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Deaths: Final Data for 2021

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Abstract

Objectives—This report presents final 2021 data on U.S. deaths, death rates, life expectancy, infant and maternal mortality, and trends by selected characteristics such as age, sex, Hispanic origin and race, state of residence, and cause of death.

Methods—Information reported on death certificates is presented in descriptive tabulations. The original records are filed in state registration offices. Statistical information is compiled in a national database through the Vital Statistics Cooperative Program of the National Center for Health Statistics. Causes of death are processed according to the *International Classification of Diseases, 10th Revision*. Beginning in 2018, all states and the District of Columbia were using the 2003 revised certificate of death for the entire year, which includes the 1997 Office of Management and Budget revised standards for race. Data based on these revised standards are not completely comparable to previous years.

Results—In 2021, a total of 3,464,231 deaths were reported in the United States. The age-adjusted death rate was 879.7 deaths per 100,000 U.S. standard population, an increase of 5.3% from the 2020 rate. Life expectancy at birth was 76.4 years, a decrease of 0.6 year from 2020. Age-specific death rates increased from 2020 to 2021 for every age group. In 2021, 9 of the 10 leading causes of death remained the same as in 2020. Heart disease remained the top leading cause, followed by cancer and COVID-19. The infant mortality rate of 5.44 infant deaths per 1,000 live births in 2021 did not change significantly from the rate in 2020 (5.42).

Conclusions—In 2021, the age-adjusted death rate increased and life expectancy at birth decreased for the total, male, and female populations, primarily due to the influence of deaths from COVID-19.

Keywords: mortality • cause of death • life expectancy • National Vital Statistics System

Highlights

Mortality experience in 2021

- In 2021, a total of 3,464,231 resident deaths were registered in the United States, an increase of 80,502 deaths compared with 2020 (3,383,729). The 1-year increase in the number of deaths was primarily driven by the COVID-19 pandemic.
- The crude death rate was 1,043.8 deaths per 100,000 population. The age-adjusted death rate, which accounts for the aging of the population, was 879.7 deaths per 100,000 U.S. standard population.
- The age-adjusted death rate for the American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native) population (1,109.2) was 1.2 times greater than for the White non-Hispanic (subsequently, White) population (893.9).
- The age-adjusted death rate for the Black non-Hispanic (subsequently, Black) population (1,118.0) was 1.3 times greater than for the White population (893.9).
- The age-adjusted death rate for the White population (893.9) was 1.9 times greater than for the Asian non-Hispanic (subsequently, Asian) population (461.7) and 1.2 times greater than for the Hispanic population (724.7).
- Life expectancy at birth was 76.4 years.
- From 2020 to 2021, life expectancy at birth decreased by 0.7 year for males (from 74.2 to 73.5) and by 0.6 year for females (79.9 to 79.3).
- The 15 leading causes of death in 2021 were:

    1. Diseases of heart (heart disease)
    2. Malignant neoplasms (cancer)
    3. COVID-19
    4. Accidents (unintentional injuries)
    5. Cerebrovascular diseases (stroke)
    6. Chronic lower respiratory diseases
    7. Alzheimer disease
    8. Diabetes mellitus (diabetes)
    9. Chronic liver disease and cirrhosis

10. Nephritis, nephrotic syndrome and nephrosis (kidney disease)
11. Intentional self-harm (suicide)
12. Essential hypertension and hypertensive renal disease (hypertension)
13. Influenza and pneumonia
14. Septicemia
15. Parkinson disease

- In 2021, the infant mortality rate (IMR) was 5.44 infant deaths per 1,000 live births.
- The 10 leading causes of infant death were:

