclusion of numbers that do not meet standards of reliability, numbers across may not sum to the total number of hospital discharges.
(3) Date from 1988-2010 may not be comparable to earlier years due to the redesign of the survey in 1988.
--- Figure does not meet standards of reliability or precision.

* Estimates of 5,000-10,000 and corresponding rates should be used with caution.

Table 15: Number of First-Listed Hospital Discharges ${ }^{1}$ and Rate per 10,000 Population by Race, 1988-2010

| Year | Number of Discharges |  |  |  | Rate per 10,000 population |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | White | Black | All Other | Total | White | Black | All Other |
| 1988 | 236,000 | 193,000 | N/A | N/A | 9.7 | 9.3 | N/A | N/A |
| 1989 | 239,000 | 194,000 | N/A | N/A | 9.7 | 9.3 | N/A | N/A |
| 1990 | 231,000 | 183,000 | 19,000 | --- | 9.3 | 8.7 | 6.3 | --- |
| 1991 | 236,000 | 181,000 | 21,000 | 7,000* | 9.4 | 8.6 | 6.9 | 7.1* |
| 1992 | 215,000 | 161,000 | 16,000 | 5,000* | 8.5 | 7.6 | 5.2 | 4.7* |
| 1993 | 194,000 | 149,000 | 16,000 | --- | 7.6 | 7.0 | 5.1 | --- |
| 1994 | 199,000 | 151,000 | 21,000 | 7,000* | 7.6 | 7.0 | 6.4 | 6.0* |
| 1995 | 197,000 | 140,000 | 21,000 | --- | 7.5 | 6.5 | 6.4 | --- |
| 1996 | 210,000 | 156,000 | 17,000 | 5,000* | 8.0 | 7.1 | 5.3 | 4.4* |
| 1997 | 192,000 | 142,000 | 20,000 | --- | 7.1 | 6.4 | 5.6 | --- |
| 1998 | 165,000 | 114,000 | 14,000 | 7,000* | 6.0 | 5.1 | 3.8 | 5.1* |
| 1999 | 164,000 | 115,000 | 13,000 | 8,000* | 6.0 | 5.1 | 3.5 | 6.3 * |
| 2000 | 139,000 | 85,000 | 12,000 | --- | 5.0 | 3.7 | 3.5 | --- |
| 2001 | 153,000 | 95,000 | 14,000 | --- | 5.4 | 4.1 | 4.0 | --- |
| 2002 | 160,000 | 102,000 | 12,000 | --- | 5.6 | 4.4 | 3.3 | --- |
| 2003 | 168,000 | 113,000 | 16,000 | --- | 5.8 | 4.9 | 4.3 | --- |
| 2004 | 164,000 | 102,000 | 17,000 | 6,000* | 5.6 | 4.3 | 4.5 | 3.2* |
| 2005 | 154,000 | 98,000 | 15,000 | 6,000* | 5.2 | 4.1 | 4.0 | 2.8* |
| 2006 | 166,000 | 104,000 | 15,000 | --- | 5.6 | 4.3 | 4.1 | --- |
| 2007 | 179,000 | 118,000 | 22,000 | --- | 6.0 | 4.9 | 5.8 | --- |
| 2008 | 176,000 | 101,000 | 21,000 | 10,385 | 5.8 | 4.2 | 5.5 | 4.7* |
| 2009 | 194,000 | 136,000 | 25,000 | 9,843* | 6.4 | 5.6 | 6.4 | 4.3* |
| 2010 | 177,000 | 135,000 | 21,000 | 8,469* | 5.8 | 5.5 | 5.2 | 3.6* |

Source: National Center for Health Statistics. National Hospital Discharge Survey, 1979-2010.
Notes:
(1) Hospital discharge estimates are coded by ICD-9 revisions (ICD-9 Code 162, 176.4, 197.0, 197.3).
--- Figure does not meet standards of reliability or precision.

* Estimates below 10,000 and corresponding rates should be used with caution.

N/A - Not Available.

Figure 4: Stage Distribution ${ }^{1}$ (\%) at Time of Diagnosis by Type, 2004-2010 ${ }^{2}$


Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.
Notes:
(1) Stages include localized (within lungs), regional (spread to lymph nodes), and distant (spread to other organs).
(2) Rates are from the SEER 18 areas, based on follow-up of patients into 2011.

