

Mortality in Adults Age 65 and Older: United States, 2000–2019

by Ellen A. Kramarow, Ph.D., and Betzaida Tejada-Vera, M.S.

Abstract

Objectives—This report presents data on trends in mortality before the COVID-19 pandemic for adults age 65 and older. Death rates are presented by age group, sex, race and Hispanic origin, urban–rural status, and leading causes of death.

Methods—Mortality statistics in this report are based on death certificates filed in all 50 states and the District of Columbia during 2000–2019. The 10 leading causes of death reported are based on numbers of deaths for adults age 65 and older in 2019. Trends are evaluated using the National Cancer Institute’s Joinpoint Regression Program, and annual percent changes in death rates are reported along with the years marking the inflection points where significant changes occurred in trends over time.

Results—From 2000 through 2019, age-adjusted death rates for adults age 65 and older decreased from 5,169.0 deaths per 100,000 U.S. standard population to 4,073.8, with a slower rate of decline from 2009 onward compared with earlier years. Among women, declines occurred in all age groups (65–74, 75–84, and 85 and older). Among men, declines occurred for those ages 75–84 and 85 and older. Overall, for men ages 65–74, death rates were stable from 2012 through 2019; however, death rates for Black non-Hispanic men ages 65–74 increased by 0.3% annually. Age-adjusted death rates were higher in rural areas than urban areas and declined more slowly in rural areas. Age-adjusted death rates for heart disease, cancer, chronic lower respiratory diseases, stroke, diabetes, kidney disease, and influenza and pneumonia were lower in 2019 than 2000, with varying rates of change over time.

Conclusions—Before the COVID-19 pandemic, mortality was declining among the population age 65 and older, although the pace of decline had slowed in the decade before the pandemic. Trends varied by age group, sex, race and Hispanic origin, and urban–rural status.

Keywords: deaths • older adults • National Vital Statistics System

Introduction

Before the COVID-19 pandemic, research on U.S. mortality documented periods of decline and stagnation in life expectancy at birth and increases in some cause-specific death rates among working-age adults (ages 25–64). These trends are attributed to a rise in drug- and alcohol-related and suicide deaths, along with a slowing of decline in deaths due to cardiovascular diseases (1–7). Mortality patterns among older age groups for recent decades have not been as thoroughly investigated, although research has shown disparities in life expectancy at age 65 by geographic location (8,9). Older adults have been disproportionately affected by COVID-19, with about 75% of all COVID-19-related deaths since 2020 occurring in people age 65 and older (10). A description of mortality for the older population before the pandemic contributes to a comprehensive picture of U.S. mortality trends and provides context for changes that have occurred since 2020. This report examines trends in mortality for the population age 65 and older from 2000 through 2019 by age group, sex, race and Hispanic origin, urban–rural status, and cause of death.

Data and Methods

Data

Mortality data in this report are from the National Center for Health Statistics 2000–2019 multiple cause-of-death mortality files (11). Trends are described from 2000 onward, highlighting changes in the 2000s and 2010s before the COVID-19 pandemic that coincide with changes in mortality for working-age adults (ages 25–64) (6). Data are based on information from death certificates filed in the 50 U.S. states and the District of Columbia from 2000 through 2019. Death certificates are generally completed by funeral directors, attending physicians, medical examiners, or coroners. Age, sex, and race and ethnicity of the decedent are demographic variables on the death certificate



that are supplied to the funeral director by an informant, usually the next of kin. Causes of death are classified according to the *International Classification of Diseases, 10th Revision* (ICD–10) (12). In this report, leading causes of death for adults age 65 and older are identified by the ranking of causes in 2019, according to the procedures used by the National Center for Health Statistics for identifying leading causes of death (13). More information on mortality data is available elsewhere (14) and in the Technical Notes.

Race and Hispanic origin

Race and Hispanic origin are two distinct attributes that are reported separately on the death certificate. Therefore, the data shown in this report by race and Hispanic origin are based on a combination of the two attributes for the non-Hispanic population. Death records with race not stated or not classifiable were imputed. Data shown for the Hispanic population include people of any race. Hispanic origin is not imputed if it is not reported. See Technical Notes for more information.

The 2003 revision of the U.S. Standard Certificate of Death allows the reporting of more than one race (multiple races) (15). This change was made to reflect the increasing diversity of the U.S. population and to be consistent with the decennial census and the 1997 “Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity,” issued by the Office of Management and Budget (16). This revision replaced standards that were issued in 1977 (17). Because data on multiple races were not reported by all states and the District of Columbia until 2018, the trends in this report are reported for Hispanic and non-Hispanic adults using bridged-race categories of American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native), Asian or Pacific Islander non-Hispanic (subsequently, Asian or Pacific Islander), Black non-Hispanic (subsequently, Black), and White non-Hispanic (subsequently, White) so that race data can be compared across time. Data for the single-race categories, according to the revised standards, are presented in the tables for 2018–2019 for American Indian and Alaska Native non-Hispanic, Asian non-Hispanic (subsequently, Asian), Black non-Hispanic, Native Hawaiian or Other Pacific Islander non-Hispanic (subsequently, Native Hawaiian or Other Pacific Islander), and White non-Hispanic. Misclassification of race and Hispanic origin on death certificates results in the underestimation of death rates by as much as 34% for American Indian and Alaska Native people, 3% for Asian and Hispanic people, and an unknown amount for Native Hawaiian or Other Pacific Islander people (18,19). Death rates in this report are not adjusted for racial misclassification. More information is available elsewhere (14) and in the Technical Notes.

Urban–rural status

Urban–rural status was categorized using the 2013 NCHS Urban–Rural Classification Scheme for Counties (20). Counties were classified into six urbanization levels based on metropolitan or nonmetropolitan status, population distribution, and other factors. The four metropolitan categories (large central metropolitan, large fringe metropolitan, medium metropolitan,

and small metropolitan) were grouped as urban. The two nonmetropolitan categories (micropolitan and noncore) were grouped as rural.

Rates and significance testing

Annual death rates are calculated as the number of deaths per 100,000 people residing in the United States age 65 and older overall and by age groups 65–74, 75–84, and 85 and older. Age-adjusted death rates are computed by the direct method using the U.S. standard age distribution (21). Comparisons among rates, unless otherwise specified, are statistically significant at the 0.05 level using the *z* test statistic. Trends were evaluated using the National Cancer Institute’s Joinpoint Regression Program (22). The Joinpoint software, using the default settings, was used to fit weighted least-squares regression models to the estimated proportions on the logarithmic scale. The Joinpoint software allows for identification of inflection points (joinpoints) where trends change (23). Annual percent changes in death rates are reported, along with the years marking the inflection points where significant changes in trends over time occurred. References to increasing or decreasing trends in rates are statistically significant at the 0.05 level, unless otherwise noted. For more detail, see the Technical Notes.

Results

Death rate by sex

From 2000 through 2019, age-adjusted death rates for adults age 65 and older decreased from 5,169.0 to 4,073.8 deaths per 100,000 U.S. standard population (Table 1, Figure 1). The death rates decreased for both men (from 6,178.3 to 4,684.7) and women (from 4,518.2 to 3,603.4). Death rates declined over the entire period for men and women, but the decline was greater in earlier years (2.2% per year from 2000 through 2009 for men and 1.6% per year from 2000 through 2010 for women) compared with later years. After 2010, rates of decline were less than 1% per year for both men (0.8%) and women (0.7%). Death rates for men were higher than for women throughout the 2000–2019 period.

Death rate by race and Hispanic origin

Age-adjusted death rates were lower in 2019 than 2000 for all race and Hispanic-origin groups among men age 65 and older (Table 1, Figure 2). Among White men, rates decreased from 6,197.6 to 4,829.9 deaths per 100,000 standard population. The pace of decline in death rates slowed after 2009 from 2.1% to 0.6% per year. Death rates for Black men were higher than other groups throughout the period, declining from 7,361.9 to 5,394.3. The pace of decline for Black men slowed from 2.5% per year from 2003 through 2012 to 0.6% per year after 2012. Death rates for American Indian and Alaska Native men declined by 1.7% per year from 2003 through 2019. Death rates among men age 65 and older were lowest for Asian or Pacific Islander men from 2000 through 2019, declining from 3,897.5 to 2,698.8; the

Figure 1. Age-adjusted death rate for adults age 65 and older, by sex: United States, 2000–2019

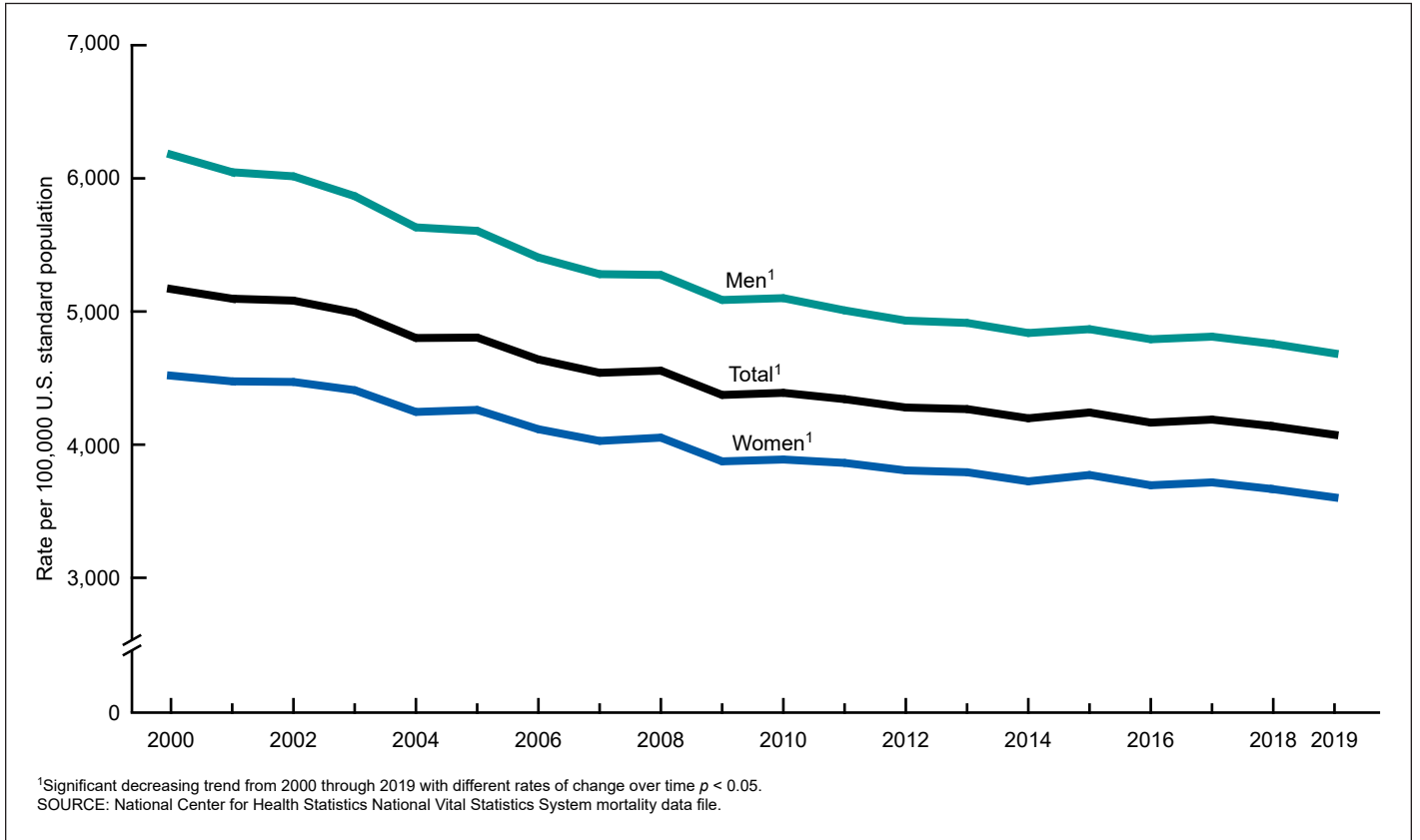
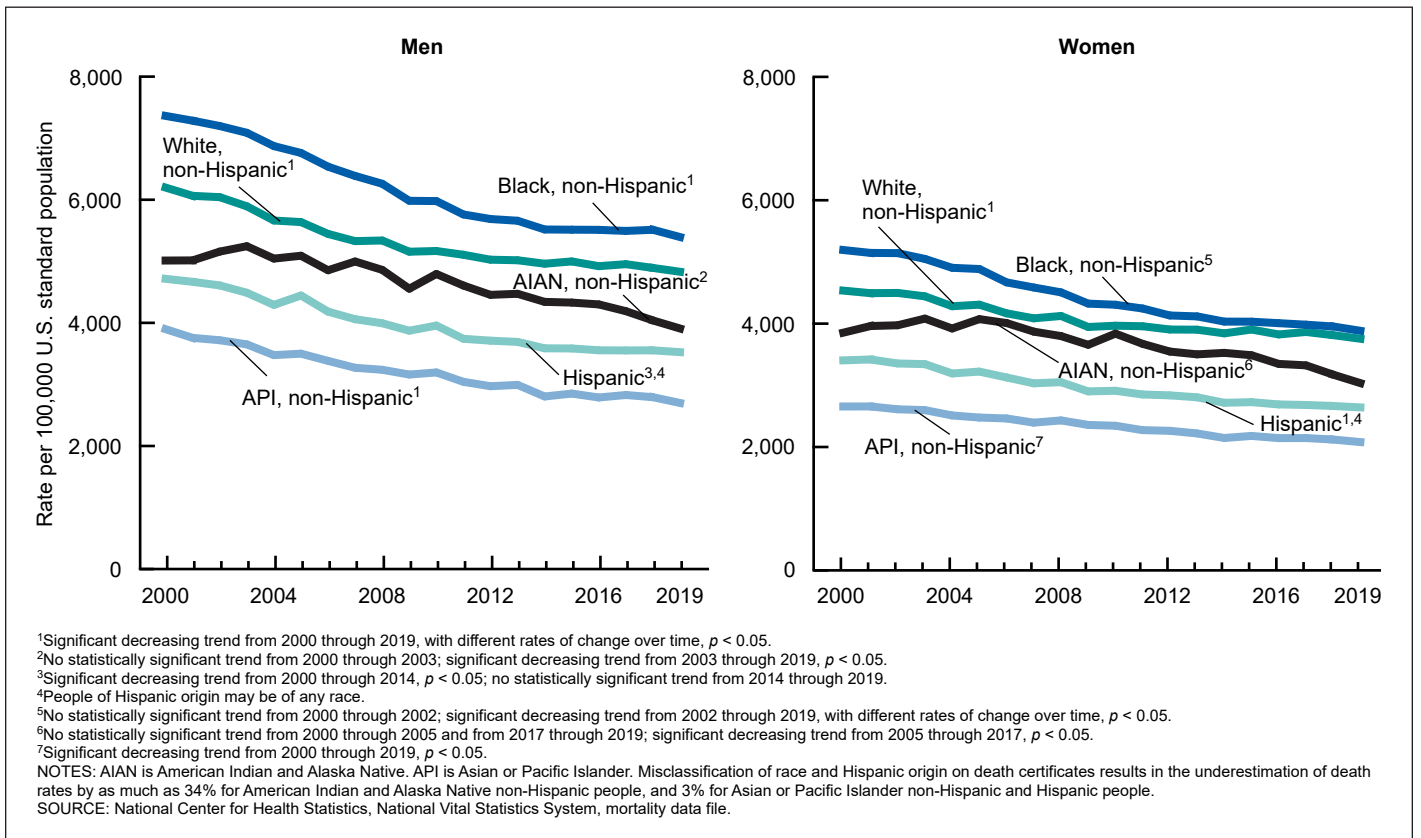


Figure 2. Age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019



pace of decline slowed from 2.1% per year from 2000 through 2014 to 0.9% per year from 2014 through 2019. Among Hispanic men, death rates declined by 2.0% annually from 2000 through 2014; declines were not significant from 2014 through 2019.

Among women age 65 and older, death rates also declined between 2000 and 2019 for all race and Hispanic-origin groups (Table 1, Figure 2). For White women, death rates declined from 4,535.1 to 3,754.3 deaths per 100,000 standard population; however, the pace of decline in death rates slowed after 2009 from 1.5% to 0.6% per year. Among Black women, death rates decreased from 5,193.2 in 2000 to 3,883.6 in 2019, remaining higher than other groups throughout the period; death rates declined by 2.2% per year from 2002 through 2012 and by 0.8% per year after 2012. For American Indian and Alaska Native women, death rates declined by 1.6% per year from 2005 through 2017; declines from 2017 through 2019 were not significant. Death rates were lowest among Asian or Pacific Islander women throughout the period, declining by 1.3% per year on average. Among Hispanic women, death rates decreased from 3,404.3 in 2000 to 2,642.0 in 2019, declining by 1.7% per year from 2000 through 2014 and by 0.6% per year from 2014 through 2019.

Death rate by age group

Ages 65–74

Death rates for men ages 65–74 declined from 2,979.6 per 100,000 in 2000 to 2,178.6 in 2019 (Table 1, Figures 3 and 4). Death rates declined more slowly from 2007 through 2012 (1.8%

per year) compared with 2000 through 2007 (3.1% per year) and then were stable from 2012 through 2019. Death rates for men ages 65–74 declined for all race and Hispanic-origin groups from 2000 through 2012 or 2013 (depending on group), with different rates of change. Death rates were stable from 2012 through 2019 for White, American Indian and Alaska Native (from 2013), Asian or Pacific Islander, and Hispanic men. Among Black men, death rates increased during the same period by 0.3% annually from 3,146.5 in 2012 to 3,180.2 in 2019. Death rates for Black men were higher than rates for other race and Hispanic-origin groups throughout the period.

Death rates for women ages 65–74 were lower than for men (Table 1, Figures 3 and 4). Death rates for all women declined from 1,921.2 to 1,402.0 from 2000 through 2019. Although death rates declined throughout the entire period, the decrease slowed from 2011 onward (2.4% per year from 2000 through 2011 and 0.6% per year from 2011 through 2019). Death rates for White and Hispanic women declined from 2000 through 2019, with slower rates of decline from 2011 through 2019 compared with the earlier period (2.1% compared with 0.6% for White women and 2.9% compared with 0.4% for Hispanic women). Death rates for American Indian and Alaska Native women declined throughout the period by 1.7% per year. Death rates for Asian or Pacific Islander women declined by 3.1% from 2000 through 2013 and then were stable. For Black women, death rates declined by 3.1% per year from 2000 through 2007 and by 2.0% per year from 2007 through 2013. Changes from 2013 through 2019 were not statistically significant. Death rates

Figure 3. Death rate for adults age 65 and older, by age group and sex: United States, 2000–2019

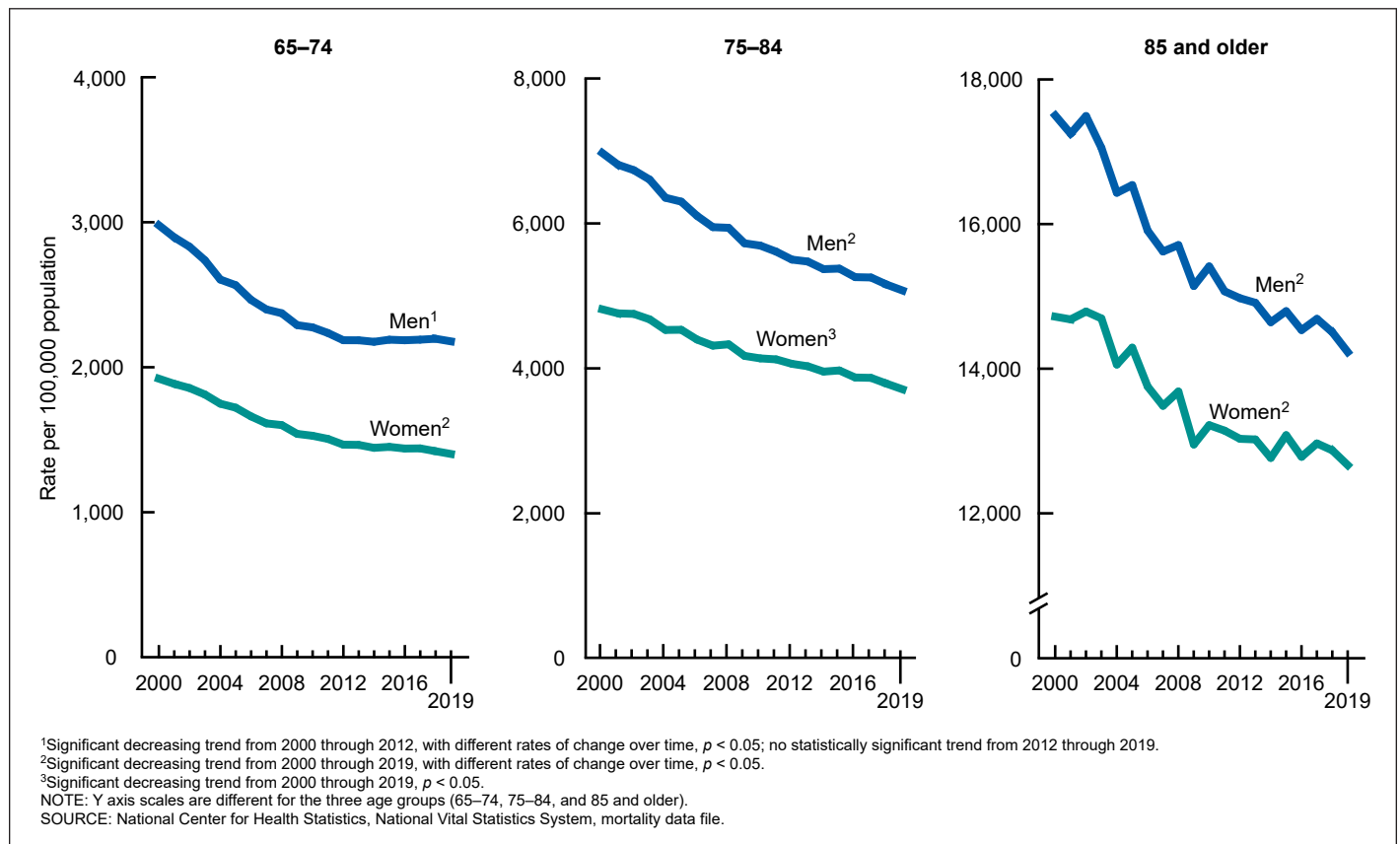
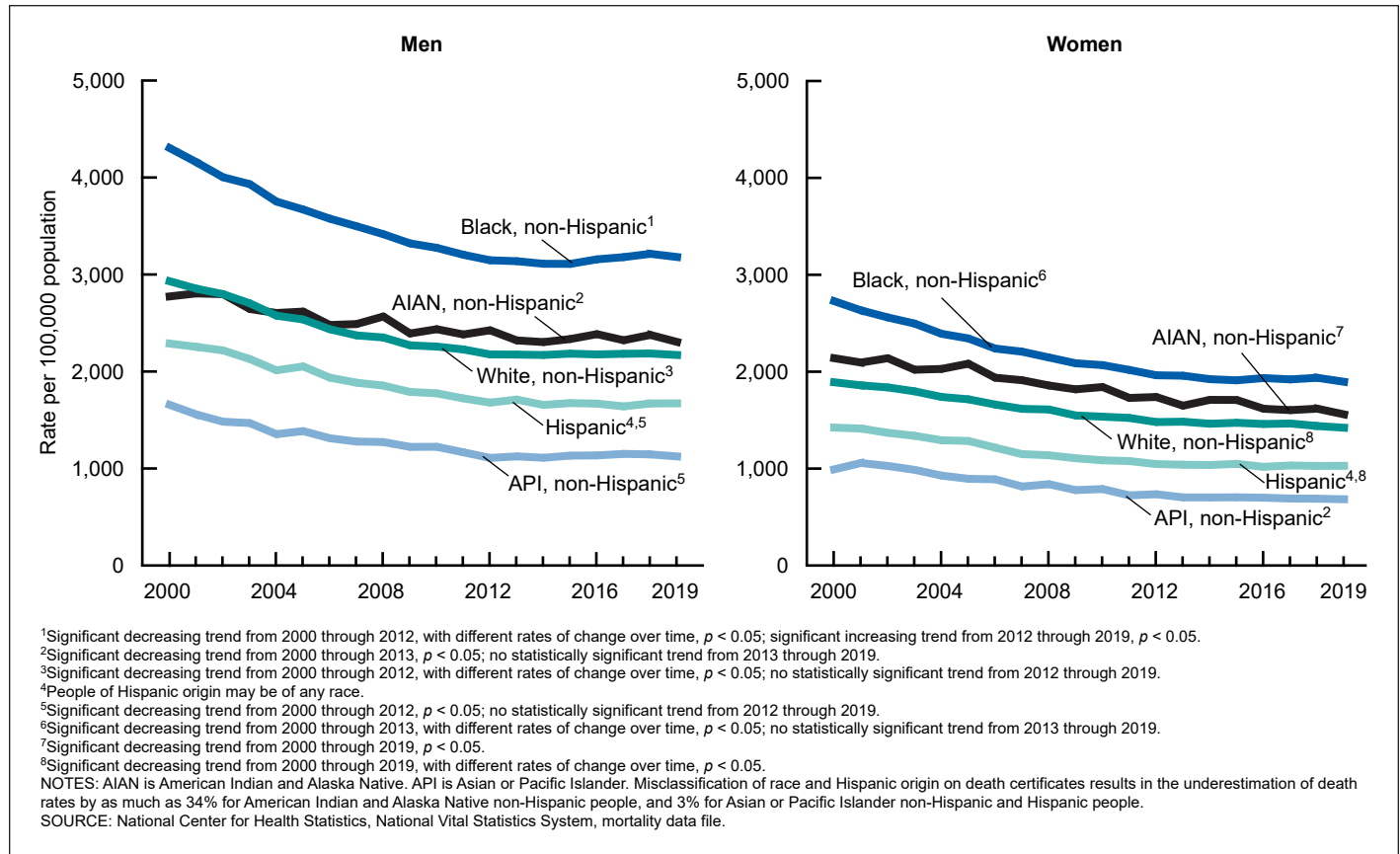


Figure 4. Death rate for adults ages 65–74, by sex and race and Hispanic origin: United States, 2000–2019

for Black women were higher than rates for other race and Hispanic-origin groups throughout the period.