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

Comparison with previous year

- The age-adjusted death rate increased 5.3% from 835.4 per 100,000 standard population in 2020 to 879.7 in 2021.
- Life expectancy for the total population decreased 0.6 year from 77.0 in 2020 to 76.4 in 2021.
- Life expectancy for females (79.3) was 5.8 years higher than for males (73.5), an increase of 0.1 year from 2020.
- The difference in life expectancy between the Black and White populations decreased 0.4 year from 5.9 years in 2020 to 5.5 years in 2021.
- From 2020 to 2021, life expectancy decreased for American Indian and Alaska Native males (1.6 years), American Indian and Alaska Native females (1.5 years), White males (0.8 year), White females (0.6 year), Black females (0.4 year), Asian females (0.3 year), Hispanic females (0.2 year), and Black males (0.2 year).
- The 15 leading causes of death remained the same in 2021 as in 2020, although some causes changed ranks.
- Age-adjusted death rates increased significantly in 2021 from 2020 for 11 of the 15 leading causes of death: heart disease, cancer, COVID-19, unintentional injuries, stroke, diabetes, Chronic liver disease and cirrhosis, kidney disease, suicide, hypertension, and Septicemia. Significant decreases occurred in 2021 from 2020 for 3 of the 15 leading causes of death: Chronic lower respiratory diseases, Alzheimer disease, and Influenza and pneumonia.
- Age-adjusted death rates increased from 2020 to 2021 for drug-induced causes (13.9%) and for alcohol-induced causes (9.9%).
- The decrease in life expectancy at birth for the total population in 2021 was mainly due to increases in mortality from COVID-19, unintentional injuries, Chronic liver disease and cirrhosis, suicide, and homicide.
- Among external causes of injury death, unintentional poisoning has been the leading mechanism of injury mortality since 2011.
- IMR did not change significantly in 2021 from 2020.
- Nine of the 10 leading causes of infant death remained the same in 2021 as in 2020. Intrauterine hypoxia and birth asphyxia replaced Neonatal hemorrhage as the 10th leading cause of infant death.

Introduction

This report presents detailed 2021 data on deaths and death rates according to demographic and medical characteristics. These data provide information on mortality patterns among residents of the United States by such variables as age, sex, Hispanic origin and race, state of residence, and cause of death. Information on these mortality patterns is key to understanding changes in the health and well-being of the U.S. population (1). Companion reports present additional details on leading causes of death and life expectancy in the United States (2,3).

Cause-of-death statistics presented in this report are classified according to the *International Classification of Diseases, 10th Revision* (ICD–10) (4–6). Detail on cause-of-death classification is provided in Technical Notes of this report. The COVID-19 pandemic that began in 2020 continued to have a substantial impact on the mortality profile of the U.S. population for 2021.

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

The 2003 revision of the U.S. Standard Certificate of Death uses the revised 1997 Office of Management and Budget standards for the collection of race and Hispanic ethnicity (7,8). The 1997 standards allow individuals to report more than one race and increase the race categories from four to five by separating the Asian and Pacific Islander groups. Beginning with the 2018 data year, all 50 states and the District of Columbia reported deaths based on the 2003 revision for the entire year, so the revised standards became the official standards for presenting mortality data by race and ethnicity (9). The Hispanic category did not change, remaining consistent with reports before 2018.

The race and ethnicity categories in this report follow the 1997 OMB revised race and Hispanic-origin standards. These categories differ from the bridged-race categories used before

2018 (10). The new categories include Hispanic, single-race American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native), single-race Asian non-Hispanic (subsequently, Asian), single-race Black or African American non-Hispanic (subsequently, Black), single-race Native Hawaiian or Other Pacific Islander non-Hispanic (subsequently, Native Hawaiian or Other Pacific Islander), and single-race White non-Hispanic (subsequently, White). Because single-race data are not available for the entire United States before 2018, data by race for 2018 through 2021 are not completely comparable with bridged-race data used in earlier years, so comparisons should be made with this consideration (11).