Table 16: Relative Five-Year Survival Rates by Race and Site, Cases Diagnosed in 1960-63, 1970-2010

|  | Lung \& Bronchus | Colon | Rectum | Female Breast | Esophagus | Prostate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  |  |  |  |  |  |
| 1960-1963 ${ }^{1}$ | -- | -- | -- | -- | -- | -- |
| 1970-1973 ${ }^{1}$ | -- | -- | -- | -- | -- | -- |
| 1975-1977 | 12.2 | 50.6 | 48.1 | 74.8 | 5.0 | 67.8 |
| 1978-1980 | 12.8 | 52.3 | 48.9 | 74.4 | 5.0 | 70.1 |
| 1981-1983 | 13.1 | 55.2 | 51.4 | 76.1 | 6.6 | 72.0 |
| 1984-1986 | 12.8 | 58.3 | 56.2 | 78.9 | 9.5 | 75.2 |
| 1987-1989 | 13.0 | 60.2 | 58.1 | 84.0 | 9.4 | 82.8 |
| 1990-1992 | 13.6 | 62.0 | 59.2 | 85.2 | 12.1 | 92.9 |
| 1993-1995 | 14.3 | 59.8 | 60.1 | 86.4 | 12.1 | 95.2 |
| 1996-1998 | 14.6 | 62.2 | 63.3 | 88.2 | 13.4 | 97.4 |
| 1999-2003 | 15.5 | 64.9 | 67.1 | 89.9 | 17.7 | 99.6 |
| 2004-2010 | 17.8* | 65.4* | 67.8* | 90.5* | 20.0* | 99.6* |
| White |  |  |  |  |  |  |
| 1960-1963 ${ }^{1}$ | 8 | 43 | 38 | 63 | 4 | 50 |
| 1970-1973 ${ }^{1}$ | 10 | 49 | 45 | 68 | 4 | 63 |
| 1975-1977 | 12.2 | 50.9 | 48.2 | 75.6 | 5.5 | 68.5 |
| 1978-1980 | 12.9 | 52.4 | 49.7 | 75.1 | 5.3 | 71.2 |
| 1981-1983 | 13.3 | 55.4 | 52.0 | 77.1 | 7.3 | 73.1 |
| 1984-1986 | 13.0 | 59.0 | 57.0 | 80.0 | 10.2 | 76.4 |
| 1987-1989 | 13.3 | 60.6 | 58.7 | 85.1 | 10.5 | 84.4 |
| 1990-1992 | 14.0 | 62.8 | 59.9 | 86.5 | 12.9 | 94.1 |
| 1993-1995 | 14.5 | 60.5 | 60.5 | 87.7 | 13.4 | 95.9 |
| 1996-1998 | 14.8 | 62.9 | 63.6 | 89.4 | 14.2 | 97.9 |
| 1999-2003 | 15.8 | 66.3 | 67.8 | 91.2 | 18.7 | 99.8 |
| 2004-2010 | 18.2* | 66.5* | 68.0* | 91.8* | 21.0* | 99.8* |
| Black |  |  |  |  |  |  |
| 1960-1963 ${ }^{1}$ | 5 | 34 | 27 | 46 | 1 | 35 |
| 1970-1973 ${ }^{1}$ | 7 | 37 | 30 | 51 | 4 | 55 |
| 1975-1977 | 11.3 | 44.7 | 44.4 | 62.0 | 3.5 | 60.7 |
| 1978-1980 | 11.7 | 48.9 | 34.6 | 63.3 | 4.3 | 62.1 |
| 1981-1983 | 11.3 | 48.5 | 39.9 | 63.3 | 4.3 | 62.7 |
| 1984-1986 | 11.1 | 49.1 | 45.8 | 65.0 | 8.7 | 65.6 |
| 1987-1989 | 10.9 | 52.3 | 52.3 | 71.0 | 6.6 | 71.1 |
| 1990-1992 | 10.4 | 53.2 | 51.1 | 71.4 | 9.1 | 84.3 |
| 1993-1995 | 12.9 | 51.1 | 53.9 | 72.6 | 7.6 | 91.6 |
| 1996-1998 | 12.3 | 53.5 | 54.8 | 76.1 | 10.2 | 94.8 |
| 1999-2003 | 12.7 | 54.1 | 60.2 | 78.1 | 12.0 | 97.5 |
| 2004-2010 | 14.9* | 55.8* | 63.2* | 80.0* | 13.2* | 97.9* |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.