Ages 75–84

Death rates for men ages 75–84 declined from 2000 through 2019, from 6,972.6 per 100,000 population in 2000 to 5,074.1 in 2019 (Table 1, Figures 3 and 5). The death rate declined by 2.2% annually from 2000 through 2009 and by 1.2% annually from 2009 through 2019. Death rates declined for White men by 2.0% annually from 2000 through 2009 and then by 1.1% annually from 2009 through 2019. From 2000 through 2011, death rates declined annually for Black men by 2.5% and for Hispanic men by 2.1%; from 2011 through 2019, death rates declined by 1.0% annually for both groups. Death rates for American Indian and Alaska Native men declined by 1.3% per year throughout the period. Death rates for Asian or Pacific Islander men declined by 2.4% per year from 2000 through 2014; declines from 2014 through 2019 were not significant. Death rates for Black men were higher than rates for other race and Hispanic-origin groups throughout the period.

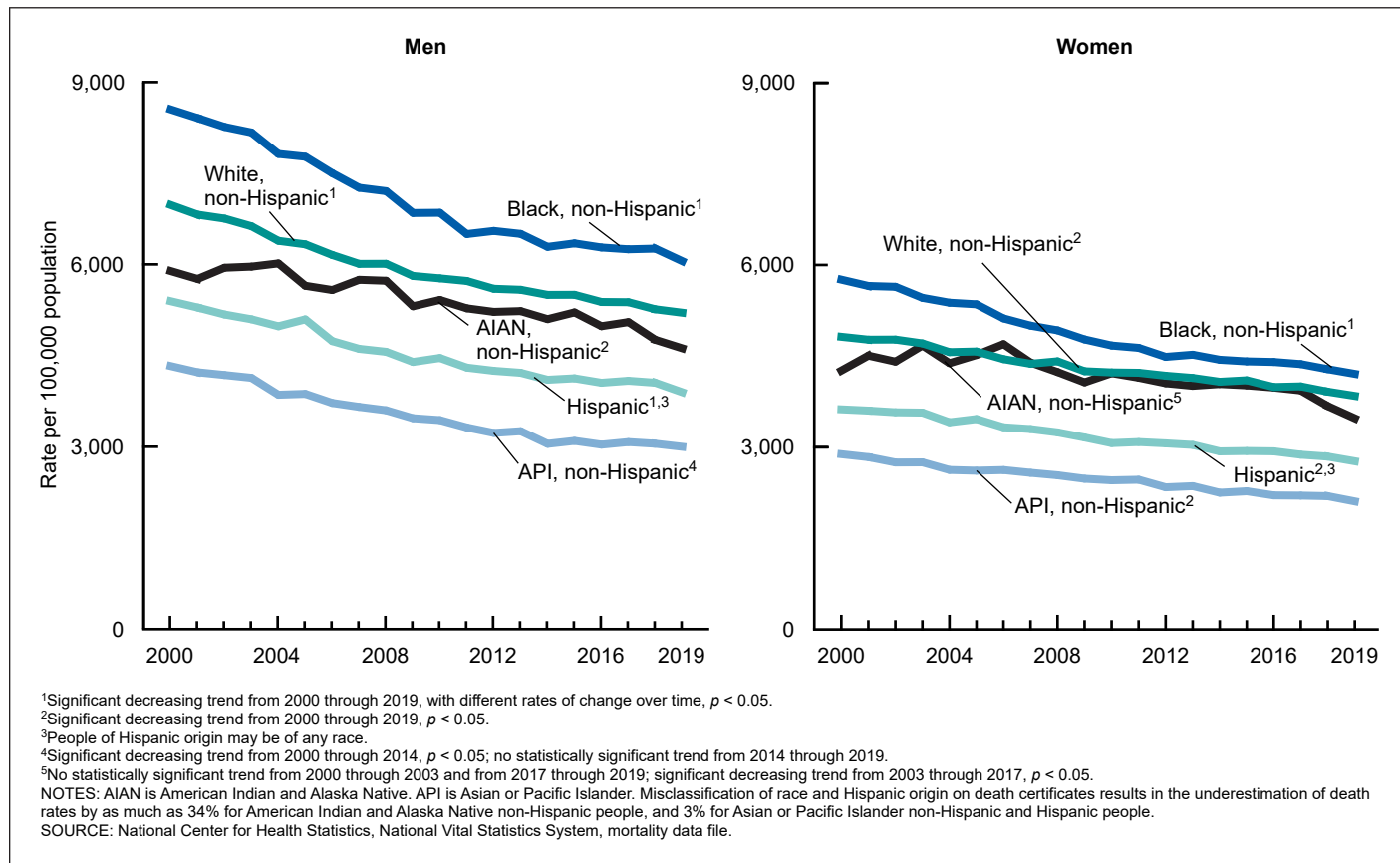
Death rates for women ages 75–84 were lower than for men (Table 1, Figures 3 and 5). Death rates for women ages 75–84 decreased from 4,814.7 in 2000 to 3,710.9 in 2019, declining by 1.4% annually over the period. From 2000 through 2019, death rates declined 1.2% annually for White women, 1.6% annually for Asian or Pacific Islander women, and 1.4% annually for Hispanic women. For Black women, death rates declined by 2.1%

annually from 2000 through 2012 and by 0.9% annually from 2012 through 2019. Death rates for American Indian and Alaska Native women declined by 1.2% annually from 2003 through 2017; declines from 2017 through 2019 were not significant. Death rates for Black women were higher than rates for other race and Hispanic-origin groups throughout the period.

Age 85 and older

From 2000 through 2019, death rates for men age 85 and older declined from 17,501.4 to 14,229.6 deaths per 100,000 (Table 1, Figures 3 and 6). Rates declined more slowly from 2009 through 2019 (0.7% annually) compared with 2000 through 2009 (1.6% annually). Among White men age 85 and older, death rates declined by 1.5% per year from 2000 through 2009 and by 0.3% per year from 2009 through 2019. Death rates for Black men declined by 2.4% annually from 2003 through 2014 and by 0.8% annually from 2014 through 2019. Death rates for American Indian and Alaska Native men declined from 2005 through 2019 by 3.1% per year. For Hispanic men, death rates declined by 1.8% per year from 2000 through 2016, while increases from 2016 through 2019 were not statistically significant. Death rates for Asian or Pacific Islander men declined throughout the period by 1.8% per year. Death rates were highest for White men compared with other groups from 2008 through 2019.

Death rates for women age 85 and older were lower than for men (Table 1, Figures 3 and 6). Death rates for women age 85 and older declined from 14,719.2 to 12,666.1 during

Figure 5. Death rate for adults ages 75–84, by sex and race and Hispanic origin: United States, 2000–2019

2000–2019. Similar to men, death rates declined more slowly from 2009 through 2019 (0.4% annually) compared with 2000 through 2009 (1.4% annually). Rates for Asian or Pacific Islander and Hispanic women declined by 0.8% and 1.3% per year, respectively, from 2000 through 2019. Death rates for White women declined by 1.3% annually from 2000 through 2009 and then were stable from 2009 through 2019. Death rates for Black women increased from 2000 through 2003. From 2003 through 2009, the rates declined by 2.4% annually and by 1.2% annually from 2009 through 2019. Death rates for American Indian and Alaska Native women were stable from 2000 through 2010 and then declined from 2010 through 2019. Death rates were highest for White women compared with other groups throughout the period.

Death rate by urban–rural status

From 2000 through 2019, age-adjusted death rates for the 65 and older population declined by 15% in rural areas, from 5,377.5 to 4,560.2 deaths per 100,000 standard population and by 22% in urban areas, from 5,119.0 to 3,974.1 (Table 2, Figure 7). Death rates were higher in rural areas than urban areas for both men and women. From 2000 through 2009, death rates for men declined by 2.3% per year in urban areas and by 1.8% per year in rural areas. From 2009 through 2019, death rates for men declined by 0.9% per year in urban areas and by 0.6% per year in rural areas. Among women, death rates in urban areas declined by 1.8% per year from 2000 through 2010 and

by 0.8% per year from 2010 through 2019. In rural areas, death rates declined by 1.1% per year from 2000 through 2009 and by 0.5% per year from 2009 through 2019. Death rates were generally higher in rural areas than urban areas for all race and Hispanic-origin groups (Table 2).

Death rate for leading causes of death

Age 65 and older

In 2019, the 10 leading causes of death for all adults age 65 and older, based on numbers of deaths, were: heart disease, cancer, chronic lower respiratory diseases (CLRD), stroke, Alzheimer disease, diabetes, unintentional injuries, kidney disease, influenza and pneumonia, and Parkinson disease (24). Age-adjusted death rates for heart disease, cancer, CLRD, stroke, diabetes, kidney disease, and influenza and pneumonia were lower in 2019 than in 2000 (Table 3, Figure 8). Some causes declined throughout the entire period. For example, death rates for heart disease were 1,706.6 in 2000 compared with 1,020.9 in 2019, declining on average by 4% per year from 2000 through 2011 and by 0.9% per year from 2011 through 2019. Death rates for cancer were 1,123.6 in 2000 compared with 833.5 in 2019, declining by 1.3% per year from 2000 through 2010 and by 1.8% per year from 2010 through 2019. Death rates for CLRD generally declined throughout the period, falling from 305.1 to 258.2. Death rates for influenza and pneumonia declined by 3.6% annually from 2000 through 2019, from 168.6 to 77.8.

Figure 6. Death rate for adults ages 85 and older, by sex and race and Hispanic origin: United States, 2000–2019

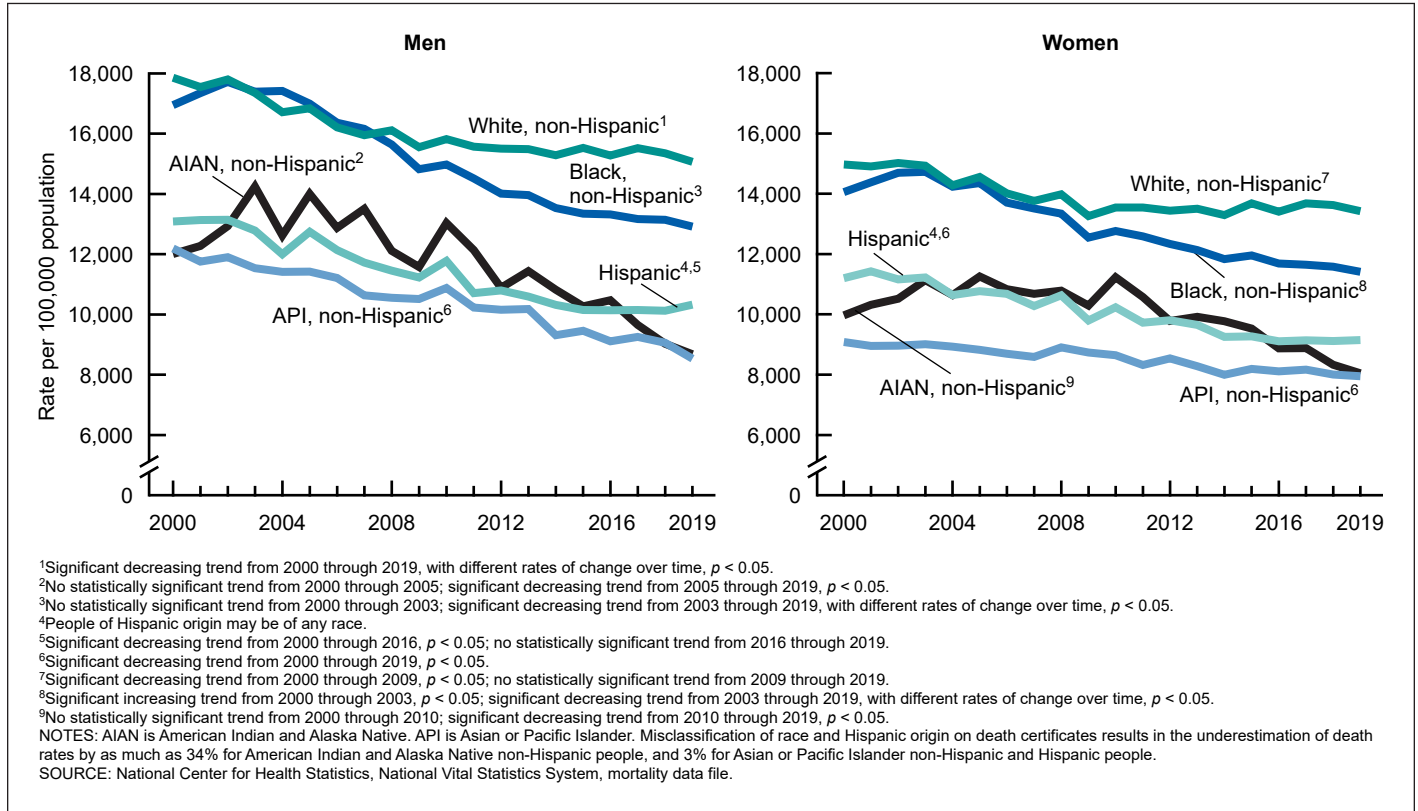


Figure 7. Age-adjusted death rate for adults age 65 and older, by sex and urban–rural status: United States, 2000–2019

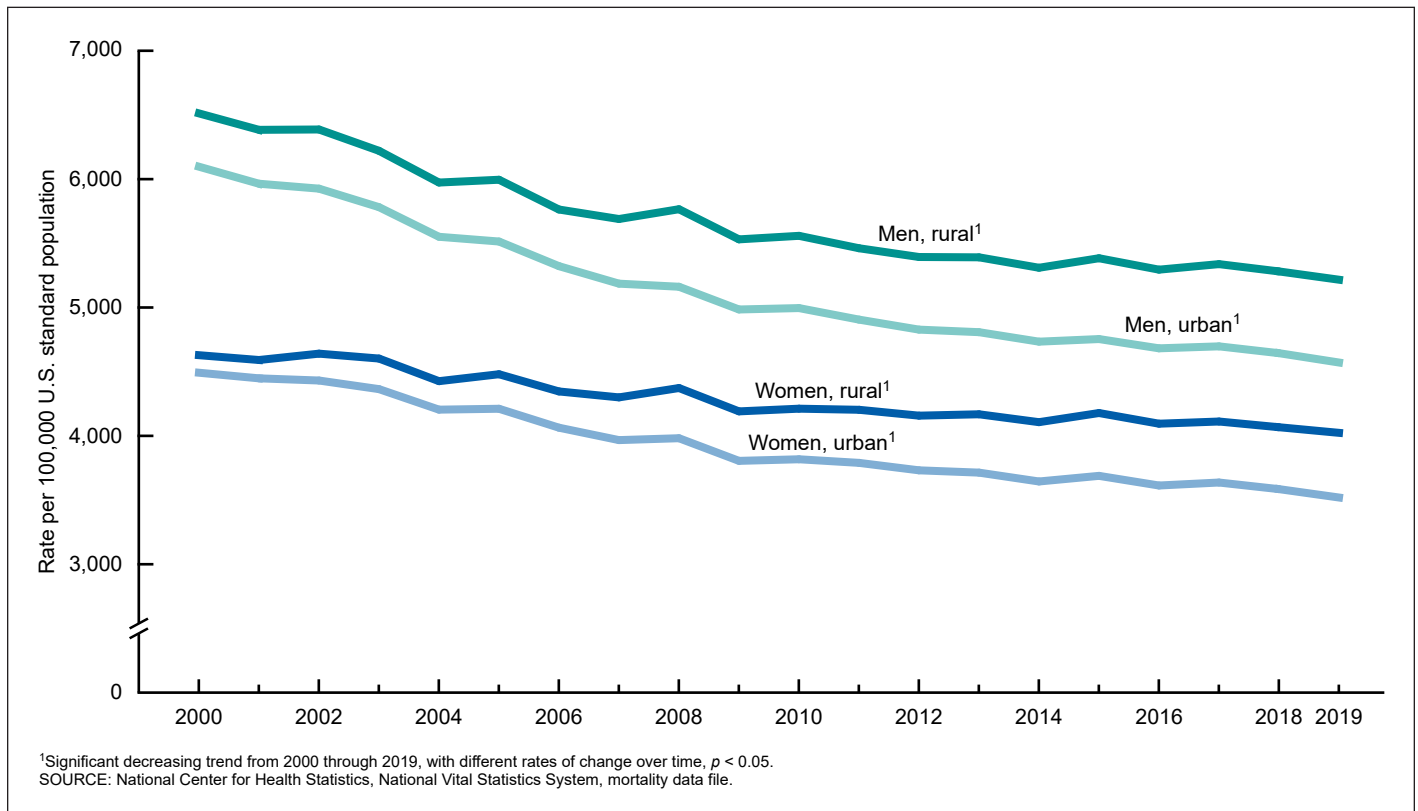
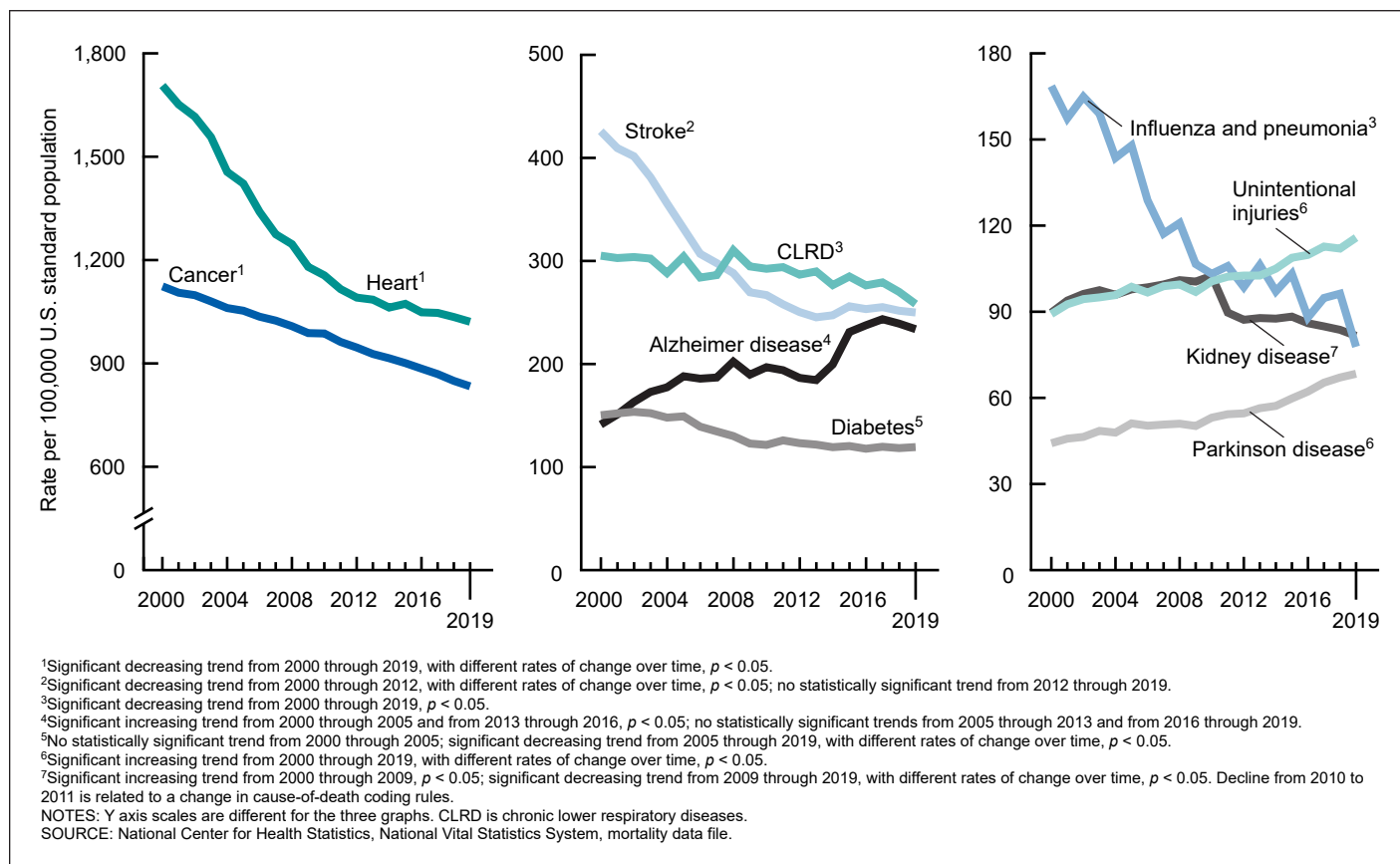


Figure 8. Age-adjusted death rate for leading causes of death among adults age 65 and older: United States, 2000–2019

Other leading causes of death had different patterns of change from 2000 through 2019. Age-adjusted death rates for stroke were higher in 2000 (425.9) compared with 2019 (250.0), but the decline was not steady over time; death rates declined 3.5% per year from 2000 through 2003; 7.2% per year from 2003 through 2006; and 3.5% per year from 2006 through 2012. From 2012 through 2019, changes in stroke death rates were not significant. Diabetes death rates were stable from 2000 through 2005 and then declined on average by 4.5% per year from 2005 through 2009. From 2009 through 2019, the death rates declined on average by 0.4% per year to 119.4 in 2019. Death rates for kidney disease (nephritis, nephrotic syndrome and nephrosis) increased from 2000 through 2009 by 1.2% per year and then decreased at varying rates from 2009 through 2019. The decline in kidney disease death rates from 2010 to 2011 is related to a change in coding rules that affected how renal failure (a component of the larger category of nephritis, nephrotic syndrome and nephrosis) is attributed to other conditions as an underlying cause of death (for example, diabetes) instead of kidney disease (25).

Age-adjusted death rates for unintentional injuries, Parkinson disease, and Alzheimer disease increased from 2000 through 2019, with varying rates of change. Death rates for unintentional injuries, which include falls and unintentional drug overdose deaths, increased among all adults age 65 and older, from 89.2 in 2000 to 115.8 in 2019, with a faster rate of change from 2013 through 2019 (1.9% annually) compared with 2000

through 2013 (0.9% annually). Parkinson disease death rates increased over the period from 44.2 to 68.4, with a faster pace of change from 2013 through 2019 (3.7% annually) compared with 2000 through 2013 (1.6% annually). Alzheimer disease death rates had periods of increase (6.1% annually from 2000 through 2005 and 8.7% from 2013 through 2016), along with periods of change that were not statistically significant from 2005 through 2013 and 2016 through 2019. For all adults age 65 and older, Alzheimer disease age-adjusted death rates were 1.7 times higher in 2019 (233.8) compared with 2000 (141.2).

Death rate for leading causes by sex

Age-adjusted death rates were higher for men than women for most leading causes of death during 2000–2019 (Table 3). Exceptions were death rates for stroke, where rates were similar for men and women, and Alzheimer disease, where death rates for women were higher than for men. Trends in death rates by sex were in the same direction for most leading causes of death. Notable exceptions include CLRD, where death rates for men declined throughout the period, while changes in death rates for women were not statistically significant. Death rates for diabetes for men declined from 2005 through 2009 and then increased from 2009 through 2019, while death rates among women declined throughout the period at varying rates.

Death rate for leading causes by race and Hispanic origin

During 2000–2019, age-adjusted death rates for heart disease and cancer were highest among Black adults (1,155.8 and 933.9, respectively, in 2019) and lowest among Asian or Pacific Islander adults (545.2 and 518.9, respectively, in 2019) ([Internet Table](#)). Black adults had the highest death rates for stroke (518.6 in 2000 and 328.4 in 2019). White adults had the highest death rates for CLRD (327.6 in 2000 and 293.2 in 2019), Alzheimer disease (149.2 in 2000 and 246.1 in 2019), and Parkinson disease (47.6 in 2000 and 75.3 in 2019). In 2019, death rates for diabetes were lower among White (105.7) and Asian or Pacific Islander (105.0) adults compared with Hispanic (154.2), Black (204.6), and American Indian and Alaska Native (200.6) adults. Death rates for unintentional injuries were higher for American Indian and Alaska Native (118.9) and White (125.2) adults compared with other groups. Hispanic (63.1) and Asian or Pacific Islander (67.5) adults generally had the lowest death rates for influenza and pneumonia. Black adults had the highest death rates for kidney disease (173.2 in 2000 and 149.6 in 2019).