In addition to the tabulations included in this report, more detailed analysis is possible by using the annual mortality public-use file. The data file may be downloaded from: https://www.cdc.gov/nchs/data_access/Vitalstatsonline.htm (12). Data file documentation is available from: https://www.cdc.gov/nchs/data/dvs/Multiple-Cause-Record-Layout-2021.pdf. The public-use file does not include geographic detail, but a file with this information may be available upon request (13). Death data also may be accessed from the Centers for Disease Control and Prevention's (CDC) WONDER, a web-based system that makes the agency's information resources available to public health professionals and the general public (14).

Methods

Data in this report are based on information from all resident death certificates filed in the 50 states and the District of Columbia.

This report provides detailed death data in Tables 1–25. Tables showing data by state also provide information for the Commonwealth of the Northern Mariana Islands (Northern Marianas), Guam, Puerto Rico, and U.S. Virgin Islands.

Mortality data on specific demographic and medical characteristics cover all 50 states and the District of Columbia. Measures of mortality in this report include the number of deaths; crude, age-specific, and age-adjusted death rates; infant, neonatal, postneonatal, and maternal mortality rates; life expectancy; and rate ratios. Changes in death rates in 2021 compared with 2020 and differences in death rates across demographic groups in 2021 were tested for statistical significance. Unless otherwise specified, reported differences are statistically significant. Additional information on these statistical methods, random variation and relative standard error, the computation of derived statistics and rates, population denominators, and the definition of terms are presented in Technical Notes.

In accordance with the revised standards issued by the Office of Management and Budget in 1997, the 2003 revision of the U.S. Standard Certificate of Death provided for the reporting of more than one race (multiple races) and increased the race categories from four to five by separating the Asian and Pacific Islander groups (7,8). Starting in 2018, all 50 states and the District of Columbia reported deaths using the 2003 revision for the entire year.

The race and Hispanic-origin groups in this report follow the 1997 standards and differ from the race categories used in reports for data years before 2018 (8,10,15). The categories include Hispanic, single-race American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native), single-race Asian non-Hispanic (subsequently, Asian), single-race Black or African American non-Hispanic (subsequently, Black), single-race Native Hawaiian or Other Pacific Islander non-Hispanic (subsequently, Native Hawaiian or Other Pacific Islander), and single-race White non-Hispanic (subsequently, White). For brevity, text references to race refer to single race in this report. Because the number of deaths reported with more than one race in 2021 is relatively small (0.6%), these deaths are included in totals but are shown separately in only one report table (Table 2). Some comparisons between race and ethnicity groups in this report are limited to the following groups based on population size: American Indian and Alaska Native, Asian, Black, Hispanic, and White.

Data presented in this report by the revised Hispanic-origin and race categories for 2018–2021 are not completely comparable with data by bridged race shown in earlier reports, and comparisons should be made with this consideration. The Hispanic-origin category is a separate item on the death certificate and was not affected by the revised standards; as a result, data by Hispanic origin for 2021 and earlier years are comparable.

Death rates by race and ethnicity for the American Indian and Alaska Native, Asian, Hispanic, and Native Hawaiian or Other Pacific Islander populations are affected by inconsistencies in reporting Hispanic origin and race on death certificates as compared with censuses and surveys (16). Death rates for the American Indian and Alaska Native population are underestimated by about 33% due to misclassification (16). Death rates for the Asian and Hispanic populations are underestimated by about 3.0% (16). This should be considered when making rate comparisons across racial and ethnic groups. At this time, information about the prevalence of misclassification for the Native Hawaiian or Other Pacific Islander population is not available.

To maintain consistency with data reported by the jurisdictions and data in the mortality data file, numbers of deaths and death rates in this report are not adjusted for misclassification of race and ethnicity unless otherwise indicated. Specifically, Tables 4 and 5 present life expectancies by Hispanic origin and race that are produced using methods based on death rates adjusted for Hispanic-origin and race misclassification on death certificates. For additional detail, see *Quality of race and Hispanic-origin data* in Technical Notes.