## Notes:

(1) Rates are based on data from a series of hospital registries and one population based registry. Later rates are from the SEER 9 areas.
-- Statistic could not be calculated.

* The difference in rates between 1975-1977 and 2004-2010 is statistically significant ( $\mathrm{p}<.05$ ).

Table 17: Five-Year Survival Rates ${ }^{1}$ (\%) by Type, Race and Sex, 1975-2010

| Type/Year of Diagnosis | All Races |  |  | Whites |  |  | Blacks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| Lung \& Bronchus |  |  |  |  |  |  |  |  |  |
| 1975-1977 | 12.2 | 11.1 | 15.3 | 12.2 | 11.1 | 15.4 | 11.3 | 10.6 | 13.8 |
| 1978-1980 | 12.8 | 11.4 | 16.3 | 12.9 | 11.5 | 16.2 | 11.7 | 9.7 | 17.8 |
| 1981-1983 | 13.1 | 11.5 | 16.4 | 13.3 | 11.7 | 16.5 | 11.3 | 10.1 | 14.9 |
| 1984-1986 | 12.8 | 11.2 | 16.0 | 13.0 | 11.3 | 16.3 | 11.1 | 10.3 | 12.8 |
| 1987-1989 | 13.0 | 11.9 | 14.9 | 13.3 | 12.0 | 15.3 | 10.9 | 10.8 | 11.1 |
| 1990-1992 | 13.6 | 12.1 | 15.9 | 14.0 | 12.4 | 16.2 | 10.4 | 9.3 | 12.5 |
| 1993-1995 | 14.3 | 12.5 | 16.9 | 14.5 | 12.6 | 17.1 | 12.9 | 11.3 | 15.7 |
| 1996-1998 | 14.6 | 12.9 | 16.8 | 14.8 | 13.0 | 17.0 | 12.3 | 10.7 | 14.8 |
| 1999-2003 | 15.5 | 13.4 | 18.0 | 15.8 | 13.7 | 18.3 | 12.7 | 11.3 | 14.5 |
| 2004-2010 | 17.8* | 15.5* | 20.4* | 18.2* | 15.8* | 20.7* | 14.9* | 13.0* | 17.1* |
| Small Cell Lung \& Bronchus |  |  |  |  |  |  |  |  |  |
| 1975-1977 | 3.6 | 3.1 | 4.8 | 3.7 | 3.1 | 4.9 | 3.7 | 3.8 | 3.6 |
| 1978-1980 | 4.2 | 3.2 | 6.4 | 4.3 | 3.3 | 6.4 | 3.1 | 2.4 | 5.0 |
| 1981-1983 | 4.5 | 3.5 | 6.2 | 4.6 | 3.6 | 6.1 | 5.0 | 3.7 | 8.2 |
| 1984-1986 | 4.5 | 3.5 | 6.2 | 4.7 | 3.6 | 6.4 | 3.5 | 2.2 | 5.6 |
| 1987-1989 | 5.1 | 3.9 | 6.6 | 5.1 | 3.9 | 6.8 | 4.0 | 3.3 | 5.1 |
| 1990-1992 | 5.4 | 4.5 | 6.4 | 5.5 | 4.5 | 6.6 | 3.9 | 3.9 | 3.9 |
| 1993-1995 | 6.4 | 5.1 | 7.9 | 6.3 | 5.1 | 7.7 | 6.7 | 4.0 | 10.4 |
| 1996-1998 ${ }^{2}$ | 5.9 | 5.2 | 6.5 | 6.1 | 5.4 | 6.7 | 3.6 | 2.7 | 4.5 |
| 1999-2003 | 6.1 | 4.8 | 7.4 | 6.0 | 4.5 | 7.6 | 5.2 | 5.4 | 4.9 |
| 2004-2010 | 6.6* | 4.9* | 8.3* | 6.5* | 4.8* | 8.2* | 6.9* | 5.7* | 8.0 |
| Non-Small Cell Lung \& Bronchus |  |  |  |  |  |  |  |  |  |
| 1975-1977 | 16.4 | 14.8 | 21.0 | 16.7 | 15.0 | 21.4 | 13.6 | 12.5 | 17.7 |
| 1978-1980 | 16.7 | 14.8 | 21.4 | 17.0 | 15.2 | 21.5 | 14.2 | 11.6 | 22.8 |
| 1981-1983 | 17.1 | 15.0 | 21.8 | 17.5 | 15.4 | 22.1 | 13.9 | 12.2 | 19.2 |
| 1984-1986 | 16.6 | 14.4 | 21.0 | 17.0 | 14.7 | 21.5 | 13.2 | 11.9 | 16.4 |
| 1987-1989 | 16.9 | 15.2 | 19.8 | 17.4 | 15.5 | 20.6 | 13.2 | 12.9 | 14.0 |
| 1990-1992 | 17.6 | 15.5 | 21.1 | 18.3 | 16.1 | 21.7 | 12.8 | 11.1 | 16.1 |
| 1993-1995 | 18.7 | 16.1 | 22.5 | 19.3 | 16.5 | 23.2 | 15.1 | 13.3 | 18.4 |
| 1996-1998 ${ }^{2}$ | 19.4 | 16.7 | 22.9 | 19.9 | 17.1 | 23.5 | 15.2 | 12.8 | 19.3 |
| 1999-2003 | 19.7 | 16.8 | 23.4 | 20.5 | 17.5 | 24.1 | 14.6 | 12.7 | 17.4 |
| 2004-2010 | 21.7* | 18.7* | 25.1* | 22.6* | 19.5* | 26.0* | 16.7* | 14.2* | 19.6 |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.
Notes:
(1) Rates are from the SEER 9 areas, based on follow-up of patients into 2011.
(2) Rates are from the SEER 18 areas, based on follow-up of patients into 2011.