Death rate for other selected causes

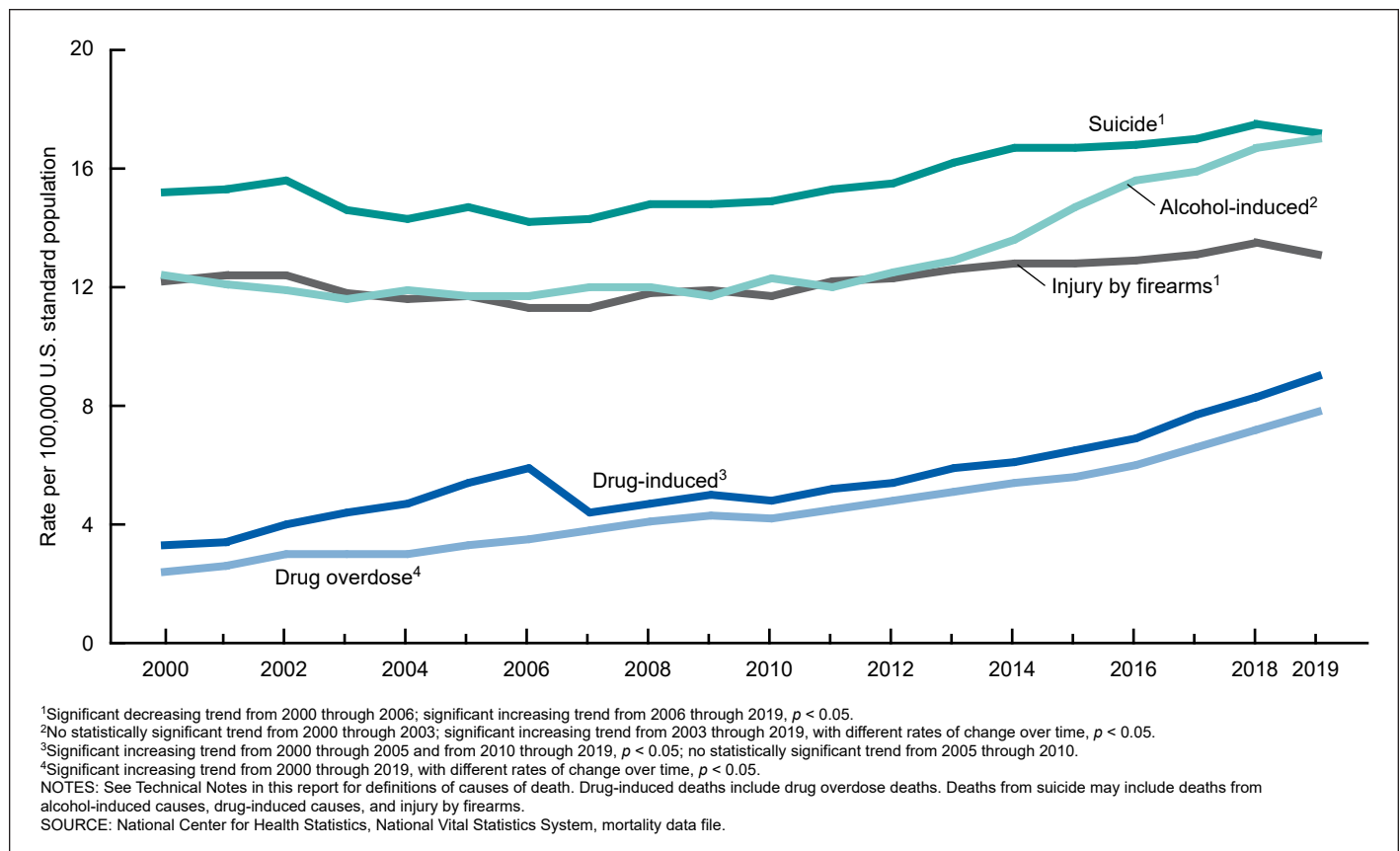
Intentional self-harm (suicide)

Age-adjusted death rates for suicide among adults age 65 and older were 13% higher in 2019 compared with 2000 (17.2 deaths per 100,000 standard population compared with 15.2) ([Table 3](#), [Figure 9](#)). Among all adults age 65 and older, death rates declined from 2000 through 2006 and then increased from 2006 through 2019. Death rates for men were higher than for women throughout the period. Death rates for men declined from 32.6 in 2000 to 29.2 in 2007 and then increased to 32.9 in 2019. Among women, death rates did not change significantly from 2000 through 2008. From 2008 through 2016, death rates increased from 4.1 to 5.3 and then had decreases that were not statistically significant from 2016 through 2019. Death rates were higher for White adults than for Black, Asian or Pacific Islander, and Hispanic adults from 2000 through 2019. Trends in death rates for suicide for American Indian and Alaska Native adults were not reliable due to small numbers of deaths ([Internet Table](#)).

Dementia-related mortality

Deaths from dementia-related causes include vascular dementia, unspecified dementia, Alzheimer disease, and other degenerative diseases of the nervous system, which together provide a more comprehensive estimate of the burden of

Figure 9. Age-adjusted death rate for alcohol-induced causes, drug-induced causes, drug overdoses, injury by firearms, and suicide among adults age 65 and older: United States, 2000–2019



mortality from Alzheimer disease and other dementias (14,26). Examining all dementia-related causes together (Table 3) shows an increasing trend in age-adjusted death rates from 237.8 in 2000 to 482.9 in 2011. Increases after 2011 were not statistically significant. Dementia-related death rates were higher for women than men throughout the period (1.2 times higher in 2000 and 1.3 times higher in 2019). In 2019, rates for White adults were higher than rates for Black, Asian or Pacific Islander, American Indian and Alaska Native, and Hispanic adults (Internet Table).

Drug-induced mortality

Drug-induced deaths include deaths from drug overdose and from other medical conditions caused by the use of legal or illegal drugs. In 2019, in adults age 65 and older, 87% of drug-induced deaths were drug overdoses (11,14). Age-adjusted death rates for drug-induced causes were 2.7 times higher in 2019 than in 2000, increasing from 3.3 deaths per 100,000 standard population in 2000 to 9.0 in 2019 (Table 3, Figure 9). Among all adults age 65 and older, drug-induced death rates increased from 2000 through 2005 and then again from 2010 to 2019. The decline in drug-induced death rates between 2006 and 2007 may be related to a revision in coding instructions for tobacco-related disorders (27). Drug-induced death rates for men were higher than for women throughout the period, and the gap increased from 1.2 times higher in 2000 to 1.9 times higher in 2019 (12.0 compared with 6.4). Drug-induced death rates were lower for Hispanic adults compared with White and Black adults (Internet Table). Rates were similar for White and Black adults in the early period, but by 2019, the death rate for Black adults was more than twice as high as for White adults (18.4 per 100,000 standard population compared with 8.5). Overall for adults age 65 and older, death rates for drug overdoses, a subset of drug-induced deaths, increased throughout the period at varying rates of change.

Alcohol-induced mortality

Alcohol-induced causes of death include deaths from dependent and nondependent use of alcohol and deaths from accidental poisoning by alcohol (14). Age-adjusted death rates for alcohol-induced causes increased from 12.4 deaths per 100,000 standard population in 2000 to 17.0 in 2019 (Table 3, Figure 9). Death rates for men were about four times higher than rates for women throughout the period. Death rates for American Indian and Alaska Native adults were higher than rates for Hispanic, White, Black, and Asian or Pacific Islander adults throughout the period.

Firearm-related mortality

Age-adjusted firearm-related death rates for adults age 65 and older were higher in 2019 (13.1) compared with 2000 (12.2). The rates decreased from 2000 through 2006 and then increased from 2006 through 2019 (Table 3, Figure 9). Death rates were higher for men than women throughout the period. Death rates for men were stable from 2000 through 2006, but

then increased to 27.0 in 2019. Death rates for women were 2.2 in 2000 and 2.5 in 2019. Death rates for White adults were higher than rates for Black and Hispanic adults (Internet Table). Death rates for Hispanic and Black adults generally declined from 2000 through 2019, while death rates for White adults declined from 2000 through 2006 and then increased from 2006 through 2019. Trends in death rates for firearm-related causes for American Indian and Alaska Native and Asian or Pacific Islander adults were not reliable due to small numbers of deaths.

Summary

From 2000 through 2019, just before the COVID-19 pandemic, age-adjusted death rates for the 65 and older population were declining, with a slowing of the pace of decline in the later part of the period. Among men, death rates declined throughout the period for those ages 75–84 and 85 and older. For men ages 65–74, death rates did not change significantly from 2012 through 2019. Among women, declines occurred in all age groups (65–74, 75–84, and 85 and older) throughout the period.

Trends in mortality for the 65 and older population varied by race and Hispanic origin. Death rates for White, American Indian and Alaska Native, Asian or Pacific Islander, and Hispanic men ages 65–74 did not change significantly from 2012 or 2013, depending on race and Hispanic-origin group, through 2019, while death rates for Black men increased during the same period. Among women ages 65–74, death rates for Black and Asian or Pacific Islander women did not change significantly from 2013 through 2019, while they continued to decline for White, American Indian and Alaska Native, and Hispanic women. Death rates declined for nearly all race and Hispanic-origin groups ages 75–84, except Asian or Pacific Islander men from 2014 through 2019 and American Indian and Alaska Native women from 2017 through 2019. Death rates declined for most groups among adults age 85 and older, except for Hispanic men where increases in death rates were not statistically significant from 2016 through 2019 and for White women who experienced stable death rates from 2009 through 2019.

Between 2000 and 2019, a slowing of the decline in cardiovascular disease mortality was seen, along with an increase in alcohol- and drug-induced deaths in adults age 65 and older. In addition, suicide death rates increased from 2006 onward. Death rates for older adults in rural areas were higher than in urban areas throughout the period, and the gap widened as it did overall for all ages (28). The slowing of declines in mortality overall for adults age 65 and older beginning around 2010, along with stable and rising death rates among some groups of adults ages 65–74, coincides with documented increases in mortality in working-age adults (ages 25–64) (6).

This report summarizes trends in older adult mortality before the COVID-19 pandemic, which has disproportionately impacted this population (10). In 2019, the top six leading causes of death in adults age 65 and older, comprising two-thirds of all deaths in this age group, were chronic diseases (13). Patterns of older adult mortality from 2020 onward will reflect the impact of large numbers of deaths in older adults caused by COVID-19, an

infectious disease that was the third leading cause of death for this age group in 2020 and 2021, as well as the pandemic's effect on overall mortality patterns.

References

- Kochanek KD, Anderson RN, Arias E. Changes in life expectancy at birth, 2010–2018. *NCHS Health E-Stat*. 2020.
- Woolf SH, Schoemaker H. Life expectancy and mortality rates in the United States, 1959–2017. *JAMA* 322(20):1996–2016. 2019. DOI: <https://dx.doi.org/10.1001/jama.2019.16932>.
- Mehta NK, Abrams LR, Myrskylä M. US life expectancy stalls due to cardiovascular disease, not drug deaths. *Proc Natl Acad Sci USA* 117(13):6998–7000. 2020. DOI: <https://dx.doi.org/10.1073/pnas.1920391117>.
- Arias E, Xu JQ. United States life tables, 2019. *National Vital Statistics Reports*; vol 70 no 19. Hyattsville, MD: National Center for Health Statistics. 2022. DOI: <https://dx.doi.org/10.15620/cdc:113096>.
- Case A, Deaton A. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *Proc Natl Acad Sci USA* 112 (49):15078–83. 2015.
- The National Academies of Sciences, Engineering, and Medicine. High and rising mortality rates among working-age adults. The National Academies Press. 2021. DOI: <https://doi.org/10.17226/25976>.
- Curtin SC. Trends in cancer and heart disease death rates among adults aged 45–64: United States, 1999–2017. *National Vital Statistics Reports*; vol 68 no 5. Hyattsville, MD: National Center for Health Statistics. 2019.
- Vierboom YC, Preston SH. Life beyond 65: Changing spatial patterns of survival at older ages in the United States, 2000–2016. *J Gerontol B Psychol Sci Soc Sci* 75(5):1093–103. 2020. DOI: <https://doi.org/10.1093/geronb/gbz160>.
- Arias E, Xu JQ, Tejada-Vera B, Bastian B. U.S. state life tables, 2019. *National Vital Statistics Reports*; vol 70 no 18. Hyattsville, MD: National Center for Health Statistics. 2022. DOI: <https://dx.doi.org/10.15620/cdc:113251>.
- National Center for Health Statistics, National Vital Statistics System. COVID-19 deaths dashboard. Available from: https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm#SexAndAge.
- Centers for Disease Control and Prevention. CDC WONDER. About underlying cause of death, 1999–2020. Available from: <https://wonder.cdc.gov/ucd-icd10.html>.
- World Health Organization. International statistical classification of diseases and related health problems, 10th revision (ICD–10). 2008 ed. 2009.
- Heron M. Deaths: Leading causes for 2019. *National Vital Statistics Reports*; vol 70 no 9. Hyattsville, MD: National Center for Health Statistics. 2021. DOI: <https://dx.doi.org/10.15620/cdc:107021>.
- Xu JQ, Murphy SL, Kochanek KD, Arias E. Deaths: Final data for 2019. *National Vital Statistics Reports*; vol 70 no 8. Hyattsville, MD: National Center for Health Statistics. 2021. DOI: <https://dx.doi.org/10.15620/cdc:106058>.
- National Center for Health Statistics. 2003 revision of the U.S. Standard Certificate of Death. 2003. Available from: <https://www.cdc.gov/nchs/data/dvs/DEATH11-03final-acc.pdf>.
- Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. *Fed Regist* 62(210):58782. 1997. Available from: <https://www.govinfo.gov/content/pkg/FR-1997-10-30/pdf/97-28653.pdf>.
- Office of Management and Budget. Race and ethnic standards for federal statistics and administrative reporting. *Statistical Policy Directive no 15*. 1977. Available from: <https://wonder.cdc.gov/wonder/help/populations/bridged-race/directive15.html>.
- Arias E, Heron M, Hakes JK. The validity of race and Hispanic-origin reporting on death certificates in the United States: An update. *National Center for Health Statistics. Vital Health Stat* 2(172). 2016. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_172.pdf.
- Arias E, Xu JQ, Curtin S, Bastian B, Tejada-Vera B. Mortality profile of the non-Hispanic American Indian or Alaska Native population, 2019. *National Vital Statistics Reports*; vol 70 no 12. Hyattsville, MD: National Center for Health Statistics. 2021. DOI: <https://dx.doi.org/10.15620/cdc:110370>.
- Ingram DD, Franco SJ. 2013 NCHS urban–rural classification scheme for counties. *National Center for Health Statistics. Vital Health Stat* 2(166). 2014. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_166.pdf.
- Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the year 2000 standard. *National Vital Statistics Reports*; vol 47 no 3. Hyattsville, MD: National Center for Health Statistics. 1998. Available from: https://www.cdc.gov/nchs/data/nvsr/nvsr47/nvsr47_03.pdf.
- National Cancer Institute. Joinpoint Regression Program (Version 4.8.0.1) [computer software]. 2020.
- Irimata KE, Bastian BA, Clarke TC, Curtin SC, Rui P. Guidance for selecting model options in the National Cancer Institute Joinpoint Regression Software. *National Center for Health Statistics. Vital Health Stat* 2(194). 2022. DOI: <https://dx.doi.org/10.15620/cdc:118050>.
- Heron M. Deaths: Leading causes for 2019. *National Vital Statistics Reports*; vol 70 no 9. Hyattsville, MD: National Center for Health Statistics. 2021. DOI: <https://dx.doi.org/10.15620/cdc:107021>.
- Hoyert DL, Xu JQ. Deaths: Preliminary data for 2011. *National Vital Statistics Reports*; vol 61 no 6. Hyattsville, MD: National Center for Health Statistics. 2012.
- Kramarow EA, Tejada-Vera B. Dementia mortality in the United States, 2000–2017. *National Vital Statistics Reports*; vol 68 no 2. Hyattsville, MD: National Center for Health Statistics. 2019.

27. National Center for Health Statistics. Instruction Manual, part 2a: Instructions for classifying the underlying cause of death. Hyattsville, MD. 2007. Available from: <https://www.cdc.gov/nchs/data/dvs/2a2007.pdf>.

28. Curtin SC, Spencer MR. Trends in death rates in urban and rural areas: United States, 1999–2019. NCHS Data Brief, no 417. Hyattsville, MD: National Center for Health Statistics. 2021. DOI: <https://dx.doi.org/10.15620/cdc:109049>.

29. National Center for Health Statistics. Vital statistics of the United States: Mortality, 1999. Technical appendix. 2004. Available from: <https://www.cdc.gov/nchs/data/statab/techap99.pdf>.

30. Ingram DD, Parker JD, Schenker N, Weed JA, Hamilton B, Arias E, Madans JH. United States Census 2000 population with bridged race categories. National Center for Health Statistics. Vital Health Stat 2(135). 2003. Available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_135.pdf.

31. Schenker N, Parker JD. From single-race reporting to multiple-race reporting: Using imputation methods to bridge the transition. *Stat Med* 22(9):1571–87. 2003.

32. National Center for Health Statistics. Vintage 2011–2019 bridged-race postcensal population estimates for July 1, 2011–July 1, 2019, by year, county, single-year of age (0 to 85+), bridged race, Hispanic origin, and sex. Prepared under a collaborative agreement with the U.S. Census Bureau. 2003. Available from: https://www.cdc.gov/nchs/nvss/bridged_race.htm.

33. National Center for Health Statistics. Estimates of the April 1, 2010, resident population of the United States, by county, single-year of age (0, 1, 2, ..., 85 years and over), bridged race, Hispanic origin, and sex. Prepared under a collaborative agreement with the U.S. Census Bureau. 2003. Available from: https://www.cdc.gov/nchs/nvss/bridged_race.htm.

34. National Center for Health Statistics. Revised intercensal estimates of the resident population of the United States for July 1, 2001– July 1, 2009, by year, county, single-year of age (0, 1, 2, ..., 85 years and over), bridged-race, Hispanic origin, and sex. Prepared under a collaborative agreement with the U.S. Census Bureau. 2012. Available from: https://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm.

35. National Center for Health Statistics. Bridged-race population estimates for April 1, 2000, by county, single-year of age, bridged race, Hispanic origin, and sex. Prepared under a collaborative arrangement with the U.S. Census Bureau. 2003. Available from: https://www.cdc.gov/nchs/nvss/bridged_race.htm.

List of Detailed Tables

1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019	13
2. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex, race and Hispanic origin, and urban–rural status: United States, 2000–2019	22
3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019	28

Internet Table

(Available from: <https://www.cdc.gov/nchs/data/nvsr/nvsr72/nvsr72-14-tables.pdf>.)

Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019

Race and Hispanic origin and year	Both sexes								
	Number of deaths				Death rate ¹				Age-adjusted rate ²
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
All races and origins³									
2019.	2,117,332	555,559	688,027	873,746	3,916.8	1,764.6	4,308.3	13,228.6	4,073.8
2018.	2,099,263	543,778	675,205	880,280	4,003.8	1,783.3	4,386.1	13,450.7	4,138.5
2017.	2,067,404	531,610	657,759	878,035	4,065.0	1,790.9	4,472.6	13,573.6	4,188.2
2016.	2,003,458	512,080	636,916	854,462	4,068.4	1,788.6	4,474.8	13,392.1	4,165.5
2015.	1,992,283	495,016	637,566	859,701	4,171.4	1,796.8	4,579.2	13,673.9	4,241.4
2014.	1,922,271	471,541	624,504	826,226	4,156.9	1,786.3	4,564.2	13,407.9	4,198.0
2013.	1,904,640	454,429	625,013	825,198	4,260.6	1,802.1	4,648.1	13,660.4	4,267.0
2012.	1,858,081	432,346	620,428	805,307	4,306.6	1,802.5	4,674.5	13,678.6	4,278.8
2011.	1,831,822	415,052	626,225	790,545	4,425.3	1,846.2	4,753.0	13,779.3	4,341.8
2010.	1,798,276	407,151	625,651	765,474	4,465.8	1,875.1	4,790.2	13,934.3	4,389.1
2009.	1,761,937	401,032	627,727	733,178	4,446.7	1,888.7	4,820.2	13,660.1	4,373.2
2008.	1,799,830	401,579	653,560	744,691	4,641.4	1,958.4	4,998.1	14,332.4	4,555.3
2007.	1,755,567	389,238	652,682	713,647	4,641.2	1,976.0	4,987.1	14,160.9	4,539.5
2006.	1,759,423	390,093	667,338	701,992	4,734.2	2,031.4	5,096.1	14,426.7	4,639.8
2005.	1,788,189	398,355	686,665	703,169	4,879.1	2,109.7	5,251.8	14,982.4	4,804.1
2004.	1,755,669	399,666	684,230	671,773	4,849.5	2,141.0	5,267.4	14,777.6	4,800.9
2003.	1,804,373	413,497	703,024	687,852	5,031.2	2,235.0	5,451.3	15,401.4	4,991.8
2002.	1,811,720	422,990	707,654	681,076	5,100.2	2,300.3	5,543.8	15,589.5	5,081.8
2001.	1,798,420	430,960	701,929	665,531	5,096.1	2,344.2	5,573.7	15,432.6	5,096.1
2000.	1,799,825	441,209	700,445	658,171	5,143.6	2,399.1	5,666.5	15,524.4	5,169.0
American Indian and Alaska Native, non-Hispanic, single race⁴									
2019.	9,226	3,693	3,270	2,263	3,060.9	1,924.9	3,956.5	8,407.6	3,441.2
2018.	9,058	3,635	3,206	2,217	3,156.3	1,985.5	4,111.4	8,552.6	3,545.6
American Indian and Alaska Native, non-Hispanic, bridged race⁵									
2019.	10,131	4,041	3,589	2,501	3,044.5	1,902.7	3,979.8	8,280.1	3,422.2
2018.	10,004	3,987	3,531	2,486	3,161.2	1,969.0	4,153.1	8,587.2	3,556.0
2017.	9,746	3,744	3,529	2,473	3,247.9	1,937.0	4,423.7	9,157.2	3,705.3
2016.	9,358	3,637	3,332	2,389	3,284.9	1,975.1	4,416.7	9,445.3	3,758.0
2015.	9,066	3,498	3,224	2,344	3,359.0	2,000.9	4,531.4	9,792.4	3,854.8
2014.	8,564	3,280	3,029	2,255	3,362.7	1,987.4	4,493.9	10,141.2	3,877.2
2013.	8,110	3,050	2,887	2,173	3,381.3	1,963.4	4,532.3	10,441.6	3,915.2
2012.	7,721	3,003	2,748	1,970	3,422.4	2,060.0	4,548.2	10,153.6	3,936.0
2011.	7,423	2,757	2,686	1,980	3,510.2	2,034.3	4,623.3	11,096.2	4,064.8
2010.	7,228	2,708	2,561	1,959	3,639.0	2,119.1	4,718.9	11,826.1	4,232.6
2009.	6,725	2,584	2,423	1,718	3,489.1	2,086.0	4,586.1	10,713.4	4,031.7
2008.	6,795	2,587	2,498	1,710	3,675.5	2,188.8	4,857.0	11,213.1	4,242.8
2007.	6,623	2,450	2,472	1,701	3,743.4	2,180.8	4,954.1	11,587.2	4,319.0
2006.	6,425	2,359	2,449	1,617	3,774.0	2,189.0	5,061.2	11,474.6	4,347.5
2005.	6,411	2,413	2,354	1,644	3,900.6	2,330.6	4,982.1	12,110.5	4,471.4
2004.	6,047	2,277	2,303	1,467	3,828.8	2,293.9	5,046.1	11,256.0	4,370.1
2003.	6,066	2,203	2,309	1,554	3,971.0	2,307.8	5,194.1	12,097.2	4,533.1
2002.	5,840	2,246	2,172	1,422	3,949.3	2,440.8	5,024.3	11,264.3	4,440.1
2001.	5,632	2,154	2,096	1,382	3,922.7	2,418.5	5,007.6	10,922.3	4,380.6
2000.	5,459	2,094	2,006	1,359	3,901.0	2,427.6	4,907.2	10,616.4	4,312.2

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019—Con.