The population data used to calculate death rates for 2021 shown in this report are estimated as of July 1, 2021, based on the Blended Base produced by the U.S. Census Bureau (Technical Notes), and are available from the CDC WONDER website: https://wonder.cdc.gov/single-race-population.html (17).

Data presented in this report and other mortality tabulations are available from the National Vital Statistics System website: https://www.cdc.gov/nchs/nvss/deaths.htm. The availability of mortality microdata is described in Technical Notes.

Results and Discussion

Deaths and death rates

In 2021, a total of 3,464,231 resident deaths were registered in the United States—80,502 more deaths than in 2020. The crude death rate for 2021 (1,043.8 deaths per 100,000 population) was 1.6% higher than the 2020 rate (1,027.0) (Tables A, 1, 2, 6, 8, and 10). In 2021, 416,893 deaths were identified with COVID-19 as the underlying cause of death (Tables B, 7, and 9). COVID-19 was a contributing cause but was not considered the underlying cause of an additional 45,300 deaths (18).

The age-adjusted death rate in 2021 was 879.7 deaths per 100,000 U.S. standard population—5.3% higher than the rate of 835.4 in 2020 (Tables A and 1). The age-adjusted death rates increased for males (5.0%) and females (5.5%). Age-adjusted death rates should be viewed as relative indexes rather than as actual measures of mortality risk. They are constructs that show what the level of mortality would be if no changes occurred in the age composition of the population from year to year. (For a discussion of age-adjusted death rates, see Technical Notes.) Thus, age-adjusted death rates are better indicators than unadjusted (crude) death rates for examining changes in the risk of death over a period of time when the age distribution of the population is changing. Age-adjusted death rates are also better indicators of relative risk when comparing mortality across geographic areas or between sex or race and ethnicity subgroups of the population that have different age distributions; see Technical Notes. Since 1980, the age-adjusted death rate decreased significantly every year except for 1983, 1985, 1988, 1993, 1999, 2005, 2010, 2013, 2015, 2017, 2020, and 2021 (Figure 1) (14).