* The difference in rates between 1975-1977 and 2004-2010 is statistically significant (p<.05).

Figure 5: Five-Year Survival Rates (\%) by Type and Stage, 2004-2010


Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.

## Notes:

(1) Rates are per 100,000 persons, age-adjusted to the 2000 U.S. standard population and coded by ICD-10.
(2) Rates are from the SEER 18 areas, based on follow-up of patients into 2011.

Table 18: Lifetime Risk (\%) of Being Diagnosed With or Dying From Lung Cancer, by Race and Sex, 2009-2011

| Type of Risk | All Races |  | Whites |  | Blacks |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females | Males | Females |
| Lifetime Risk of Diagnosis | 7.43 | 6.17 | 7.46 | 6.46 | 7.78 | 5.39 |
| Lifetime Risk of Dying | 6.47 | 4.95 | 6.53 | 5.14 | 6.49 | 4.15 |

Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.


[^0]:    ${ }^{\text {I }}$ Unless otherwise noted, terms such as higher or less are not intended to indicate statistical significance.
    ${ }^{\text {II }}$ This change had three important outcomes: (i) provided age-adjusted rates that are less divergent from crude rates (ii) ensured that all government agencies use the same standard and (iii) corrected the public perception that age-adjustment to the 1940 population provided out-of-date statistics. Use of the 2000 population standard placed more weight on death rates at older ages and less weight on death rates at younger ages. Because most lung disease rates increase with age, death rates using the new standard generally were higher than those using the old standard.
    ${ }^{\text {III }}$ The ICD is periodically revised to reflect changes in the medical field. This change has had several consequences: (i) new cause-of-death titles and corresponding cause-of-death codes, i.e. ICD-10 has alphanumeric categories rather than numeric categories, (ii) breaks in comparability of cause-of-death statistics, and (iii) restructuring of the leading causes of death. In order to assess the net effect of the new revision on death statistics, a comparability ratio is derived. The comparability ratio is calculated by dividing the number of deaths for a selected cause of death classified by the new revision by the number of deaths classified to the most nearly comparable cause of death by the previous revision. A comparability ratio of 1 denotes no change between revisions; a ratio of less than 1 signifies a decrease and a ratio of greater than 1 symbolizes an increase in deaths. The comparability ratio for lung cancer is 0.9837 , indicating a 2 percent decrease in assignments of deaths due to lung cancer when using ICD-10.

[^1]:    Source: National Cancer Institute. SEER Cancer Statistics Review, 1975-20011

[^2]:    Source: Centers for Disease Control and Prevention. National Center for Health Statistics. CDC Wonder On-line Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.

[^3]:    Source: Centers for Disease Control and Prevention. National Center for Health Statistics. CDC Wonder On-line Database, compiled from Compressed Mortality File 1999-2012 Series 20 No. 2R, 2014.