Race and Hispanic origin and year	Both sexes								
	Number of deaths				Death rate ¹				Age-adjusted rate ²
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
Asian, non-Hispanic, single race⁴									
2019.....	53,763	12,409	17,425	23,929	2,156.7	831.6	2,454.8	8,229.2	2,315.3
2018.....	52,169	12,061	17,012	23,096	2,201.8	847.3	2,526.0	8,476.4	2,379.1
Native Hawaiian or Other Pacific Islander, non-Hispanic, single race⁴									
2019.....	1,795	842	579	374	2,969.1	2,165.8	3,637.2	6,606.6	3,232.8
2018.....	1,683	742	604	337	2,963.3	2,015.8	4,081.9	6,495.8	3,298.6
Asian or Pacific Islander, non-Hispanic, bridged race^{5,6}									
2019.....	57,471	13,899	18,673	24,899	2,180.8	878.1	2,498.1	8,165.3	2,347.1
2018.....	55,633	13,440	18,208	23,985	2,222.5	890.8	2,568.8	8,398.9	2,407.5
2017.....	53,411	12,893	17,530	22,988	2,237.2	894.9	2,583.9	8,567.8	2,435.7
2016.....	49,376	12,025	16,274	21,077	2,215.2	893.1	2,566.8	8,481.1	2,418.0
2015.....	47,558	11,496	15,915	20,147	2,241.2	895.3	2,630.2	8,653.4	2,462.8
2014.....	43,383	10,530	14,742	18,111	2,200.5	885.6	2,592.2	8,475.4	2,422.4
2013.....	41,975	9,780	14,585	17,610	2,301.4	893.0	2,739.2	8,973.8	2,539.6
2012.....	39,051	9,181	13,615	16,255	2,303.2	904.2	2,711.7	9,130.8	2,555.0
2011.....	36,779	8,707	13,357	14,715	2,330.4	925.0	2,819.2	9,020.2	2,590.4
2010.....	35,126	8,685	12,698	13,743	2,390.3	986.5	2,859.2	9,475.3	2,692.6
2009.....	33,559	8,288	12,375	12,896	2,377.1	980.2	2,885.0	9,393.9	2,688.5
2008.....	32,647	8,292	12,225	12,130	2,437.7	1,036.0	2,971.3	9,517.3	2,763.4
2007.....	30,691	7,795	11,863	11,033	2,413.2	1,024.5	3,018.7	9,349.7	2,753.6
2006.....	29,861	7,787	11,572	10,502	2,474.7	1,080.0	3,072.7	9,629.1	2,836.1
2005.....	28,755	7,632	11,228	9,895	2,512.8	1,114.9	3,129.8	9,790.9	2,894.4
2004.....	26,967	7,257	10,627	9,083	2,495.1	1,117.5	3,132.7	9,854.6	2,904.6
2003.....	26,616	7,422	10,667	8,527	2,595.9	1,199.3	3,324.6	9,961.2	3,028.5
2002.....	25,347	7,227	10,092	8,028	2,611.6	1,226.3	3,346.6	10,078.6	3,064.8
2001.....	24,236	7,154	9,681	7,401	2,639.6	1,274.5	3,420.1	10,030.8	3,110.2
2000.....	22,752	6,761	9,094	6,897	2,659.3	1,278.9	3,497.5	10,314.7	3,174.8
Black, non-Hispanic, single race⁴									
2019.....	206,301	76,804	68,102	61,395	4,143.3	2,477.0	4,982.1	12,002.0	4,534.6
2018.....	202,290	74,478	66,907	60,905	4,240.1	2,515.9	5,105.5	12,180.9	4,620.7
Black, non-Hispanic, bridged race⁵									
2019.....	207,014	77,055	68,321	61,638	4,093.9	2,446.5	4,923.2	11,869.0	4,481.5
2018.....	203,001	74,709	67,137	61,155	4,190.7	2,484.8	5,048.1	12,050.1	4,568.0
2017.....	195,742	71,021	65,076	59,645	4,203.6	2,460.9	5,093.1	12,101.9	4,577.8
2016.....	188,818	67,628	63,074	58,116	4,235.2	2,459.5	5,123.4	12,171.0	4,596.3
2015.....	182,355	63,318	61,461	57,576	4,271.9	2,425.7	5,152.8	12,364.4	4,612.8
2014.....	175,050	60,068	59,483	55,499	4,295.0	2,432.6	5,144.2	12,331.4	4,609.3
2013.....	171,707	57,508	59,224	54,975	4,412.8	2,464.8	5,270.9	12,659.0	4,711.3
2012.....	165,703	54,481	57,565	53,657	4,456.1	2,470.1	5,261.4	12,812.2	4,729.5
2011.....	162,044	52,744	57,367	51,933	4,550.7	2,524.5	5,331.0	13,131.3	4,821.8
2010.....	160,114	51,930	56,942	51,242	4,663.4	2,582.2	5,477.8	13,385.7	4,935.2
2009.....	156,952	51,335	56,785	48,832	4,668.5	2,611.6	5,535.9	13,179.2	4,945.9
2008.....	159,439	51,220	58,481	49,738	4,862.9	2,685.4	5,759.2	13,976.5	5,161.5
2007.....	158,050	50,890	58,398	48,762	4,949.3	2,753.3	5,825.5	14,233.4	5,252.0
2006.....	157,668	50,574	59,416	47,678	5,042.2	2,803.8	5,985.8	14,423.0	5,358.5
2005.....	160,966	51,166	61,319	48,481	5,245.8	2,903.3	6,230.1	15,062.1	5,575.6
2004.....	158,751	51,126	60,748	46,877	5,280.4	2,963.5	6,260.2	15,082.0	5,620.2
2003.....	161,779	52,583	61,770	47,426	5,457.9	3,097.6	6,438.8	15,434.7	5,796.9
2002.....	162,496	52,748	62,183	47,565	5,566.2	3,161.6	6,587.2	15,498.5	5,890.8
2001.....	162,363	53,803	61,592	46,968	5,631.0	3,266.2	6,647.5	15,172.0	5,926.8
2000.....	162,179	54,645	60,874	46,660	5,727.3	3,378.8	6,764.3	14,837.5	5,986.1

See footnotes at end of table.

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019—Con.

Race and Hispanic origin and year	Both sexes								
	Number of deaths				Death rate ¹				Age-adjusted rate ²
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
White, non-Hispanic single race⁴									
2019.....	1,707,073	420,378	552,717	733,978	4,147.8	1,783.6	4,468.3	14,067.8	4,243.5
2018.....	1,698,503	413,115	542,277	743,111	4,233.1	1,799.9	4,529.9	14,287.4	4,300.8
White, non-Hispanic bridged race⁵									
2019.....	1,710,052	421,407	553,760	734,885	4,131.1	1,776.9	4,452.6	14,020.8	4,228.7
2018.....	1,701,556	414,203	543,365	743,988	4,217.1	1,793.7	4,515.2	14,243.2	4,286.9
2017.....	1,684,667	408,427	530,116	746,124	4,285.5	1,806.1	4,612.9	14,336.0	4,339.5
2016.....	1,638,592	395,154	514,552	728,886	4,277.9	1,800.3	4,606.0	14,062.6	4,300.4
2015.....	1,638,812	384,094	517,686	737,032	4,390.4	1,811.0	4,717.9	14,324.3	4,377.9
2014.....	1,589,400	367,779	510,281	711,340	4,367.7	1,798.8	4,700.7	13,977.4	4,322.8
2013.....	1,581,591	355,949	512,252	713,390	4,465.5	1,811.8	4,769.4	14,176.8	4,378.4
2012.....	1,549,055	339,392	511,339	698,324	4,508.0	1,810.1	4,792.4	14,129.9	4,380.0
2011.....	1,535,530	325,930	519,160	690,440	4,642.6	1,856.1	4,871.3	14,215.3	4,442.5
2010.....	1,509,149	319,805	520,983	668,361	4,660.1	1,876.2	4,886.8	14,286.1	4,467.2
2009.....	1,482,669	315,532	524,664	642,473	4,636.1	1,888.2	4,911.3	14,006.3	4,447.8
2008.....	1,519,812	316,682	549,086	654,044	4,835.6	1,958.1	5,085.3	14,667.4	4,627.2
2007.....	1,483,736	306,342	549,752	627,642	4,823.5	1,970.6	5,056.2	14,453.9	4,597.2
2006.....	1,489,841	307,475	564,113	618,253	4,909.7	2,023.0	5,156.3	14,700.3	4,690.3
2005.....	1,516,916	314,958	581,712	620,246	5,046.6	2,097.9	5,297.1	15,263.1	4,848.5
2004.....	1,493,442	317,606	582,454	593,382	5,003.7	2,127.9	5,309.2	15,022.1	4,838.9
2003.....	1,538,976	329,570	600,563	608,843	5,181.2	2,216.6	5,486.7	15,656.0	5,026.0
2002.....	1,548,455	338,961	606,431	603,063	5,238.7	2,280.4	5,569.8	15,843.2	5,111.7
2001.....	1,538,801	346,389	603,143	589,269	5,215.5	2,316.1	5,589.7	15,677.5	5,117.1
2000.....	1,545,284	356,869	604,658	583,757	5,250.5	2,366.2	5,675.4	15,799.7	5,188.7
Hispanic⁷									
2019.....	128,471	37,337	42,375	48,759	2,769.4	1,323.0	3,240.3	9,577.6	3,016.2
2018.....	124,164	35,433	41,404	47,327	2,810.4	1,320.8	3,348.8	9,483.8	3,042.0
2017.....	118,434	33,368	39,830	45,236	2,817.1	1,308.7	3,379.7	9,504.4	3,049.2
2016.....	111,932	31,550	38,106	42,276	2,820.3	1,313.9	3,397.2	9,481.9	3,055.3
2015.....	107,567	30,275	37,089	40,203	2,851.0	1,332.4	3,430.1	9,585.2	3,089.4
2014.....	100,670	28,036	35,342	37,292	2,834.7	1,316.5	3,415.6	9,635.1	3,082.0
2013.....	97,140	26,684	34,766	35,690	2,916.3	1,342.8	3,524.6	9,986.9	3,177.6
2012.....	91,892	24,868	33,614	33,410	2,923.0	1,330.9	3,552.1	10,157.0	3,202.0
2011.....	87,193	23,984	32,621	30,588	2,936.8	1,366.2	3,585.5	10,072.2	3,221.9
2010.....	83,492	22,962	31,364	29,166	3,001.6	1,392.7	3,637.3	10,777.9	3,340.7
2009.....	79,274	22,379	30,498	26,397	2,962.6	1,410.1	3,663.9	10,293.5	3,299.8
2008.....	78,201	21,943	30,262	25,996	3,072.4	1,456.3	3,780.9	10,917.7	3,442.1
2007.....	74,507	21,127	29,490	23,890	3,075.0	1,475.5	3,833.7	10,765.4	3,452.1
2006.....	72,894	21,061	28,772	23,061	3,148.2	1,535.4	3,902.6	11,167.9	3,557.3
2005.....	72,490	21,422	29,010	22,058	3,273.6	1,624.9	4,126.9	11,423.6	3,715.0
2004.....	67,236	20,420	26,879	19,937	3,184.1	1,610.8	4,047.5	11,088.4	3,638.3
2003.....	66,944	20,596	26,219	20,129	3,316.5	1,686.9	4,188.2	11,732.4	3,807.0
2002.....	64,579	20,476	24,838	19,265	3,352.5	1,742.9	4,222.0	11,805.8	3,857.3
2001.....	62,716	20,172	23,637	18,907	3,407.2	1,783.5	4,283.2	11,982.6	3,921.9
2000.....	59,189	19,420	21,951	17,818	3,414.2	1,803.8	4,335.9	11,822.9	3,931.6

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019—Con.

Race and Hispanic origin and year	Men								
	Number of deaths				Death rate ¹				Age-adjusted rate ²
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
All races and origins³									
2019.....	1,013,512	320,247	355,100	338,165	4,209.9	2,178.6	5,074.1	14,229.6	4,684.7
2018.....	997,417	312,911	347,188	337,318	4,279.5	2,196.5	5,155.0	14,504.0	4,756.4
2017.....	975,468	303,931	336,671	334,866	4,323.0	2,190.2	5,254.0	14,689.2	4,811.0
2016.....	940,916	292,742	324,819	323,355	4,317.5	2,186.1	5,258.6	14,533.8	4,791.4
2015.....	927,897	282,347	323,846	321,704	4,399.7	2,190.0	5,376.3	14,795.8	4,867.3
2014.....	893,863	268,648	316,430	308,785	4,392.2	2,175.5	5,369.2	14,642.2	4,838.4
2013.....	877,700	257,898	315,340	304,462	4,478.1	2,186.0	5,474.2	14,911.6	4,914.2
2012.....	849,719	244,935	310,681	294,103	4,516.2	2,186.4	5,500.6	14,974.4	4,931.5
2011.....	832,394	234,276	312,693	285,425	4,639.0	2,236.2	5,610.8	15,069.8	5,008.3
2010.....	817,400	229,704	311,830	275,866	4,707.7	2,275.1	5,693.7	15,414.3	5,100.3
2009.....	799,608	225,794	311,032	262,782	4,696.6	2,290.5	5,725.8	15,142.9	5,086.4
2008.....	808,517	225,400	321,896	261,221	4,875.3	2,372.3	5,939.4	15,709.6	5,274.5
2007.....	788,013	218,344	320,803	248,866	4,897.8	2,398.6	5,948.6	15,620.2	5,280.5
2006.....	787,058	218,165	327,315	241,578	5,002.5	2,464.5	6,103.8	15,910.1	5,405.6
2005.....	796,838	222,807	335,235	238,796	5,158.2	2,566.0	6,300.3	16,538.9	5,605.5
2004.....	783,210	222,891	333,669	226,650	5,156.9	2,604.7	6,354.2	16,432.3	5,631.8
2003.....	801,965	231,421	342,332	228,212	5,355.6	2,737.8	6,604.5	17,053.6	5,866.4
2002.....	806,431	237,021	343,504	225,906	5,462.1	2,831.2	6,734.4	17,493.6	6,015.3
2001.....	799,856	241,581	340,742	217,533	5,476.2	2,896.3	6,809.5	17,250.0	6,046.0
2000.....	802,369	247,408	340,219	214,742	5,568.3	2,979.6	6,972.6	17,501.4	6,178.3
American Indian and Alaska Native, non-Hispanic, single race⁴									
2019.....	4,475	2,023	1,623	829	3,307.5	2,281.4	4,434.7	8,268.5	3,780.1
2018.....	4,328	1,959	1,556	813	3,357.0	2,306.3	4,515.9	8,534.5	3,854.5
American Indian and Alaska Native, non-Hispanic, bridged race⁵									
2019.....	5,056	2,255	1,833	968	3,400.9	2,304.7	4,620.9	8,676.2	3,908.3
2018.....	4,955	2,225	1,777	953	3,502.0	2,376.9	4,760.5	9,031.5	4,039.2
2017.....	4,786	2,084	1,762	940	3,561.9	2,322.1	5,051.9	9,649.9	4,189.8
2016.....	4,624	2,047	1,627	950	3,625.4	2,384.9	4,984.4	10,474.1	4,299.8
2015.....	4,376	1,908	1,593	875	3,622.1	2,334.6	5,211.3	10,272.4	4,329.3
2014.....	4,097	1,780	1,469	848	3,596.3	2,303.2	5,100.2	10,821.8	4,340.9
2013.....	3,930	1,688	1,421	821	3,670.0	2,320.3	5,232.5	11,437.7	4,472.3
2012.....	3,708	1,655	1,336	717	3,691.9	2,424.8	5,219.8	10,886.7	4,454.8
2011.....	3,525	1,509	1,293	723	3,757.5	2,381.8	5,278.0	12,134.9	4,606.2
2010.....	3,391	1,453	1,225	713	3,865.1	2,436.0	5,416.0	13,034.7	4,793.9
2009.....	3,159	1,384	1,167	608	3,712.8	2,391.8	5,312.0	11,576.5	4,554.9
2008.....	3,232	1,417	1,221	594	3,969.9	2,566.9	5,731.0	12,112.6	4,860.9
2007.....	3,121	1,302	1,185	634	4,020.6	2,489.0	5,746.6	13,506.6	4,996.7
2006.....	2,920	1,240	1,112	568	3,926.7	2,479.1	5,578.7	12,874.0	4,854.4
2005.....	2,941	1,256	1,093	592	4,110.1	2,617.9	5,648.6	14,001.9	5,090.1
2004.....	2,819	1,194	1,113	512	4,119.8	2,603.1	6,015.9	12,626.4	5,043.9
2003.....	2,796	1,163	1,067	566	4,246.2	2,644.4	5,962.9	14,242.6	5,245.0
2002.....	2,712	1,180	1,028	504	4,279.2	2,797.1	5,944.6	12,933.0	5,157.6
2001.....	2,580	1,139	960	481	4,216.2	2,804.9	5,760.2	12,270.4	5,014.9
2000.....	2,531	1,087	953	491	4,256.9	2,773.9	5,890.4	12,004.9	5,012.4
Asian, non-Hispanic, single race⁴									
2019.....	25,550	6,993	9,174	9,383	2,378.8	1,067.7	2,956.5	8,624.8	2,665.2
2018.....	24,941	6,858	8,860	9,223	2,442.0	1,095.5	3,007.9	9,149.3	2,762.3

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019—Con.

Race and Hispanic origin and year	Men								
	Number of deaths				Death rate ¹				Age-adjusted rate ²
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
Native Hawaiian or Other Pacific Islander, non-Hispanic, single race⁴									
2019.....	896	471	287	138	3,173.4	2,529.0	3,897.9	6,138.8	3,457.6
2018.....	822	394	289	139	3,095.8	2,222.6	4,252.5	6,850.7	3,510.7
Asian or Pacific Islander, non-Hispanic, bridged race^{5,6}									
2019.....	27,434	7,851	9,820	9,763	2,406.3	1,124.3	2,999.3	8,533.9	2,698.8
2018.....	26,709	7,639	9,471	9,599	2,465.3	1,145.4	3,049.8	9,062.0	2,792.5
2017.....	25,619	7,352	9,098	9,169	2,478.0	1,150.4	3,076.9	9,252.7	2,828.1
2016.....	23,502	6,793	8,370	8,339	2,433.1	1,134.8	3,034.5	9,112.6	2,787.8
2015.....	22,673	6,499	8,105	8,069	2,462.1	1,132.5	3,096.7	9,459.6	2,851.2
2014.....	20,643	5,927	7,430	7,286	2,412.3	1,110.6	3,047.8	9,309.8	2,804.0
2013.....	20,198	5,552	7,352	7,294	2,553.7	1,125.0	3,256.5	10,183.0	2,992.7
2012.....	18,485	5,090	6,793	6,602	2,516.9	1,109.1	3,227.4	10,155.5	2,970.7
2011.....	17,665	4,987	6,535	6,143	2,581.1	1,166.9	3,317.9	10,227.6	3,041.9
2010.....	17,018	4,897	6,272	5,849	2,674.4	1,223.6	3,439.0	10,880.8	3,194.6
2009.....	16,150	4,704	6,083	5,363	2,643.2	1,222.7	3,470.4	10,515.5	3,160.5
2008.....	15,676	4,629	6,037	5,010	2,708.3	1,272.7	3,601.3	10,556.0	3,238.0
2007.....	14,929	4,402	5,864	4,663	2,720.7	1,277.7	3,657.2	10,633.5	3,270.0
2006.....	14,533	4,269	5,728	4,536	2,796.1	1,311.9	3,722.0	11,215.0	3,382.2
2005.....	14,252	4,257	5,701	4,294	2,896.1	1,385.4	3,871.4	11,425.4	3,499.4
2004.....	13,237	3,915	5,391	3,931	2,856.6	1,353.9	3,857.0	11,411.1	3,476.1
2003.....	13,215	4,008	5,502	3,705	3,016.1	1,468.1	4,135.3	11,539.5	3,650.3
2002.....	12,693	3,823	5,263	3,607	3,065.3	1,482.3	4,181.8	11,897.2	3,718.1
2001.....	12,158	3,796	5,023	3,339	3,109.0	1,556.8	4,226.9	11,756.6	3,755.8
2000.....	11,781	3,778	4,774	3,229	3,228.9	1,656.3	4,329.1	12,192.7	3,897.5
Black, non-Hispanic, single race⁴									
2019.....	95,719	42,843	32,462	20,414	4,751.3	3,222.5	6,134.6	13,094.9	5,467.1
2018.....	93,524	41,369	32,058	20,097	4,852.0	3,255.2	6,339.3	13,310.2	5,583.3
Black, non-Hispanic, bridged race⁵									
2019.....	95,970	42,952	32,542	20,476	4,688.8	3,180.2	6,052.6	12,918.7	5,394.3
2018.....	93,782	41,474	32,147	20,161	4,790.0	3,213.1	6,258.9	13,138.2	5,511.6
2017.....	89,597	39,396	30,739	19,462	4,768.2	3,179.0	6,248.3	13,164.9	5,493.3
2016.....	85,855	37,301	29,653	18,901	4,780.1	3,156.2	6,277.6	13,320.0	5,510.9
2015.....	82,132	34,867	28,940	18,325	4,789.7	3,109.3	6,345.5	13,344.0	5,513.4
2014.....	78,444	32,962	27,672	17,810	4,808.4	3,110.5	6,287.9	13,532.9	5,516.8
2013.....	76,492	31,433	27,582	17,477	4,930.5	3,137.2	6,501.4	13,959.7	5,658.8
2012.....	73,353	29,731	26,856	16,766	4,974.5	3,146.5	6,550.1	14,006.7	5,686.7
2011.....	70,756	28,597	26,061	16,098	5,037.3	3,203.3	6,498.5	14,516.7	5,760.7
2010.....	70,396	28,060	26,281	16,055	5,223.0	3,274.7	6,849.1	14,974.2	5,978.5
2009.....	68,847	27,768	25,790	15,289	5,231.0	3,320.6	6,845.2	14,823.8	5,982.7
2008.....	69,750	27,653	26,761	15,336	5,453.2	3,415.7	7,204.8	15,638.4	6,259.9
2007.....	69,015	27,377	26,523	15,115	5,558.5	3,497.3	7,260.4	16,163.7	6,386.7
2006.....	68,938	27,265	27,045	14,628	5,685.1	3,575.2	7,500.3	16,363.7	6,537.1
2005.....	69,716	27,303	27,723	14,690	5,872.6	3,669.9	7,771.6	16,993.5	6,760.1
2004.....	69,037	27,228	27,394	14,415	5,957.1	3,751.7	7,817.7	17,418.9	6,871.4
2003.....	70,410	27,957	28,297	14,156	6,182.8	3,931.3	8,171.7	17,391.7	7,087.5
2002.....	70,418	27,859	28,137	14,422	6,298.9	4,002.6	8,263.2	17,717.7	7,197.2
2001.....	70,881	28,446	28,083	14,352	6,438.7	4,157.7	8,409.1	17,347.0	7,284.5
2000.....	70,891	28,745	27,715	14,431	6,581.2	4,303.9	8,551.0	16,944.8	7,361.9

See footnotes at end of table.

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019—Con.