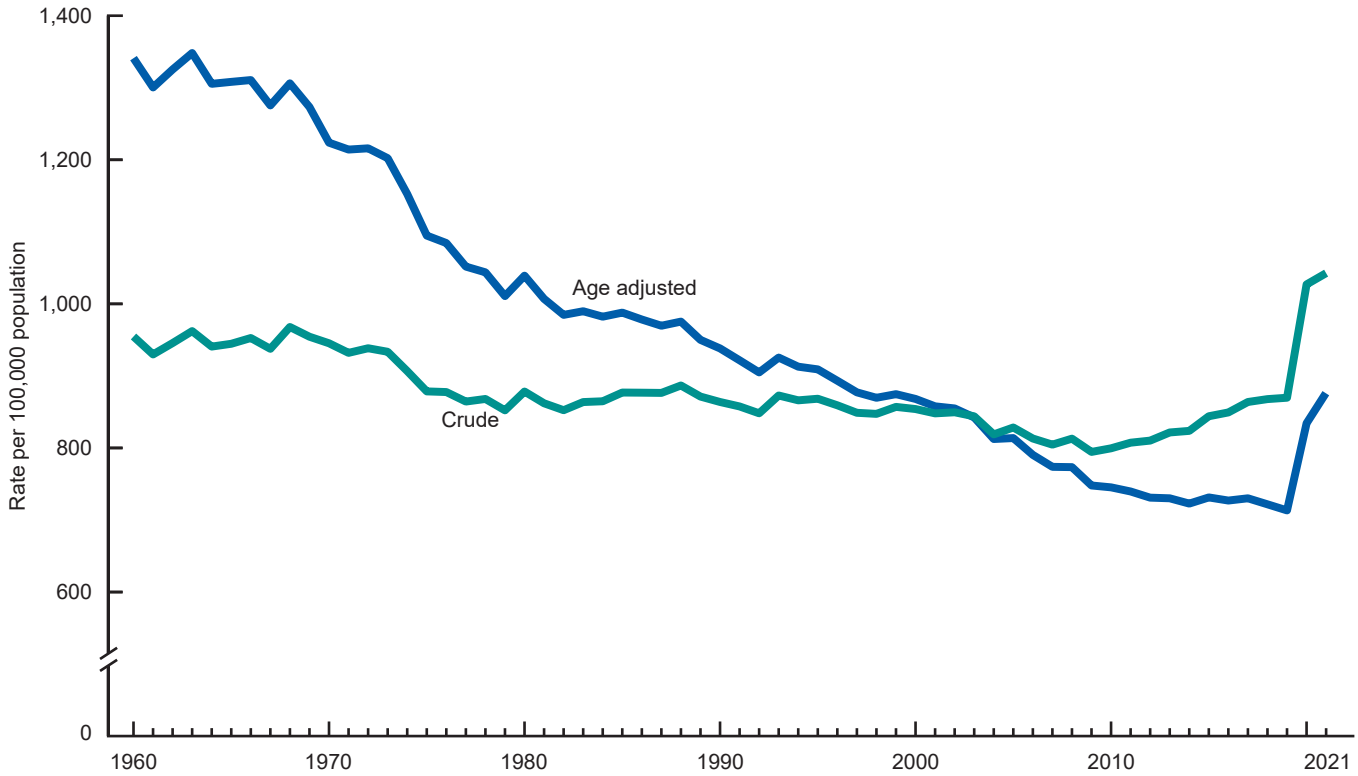
Death rates by Hispanic origin and race

In 2021, age-adjusted death rates by ethnicity and race groups (Table 1) were:

- Hispanic population: 724.7 deaths per 100,000 U.S. standard population
- American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native) population: 1,109.2
- Asian non-Hispanic (subsequently, Asian) population: 461.7
- Black non-Hispanic (subsequently, Black) population: 1,118.0
- Native Hawaiian or Other Pacific Islander non-Hispanic (subsequently, Native Hawaiian or Other Pacific Islander) population: 924.3
- White non-Hispanic (subsequently, White) population: 893.9

In 2021, the age-adjusted death rate for the American Indian and Alaska Native population was 1.2 times that for the White population. The rate for the Black population was 1.3 times that for the White population. The rate for the White population was 1.9 times the rate for the Asian population and 1.2 times the rate for the Hispanic population (Table B).

Figure 1. Crude and age-adjusted death rates: United States, 1960–2021



NOTE: Crude death rates are on an annual basis per 100,000 population; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report.
SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

Table A. Percent change in death rates and age-adjusted death rates in 2021 from 2020, by age, Hispanic origin and race, and sex: United States

[Based on death rates on an annual basis per 100,000 population and age-adjusted rates per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards; see Technical Notes. Data for some Hispanic-origin or race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes]

							Non-Hispanic, single race[3]														
	Total[1]			Hispanic[2]			American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
Age group (years)	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages																					
Crude rate	1.6	2.5	0.6	1.1	0.6	1.5	8.2	8.3	8.0	-0.3	-0.8	0.2	-0.9	-1.2	-0.7	15.3	14.0	16.8	2.6	3.9	1.1
Age-adjusted rate	5.3	5.0	5.5	0.2	-2.1	2.2	7.0	6.4	7.4	0.9	-0.4	2.1	-0.1	-1.8	1.3	12.5	10.0	15.2	7.1	7.2	6.9
Younger than 1 year[4]	6.6	5.2	8.3	8.2	5.2	11.9	3.8	-2.6	12.2	28.7	29.8	27.4	2.7	3.4	1.7	7.0	36.3	-25.2	6.3	5.0	7.9
1–4	10.1	5.9	16.2	10.3	1.0	22.0	-11.0	-2.2	-22.3	11.2	16.0	4.0	17.6	10.0	28.4	1.4	-44.9	129.1	6.3	5.2	7.9
5–14	4.4	1.9	8.0	5.9	6.2	6.6	-6.2	-15.5	4.6	9.0	18.5	-1.3	10.0	6.7	14.8	-27.5	-30.7	-19.0	0.8	-2.6	4.9
15–24	5.6	4.1	10.0	6.1	3.2	16.1	20.5	17.8	26.3	8.8	12.1	2.1	5.4	4.1	10.0	47.8	49.7	43.2	4.3	3.3	7.3
25–34	13.4	13.6	13.5	20.9	22.3	18.4	16.5	20.2	10.6	15.4	16.3	13.8	14.5	12.4	19.9	22.8	24.0	20.6	10.5	10.9	9.9
35–44	16.1	14.7	17.9	19.8	18.3	21.7	20.4	19.5	21.2	7.5	4.5	12.1	14.2	12.8	15.7	45.9	43.4	49.6	15.7	14.2	17.7
45–54	12.1	11.1	12.9	9.6	7.7	12.6	17.6	16.7	18.1	5.0	4.4	5.1	8.7	7.2	10.3	29.1	28.2	29.8	14.5	13.8	14.8
55–64	7.5	5.6	9.7	2.3	-0.6	6.6	13.1	14.0	11.1	-0.2	-2.9	3.1	1.9	-0.7	5.0	11.3	6.6	17.3	10.4	8.8	12.1
65–74	3.8	2.3	5.5	-3.1	-7.3	2.4	2.5	-3.3	9.7	-1.1	-4.2	2.7	-2.6	-5.7	0.7	7.6	6.5	8.9	6.3	5.4	7.0
75–84	2.4	1.6	3.2	-4.8	-7.2	-2.5	-3.1	-3.6	-2.8	0.6	-1.4	2.7	-5.0	-7.8	-2.5	2.5	-7.0	12.8	4.5	4.0	4.8
85 and older	3.5	5.1	2.4	-1.8	-3.8	-0.4	-1.5	-2.6	-0.9	-0.5	-0.3	-0.7	-4.3	-4.0	-4.5	2.6	2.9	2.4	5.3	7.3	4.0

[1]Includes deaths with origin not stated, origin not classifiable, and two or more races reported; see Technical Notes.
[2]Includes people of Hispanic origin of any race; see Technical Notes.
[3]Only one race was reported on the death certificate; see Technical Notes.
[4]Death rates for younger than 1 year (based on population estimates) differ from infant mortality rates (based on live births); see Technical Notes.

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

Table B. Number of deaths, percentage of total deaths, death rate, and age-adjusted death rate for 2021, percent change in age-adjusted death rates in 2021 from 2020, and ratio of age-adjusted death rates. by sex and Hispanic origin and race for the 15 leading causes of death for the total population in 2021: United States

[Crude death rates on an annual basis per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards]