Race and Hispanic origin and year	Men								
	Number of deaths				Death rate ¹				Age-adjusted rate ²
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
White, non-Hispanic, single race⁴									
2019.....	819,195	243,812	288,331	287,052	4,402.9	2,178.7	5,226.0	15,123.0	4,848.3
2018.....	807,974	239,182	281,466	287,326	4,463.9	2,193.5	5,280.3	15,400.2	4,909.3
White, non-Hispanic, bridged race⁵									
2019.....	820,504	244,336	288,804	287,364	4,384.2	2,169.9	5,206.1	15,068.1	4,829.9
2018.....	809,364	239,733	281,994	287,637	4,446.3	2,185.3	5,262.3	15,348.9	4,892.3
2017.....	795,777	234,580	274,094	287,103	4,497.5	2,182.5	5,378.9	15,521.8	4,953.4
2016.....	770,488	227,014	265,420	278,054	4,483.5	2,175.8	5,382.6	15,274.6	4,920.9
2015.....	763,873	220,260	265,528	278,085	4,573.2	2,184.0	5,500.5	15,526.0	4,997.9
2014.....	739,947	210,808	261,374	267,765	4,562.1	2,170.0	5,499.0	15,286.4	4,960.6
2013.....	728,907	202,897	261,077	264,933	4,637.1	2,174.3	5,582.7	15,485.9	5,017.0
2012.....	708,546	193,452	258,273	256,821	4,673.8	2,175.8	5,599.2	15,504.4	5,026.0
2011.....	697,841	185,021	262,132	250,688	4,814.7	2,227.4	5,727.3	15,568.2	5,106.2
2010.....	685,031	181,567	261,723	241,741	4,855.2	2,256.9	5,770.3	15,816.6	5,167.3
2009.....	672,473	178,722	262,553	231,198	4,845.2	2,269.9	5,810.0	15,552.9	5,155.9
2008.....	681,707	178,730	272,482	230,495	5,024.5	2,350.7	6,009.9	16,114.4	5,337.9
2007.....	664,684	172,867	272,398	219,419	5,036.5	2,372.1	6,008.4	15,946.0	5,327.9
2006.....	664,897	173,056	278,690	213,151	5,134.6	2,435.4	6,154.5	16,206.8	5,444.8
2005.....	673,920	177,517	285,608	210,795	5,279.8	2,536.0	6,329.5	16,840.7	5,637.2
2004.....	664,751	178,642	285,752	200,357	5,272.3	2,575.6	6,387.5	16,711.2	5,662.6
2003.....	682,034	186,112	293,774	202,148	5,463.5	2,702.8	6,627.1	17,356.7	5,893.3
2002.....	687,441	191,844	295,763	199,834	5,561.6	2,797.3	6,753.1	17,800.1	6,041.8
2001.....	682,255	196,158	294,013	192,084	5,555.5	2,853.6	6,818.2	17,550.2	6,063.6
2000.....	686,417	202,038	294,842	189,537	5,635.0	2,930.5	6,977.8	17,853.2	6,197.6
Hispanic⁷									
2019.....	62,035	21,604	21,286	19,145	3,065.3	1,671.6	3,898.2	10,330.6	3,524.1
2018.....	59,730	20,454	20,873	18,403	3,109.4	1,670.5	4,054.5	10,124.4	3,553.7
2017.....	56,631	19,032	20,011	17,588	3,105.5	1,639.9	4,086.8	10,147.1	3,552.0
2016.....	53,484	18,211	18,848	16,425	3,112.9	1,668.9	4,054.0	10,139.3	3,554.5
2015.....	51,164	17,253	18,483	15,428	3,138.2	1,674.3	4,127.1	10,145.7	3,584.1
2014.....	47,887	15,948	17,544	14,395	3,128.6	1,655.1	4,103.3	10,318.0	3,586.7
2013.....	45,969	15,355	17,160	13,454	3,211.2	1,710.4	4,218.1	10,596.0	3,690.5
2012.....	43,214	14,102	16,552	12,560	3,211.7	1,679.1	4,250.9	10,799.6	3,710.7
2011.....	41,063	13,540	16,081	11,442	3,241.9	1,722.4	4,303.5	10,707.8	3,740.8
2010.....	39,934	13,040	15,723	11,171	3,378.8	1,775.0	4,461.9	11,779.8	3,956.0
2009.....	37,573	12,623	14,911	10,039	3,313.1	1,789.2	4,396.7	11,225.7	3,872.3
2008.....	36,666	12,421	14,851	9,394	3,404.2	1,854.9	4,563.6	11,453.4	3,993.8
2007.....	35,225	11,978	14,438	8,809	3,440.2	1,884.2	4,612.2	11,719.4	4,059.0
2006.....	34,356	11,780	14,209	8,367	3,515.8	1,936.1	4,739.5	12,135.6	4,182.3
2005.....	34,666	11,984	14,539	8,143	3,715.1	2,052.2	5,096.5	12,746.1	4,444.5
2004.....	31,766	11,279	13,397	7,090	3,575.5	2,012.3	4,983.1	11,996.6	4,291.5
2003.....	31,534	11,465	12,904	7,165	3,719.3	2,128.4	5,097.9	12,782.3	4,489.3
2002.....	30,744	11,476	12,291	6,977	3,804.8	2,217.5	5,176.7	13,142.1	4,608.0
2001.....	29,757	11,231	11,759	6,767	3,854.1	2,253.8	5,291.3	13,133.4	4,666.5
2000.....	28,308	10,842	10,973	6,493	3,894.5	2,287.9	5,395.3	13,086.2	4,715.4

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019—Con.

Race and Hispanic origin and year	Women								
	Number of deaths				Death rate ¹				Age-adjusted rate ²
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
All races and origins³									
2019.....	1,103,820	235,312	332,927	535,581	3,681.4	1,402.0	3,710.9	12,666.1	3,603.4
2018.....	1,101,846	230,867	328,017	542,962	3,783.2	1,421.0	3,788.0	12,870.0	3,665.7
2017.....	1,091,936	227,679	321,088	543,169	3,859.2	1,440.4	3,869.1	12,966.5	3,716.5
2016.....	1,062,542	219,338	312,097	531,107	3,870.6	1,439.3	3,873.8	12,780.9	3,694.8
2015.....	1,064,386	212,669	313,720	537,997	3,990.9	1,450.9	3,971.3	13,080.8	3,772.2
2014.....	1,028,408	202,893	308,074	517,441	3,971.9	1,444.2	3,955.1	12,765.7	3,724.3
2013.....	1,026,940	196,531	309,673	520,736	4,090.7	1,464.6	4,029.1	13,021.6	3,792.6
2012.....	1,008,362	187,411	309,747	511,204	4,144.5	1,466.1	4,062.5	13,030.0	3,806.3
2011.....	999,428	180,776	313,532	505,120	4,261.8	1,505.8	4,124.2	13,143.4	3,862.8
2010.....	980,876	177,447	313,821	489,608	4,282.4	1,527.5	4,137.7	13,219.2	3,888.3
2009.....	962,329	175,238	316,695	470,396	4,258.5	1,540.5	4,172.2	12,951.6	3,874.5
2008.....	991,313	176,179	331,664	483,470	4,466.6	1,601.0	4,331.8	13,684.3	4,052.6
2007.....	967,554	170,894	331,879	464,781	4,451.3	1,612.8	4,313.2	13,486.3	4,027.9
2006.....	972,365	171,928	340,023	460,414	4,537.2	1,661.0	4,397.2	13,753.8	4,115.7
2005.....	991,351	175,548	351,430	464,373	4,675.8	1,721.3	4,532.3	14,290.8	4,261.0
2004.....	972,459	176,775	350,561	445,123	4,627.3	1,748.5	4,529.9	14,056.9	4,245.7
2003.....	1,002,408	182,076	360,692	459,640	4,798.7	1,812.0	4,676.3	14,694.5	4,409.0
2002.....	1,005,289	185,969	364,150	455,170	4,842.9	1,856.6	4,751.4	14,790.5	4,470.8
2001.....	998,564	189,379	361,187	447,998	4,827.6	1,885.7	4,758.9	14,681.6	4,475.3
2000.....	997,456	193,801	360,226	443,429	4,846.2	1,921.2	4,814.7	14,719.2	4,518.2
American Indian and Alaska Native, non-Hispanic, single race⁴									
2019.....	4,751	1,670	1,647	1,434	2,860.0	1,618.5	3,576.5	8,490.2	3,156.4
2018.....	4,730	1,676	1,650	1,404	2,992.6	1,707.8	3,791.2	8,563.1	3,288.2
American Indian and Alaska Native, non-Hispanic, bridged race⁵									
2019.....	5,075	1,786	1,756	1,533	2,756.6	1,559.3	3,476.4	8,048.1	3,035.7
2018.....	5,049	1,762	1,754	1,533	2,885.6	1,618.2	3,677.8	8,332.4	3,172.8
2017.....	4,960	1,660	1,767	1,533	2,993.3	1,603.2	3,935.7	8,879.2	3,323.6
2016.....	4,734	1,590	1,705	1,439	3,008.9	1,617.3	3,983.7	8,870.1	3,346.9
2015.....	4,690	1,590	1,631	1,469	3,145.8	1,708.0	4,019.2	9,527.2	3,487.5
2014.....	4,467	1,500	1,560	1,407	3,173.6	1,709.3	4,041.5	9,770.8	3,526.0
2013.....	4,180	1,362	1,466	1,352	3,148.4	1,649.1	4,011.8	9,917.1	3,501.9
2012.....	4,013	1,348	1,412	1,253	3,206.1	1,738.8	4,054.6	9,776.8	3,546.8
2011.....	3,898	1,248	1,393	1,257	3,313.1	1,729.3	4,146.0	10,575.5	3,672.2
2010.....	3,837	1,255	1,336	1,246	3,460.2	1,841.7	4,220.8	11,230.3	3,837.9
2009.....	3,566	1,200	1,256	1,110	3,312.4	1,818.0	4,069.3	10,293.0	3,656.7
2008.....	3,563	1,170	1,277	1,116	3,443.8	1,857.5	4,238.9	10,786.8	3,798.1
2007.....	3,502	1,148	1,287	1,067	3,526.8	1,912.2	4,395.9	10,685.0	3,869.9
2006.....	3,505	1,119	1,337	1,049	3,655.5	1,937.8	4,698.6	10,836.8	4,009.3
2005.....	3,470	1,157	1,261	1,052	3,739.1	2,082.5	4,519.9	11,254.9	4,072.8
2004.....	3,228	1,083	1,190	955	3,606.3	2,028.3	4,385.0	10,637.1	3,920.8
2003.....	3,270	1,040	1,242	988	3,762.5	2,020.2	4,676.2	11,136.2	4,081.2
2002.....	3,128	1,066	1,144	918	3,701.9	2,139.1	4,410.7	10,519.1	3,973.4
2001.....	3,052	1,015	1,136	901	3,704.8	2,094.6	4,509.7	10,317.2	3,960.5
2000.....	2,928	1,007	1,053	868	3,638.1	2,139.4	4,263.2	9,964.4	3,853.1
Asian, non-Hispanic, single race⁴									
2019.....	28,213	5,416	8,251	14,546	1,988.5	646.8	2,065.2	7,992.7	2,051.5
2018.....	27,228	5,203	8,152	13,873	2,019.8	652.5	2,151.5	8,081.2	2,095.9

See footnotes at end of table.

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019—Con.

Race and Hispanic origin and year	Women								
	Number of deaths				Death rate ¹				Age-adjusted rate ²
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
Native Hawaiian or Other Pacific Islander, non-Hispanic, single race⁴									
2019.....	899	371	292	236	2,790.0	1,831.8	3,412.8	6,914.7	3,016.5
2018.....	861	348	315	198	2,847.0	1,823.7	3,937.0	6,267.8	3,118.8
Asian or Pacific Islander, non-Hispanic, bridged race^{5,6}									
2019.....	30,037	6,048	8,853	15,136	2,008.8	683.7	2,107.4	7,944.0	2,079.7
2018.....	28,924	5,801	8,737	14,386	2,037.3	689.1	2,193.7	8,008.0	2,121.0
2017.....	27,792	5,541	8,432	13,819	2,053.2	691.2	2,203.0	8,166.7	2,144.9
2016.....	25,874	5,232	7,904	12,738	2,048.6	699.6	2,206.6	8,113.1	2,144.0
2015.....	24,885	4,997	7,810	12,078	2,071.8	703.6	2,274.6	8,187.2	2,179.3
2014.....	22,740	4,603	7,312	10,825	2,038.1	702.3	2,250.3	7,993.2	2,146.2
2013.....	21,777	4,228	7,233	10,316	2,108.1	702.7	2,358.4	8,278.8	2,219.8
2012.....	20,566	4,091	6,822	9,653	2,139.9	735.2	2,339.4	8,541.4	2,262.3
2011.....	19,114	3,720	6,822	8,572	2,138.5	723.9	2,464.4	8,316.6	2,273.1
2010.....	18,108	3,788	6,426	7,894	2,173.3	788.9	2,455.2	8,647.6	2,344.4
2009.....	17,409	3,584	6,292	7,533	2,174.1	777.8	2,480.5	8,730.9	2,357.8
2008.....	16,971	3,663	6,188	7,120	2,231.7	838.9	2,538.1	8,901.0	2,431.1
2007.....	15,762	3,393	5,999	6,370	2,179.8	815.0	2,578.6	8,590.5	2,394.8
2006.....	15,328	3,518	5,844	5,966	2,231.4	889.3	2,624.0	8,694.4	2,462.5
2005.....	14,503	3,375	5,527	5,601	2,223.6	894.6	2,613.4	8,823.3	2,477.3
2004.....	13,730	3,342	5,236	5,152	2,223.8	927.7	2,625.2	8,925.7	2,511.4
2003.....	13,401	3,414	5,165	4,822	2,282.4	987.1	2,750.3	9,013.9	2,597.6
2002.....	12,654	3,404	4,829	4,421	2,274.1	1,027.1	2,748.3	8,961.0	2,611.3
2001.....	12,078	3,358	4,658	4,062	2,291.3	1,057.6	2,836.3	8,950.7	2,657.2
2000.....	10,971	2,983	4,320	3,668	2,235.8	992.4	2,885.1	9,083.0	2,656.7
Black, non-Hispanic, single race⁴									
2019.....	110,582	33,961	35,640	40,981	3,730.1	1,917.5	4,254.1	11,522.9	3,925.2
2018.....	108,766	33,109	34,849	40,808	3,825.3	1,959.7	4,330.2	11,692.3	3,995.0
Black, non-Hispanic, bridged race⁵									
2019.....	111,044	34,103	35,779	41,162	3,689.3	1,895.7	4,208.9	11,407.9	3,883.6
2018.....	109,219	33,235	34,990	40,994	3,784.1	1,936.9	4,286.2	11,578.5	3,953.5
2017.....	106,145	31,625	34,337	40,183	3,821.6	1,920.5	4,369.8	11,646.4	3,983.0
2016.....	102,963	30,327	33,421	39,215	3,867.6	1,934.3	4,404.8	11,685.1	4,007.3
2015.....	100,223	28,451	32,521	39,251	3,924.3	1,910.9	4,414.5	11,954.7	4,031.6
2014.....	96,606	27,106	31,811	37,689	3,952.3	1,922.9	4,441.4	11,834.9	4,032.7
2013.....	95,215	26,075	31,642	37,498	4,069.6	1,958.7	4,524.5	12,132.2	4,117.4
2012.....	92,350	24,750	30,709	36,891	4,115.5	1,963.1	4,489.1	12,334.1	4,131.9
2011.....	91,288	24,147	31,306	35,835	4,233.7	2,018.0	4,637.5	12,591.4	4,244.8
2010.....	89,718	23,870	30,661	35,187	4,301.8	2,068.1	4,675.5	12,767.7	4,306.1
2009.....	88,105	23,567	30,995	33,543	4,306.7	2,086.7	4,775.8	12,544.8	4,324.1
2008.....	89,689	23,567	31,720	34,402	4,485.3	2,146.7	4,925.5	13,344.2	4,506.6
2007.....	89,035	23,513	31,875	33,647	4,561.8	2,206.7	5,002.8	13,508.7	4,585.6
2006.....	88,730	23,309	32,371	33,050	4,635.0	2,238.8	5,121.7	13,703.6	4,668.5
2005.....	91,250	23,863	33,596	33,791	4,850.3	2,343.2	5,353.8	14,352.9	4,885.1
2004.....	89,714	23,898	33,354	32,462	4,856.0	2,391.1	5,379.9	14,234.0	4,904.7
2003.....	91,369	24,626	33,473	33,270	5,005.6	2,496.5	5,460.0	14,729.5	5,049.0
2002.....	92,078	24,889	34,046	33,143	5,111.5	2,559.6	5,641.5	14,697.5	5,142.5
2001.....	91,482	25,357	33,509	32,616	5,132.2	2,632.9	5,654.8	14,378.7	5,146.4
2000.....	91,288	25,900	33,159	32,229	5,203.0	2,728.0	5,758.6	14,054.9	5,193.2

See footnotes at end of table.

Table 1. Number of deaths, death rate by age, and age-adjusted death rate for adults age 65 and older, by sex and race and Hispanic origin: United States, 2000–2019—Con.

Race and Hispanic origin and year	Women								Age-adjusted rate ²
	Number of deaths				Death rate ¹				
	65 and older	65–74	75–84	85 and older	65 and older	65–74	75–84	85 and older	
White, non-Hispanic, single race⁴									
2019.....	887,878	176,566	264,386	446,926	3,937.3	1,426.4	3,858.3	13,464.4	3,766.4
2018.....	890,529	173,933	260,811	455,785	4,043.4	1,443.7	3,927.5	13,665.0	3,824.6
White, non-Hispanic, bridged race⁵									
2019.....	889,548	177,071	264,956	447,521	3,922.2	1,421.6	3,845.9	13,421.7	3,754.3
2018.....	892,192	174,470	261,371	456,351	4,028.6	1,439.4	3,915.4	13,624.6	3,813.1
2017.....	888,890	173,847	256,022	459,021	4,112.1	1,465.2	4,002.6	13,682.1	3,864.6
2016.....	868,104	168,140	249,132	450,832	4,110.7	1,460.2	3,992.4	13,406.5	3,824.5
2015.....	874,939	163,834	252,158	458,947	4,242.3	1,472.8	4,103.1	13,682.6	3,904.3
2014.....	849,453	156,971	248,907	443,575	4,211.4	1,462.9	4,078.9	13,290.4	3,842.4
2013.....	852,684	153,052	251,175	448,457	4,328.5	1,483.9	4,142.2	13,502.5	3,901.8
2012.....	840,509	145,940	253,066	441,503	4,377.2	1,480.2	4,178.1	13,437.0	3,904.6
2011.....	837,689	140,909	257,028	439,752	4,508.4	1,522.8	4,227.0	13,544.3	3,957.4
2010.....	824,118	138,238	259,260	426,620	4,509.4	1,535.9	4,232.6	13,543.5	3,966.1
2009.....	810,196	136,810	262,111	411,275	4,475.8	1,548.1	4,252.4	13,264.8	3,945.3
2008.....	838,105	137,952	276,604	423,549	4,692.1	1,609.8	4,416.1	13,984.1	4,123.9
2007.....	819,052	133,475	277,354	408,223	4,663.4	1,616.4	4,375.2	13,761.8	4,085.6
2006.....	824,944	134,419	285,423	405,102	4,742.3	1,660.9	4,451.4	14,014.9	4,166.9
2005.....	842,996	137,441	296,104	409,451	4,874.4	1,715.2	4,577.1	14,560.9	4,306.9
2004.....	828,691	138,964	296,702	393,025	4,807.3	1,739.2	4,566.8	14,286.0	4,282.0
2003.....	856,942	143,458	306,789	406,695	4,976.6	1,797.2	4,710.5	14,928.9	4,442.2
2002.....	861,014	147,117	310,668	403,229	5,006.6	1,837.6	4,773.6	15,024.6	4,497.4
2001.....	856,546	150,231	309,130	397,185	4,973.1	1,859.0	4,771.9	14,908.1	4,493.7
2000.....	858,867	154,831	309,816	394,220	4,979.0	1,891.0	4,819.3	14,971.7	4,535.1
Hispanic⁷									
2019.....	66,436	15,733	21,089	29,614	2,540.4	1,028.5	2,768.6	9,146.5	2,642.0
2018.....	64,434	14,979	20,531	28,924	2,580.3	1,027.2	2,845.4	9,116.8	2,665.0
2017.....	61,803	14,336	19,819	27,648	2,596.2	1,032.1	2,877.0	9,136.3	2,681.1
2016.....	58,448	13,339	19,258	25,851	2,597.0	1,018.2	2,932.3	9,106.8	2,689.9
2015.....	56,403	13,022	18,606	24,775	2,632.5	1,048.7	2,937.3	9,266.4	2,727.2
2014.....	52,783	12,088	17,798	22,897	2,612.1	1,036.7	2,931.3	9,250.2	2,716.8
2013.....	51,171	11,329	17,606	22,236	2,694.1	1,039.9	3,037.8	9,651.3	2,805.4
2012.....	48,678	10,766	17,062	20,850	2,707.1	1,046.7	3,063.5	9,805.6	2,837.1
2011.....	46,130	10,444	16,540	19,146	2,709.8	1,077.4	3,085.1	9,727.2	2,851.1
2010.....	43,558	9,922	15,641	17,995	2,722.8	1,085.5	3,067.4	10,237.3	2,911.7
2009.....	41,701	9,756	15,587	16,358	2,704.7	1,106.7	3,160.1	9,794.3	2,901.3
2008.....	41,535	9,522	15,411	16,602	2,829.0	1,137.4	3,244.7	10,636.2	3,050.7
2007.....	39,282	9,149	15,052	15,081	2,807.7	1,149.2	3,299.5	10,276.7	3,032.1
2006.....	38,538	9,281	14,563	14,694	2,879.7	1,216.0	3,329.0	10,682.9	3,127.4
2005.....	37,824	9,438	14,471	13,915	2,952.0	1,285.1	3,464.7	10,769.7	3,222.3
2004.....	35,470	9,141	13,482	12,847	2,899.9	1,292.5	3,411.2	10,643.7	3,191.7
2003.....	35,410	9,131	13,315	12,964	3,024.8	1,338.4	3,570.6	11,222.9	3,343.3
2002.....	33,835	9,000	12,547	12,288	3,025.7	1,369.2	3,576.0	11,161.4	3,353.8
2001.....	32,959	8,941	11,878	12,140	3,084.3	1,413.1	3,603.6	11,424.6	3,418.8
2000.....	30,881	8,578	10,978	11,325	3,067.5	1,423.2	3,624.5	11,202.8	3,404.3

¹Rates are on an annual basis per 100,000 population in specified group.²Age-adjusted rates are per 100,000 U.S. standard population.³Includes races and origins not shown separately.⁴Only one race was reported on the death certificate. Race and Hispanic-origin categories are consistent with the 1997 Office of Management and Budget (OMB) standards; see Technical Notes in this report.⁵Multiple-race data reported according to the 1997 OMB standards were bridged to single-race categories of the 1977 OMB standards. Race and Hispanic-origin categories are consistent with the 1977 OMB standards. For more information, see Technical Notes in this report.⁶Includes Chinese, Filipino, Hawaiian, Japanese, and other Asian or Pacific Islander people.⁷People of Hispanic origin may be of any race. The Hispanic-origin category is consistent with the 1997 OMB standards; see Technical Notes in this report.

SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

Table 2. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex, race and Hispanic origin, and urban–rural status: United States, 2000–2019

Race and Hispanic origin and year	Urban								
	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
All races and origins³									
2019.....	1,716,709	3,825.1	3,974.1	816,164	4,111.9	4,571.4	900,545	3,597.7	3,519.8
2018.....	1,701,948	3,915.3	4,041.3	802,859	4,183.9	4,644.2	899,089	3,703.0	3,585.1
2017.....	1,674,753	3,976.6	4,090.6	784,399	4,227.1	4,697.3	890,354	3,779.3	3,636.6
2016.....	1,621,029	3,983.9	4,068.7	755,902	4,227.9	4,682.0	865,127	3,792.6	3,613.3
2015.....	1,608,906	4,084.7	4,141.9	743,869	4,306.7	4,754.2	865,037	3,911.4	3,688.5
2014.....	1,551,540	4,076.9	4,104.2	716,621	4,308.5	4,733.9	834,919	3,897.2	3,644.7
2013.....	1,534,801	4,180.9	4,173.0	702,351	4,393.6	4,807.8	832,450	4,016.8	3,713.7
2012.....	1,496,224	4,232.6	4,188.8	679,539	4,438.0	4,827.7	816,685	4,075.5	3,731.6
2011.....	1,473,422	4,353.2	4,253.2	665,139	4,564.6	4,905.7	808,283	4,193.4	3,789.7
2010.....	1,443,612	4,393.5	4,301.4	651,825	4,632.6	4,995.5	791,787	4,214.5	3,817.7
2009.....	1,413,705	4,376.5	4,287.4	637,614	4,626.2	4,984.6	776,091	4,190.6	3,805.3
2008.....	1,440,780	4,563.9	4,464.6	643,123	4,795.4	5,161.7	797,657	4,393.0	3,981.7
2007.....	1,406,702	4,575.0	4,462.0	627,861	4,833.3	5,185.7	778,841	4,386.0	3,967.0
2006.....	1,411,324	4,675.3	4,572.2	627,966	4,946.2	5,322.1	783,358	4,478.8	4,063.7
2005.....	1,433,260	4,814.7	4,735.3	634,819	5,091.1	5,514.1	798,441	4,615.5	4,211.2
2004.....	1,407,248	4,790.2	4,741.1	624,052	5,093.9	5,550.8	783,196	4,572.9	4,204.3
2003.....	1,444,158	4,964.9	4,928.7	638,475	5,286.5	5,781.8	805,683	4,736.6	4,364.2
2002.....	1,448,462	5,030.5	5,020.3	640,896	5,382.9	5,925.9	807,566	4,782.1	4,431.2
2001.....	1,438,682	5,033.0	5,045.6	635,680	5,398.5	5,964.2	803,002	4,776.9	4,448.2
2000.....	1,437,349	5,077.0	5,119.0	636,773	5,486.0	6,096.8	800,576	4,792.8	4,491.9
American Indian and Alaska Native, non-Hispanic, single race⁴									
2019.....	4,576	2,584.1	---	2,145	2,690.3	---	2,431	2,497.1	---
2018.....	4,533	2,692.5	---	2,129	2,804.9	---	2,404	2,600.3	---
American Indian and Alaska Native, non-Hispanic, bridged race⁵									
2019.....	5,208	2,598.8	2,947.6	2,546	2,846.2	3,311.7	2,662	2,399.3	2,661.1
2018.....	5,225	2,744.7	3,107.5	2,593	3,046.9	3,534.4	2,632	2,500.3	2,769.5
2017.....	5,086	2,819.9	3,254.0	2,569	3,184.4	3,812.6	2,517	2,524.9	2,828.4
2016.....	4,889	2,875.6	3,304.6	2,420	3,180.3	3,768.9	2,469	2,628.8	2,943.4
2015.....	4,661	2,896.4	3,356.7	2,217	3,080.0	3,746.0	2,444	2,747.8	3,058.5
2014.....	4,409	2,912.8	3,384.5	2,055	3,038.1	3,695.3	2,354	2,811.5	3,141.2
2013.....	4,180	2,947.2	3,469.6	2,069	3,267.1	4,091.7	2,111	2,689.1	3,024.5
2012.....	3,967	2,980.8	3,457.5	1,891	3,198.2	3,919.6	2,076	2,807.0	3,121.4
2011.....	3,723	3,000.2	3,487.8	1,764	3,209.7	3,958.5	1,959	2,833.8	3,151.1
2010.....	3,694	3,201.4	3,747.8	1,720	3,379.7	4,256.0	1,974	3,060.7	3,400.9
2009.....	3,364	3,002.2	3,476.8	1,557	3,149.3	3,931.5	1,807	2,885.9	3,177.0
2008.....	3,415	3,172.1	3,676.8	1,625	3,422.8	4,228.1	1,790	2,974.3	3,286.7
2007.....	3,316	3,238.4	3,740.2	1,540	3,415.0	4,270.3	1,776	3,099.4	3,396.4
2006.....	3,245	3,292.9	3,809.5	1,460	3,395.0	4,242.3	1,785	3,213.8	3,528.7
2005.....	3,188	3,339.7	3,846.9	1,419	3,400.3	4,260.0	1,769	3,292.6	3,589.0
2004.....	2,978	3,294.7	3,788.6	1,343	3,425.2	4,276.1	1,635	3,194.7	3,477.5
2003.....	3,021	3,456.5	3,938.5	1,399	3,712.6	4,629.3	1,622	3,262.3	3,527.0
2002.....	2,841	3,373.9	3,810.3	1,290	3,587.7	4,406.9	1,551	3,214.6	3,445.5
2001.....	2,752	3,375.7	3,796.8	1,192	3,446.1	4,164.2	1,560	3,323.7	3,564.8
2000.....	2,646	3,333.2	3,709.9	1,183	3,531.7	4,249.0	1,463	3,188.4	3,387.3
Asian, non-Hispanic, single race⁴									
2019.....	52,198	2,152.6	---	24,908	2,380.1	---	27,290	1,979.9	---
2018.....	50,661	2,197.7	---	24,340	2,445.2	---	26,321	2,009.6	---

Table 2. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex, race and Hispanic origin, and urban–rural status: United States, 2000–2019—Con.

Race and Hispanic origin and year	Urban								
	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Native Hawaiian or Other Pacific Islander, non-Hispanic, single race⁴									
2019.....	1,632	3,070.2	---	822	3,320.9	---	810	2,851.6	---
2018.....	1,526	3,049.9	---	750	3,214.7	---	776	2,905.9	---
Asian or Pacific Islander, non-Hispanic, bridged race^{5,6}									
2019.....	55,481	2,173.2	2,341.3	26,589	2,404.5	2,698.0	28,892	1,996.5	2,069.7
2018.....	53,741	2,215.5	2,402.5	25,903	2,464.1	2,791.6	27,838	2,025.4	2,112.1
2017.....	51,568	2,227.7	2,428.3	24,814	2,471.7	2,821.8	26,754	2,040.8	2,135.8
2016.....	47,593	2,204.1	2,409.2	22,755	2,427.3	2,783.2	24,838	2,032.8	2,130.6
2015.....	45,871	2,230.6	2,454.9	21,918	2,450.7	2,840.8	23,953	2,061.2	2,171.6
2014.....	41,804	2,188.4	2,412.6	19,956	2,402.0	2,794.8	21,848	2,024.0	2,134.8
2013.....	40,411	2,287.8	2,529.0	19,505	2,540.7	2,981.7	20,906	2,093.4	2,207.4
2012.....	37,695	2,294.6	2,550.7	17,887	2,508.0	2,967.2	19,808	2,130.9	2,256.5
2011.....	35,441	2,317.4	2,581.0	17,063	2,567.2	3,030.6	18,378	2,125.4	2,263.1
2010.....	33,863	2,376.9	2,682.5	16,415	2,655.4	3,178.1	17,448	2,163.4	2,337.6
2009.....	32,268	2,358.7	2,673.5	15,551	2,620.8	3,139.8	16,717	2,157.9	2,345.1
2008.....	31,320	2,414.9	2,744.4	15,064	2,681.9	3,214.4	16,256	2,211.0	2,413.6
2007.....	29,483	2,394.9	2,738.9	14,363	2,698.6	3,252.4	15,120	2,163.5	2,381.3
2006.....	28,598	2,450.4	2,815.1	13,928	2,765.0	3,352.8	14,670	2,211.6	2,445.9
2005.....	27,612	2,496.7	2,882.9	13,695	2,874.0	3,481.0	13,917	2,211.0	2,469.0
2004.....	25,835	2,472.9	2,888.4	12,676	2,824.3	3,453.0	13,159	2,208.2	2,499.5
2003.....	25,498	2,574.8	3,013.4	12,649	2,983.5	3,626.9	12,849	2,268.8	2,588.1
2002.....	24,224	2,585.8	3,043.4	12,130	3,029.4	3,689.8	12,094	2,254.7	2,594.5
2001.....	23,164	2,616.2	3,092.9	11,608	3,073.7	3,732.5	11,556	2,275.9	2,644.8
2000.....	21,761	2,641.9	3,163.2	11,238	3,195.7	3,875.8	10,523	2,229.3	2,653.3
Black, non-Hispanic, single race⁴									
2019.....	182,342	4,087.3	---	84,294	4,691.6	---	98,048	3,679.8	---
2018.....	178,601	4,181.8	---	82,078	4,778.0	---	96,523	3,780.6	---
Black, non-Hispanic, bridged race⁵									
2019.....	183,024	4,042.7	4,430.7	84,529	4,634.9	5,331.2	98,495	3,643.2	3,845.9
2018.....	179,271	4,136.5	4,518.6	82,317	4,721.5	5,438.5	96,954	3,742.8	3,924.0
2017.....	172,451	4,142.1	4,520.3	78,557	4,697.2	5,416.3	93,894	3,769.4	3,943.4
2016.....	166,234	4,174.6	4,541.8	75,227	4,711.9	5,434.3	91,007	3,815.0	3,969.7
2015.....	160,441	4,212.6	4,561.6	71,998	4,726.1	5,445.1	88,443	3,870.2	3,995.6
2014.....	153,891	4,236.7	4,560.0	68,832	4,752.4	5,457.0	85,059	3,894.7	3,993.7
2013.....	150,145	4,336.8	4,646.7	66,636	4,843.0	5,565.2	83,509	4,002.9	4,072.0
2012.....	144,842	4,385.9	4,672.0	64,000	4,901.5	5,612.0	80,842	4,048.6	4,088.1
2011.....	141,478	4,477.9	4,763.9	61,606	4,954.9	5,676.8	79,872	4,168.4	4,204.2
2010.....	139,357	4,578.7	4,869.6	61,224	5,134.1	5,894.0	78,133	4,220.8	4,253.7
2009.....	136,246	4,579.3	4,876.5	59,690	5,135.6	5,886.7	76,556	4,222.6	4,270.9
2008.....	138,320	4,788.9	5,119.9	60,406	5,361.2	6,180.1	77,914	4,422.9	4,485.7
2007.....	136,698	4,858.4	5,192.0	59,505	5,444.1	6,282.1	77,193	4,486.3	4,551.2
2006.....	136,661	4,967.5	5,319.4	59,738	5,601.6	6,476.1	76,923	4,566.0	4,641.6
2005.....	139,216	5,160.7	5,531.1	60,213	5,768.6	6,684.2	79,003	4,777.0	4,858.8
2004.....	137,283	5,206.8	5,592.2	59,648	5,866.4	6,822.1	77,635	4,792.7	4,890.3
2003.....	139,474	5,376.2	5,761.4	60,698	6,083.6	7,024.8	78,776	4,934.0	5,027.2
2002.....	139,733	5,482.4	5,856.9	60,486	6,190.1	7,133.2	79,247	5,042.4	5,126.7
2001.....	139,619	5,560.2	5,912.2	60,785	6,332.9	7,234.3	78,834	5,082.1	5,151.3
2000.....	139,006	5,651.0	5,967.6	60,596	6,468.7	7,310.0	78,410	5,148.2	5,194.7

See footnotes at end of table.

Table 2. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex, race and Hispanic origin, and urban–rural status: United States, 2000–2019—Con.

Race and Hispanic origin and year	Urban								
	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
White, non-Hispanic, single race⁴									
2019.....	1,347,515	4,072.6	---	641,853	4,315.7	---	705,662	3,874.2	---
2018.....	1,341,188	4,162.0	---	633,032	4,380.1	---	708,156	3,984.7	---
White, non-Hispanic, bridged race⁵									
2019.....	1,349,986	4,057.9	4,137.0	642,954	4,299.4	4,722.6	707,032	3,860.6	3,679.9
2018.....	1,343,733	4,147.9	4,197.3	634,195	4,364.8	4,785.7	709,538	3,971.5	3,740.7
2017.....	1,330,703	4,220.3	4,252.4	623,389	4,418.3	4,847.8	707,314	4,060.0	3,796.5
2016.....	1,293,481	4,216.1	4,211.8	603,412	4,411.1	4,818.8	690,069	4,059.2	3,751.7
2015.....	1,292,249	4,329.6	4,288.1	597,375	4,500.1	4,893.9	694,874	4,193.0	3,830.5
2014.....	1,253,489	4,314.2	4,238.4	579,075	4,499.2	4,865.1	674,414	4,167.1	3,772.4
2013.....	1,246,466	4,413.8	4,293.9	569,794	4,574.3	4,919.0	676,672	4,287.2	3,833.2
2012.....	1,220,486	4,463.1	4,298.5	553,795	4,618.6	4,929.5	666,691	4,341.7	3,839.2
2011.....	1,209,474	4,604.0	4,363.9	545,477	4,769.0	5,013.6	663,997	4,476.8	3,894.5
2010.....	1,186,882	4,621.0	4,388.7	534,358	4,806.6	5,069.6	652,524	4,479.2	3,906.6
2009.....	1,166,637	4,600.4	4,372.9	525,222	4,804.7	5,064.1	641,415	4,445.7	3,887.9
2008.....	1,193,492	4,790.8	4,544.4	531,231	4,972.9	5,231.8	662,261	4,654.1	4,062.2
2007.....	1,167,090	4,792.4	4,529.9	519,391	5,005.0	5,243.9	647,699	4,634.5	4,034.7
2006.....	1,173,459	4,884.5	4,632.2	520,139	5,107.3	5,368.4	653,320	4,720.6	4,126.1
2005.....	1,194,471	5,015.1	4,789.0	526,667	5,240.8	5,553.0	667,804	4,850.3	4,268.1
2004.....	1,176,618	4,974.9	4,787.9	519,992	5,236.6	5,589.4	656,626	4,785.5	4,250.2
2003.....	1,211,510	5,144.8	4,972.1	533,363	5,420.5	5,816.8	678,147	4,946.9	4,407.5
2002.....	1,218,578	5,198.2	5,060.3	537,059	5,507.7	5,961.3	681,519	4,977.7	4,468.7
2001.....	1,211,961	5,177.8	5,074.7	533,223	5,499.9	5,989.0	678,738	4,950.1	4,475.2
2000.....	1,215,887	5,207.6	5,146.6	536,084	5,572.9	6,123.2	679,803	4,951.7	4,517.4
Hispanic⁷									
2019.....	119,257	2,753.7	3,000.4	57,287	3,054.4	3,519.3	61,970	2,524.0	2,624.7
2018.....	115,527	2,801.3	3,033.3	55,240	3,103.5	3,553.3	60,287	2,571.8	2,655.9
2017.....	110,099	2,804.7	3,036.2	52,311	3,095.1	3,545.3	57,788	2,585.2	2,669.2
2016.....	104,027	2,812.6	3,047.7	49,413	3,109.1	3,556.1	54,614	2,589.1	2,681.3
2015.....	99,748	2,837.5	3,073.7	47,192	3,129.5	3,577.1	52,556	2,618.2	2,710.7
2014.....	93,410	2,824.1	3,069.3	44,233	3,125.8	3,585.4	49,177	2,598.5	2,701.8
2013.....	89,955	2,902.5	3,160.3	42,397	3,206.1	3,685.5	47,558	2,676.5	2,785.4
2012.....	85,077	2,907.7	3,184.1	39,805	3,201.8	3,698.9	45,272	2,690.5	2,819.3
2011.....	80,784	2,922.4	3,204.7	37,862	3,233.7	3,728.9	42,922	2,693.6	2,834.2
2010.....	77,249	2,983.7	3,319.1	36,769	3,367.6	3,939.8	40,480	2,703.7	2,891.8
2009.....	73,249	2,944.4	3,278.7	34,556	3,303.0	3,858.5	38,693	2,684.2	2,880.1
2008.....	72,206	3,054.7	3,423.0	33,729	3,397.2	3,985.5	38,477	2,806.6	3,029.3
2007.....	68,638	3,053.8	3,429.3	32,258	3,422.5	4,037.3	36,380	2,787.6	3,013.2
2006.....	67,317	3,137.3	3,546.1	31,629	3,519.6	4,185.5	35,688	2,861.8	3,111.6
2005.....	66,661	3,248.8	3,689.7	31,743	3,699.8	4,428.1	34,918	2,924.7	3,197.2
2004.....	61,952	3,169.1	3,625.6	29,096	3,564.7	4,283.1	32,856	2,885.5	3,181.6
2003.....	61,503	3,293.7	3,785.5	28,788	3,698.1	4,467.7	32,715	3,004.6	3,326.9
2002.....	59,082	3,316.9	3,823.2	27,978	3,772.5	4,576.0	31,104	2,991.9	3,324.0
2001.....	57,408	3,376.3	3,893.9	27,037	3,819.2	4,631.4	30,371	3,060.3	3,401.1
2000.....	53,954	3,372.6	3,893.3	25,626	3,848.8	4,669.4	28,328	3,033.1	3,376.2

Table 2. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex, race and Hispanic origin, and urban–rural status: United States, 2000–2019—Con.

Race and Hispanic origin and year	Rural								
	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
All races and origins³									
2019.....	400,623	4,364.9	4,560.2	197,348	4,670.6	5,216.5	203,275	4,104.1	4,023.6
2018.....	397,315	4,433.4	4,608.7	194,558	4,725.1	5,281.0	202,757	4,185.5	4,067.3
2017.....	392,651	4,490.6	4,656.5	191,069	4,766.8	5,337.9	201,582	4,256.8	4,111.8
2016.....	382,429	4,470.4	4,627.3	185,014	4,726.9	5,294.8	197,415	4,254.1	4,094.8
2015.....	383,377	4,579.0	4,710.5	184,028	4,820.2	5,383.8	199,349	4,376.8	4,178.0
2014.....	370,731	4,528.4	4,636.0	177,242	4,766.3	5,309.6	193,489	4,330.4	4,106.7
2013.....	369,839	4,626.3	4,702.2	175,349	4,851.8	5,390.9	194,490	4,440.3	4,168.2
2012.....	361,857	4,642.2	4,691.5	170,180	4,857.7	5,393.4	191,677	4,466.3	4,157.5
2011.....	358,400	4,748.8	4,744.6	167,255	4,960.7	5,461.6	191,145	4,577.7	4,203.2
2010.....	354,664	4,786.0	4,782.8	165,575	5,028.9	5,558.3	189,089	4,591.8	4,211.8
2009.....	348,232	4,756.7	4,757.6	161,994	4,995.6	5,530.8	186,238	4,566.8	4,190.8
2008.....	359,050	4,980.7	4,958.0	165,394	5,213.1	5,765.6	193,656	4,798.1	4,372.7
2007.....	348,865	4,929.0	4,880.1	160,152	5,168.4	5,689.3	188,713	4,742.5	4,299.8
2006.....	348,099	4,988.8	4,934.3	159,092	5,238.1	5,763.3	189,007	4,796.7	4,346.0
2005.....	354,929	5,157.8	5,103.2	162,019	5,439.4	5,995.2	192,910	4,942.9	4,480.2
2004.....	348,421	5,104.8	5,058.0	159,158	5,419.8	5,973.4	189,263	4,866.9	4,426.1
2003.....	360,215	5,315.9	5,260.9	163,490	5,644.0	6,220.7	196,725	5,071.0	4,602.4
2002.....	363,258	5,398.5	5,342.7	165,535	5,792.2	6,386.8	197,723	5,107.8	4,640.5
2001.....	359,738	5,365.0	5,309.1	164,176	5,799.4	6,384.0	195,562	5,047.6	4,591.0
2000.....	362,476	5,425.6	5,377.5	165,596	5,909.1	6,512.0	196,880	5,076.3	4,628.5
American Indian and Alaska Native, non-Hispanic, single race⁴									
2019.....	4,650	3,739.8	---	2,330	4,193.1	---	2,320	3,373.6	---
2018.....	4,525	3,814.6	---	2,199	4,147.5	---	2,326	3,545.5	---
American Indian and Alaska Native, non-Hispanic, bridged race⁵									
2019.....	4,923	3,719.1	4,126.4	2,510	4,238.8	4,789.7	2,413	3,298.5	3,592.7
2018.....	4,779	3,790.0	4,212.9	2,362	4,188.9	4,774.1	2,417	3,467.4	3,765.7
2017.....	4,660	3,892.8	4,365.3	2,217	4,129.1	4,740.6	2,443	3,700.6	4,051.0
2016.....	4,469	3,890.8	4,411.4	2,204	4,283.7	5,059.5	2,265	3,572.0	3,930.0
2015.....	4,405	4,042.1	4,570.2	2,159	4,421.2	5,164.7	2,246	3,734.3	4,103.2
2014.....	4,155	4,022.0	4,587.8	2,042	4,412.0	5,258.3	2,113	3,705.4	4,085.5
2013.....	3,930	4,009.3	4,547.6	1,861	4,253.0	5,011.5	2,069	3,812.8	4,182.9
2012.....	3,754	4,057.6	4,611.5	1,817	4,398.7	5,203.3	1,937	3,782.5	4,151.0
2011.....	3,700	4,234.5	4,870.7	1,761	4,532.5	5,500.3	1,939	3,996.0	4,405.3
2010.....	3,534	4,245.7	4,898.2	1,671	4,535.6	5,525.3	1,863	4,015.5	4,440.9
2009.....	3,361	4,165.4	4,802.9	1,602	4,494.2	5,408.8	1,759	3,905.2	4,331.8
2008.....	3,380	4,377.4	5,028.0	1,607	4,735.4	5,731.7	1,773	4,096.8	4,510.8
2007.....	3,307	4,437.3	5,110.6	1,581	4,860.0	5,978.4	1,726	4,109.8	4,521.8
2006.....	3,180	4,435.2	5,085.7	1,460	4,655.8	5,678.6	1,720	4,263.8	4,675.9
2005.....	3,223	4,677.8	5,325.1	1,522	5,103.3	6,220.3	1,701	4,353.1	4,734.5
2004.....	3,069	4,543.4	5,138.1	1,476	5,052.0	6,042.2	1,593	4,155.8	4,511.8
2003.....	3,045	4,659.0	5,318.3	1,397	4,960.1	6,049.7	1,648	4,431.1	4,822.0
2002.....	2,999	4,710.2	5,263.7	1,422	5,186.0	6,114.0	1,577	4,350.3	4,675.4
2001.....	2,880	4,641.6	5,134.8	1,388	5,217.5	6,077.9	1,492	4,209.3	4,483.6
2000.....	2,813	4,645.4	5,088.2	1,348	5,192.8	5,969.5	1,465	4,234.6	4,468.0
Asian, non-Hispanic, single race⁴									
2019.....	1,565	2,302.3	---	642	2,332.3	---	923	2,281.9	---
2018.....	1,508	2,349.9	---	601	2,318.9	---	907	2,370.9	---

Table 2. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex, race and Hispanic origin, and urban–rural status: United States, 2000–2019—Con.

Race and Hispanic origin and year	Rural								
	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Native Hawaiian or Other Pacific Islander, non-Hispanic, single race⁴									
2019.....	163	2,232.9	---	74	2,124.6	---	89	2,331.7	---
2018.....	157	2,322.5	---	72	2,234.6	---	85	2,402.5	---
Asian or Pacific Islander, non-Hispanic, bridged race^{5,6}									
2019.....	1,990	2,416.4	2,532.4	845	2,464.8	2,724.3	1,145	2,381.9	2,395.8
2018.....	1,892	2,440.8	2,569.7	806	2,504.0	2,822.3	1,086	2,395.9	2,403.1
2017.....	1,843	2,539.9	2,676.8	805	2,689.2	3,045.1	1,038	2,435.1	2,430.1
2016.....	1,783	2,560.3	2,697.1	747	2,625.4	2,933.3	1,036	2,515.4	2,549.0
2015.....	1,687	2,574.5	2,713.5	755	2,848.7	3,194.8	932	2,388.2	2,412.6
2014.....	1,579	2,580.3	2,717.4	687	2,758.0	3,099.9	892	2,458.3	2,476.5
2013.....	1,564	2,718.4	2,865.7	693	2,986.2	3,331.5	871	2,537.4	2,585.6
2012.....	1,356	2,569.4	2,684.4	598	2,814.6	3,085.7	758	2,404.1	2,427.0
2011.....	1,338	2,739.4	2,886.1	602	3,051.0	3,406.3	736	2,528.2	2,573.8
2010.....	1,263	2,817.6	2,988.1	603	3,322.5	3,699.6	660	2,474.0	2,541.4
2009.....	1,291	2,954.3	3,141.7	599	3,395.7	3,813.3	692	2,655.5	2,733.2
2008.....	1,327	3,136.0	3,317.9	612	3,576.6	3,934.3	715	2,836.9	2,932.5
2007.....	1,208	2,966.2	3,178.8	566	3,432.8	3,820.8	642	2,648.7	2,769.4
2006.....	1,263	3,189.5	3,419.6	605	3,775.4	4,202.1	658	2,791.2	2,924.1
2005.....	1,143	2,978.3	3,209.7	557	3,569.1	3,978.9	586	2,573.4	2,715.7
2004.....	1,132	3,139.0	3,368.1	561	3,848.8	4,132.7	571	2,657.5	2,849.4
2003.....	1,118	3,193.2	3,441.1	566	3,987.6	4,283.5	552	2,651.6	2,858.6
2002.....	1,123	3,329.4	3,610.5	563	4,114.6	4,387.5	560	2,793.4	3,055.1
2001.....	1,072	3,270.8	3,557.6	550	4,101.7	4,333.5	522	2,695.4	2,985.0
2000.....	991	3,110.6	3,434.8	543	4,113.3	4,334.5	448	2,401.1	2,741.0
Black, non-Hispanic, single race⁴									
2019.....	23,959	4,625.5	---	11,425	5,243.9	---	12,534	4,176.6	---
2018.....	23,689	4,738.8	---	11,446	5,457.7	---	12,243	4,219.3	---
Black, non-Hispanic, bridged race⁵									
2019.....	23,990	4,532.2	4,912.8	11,441	5,130.4	5,914.3	12,549	4,096.8	4,210.8
2018.....	23,730	4,650.4	4,985.0	11,465	5,346.5	6,107.5	12,265	4,145.8	4,207.7
2017.....	23,291	4,723.0	5,057.7	11,040	5,343.0	6,118.2	12,251	4,275.8	4,316.8
2016.....	22,584	4,741.9	5,048.0	10,628	5,325.4	6,125.2	11,956	4,321.0	4,327.9
2015.....	21,914	4,762.9	5,032.9	10,134	5,295.4	6,058.1	11,780	4,383.7	4,330.3
2014.....	21,159	4,772.2	5,005.6	9,612	5,251.6	5,988.3	11,547	4,435.1	4,348.2
2013.....	21,562	5,027.1	5,222.8	9,856	5,616.8	6,385.2	11,706	4,618.8	4,481.0
2012.....	20,861	5,013.9	5,175.8	9,353	5,538.5	6,260.6	11,508	4,655.5	4,471.8
2011.....	20,566	5,123.4	5,266.2	9,150	5,672.0	6,397.7	11,416	4,754.7	4,558.3
2010.....	20,757	5,325.2	5,435.7	9,172	5,905.0	6,616.9	11,585	4,941.1	4,705.7
2009.....	20,706	5,355.4	5,458.3	9,157	5,951.9	6,683.6	11,549	4,961.1	4,716.8
2008.....	21,119	5,410.4	5,459.6	9,344	6,133.0	6,823.5	11,775	4,947.8	4,658.8
2007.....	21,352	5,623.0	5,672.1	9,510	6,399.7	7,113.5	11,842	5,123.6	4,823.8
2006.....	21,007	5,589.4	5,636.5	9,200	6,294.4	6,956.5	11,807	5,140.7	4,862.1
2005.....	21,750	5,865.0	5,885.1	9,503	6,630.1	7,281.4	12,247	5,383.0	5,067.8
2004.....	21,468	5,805.8	5,823.5	9,389	6,605.9	7,219.0	12,079	5,306.2	5,014.7
2003.....	22,305	6,031.0	6,031.7	9,712	6,883.8	7,481.9	12,593	5,504.9	5,195.6
2002.....	22,763	6,143.0	6,103.3	9,932	7,054.2	7,602.2	12,831	5,584.6	5,233.7
2001.....	22,744	6,108.4	6,032.5	10,096	7,158.5	7,603.6	12,648	5,468.1	5,128.2
2000.....	23,173	6,231.4	6,110.4	10,295	7,332.5	7,691.0	12,878	5,563.5	5,190.0

Table 2. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex, race and Hispanic origin, and urban–rural status: United States, 2000–2019—Con.

Race and Hispanic origin and year	Rural								
	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
White, non-Hispanic, single race⁴									
2019.....	359,558	4,455.9	---	177,342	4,750.2	---	182,216	4,202.5	---
2018.....	357,315	4,523.0	---	174,942	4,796.0	---	182,373	4,288.9	---
White, non-Hispanic, bridged race⁵									
2019.....	360,066	4,431.0	4,602.5	177,550	4,721.4	5,255.7	182,516	4,180.9	4,065.2
2018.....	357,823	4,498.7	4,651.2	175,169	4,768.5	5,314.6	182,654	4,267.2	4,113.7
2017.....	353,964	4,549.8	4,690.7	172,388	4,809.1	5,369.1	181,576	4,328.2	4,145.9
2016.....	345,111	4,526.8	4,659.6	167,076	4,765.8	5,321.7	178,035	4,323.3	4,126.9
2015.....	346,563	4,633.0	4,738.2	166,498	4,855.9	5,405.0	180,065	4,444.4	4,207.7
2014.....	335,911	4,579.5	4,660.5	160,872	4,803.8	5,330.8	175,039	4,391.0	4,129.7
2013.....	335,125	4,668.7	4,716.2	159,113	4,877.0	5,397.5	176,012	4,495.1	4,183.4
2012.....	328,569	4,683.3	4,703.8	154,751	4,882.4	5,399.8	173,818	4,519.2	4,170.7
2011.....	326,056	4,791.5	4,752.6	152,364	4,985.9	5,462.1	173,692	4,633.1	4,211.5
2010.....	322,267	4,809.9	4,774.0	150,673	5,035.7	5,541.4	171,594	4,627.8	4,204.3
2009.....	316,032	4,772.7	4,741.8	147,251	4,995.3	5,507.8	168,781	4,594.1	4,175.8
2008.....	326,320	5,006.9	4,952.8	150,476	5,215.8	5,748.1	175,844	4,841.0	4,370.8
2007.....	316,646	4,941.8	4,859.5	145,293	5,152.8	5,650.0	171,353	4,776.0	4,287.6
2006.....	316,382	5,005.5	4,916.6	144,758	5,235.1	5,737.3	171,624	4,826.9	4,328.4
2005.....	322,445	5,166.8	5,079.6	147,253	5,424.2	5,960.4	175,192	4,968.5	4,459.7
2004.....	316,824	5,114.0	5,036.1	144,759	5,404.6	5,941.9	172,065	4,892.6	4,406.7
2003.....	327,466	5,320.6	5,234.4	148,671	5,623.2	6,184.1	178,795	5,092.7	4,577.8
2002.....	329,877	5,393.8	5,310.7	150,382	5,762.7	6,347.0	179,495	5,119.2	4,610.0
2001.....	326,840	5,360.0	5,281.3	149,032	5,763.6	6,345.8	177,808	5,062.9	4,566.5
2000.....	329,397	5,415.3	5,350.1	150,333	5,868.3	6,478.3	179,064	5,085.7	4,603.1
Hispanic⁷									
2019.....	9,214	2,989.4	3,236.7	4,748	3,202.3	3,589.1	4,466	2,792.0	2,909.9
2018.....	8,637	2,937.6	3,163.1	4,490	3,182.9	3,560.9	4,147	2,711.3	2,802.6
2017.....	8,335	2,991.3	3,230.3	4,320	3,237.1	3,636.7	4,015	2,765.3	2,863.6
2016.....	7,905	2,926.4	3,159.4	4,071	3,159.4	3,536.4	3,834	2,713.9	2,817.3
2015.....	7,819	3,035.1	3,300.8	3,972	3,245.3	3,668.6	3,847	2,844.8	2,970.8
2014.....	7,260	2,978.3	3,251.6	3,654	3,162.6	3,598.4	3,606	2,812.3	2,937.4
2013.....	7,185	3,101.7	3,408.4	3,572	3,272.6	3,744.2	3,613	2,949.4	3,097.3
2012.....	6,815	3,129.1	3,443.0	3,409	3,332.0	3,855.7	3,406	2,949.3	3,095.1
2011.....	6,409	3,131.3	3,455.9	3,201	3,341.5	3,888.7	3,208	2,946.3	3,097.6
2010.....	6,243	3,242.1	3,634.2	3,165	3,515.0	4,153.4	3,078	3,002.3	3,203.1
2009.....	6,025	3,202.1	3,580.8	3,017	3,434.0	4,037.5	3,008	2,999.0	3,204.8
2008.....	5,995	3,303.2	3,690.6	2,937	3,486.9	4,091.0	3,058	3,144.1	3,349.4
2007.....	5,869	3,346.2	3,744.5	2,967	3,646.1	4,308.6	2,902	3,086.6	3,294.2
2006.....	5,577	3,285.8	3,699.7	2,727	3,473.1	4,146.1	2,850	3,124.5	3,342.3
2005.....	5,829	3,586.4	4,033.8	2,923	3,890.0	4,630.9	2,906	3,325.3	3,562.4
2004.....	5,284	3,371.8	3,798.0	2,670	3,697.1	4,386.9	2,614	3,093.7	3,329.4
2003.....	5,441	3,597.5	4,071.5	2,746	3,956.5	4,727.5	2,695	3,293.1	3,560.3
2002.....	5,497	3,789.6	4,270.2	2,766	4,165.2	4,953.6	2,731	3,472.4	3,741.8
2001.....	5,308	3,782.0	4,250.1	2,720	4,239.8	5,034.0	2,588	3,396.5	3,641.7
2000.....	5,235	3,912.1	4,376.5	2,682	4,392.5	5,189.3	2,553	3,508.9	3,756.8

--- Data not available.

¹Rates are on an annual basis per 100,000 population in specified group.

²Age-adjusted rates are per 100,000 U.S. standard population.

³Includes races and origins not shown separately.

⁴Only one race was reported on the death certificate. Race and Hispanic-origin categories are consistent with the 1997 Office of Management and Budget (OMB) standards; see Technical Notes in this report.

⁵Multiple-race data reported according to the 1997 OMB standards were bridged to single-race categories of the 1977 OMB standards. Race and Hispanic-origin categories are consistent with the 1977 OMB standards. For more information, see Technical Notes in this report.

⁶Includes Chinese, Filipino, Hawaiian, Japanese, and other Asian or Pacific Islander people.

⁷People of Hispanic origin may be of any race. The Hispanic-origin category is consistent with 1997 OMB standards; see Technical Notes in this report.

SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

Table 3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019

Cause of death (based on <i>International Classification of Diseases, 10th Revision</i>) and year	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Diseases of heart (heart disease) (I00–I09,I11,I13,I20–I51)									
2019.....	531,583	983.4	1,020.9	269,477	1,119.4	1,256.1	262,106	874.2	843.5
2018.....	526,509	1,004.2	1,034.6	264,920	1,136.7	1,272.9	261,589	898.2	855.8
2017.....	519,052	1,020.6	1,046.6	259,248	1,148.9	1,287.5	259,804	918.2	867.7
2016.....	507,118	1,029.8	1,048.3	250,840	1,151.0	1,286.1	256,278	933.6	872.7
2015.....	507,138	1,061.8	1,072.9	247,607	1,174.0	1,308.9	259,531	973.1	898.9
2014.....	489,722	1,059.0	1,062.1	238,678	1,172.8	1,301.8	251,044	969.6	887.1
2013.....	488,156	1,092.0	1,085.0	235,460	1,201.3	1,327.9	252,696	1,006.6	909.6
2012.....	477,840	1,107.5	1,091.0	227,519	1,209.2	1,330.6	250,321	1,028.8	919.5
2011.....	475,097	1,147.7	1,115.6	223,669	1,246.5	1,355.8	251,428	1,072.2	944.3
2010.....	477,338	1,185.4	1,155.5	223,165	1,285.3	1,405.6	254,173	1,109.7	979.8
2009.....	479,150	1,209.3	1,180.2	222,976	1,309.7	1,432.6	256,174	1,133.6	1,003.8
2008.....	495,730	1,278.4	1,246.1	226,837	1,367.8	1,496.3	268,893	1,211.6	1,070.7
2007.....	496,095	1,311.5	1,274.7	225,657	1,402.5	1,530.2	270,438	1,244.2	1,097.1
2006.....	510,542	1,373.8	1,339.8	231,016	1,468.3	1,606.8	279,526	1,304.3	1,154.9
2005.....	530,926	1,448.6	1,421.8	238,119	1,541.4	1,700.4	292,807	1,381.0	1,231.7
2004.....	533,302	1,473.1	1,455.8	238,814	1,572.4	1,742.9	294,488	1,401.3	1,260.1
2003.....	563,390	1,570.9	1,556.9	251,441	1,679.2	1,866.4	311,949	1,493.3	1,346.5
2002.....	576,301	1,622.4	1,616.1	256,810	1,739.4	1,943.3	319,491	1,539.1	1,396.2
2001.....	582,730	1,651.2	1,651.6	257,686	1,764.2	1,975.9	325,044	1,571.5	1,431.9
2000.....	593,707	1,696.7	1,706.6	263,178	1,826.4	2,056.0	330,529	1,605.9	1,473.0
Malignant neoplasms (cancer) (C00–C97)									
2019.....	435,462	805.5	833.5	230,736	958.4	1,031.1	204,726	682.8	688.5
2018.....	431,102	822.2	849.2	227,938	978.0	1,051.8	203,164	697.6	702.2
2017.....	427,896	841.3	869.0	225,950	1,001.3	1,078.5	201,946	713.7	717.6
2016.....	422,927	858.8	884.8	222,788	1,022.3	1,099.6	200,139	729.1	730.8
2015.....	419,389	878.1	900.9	220,411	1,045.1	1,120.1	198,978	746.1	744.2
2014.....	413,886	895.0	915.0	217,140	1,067.0	1,140.4	196,746	759.9	755.4
2013.....	407,558	911.7	927.3	213,550	1,089.5	1,160.2	194,008	772.8	764.0
2012.....	403,497	935.2	946.1	210,648	1,119.6	1,186.4	192,849	792.6	779.0
2011.....	397,106	959.3	962.4	206,939	1,153.3	1,211.8	190,167	810.9	790.5
2010.....	396,670	985.1	986.8	206,507	1,189.4	1,250.5	190,163	830.2	808.1
2009.....	391,035	986.9	988.0	203,343	1,194.3	1,254.8	187,692	830.6	808.2
2008.....	391,729	1,010.2	1,008.0	202,983	1,224.0	1,281.4	188,746	850.4	825.0
2007.....	389,730	1,030.3	1,024.2	201,815	1,254.4	1,308.9	187,915	864.5	836.4
2006.....	387,515	1,042.7	1,035.6	199,866	1,270.3	1,324.1	187,649	875.6	846.0
2005.....	388,322	1,059.5	1,052.9	200,978	1,301.0	1,358.3	187,344	883.6	854.1
2004.....	385,847	1,065.8	1,060.7	198,648	1,308.0	1,368.2	187,199	890.8	863.1
2003.....	388,911	1,084.4	1,080.0	200,053	1,336.0	1,398.8	188,858	904.1	876.2
2002.....	391,001	1,100.7	1,098.1	201,658	1,365.9	1,433.6	189,343	912.1	885.9
2001.....	390,214	1,105.7	1,105.2	201,779	1,381.5	1,452.9	188,435	911.0	886.8
2000.....	392,366	1,121.3	1,123.6	202,358	1,404.3	1,480.8	190,008	923.2	901.0

Table 3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019—Con.

Cause of death (based on <i>International Classification of Diseases, 10th Revision</i>) and year	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Chronic lower respiratory diseases (J40–J47)									
2019.....	133,246	246.5	258.2	61,967	257.4	285.1	71,279	237.7	238.9
2018.....	135,560	258.5	270.0	63,097	270.7	299.9	72,463	248.8	248.7
2017.....	136,139	267.7	279.2	63,004	279.2	310.2	73,135	258.5	257.9
2016.....	131,002	266.0	276.3	61,221	280.9	311.3	69,781	254.2	252.3
2015.....	131,804	276.0	284.9	60,714	287.9	318.1	71,090	266.5	262.3
2014.....	124,693	269.6	276.6	58,078	285.4	313.8	66,615	257.3	251.7
2013.....	127,194	284.5	289.8	59,109	301.6	330.4	68,085	271.2	263.0
2012.....	122,375	283.6	286.7	56,938	302.6	329.8	65,437	269.0	258.7
2011.....	121,869	294.4	294.0	56,697	316.0	340.1	65,172	277.9	264.4
2010.....	118,031	293.1	292.4	55,205	317.9	342.4	62,826	274.3	260.7
2009.....	117,098	295.5	294.7	54,758	321.6	346.5	62,340	275.9	262.3
2008.....	121,223	312.6	310.4	56,809	342.6	367.9	64,414	290.2	274.7
2007.....	109,562	289.6	286.3	51,598	320.7	342.3	57,964	266.7	251.4
2006.....	106,845	287.5	283.9	50,164	318.8	340.6	56,681	264.5	249.6
2005.....	112,716	307.5	304.3	53,043	343.4	367.7	59,673	281.5	265.5
2004.....	105,197	290.6	288.3	49,989	329.1	354.5	55,208	262.7	249.2
2003.....	109,139	304.3	302.3	51,808	346.0	373.5	57,331	274.5	260.7
2002.....	108,313	304.9	303.8	52,207	353.6	383.8	56,106	270.3	257.4
2001.....	106,904	302.9	302.8	51,480	352.5	383.3	55,424	268.0	256.2
2000.....	106,375	304.0	305.1	51,924	360.3	394.1	54,451	264.6	254.3
Cerebrovascular diseases (stroke) (I60–69)									
2019.....	129,193	239.0	250.0	52,368	217.5	247.8	76,825	256.2	248.4
2018.....	127,244	242.7	251.7	51,051	219.0	248.9	76,193	261.6	250.4
2017.....	125,653	247.1	255.2	49,693	220.2	250.7	75,960	268.5	255.0
2016.....	121,630	247.0	253.3	47,569	218.3	247.6	74,061	269.8	253.5
2015.....	120,156	251.6	256.0	46,890	222.3	251.1	73,266	274.7	255.9
2014.....	113,308	245.0	247.3	44,125	216.8	243.3	69,183	267.2	246.7
2013.....	109,602	245.2	245.3	42,544	217.1	242.2	67,058	267.1	244.1
2012.....	109,127	252.9	250.4	41,628	221.2	245.4	67,499	277.4	250.5
2011.....	109,323	264.1	257.9	41,284	230.1	251.9	68,039	290.1	258.5
2010.....	109,990	273.1	266.9	41,414	238.5	262.3	68,576	299.4	266.6
2009.....	109,238	275.7	269.6	41,102	241.4	265.4	68,136	301.5	268.8
2008.....	114,508	295.3	288.2	42,689	257.4	283.1	71,819	323.6	287.8
2007.....	115,961	306.6	297.9	42,966	267.1	292.7	72,995	335.8	297.3
2006.....	117,010	314.8	306.9	43,412	275.9	303.6	73,598	343.4	305.5
2005.....	123,881	338.0	331.4	45,788	296.4	329.1	78,093	368.3	328.9
2004.....	130,538	360.6	355.9	48,091	316.6	354.4	82,447	392.3	352.7
2003.....	138,134	385.2	381.3	50,761	339.0	381.9	87,373	418.3	376.3
2002.....	143,293	403.4	401.6	52,178	353.4	401.6	91,115	438.9	397.3
2001.....	144,486	409.4	409.5	52,880	362.0	412.7	91,606	442.9	402.6
2000.....	148,045	423.1	425.9	54,200	376.1	432.0	93,845	456.0	417.3

Table 3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019—Con.

Cause of death (based on <i>International Classification of Diseases, 10th Revision</i>) and year	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Alzheimer disease (G30)									
2019.....	120,090	222.1	233.8	37,381	155.3	186.7	82,709	275.8	263.0
2018.....	120,658	230.1	239.2	37,359	160.3	191.9	83,299	286.0	267.9
2017.....	120,107	236.2	243.5	36,757	162.9	194.7	83,350	294.6	272.9
2016.....	114,883	233.3	237.6	34,855	159.9	190.3	80,028	291.5	265.7
2015.....	109,495	229.3	231.0	33,225	157.5	186.1	76,270	286.0	257.4
2014.....	92,604	200.3	199.6	27,965	137.4	161.1	64,639	249.6	222.1
2013.....	83,786	187.4	184.4	25,420	129.7	151.0	58,366	232.5	203.3
2012.....	82,690	191.7	186.5	25,235	134.1	155.0	57,455	236.1	204.3
2011.....	84,032	203.0	194.0	25,260	140.8	159.8	58,772	250.6	212.8
2010.....	82,616	205.2	196.9	24,995	144.0	164.8	57,621	251.6	214.3
2009.....	78,168	197.3	189.7	23,516	138.1	158.4	54,652	241.8	206.4
2008.....	81,573	210.4	202.3	24,128	145.5	166.8	57,445	258.8	221.2
2007.....	73,797	195.1	186.9	21,423	133.2	152.4	52,374	240.9	205.1
2006.....	71,660	192.8	185.8	20,786	132.1	152.1	50,874	237.4	202.9
2005.....	70,858	193.3	188.1	20,236	131.0	152.7	50,622	238.8	205.9
2004.....	65,313	180.4	177.4	18,678	123.0	145.2	46,635	221.9	193.4
2003.....	62,814	175.1	172.9	18,054	120.6	142.8	44,760	214.3	187.5
2002.....	58,289	164.1	163.2	16,724	113.3	135.5	41,565	200.2	176.5
2001.....	53,245	150.9	151.0	15,491	106.1	127.7	37,754	182.5	161.8
2000.....	48,993	140.0	141.2	14,188	98.5	119.1	34,805	169.1	151.2
Diabetes mellitus (diabetes) (E10–E14)									
2019.....	62,397	115.4	119.4	33,565	139.4	149.9	28,832	96.2	96.3
2018.....	60,182	114.8	118.4	32,027	137.4	147.8	28,155	96.7	96.0
2017.....	59,020	116.0	119.7	31,064	137.7	148.6	27,956	98.8	98.0
2016.....	56,452	114.6	117.8	29,171	133.9	144.4	27,281	99.4	97.9
2015.....	56,142	117.5	120.4	28,711	136.1	146.5	27,431	102.9	101.0
2014.....	54,161	117.1	119.3	27,341	134.3	144.2	26,820	103.6	100.8
2013.....	53,751	120.2	121.8	26,520	135.3	145.3	27,231	108.5	104.6
2012.....	52,881	122.6	123.2	25,702	136.6	145.9	27,179	111.7	106.6
2011.....	52,402	126.6	125.9	25,333	141.2	149.3	27,069	115.4	109.2
2010.....	49,191	122.2	121.5	23,327	134.3	142.7	25,864	112.9	106.4
2009.....	48,944	123.5	122.8	22,949	134.8	142.7	25,995	115.0	108.6
2008.....	50,883	131.2	130.1	23,543	142.0	150.1	27,340	123.2	116.1
2007.....	51,528	136.2	134.6	23,615	146.8	154.5	27,913	128.4	120.7
2006.....	52,351	140.9	139.2	24,049	152.9	161.1	28,302	132.1	124.2
2005.....	55,222	150.7	149.2	24,729	160.1	169.4	30,493	143.8	135.4
2004.....	53,956	149.0	148.0	24,034	158.2	167.7	29,922	142.4	134.6
2003.....	54,919	153.1	152.3	24,289	162.2	171.9	30,630	146.6	138.9
2002.....	54,715	154.0	153.6	23,556	159.6	170.1	31,159	150.1	142.8
2001.....	53,707	152.2	152.1	22,812	156.2	166.6	30,895	149.4	142.5
2000.....	52,414	149.8	150.3	22,198	154.0	164.9	30,216	146.8	140.7

Table 3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019—Con.

Cause of death (based on <i>International Classification of Diseases, 10th Revision</i>) and year	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Accidents (unintentional injuries) (V01–X59, Y85–Y86)									
2019.....	60,527	112.0	115.8	32,229	133.9	147.1	28,298	94.4	91.9
2018.....	57,213	109.1	112.0	29,934	128.4	141.0	27,279	93.7	90.0
2017.....	55,951	110.0	112.7	29,065	128.8	142.0	26,886	95.0	90.7
2016.....	53,141	107.9	109.8	27,301	125.3	137.8	25,840	94.1	89.0
2015.....	51,395	107.6	108.8	26,272	124.6	137.0	25,123	94.2	88.1
2014.....	48,282	104.4	105.0	24,323	119.5	131.3	23,959	92.5	85.9
2013.....	45,942	102.8	102.6	23,069	117.7	128.7	22,873	91.1	83.7
2012.....	44,698	103.6	102.6	22,144	117.7	128.0	22,554	92.7	84.5
2011.....	43,258	104.5	102.2	21,304	118.7	127.8	21,954	93.6	84.0
2010.....	41,300	102.6	100.6	20,479	117.9	127.7	20,821	90.9	82.0
2009.....	39,111	98.7	96.9	19,477	114.4	123.9	19,634	86.9	78.4
2008.....	39,359	101.5	99.5	19,592	118.1	127.7	19,767	89.1	80.4
2007.....	38,292	101.2	98.9	19,062	118.5	127.7	19,230	88.5	79.6
2006.....	36,689	98.7	96.7	18,098	115.0	124.4	18,591	86.7	78.6
2005.....	36,729	100.2	98.7	18,201	117.8	128.0	18,528	87.4	79.6
2004.....	35,020	96.7	95.8	17,232	113.5	124.3	17,788	84.6	77.5
2003.....	34,335	95.7	95.0	16,865	112.6	124.0	17,470	83.6	76.8
2002.....	33,641	94.7	94.4	16,535	112.0	123.7	17,106	82.4	76.0
2001.....	32,694	92.6	92.6	16,060	110.0	122.3	16,634	80.4	74.5
2000.....	31,051	88.7	89.2	15,115	104.9	117.4	15,936	77.4	72.1
Nephritis, nephrotic syndrome and nephrosis (kidney disease) (N00–N07, N17–N19, N25–N27)									
2019.....	42,230	78.1	81.6	21,158	87.9	98.9	21,072	70.3	69.7
2018.....	42,232	80.5	83.7	21,301	91.4	102.7	20,931	71.9	70.6
2017.....	41,670	81.9	84.9	20,644	91.5	103.1	21,026	74.3	72.6
2016.....	41,095	83.5	86.0	20,266	93.0	104.8	20,829	75.9	73.4
2015.....	41,258	86.4	88.3	20,396	96.7	108.5	20,862	78.2	74.9
2014.....	39,957	86.4	87.6	19,658	96.6	108.1	20,299	78.4	74.3
2013.....	39,080	87.4	87.8	18,925	96.6	107.7	20,155	80.3	75.2
2012.....	37,740	87.5	87.2	18,242	97.0	107.4	19,498	80.1	74.3
2011.....	37,796	91.3	89.7	18,183	101.3	111.0	19,613	83.6	76.4
2010.....	41,994	104.3	102.5	20,120	115.9	127.4	21,874	95.5	87.2
2009.....	40,465	102.1	100.5	19,143	112.4	123.6	21,322	94.4	86.4
2008.....	39,921	102.9	101.0	18,821	113.5	124.5	21,100	95.1	86.8
2007.....	38,484	101.7	99.5	18,165	112.9	123.6	20,319	93.5	85.1
2006.....	37,377	100.6	98.5	17,521	111.4	122.5	19,856	92.7	84.4
2005.....	36,416	99.4	97.8	16,948	109.7	121.6	19,468	91.8	84.1
2004.....	35,105	97.0	95.9	16,296	107.3	119.7	18,809	89.5	82.3
2003.....	35,254	98.3	97.5	16,434	109.7	123.0	18,820	90.1	83.1
2002.....	34,316	96.6	96.2	16,080	108.9	122.8	18,236	87.8	81.3
2001.....	33,121	93.9	93.9	15,425	105.6	119.7	17,696	85.6	79.6
2000.....	31,225	89.2	89.7	14,448	100.3	114.3	16,777	81.5	76.3

Table 3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019—Con.

Cause of death (based on <i>International Classification of Diseases, 10th Revision</i>) and year	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Influenza and pneumonia (J09–J18)									
2019.....	40,399	74.7	77.8	19,359	80.4	91.6	21,040	70.2	67.9
2018.....	48,888	93.2	96.3	22,923	98.4	112.4	25,965	89.2	85.3
2017.....	46,862	92.1	94.8	21,684	96.1	110.1	25,178	89.0	84.3
2016.....	42,479	86.3	88.0	19,966	91.6	104.2	22,513	82.0	77.0
2015.....	48,774	102.1	103.2	22,204	105.3	120.1	26,570	99.6	91.8
2014.....	44,836	97.0	97.1	20,804	102.2	115.5	24,032	92.8	85.0
2013.....	48,031	107.4	106.3	21,717	110.8	125.0	26,314	104.8	94.1
2012.....	43,355	100.5	98.6	19,847	105.5	118.7	23,508	96.6	85.9
2011.....	45,386	109.6	105.9	20,572	114.6	127.1	24,814	105.8	92.6
2010.....	42,846	106.4	103.2	19,450	112.0	125.0	23,396	102.1	89.6
2009.....	43,469	109.7	106.6	19,532	114.7	128.2	23,937	105.9	93.2
2008.....	48,382	124.8	120.9	21,086	127.1	142.7	27,296	123.0	107.4
2007.....	45,941	121.5	117.2	20,098	124.9	140.5	25,843	118.9	103.3
2006.....	49,346	132.8	128.8	21,586	137.2	154.9	27,760	129.5	113.2
2005.....	55,453	151.3	147.9	23,653	153.1	175.1	31,800	150.0	131.6
2004.....	52,760	145.7	143.6	22,830	150.3	173.7	29,930	142.4	126.0
2003.....	57,670	160.8	159.0	24,461	163.4	190.3	33,209	159.0	140.7
2002.....	58,826	165.6	164.9	24,944	169.0	199.3	33,882	163.2	145.2
2001.....	55,518	157.3	157.4	23,528	161.1	191.4	31,990	154.7	138.2
2000.....	58,557	167.3	168.6	24,709	171.5	205.6	33,848	164.5	148.1
Parkinson disease (G20–G21)									
2019.....	34,435	63.7	68.4	21,015	87.3	101.9	13,420	44.8	44.8
2018.....	32,988	62.9	67.1	19,943	85.6	99.9	13,045	44.8	44.5
2017.....	31,177	61.3	65.3	18,872	83.6	97.9	12,305	43.5	43.0
2016.....	28,929	58.7	62.2	17,373	79.7	93.2	11,556	42.1	41.1
2015.....	27,269	57.1	59.8	16,388	77.7	90.2	10,881	40.8	39.4
2014.....	25,482	55.1	57.2	15,240	74.9	86.5	10,242	39.6	37.8
2013.....	24,526	54.9	56.4	14,640	74.7	85.6	9,886	39.4	37.2
2012.....	23,203	53.8	54.6	13,739	73.0	82.9	9,464	38.9	36.2
2011.....	22,535	54.4	54.3	13,187	73.5	81.9	9,348	39.9	36.6
2010.....	21,448	53.3	53.1	12,480	71.9	80.4	8,968	39.2	35.7
2009.....	20,028	50.5	50.2	11,740	69.0	77.2	8,288	36.7	33.6
2008.....	19,995	51.6	51.0	11,651	70.3	78.0	8,344	37.6	34.2
2007.....	19,584	51.8	50.7	11,252	69.9	77.3	8,332	38.3	34.6
2006.....	19,080	51.3	50.3	10,979	69.8	77.3	8,101	37.8	34.1
2005.....	19,030	51.9	51.1	10,920	70.7	78.5	8,110	38.3	34.6
2004.....	17,564	48.5	47.9	10,081	66.4	74.2	7,483	35.6	32.4
2003.....	17,566	49.0	48.5	9,921	66.3	74.3	7,645	36.6	33.4
2002.....	16,577	46.7	46.4	9,357	63.4	71.8	7,220	34.8	31.8
2001.....	16,181	45.9	45.8	9,146	62.6	71.4	7,035	34.0	31.3
2000.....	15,350	43.9	44.2	8,596	59.7	68.6	6,754	32.8	30.4

Table 3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019—Con.

Cause of death (based on <i>International Classification of Diseases, 10th Revision</i>) and year	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Intentional self-harm (suicide) (U03,X60–X84,Y87.0)									
2019.....	9,173	17.0	17.2	7,620	31.7	32.9	1,553	5.2	5.2
2018.....	9,102	17.4	17.5	7,576	32.5	33.6	1,526	5.2	5.2
2017.....	8,568	16.8	17.0	7,085	31.4	32.6	1,483	5.2	5.2
2016.....	8,204	16.7	16.8	6,754	31.0	32.2	1,450	5.3	5.3
2015.....	7,912	16.6	16.7	6,543	31.0	32.1	1,369	5.1	5.1
2014.....	7,702	16.7	16.7	6,396	31.4	32.4	1,306	5.0	5.0
2013.....	7,215	16.1	16.2	6,062	30.9	31.8	1,153	4.6	4.6
2012.....	6,648	15.4	15.5	5,553	29.5	30.5	1,095	4.5	4.5
2011.....	6,321	15.3	15.3	5,275	29.4	30.2	1,046	4.5	4.5
2010.....	5,994	14.9	14.9	5,035	29.0	29.8	959	4.2	4.2
2009.....	5,858	14.8	14.8	4,946	29.1	29.8	912	4.0	4.1
2008.....	5,755	14.8	14.8	4,844	29.2	29.9	911	4.1	4.1
2007.....	5,421	14.3	14.3	4,569	28.4	29.2	852	3.9	4.0
2006.....	5,299	14.3	14.2	4,462	28.4	29.2	837	3.9	3.9
2005.....	5,404	14.7	14.7	4,550	29.5	30.4	854	4.0	4.0
2004.....	5,198	14.4	14.3	4,397	29.0	29.9	801	3.8	3.8
2003.....	5,248	14.6	14.6	4,453	29.7	30.8	795	3.8	3.8
2002.....	5,548	15.6	15.6	4,695	31.8	33.0	853	4.1	4.1
2001.....	5,393	15.3	15.3	4,589	31.4	32.6	804	3.9	3.9
2000.....	5,306	15.2	15.2	4,477	31.1	32.6	829	4.0	4.0
Dementia-related causes³									
2019.....	267,914	495.6	520.1	88,508	367.6	440.5	179,406	598.3	567.7
2018.....	263,172	501.9	520.2	85,892	368.5	439.5	177,280	608.7	567.3
2017.....	258,335	507.9	521.9	83,371	369.5	440.1	174,964	618.4	569.3
2016.....	246,093	499.7	507.5	78,942	362.2	429.4	167,151	608.9	552.0
2015.....	242,681	508.1	510.0	77,473	367.3	432.5	165,208	619.4	553.6
2014.....	236,495	511.4	507.8	75,283	369.9	432.7	161,212	622.6	549.8
2013.....	230,805	516.3	506.1	72,950	372.2	432.0	157,855	628.8	546.4
2012.....	220,253	510.5	495.0	69,553	369.7	426.3	150,700	619.4	532.2
2011.....	209,907	507.1	482.9	65,571	365.4	414.2	144,336	615.5	519.1
2010.....	193,555	480.7	460.1	60,571	348.9	398.9	132,984	580.6	491.6
2009.....	174,986	441.6	423.6	54,243	318.6	365.0	120,743	534.3	453.7
2008.....	176,386	454.9	436.6	53,597	323.2	370.5	122,789	553.3	469.9
2007.....	153,717	406.4	388.8	46,342	288.0	329.8	107,375	494.0	418.3
2006.....	149,194	401.4	386.4	44,792	284.7	328.1	104,402	487.2	414.4
2005.....	127,808	348.7	339.1	37,139	240.4	281.1	90,669	427.6	367.3
2004.....	112,725	311.4	306.1	32,690	215.2	255.1	80,035	380.8	330.7
2003.....	109,098	304.2	300.3	31,545	210.7	250.8	77,553	371.3	323.5
2002.....	100,829	283.8	282.4	29,269	198.2	238.7	71,560	344.7	302.4
2001.....	91,199	258.4	258.6	26,664	182.6	221.5	64,535	312.0	275.2
2000.....	82,481	235.7	237.8	23,965	166.3	202.9	58,516	284.3	252.9

Table 3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019—Con.

Cause of death (based on <i>International Classification of Diseases, 10th Revision</i>) and year	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Drug-induced causes ³									
2019.....	5,108	9.4	9.0	3,156	13.1	12.0	1,952	6.5	6.4
2018.....	4,553	8.7	8.3	2,729	11.7	10.8	1,824	6.3	6.1
2017.....	4,103	8.1	7.7	2,354	10.4	9.6	1,749	6.2	6.1
2016.....	3,575	7.3	6.9	1,965	9.0	8.4	1,610	5.9	5.7
2015.....	3,189	6.7	6.5	1,702	8.1	7.6	1,487	5.6	5.5
2014.....	2,920	6.3	6.1	1,434	7.0	6.7	1,486	5.7	5.6
2013.....	2,706	6.1	5.9	1,361	6.9	6.7	1,345	5.4	5.3
2012.....	2,396	5.6	5.4	1,166	6.2	6.0	1,230	5.1	5.0
2011.....	2,146	5.2	5.2	997	5.6	5.4	1,149	4.9	4.9
2010.....	1,960	4.9	4.8	884	5.1	5.1	1,076	4.7	4.7
2009.....	1,997	5.0	5.0	924	5.4	5.4	1,073	4.7	4.7
2008.....	1,847	4.8	4.7	847	5.1	5.1	1,000	4.5	4.5
2007.....	1,674	4.4	4.4	774	4.8	4.8	900	4.1	4.1
2006.....	2,224	6.0	5.9	1,053	6.7	6.9	1,171	5.5	5.4
2005.....	1,981	5.4	5.4	965	6.2	6.4	1,016	4.8	4.7
2004.....	1,708	4.7	4.7	801	5.3	5.4	907	4.3	4.3
2003.....	1,575	4.4	4.4	749	5.0	5.1	826	4.0	3.9
2002.....	1,397	3.9	4.0	628	4.3	4.4	769	3.7	3.6
2001.....	1,218	3.5	3.4	558	3.8	3.9	660	3.2	3.1
2000.....	1,156	3.3	3.3	514	3.6	3.7	642	3.1	3.0
Drug overdose causes ³									
2019.....	4,469	8.3	7.8	2,735	11.4	10.4	1,734	5.8	5.6
2018.....	3,972	7.6	7.2	2,368	10.2	9.4	1,604	5.5	5.4
2017.....	3,529	6.9	6.6	1,973	8.7	8.0	1,556	5.5	5.4
2016.....	3,075	6.2	6.0	1,666	7.6	7.1	1,409	5.1	5.0
2015.....	2,760	5.8	5.6	1,439	6.8	6.4	1,321	5.0	4.9
2014.....	2,568	5.6	5.4	1,219	6.0	5.7	1,349	5.2	5.1
2013.....	2,344	5.2	5.1	1,148	5.9	5.6	1,196	4.8	4.7
2012.....	2,094	4.9	4.8	981	5.2	5.0	1,113	4.6	4.6
2011.....	1,892	4.6	4.5	840	4.7	4.6	1,052	4.5	4.5
2010.....	1,722	4.3	4.2	745	4.3	4.3	977	4.3	4.2
2009.....	1,721	4.3	4.3	755	4.4	4.4	966	4.3	4.3
2008.....	1,587	4.1	4.1	701	4.2	4.2	886	4.0	4.0
2007.....	1,435	3.8	3.8	646	4.0	4.0	789	3.6	3.6
2006.....	1,321	3.6	3.5	553	3.5	3.5	768	3.6	3.6
2005.....	1,203	3.3	3.3	540	3.5	3.6	663	3.1	3.1
2004.....	1,104	3.0	3.0	461	3.0	3.1	643	3.1	3.1
2003.....	1,070	3.0	3.0	460	3.1	3.1	610	2.9	2.9
2002.....	1,060	3.0	3.0	461	3.1	3.3	599	2.9	2.9
2001.....	910	2.6	2.6	399	2.7	2.8	511	2.5	2.5
2000.....	854	2.4	2.4	364	2.5	2.7	490	2.4	2.3

Table 3. Number of deaths, death rate, and age-adjusted death rate for adults age 65 and older, by sex for the 10 leading causes of death, suicide, dementia-related causes, drug-induced causes, drug overdose causes, alcohol-induced causes, and injury by firearms: United States, 2000–2019—Con.

Cause of death (based on <i>International Classification of Diseases, 10th Revision</i>) and year	Both sexes			Men			Women		
	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²	Number of deaths	Death rate ¹	Age-adjusted rate ²
Alcohol-induced causes ³									
2019.....	9,518	17.6	17.0	7,225	30.0	28.5	2,293	7.6	7.5
2018.....	9,082	17.3	16.7	6,894	29.6	28.1	2,188	7.5	7.4
2017.....	8,343	16.4	15.9	6,421	28.5	27.0	1,922	6.8	6.7
2016.....	7,906	16.1	15.6	6,071	27.9	26.5	1,835	6.7	6.6
2015.....	7,178	15.0	14.7	5,541	26.3	25.1	1,637	6.1	6.1
2014.....	6,437	13.9	13.6	4,976	24.5	23.4	1,461	5.6	5.6
2013.....	5,873	13.1	12.9	4,504	23.0	22.1	1,369	5.5	5.5
2012.....	5,450	12.6	12.5	4,124	21.9	21.2	1,326	5.4	5.5
2011.....	4,987	12.0	12.0	3,835	21.4	20.8	1,152	4.9	5.0
2010.....	4,961	12.3	12.3	3,776	21.7	21.1	1,185	5.2	5.3
2009.....	4,659	11.8	11.7	3,536	20.8	20.1	1,123	5.0	5.1
2008.....	4,643	12.0	12.0	3,543	21.4	20.8	1,100	5.0	5.1
2007.....	4,506	11.9	12.0	3,464	21.5	21.0	1,042	4.8	4.9
2006.....	4,315	11.6	11.7	3,223	20.5	20.0	1,092	5.1	5.2
2005.....	4,259	11.6	11.7	3,177	20.6	20.1	1,082	5.1	5.3
2004.....	4,303	11.9	11.9	3,261	21.5	20.9	1,042	5.0	5.1
2003.....	4,148	11.6	11.6	3,099	20.7	20.1	1,049	5.0	5.2
2002.....	4,226	11.9	11.9	3,138	21.3	20.7	1,088	5.2	5.4
2001.....	4,271	12.1	12.1	3,190	21.8	21.2	1,081	5.2	5.4
2000.....	4,360	12.5	12.4	3,310	23.0	22.3	1,050	5.1	5.2
Injury by firearms ³									
2019.....	6,965	12.9	13.1	6,200	25.8	27.0	765	2.6	2.5
2018.....	6,990	13.3	13.5	6,213	26.7	27.7	777	2.7	2.7
2017.....	6,572	12.9	13.1	5,849	25.9	27.1	723	2.6	2.5
2016.....	6,266	12.7	12.9	5,565	25.5	26.6	701	2.6	2.6
2015.....	6,052	12.7	12.8	5,380	25.5	26.5	672	2.5	2.5
2014.....	5,864	12.7	12.8	5,229	25.7	26.6	635	2.5	2.5
2013.....	5,573	12.5	12.6	4,958	25.3	26.2	615	2.4	2.5
2012.....	5,270	12.2	12.3	4,704	25.0	25.8	566	2.3	2.4
2011.....	4,999	12.1	12.2	4,451	24.8	25.5	548	2.3	2.4
2010.....	4,703	11.7	11.7	4,189	24.1	24.8	514	2.2	2.3
2009.....	4,723	11.9	11.9	4,215	24.8	25.4	508	2.2	2.3
2008.....	4,566	11.8	11.8	4,095	24.7	25.3	471	2.1	2.2
2007.....	4,292	11.3	11.3	3,862	24.0	24.6	430	2.0	2.0
2006.....	4,183	11.3	11.3	3,777	24.0	24.6	406	1.9	1.9
2005.....	4,325	11.8	11.7	3,870	25.1	25.7	455	2.1	2.2
2004.....	4,190	11.6	11.6	3,759	24.8	25.5	431	2.1	2.1
2003.....	4,232	11.8	11.8	3,798	25.4	26.1	434	2.1	2.1
2002.....	4,402	12.4	12.4	3,979	27.0	27.8	423	2.0	2.0
2001.....	4,364	12.4	12.4	3,910	26.8	27.7	454	2.2	2.2
2000.....	4,264	12.2	12.2	3,804	26.4	27.5	460	2.2	2.2

¹Rates are on an annual basis per 100,000 population in specified group.²Age-adjusted rates are per 100,000 U.S. standard population.³For the list of *International Classification of Diseases, 10th Revision* codes included, see Technical Notes in this report.

SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

Technical Notes

Data

Mortality statistics in this report are based on death certificate information filed in the 50 states and the District of Columbia and processed by the National Center for Health Statistics through the Vital Statistics Cooperative Program. This report includes data for states using either the 1989 or 2003 revision of the U.S. Standard Certificate of Death from 2000 through 2019. In 2003, only five jurisdictions had implemented the 2003 revision of the death certificate, but by 2018, all states and the District of Columbia reported deaths using the 2003 revision. More than 99% of deaths occurring in the United States are represented in the vital statistics data (29). Only deaths of U.S. residents are included in this report.

Cause of death

Causes of death are classified according to the *International Classification of Diseases, 10th Revision* (ICD-10) (12). Cause-of-death statistics presented are based on the underlying cause of death. The underlying cause is “the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury” (12). The manner of death describes the circumstances under which the death occurred, including intent, and is classified as natural, accident (unintentional injury), suicide, homicide, or undetermined. Both cause and manner of death are reflected in the coding of underlying cause of death (12).

Codes for dementia-related causes

Causes of death attributable to dementia-related mortality include ICD-10 codes F01, Vascular dementia; F03, Unspecified dementia; G30, Alzheimer disease; and G31, Other degenerative diseases of nervous system, not elsewhere classified.

Codes for drug-induced deaths

Causes of death attributable to drug-induced mortality include ICD-10 codes D52.1, Drug-induced folate deficiency anemia; D59.0, Drug-induced hemolytic anemia; D59.2, Drug-induced nonautoimmune hemolytic anemia; D61.1, Drug-induced aplastic anemia; D64.2, Secondary sideroblastic anemia due to drugs and toxins; E06.4, Drug-induced thyroiditis; E16.0, Drug-induced hypoglycemia without coma; E23.1, Drug-induced hypopituitarism; E24.2, Drug-induced Cushing syndrome; E27.3, Drug-induced adrenocortical insufficiency; E66.1, Drug-induced obesity; selected codes from the ICD-10 title of Mental and behavioral disorders due to psychoactive substance use, specifically, F11.1–F11.5, F11.7–F11.9, F12.1–F12.5, F12.7–F12.9, F13.1–F13.5, F13.7–F13.9, F14.1–F14.5, F14.7–F14.9, F15.1–F15.5, F15.7–F15.9, F16.1–F16.5, F16.7–F16.9, F17.3–F17.5, F17.7–F17.9, F18.1–F18.5, F18.7–F18.9, F19.1–F19.5, and F19.7–F19.9; G21.1, Other drug-induced

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

Codes for drug-overdose causes—Causes of death attributable to drug overdose are a subcategory of drug-induced causes. Drug-overdose mortality includes ICD-10 codes X40–X44, X60–X64, X85, and Y10–Y14.

Codes for alcohol-induced deaths

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

Codes for firearm-related deaths

Causes of death attributable to firearm-related injuries include ICD-10 codes U01.4, Terrorism involving firearms (homicide) (U.S. code, not officially a World Health Organization

ICD code); W32–W34, Accidental discharge of firearms; X72–X74, Intentional self-harm (suicide) by discharge of firearms; X93–X95, Assault (homicide) by discharge of firearms; Y22–Y24, Discharge of firearms, undetermined intent; and Y35.0, Legal intervention involving firearm discharge. Deaths from firearm-related injuries exclude deaths due to explosives and other causes indirectly related to firearms.

Race and Hispanic origin

Beginning with data year 2018, multiple-race data were collected and reported for the entire year by all 50 states and the District of Columbia. Previously, data by race for death certificates collecting only one race—the source of the numerators for death rates—were incompatible with the reporting in other states that had adopted the new standards and with population data collected in the 2000 and 2010 censuses, intercensal estimates for 1991–1999 and 2001–2009, and postcensal estimates for 2011–2017—the denominators for the rates. To produce death rates by race, the reported multiple-race data from death certificates and population data for multiple-race people had to be bridged to single-race categories. The bridging procedures used for the mortality records and the multiple-race population estimates were similar (30,31). Multiracial decedents were imputed to a single race (American Indian and Alaska Native, Asian or Pacific Islander, Black, or White) according to the combination of races, Hispanic origin, sex, and geographic area indicated on the death certificate. The imputation procedure is detailed in “NCHS Procedures for Multiple-Race and Hispanic Origin Data: Collection, Coding, Editing, and Transmitting,” available from: https://www.cdc.gov/nchs/data/dvs/multiple_race_docu_5-10-04.pdf. Beginning with the 2018 data year, use of the bridged-race process was no longer needed because all states collected data on race according to the 1997 Office of Management and Budget guidelines for the entire year. However, bridged estimates will be calculated through 2020 to inform the reporting of trends over time.

Death rates for Hispanic, Asian or Pacific Islander non-Hispanic, and American Indian and Alaska Native non-Hispanic people are affected by inconsistencies in reporting Hispanic origin and race on the death certificate compared with censuses, surveys, and birth certificates. Studies have shown underreporting on death certificates of Hispanic decedents from 1999 through 2011 by 3% overall, 3% for ages 65–74, and 2% for age 75 and older. Among Asian or Pacific Islander non-Hispanic decedents during 1999–2011, estimates of underreporting were 3% overall, 8% for ages 65–74, and 1% for age 75 and older (18). Recent research has found that misclassification of American Indian and Alaska Native non-Hispanic people has resulted in death rates being underreported by about 34% for all ages and by 37% for ages 65–74, 31% for ages 75–84, and 39% for age 85 and older (19).

Computing rates

Bridged-race estimates of the U.S. resident population were used to compute death rates in this report. For 2001–2009, they are July 1 intercensal estimates; for 2011–2019, they are July 1

postcensal estimates based on the 2010 census; and for 2000 and 2010, they are April 1 census counts (32–35).

Comparisons among rates, unless otherwise specified, are statistically significant at the 0.05 level of significance. Tests of statistical significance are described elsewhere (14). The mortality data presented in this report are not subject to sampling error. However, mortality data based on complete counts may be affected by random variation; that is, the number of deaths that actually occurred may be considered as one of a large series of possible results that could have arisen under the same circumstances (14). When there are fewer than 100 deaths, random variation tends to be relatively large. When there are 100 deaths or more, a normal approximation is used to calculate statistical tests. Most of the comparisons in this report are based on death rates where the number of deaths is greater than 100, so the normal distribution and the z test statistic were used to compute statistical significance. Rates are not computed if the number of deaths is less than 20, below which they are considered to be statistically unreliable for presentation (14).

Trends

The National Cancer Institute’s Joinpoint software (Version 4.8.0.1), with its default settings, was used to analyze the trends in death rates from 2000 through 2019 (22,23). A linear weighted least-squares model was fitted and log-transformed. The grid search algorithm method was used and a maximum of three joinpoints were allowed, with a minimum of two observations required between joinpoints as well as between a joinpoint and the end of the data. An uncorrelated errors model was fitted, a permutation test was used for the model selection method, and the parametric method was used for the annual percent change/average annual percent change/tau confidence intervals. The alpha was set at 0.05.

**U.S. DEPARTMENT OF
HEALTH & HUMAN SERVICES**

Centers for Disease Control and Prevention
National Center for Health Statistics
3311 Toledo Road, Room 4551
Hyattsville, MD 20782–2064

FIRST CLASS MAIL
POSTAGE & FEES PAID
CDC/NCHS
PERMIT NO. G-284

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

For more NCHS NVSRs, visit:
<https://www.cdc.gov/nchs/products/nvsr.htm>.



National Vital Statistics Reports, Vol. 72, No. 14, December 15, 2023

Contents

Abstract	1
Introduction	1
Data and Methods	1
Data	1
Race and Hispanic origin	2
Urban–rural status	2
Rates and significance testing	2
Results	2
Death rate by sex	2
Death rate by race and Hispanic origin	2
Death rate by age group	4
Death rate by urban–rural status	6
Death rate for leading causes of death	6
Death rate for other selected causes	9
Summary	10
References	11
List of Detailed Tables	12
Internet Table	12
Technical Notes	36

Suggested citation

Kramarow EA, Tejada-Vera B. Mortality in adults age 65 and older: United States, 2000–2019. National Vital Statistics Reports; vol 72 no 14. Hyattsville, MD: National Center for Health Statistics. 2023. DOI: <https://dx.doi.org/10.15620/cdc:134501>.

Copyright information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

National Center for Health Statistics

Brian C. Moyer, Ph.D., *Director*
Amy M. Branum, Ph.D., *Associate Director for Science*

Division of Analysis and Epidemiology

Irma E. Arispe, Ph.D., *Director*
Julie D. Weeks, Ph.D., *Acting Associate Director for Science*

Division of Vital Statistics

Paul D. Sutton, Ph.D., *Acting Director*
Andrés A. Berruti, Ph.D., M.A., *Associate Director for Science*