					Age-adjusted death rate							
							Ratio					
								Non-Hispanic, single race[3]				
Rank[1]	Cause of death (based on ICD–10)	Number	Percent of total deaths, 2021[2]	Crude death rate, 2021	2021	Percent change from 2020 to 2021	Male to female	American Indian and Alaska Native to White	Black to White	Native Hawaiian or Other Pacific Islander to White	White to Asian	White[3] to Hispanic[4]
…	All causes	3,464,231	100.0	1,043.8	879.7	5.3	1.4	1.2	1.3	1.0	1.9	1.2
1	Diseases of heart (I00–I09,I11,I13,I20–I51)	695,547	20.1	209.6	173.8	3.3	1.6	0.9	1.3	1.0	2.1	1.5
2	Malignant neoplasms (C00–C97)	605,213	17.5	182.4	146.6	1.7	1.3	0.8	1.1	0.9	1.7	1.5
3	COVID-19 (U07.1)	416,893	12.0	125.6	104.1	22.5	1.6	2.0	1.5	2.0	1.5	0.6
4	Accidents (unintentional injuries) (V01–X59,Y85–Y86)	224,935	6.5	67.8	64.7	12.3	2.2	1.8	1.1	0.8	3.7	1.5
5	Cerebrovascular diseases (I60–I69)	162,890	4.7	49.1	41.1	5.9	1.0	0.9	1.5	1.2	1.2	1.1
6	Chronic lower respiratory diseases (J40–J47)	142,342	4.1	42.9	34.7	-4.7	1.2	0.8	0.7	0.5	4.4	2.7
7	Alzheimer disease (G30)	119,399	3.4	36.0	31.0	-4.3	0.7	0.6	0.9	0.6	1.9	1.2
8	Diabetes mellitus (E10–E14)	103,294	3.0	31.1	25.4	2.4	1.6	2.3	2.1	2.4	1.2	0.8
9	Chronic liver disease and cirrhosis (K70,K73–K74)	56,585	1.6	17.0	14.5	9.0	1.8	5.1	0.7	0.6	3.6	0.9
10	Nephritis, nephrotic syndrome and nephrosis (N00–N07,N17–N19,N25–N27)	54,358	1.6	16.4	13.6	7.1	1.4	1.3	2.2	1.7	1.5	1.0
11	Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)	48,183	1.4	14.5	14.1	4.4	4.0	1.6	0.5	0.7	2.6	2.2
12	Essential hypertension and hypertensive renal disease (I10,I12,I15)	42,816	1.2	12.9	10.7	5.9	1.2	1.1	2.1	1.2	1.0	1.0
13	Influenza and pneumonia (J09–J18)	41,917	1.2	12.6	10.5	-19.2	1.5	1.4	1.3	1.0	1.3	1.1
14	Septicemia (A40–A41)	41,281	1.2	12.4	10.2	5.2	1.2	1.2	1.8	1.1	2.2	1.4
15	Parkinson disease (G20–G21)	38,536	1.1	11.6	9.8	-1.0	2.2	0.5	0.5	0.4	1.8	1.6
…	All other causes (residual)	670,042	19.3	201.9	…	…	…	…	…	…	…	…

… Category not applicable.
[1]Based on number of deaths; see Technical Notes.
[2]Percentages may not add to 100 due to rounding.
[3]Includes only one race reported on the death certificate.
[4]Includes people of Hispanic origin of any race; see Technical Notes.

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

For the Native Hawaiian or Other Pacific Islander population, the age-adjusted rate increased 12.5%, from 821.3 in 2020 to 924.3 in 2021. During the same time period, rates increased 7.1% (from 834.7 to 893.9) for the White population and 7.0% (from 1,036.2 to 1,109.2) for the American Indian and Alaska Native population (Tables A and 1). The changes in age-adjusted rates were not statistically significant for the Asian, Black, and Hispanic populations.

From 2020 to 2021, the age-adjusted death rate increased 15.2% for Native Hawaiian or Other Pacific Islander females, 10.0% for Native Hawaiian or Other Pacific Islander males, 7.4% for American Indian and Alaska Native females, 7.2% for White males, 6.9% for White females, 6.4% for American Indian and Alaska Native males, 2.2% for Hispanic females, 2.1% for Asian females, and 1.3% for Black females (Tables A and 1). The rate decreased 2.1% for Hispanic males and 1.8% for Black males. The change in the age-adjusted rate for Asian males was not statistically significant.

Hispanic subgroups—Mortality data for 2021 by specified Hispanic subgroup for the United States are presented in Table 3. Hispanic subgroups shown in the table include Central American, Cuban, Dominican, Mexican, Puerto Rican, South American, and Other Hispanic populations.

In 2021, age-adjusted rates among the Hispanic subgroups ranged from a low of 400.7 for the South American population to a high of 767.4 for the Mexican population. Differences between subgroups are likely a function of large variation in age-specific death rates for some of the Hispanic subgroups, reflecting their relatively small population sizes. Data aggregated over several years confirm differences among the Hispanic subgroups (16).

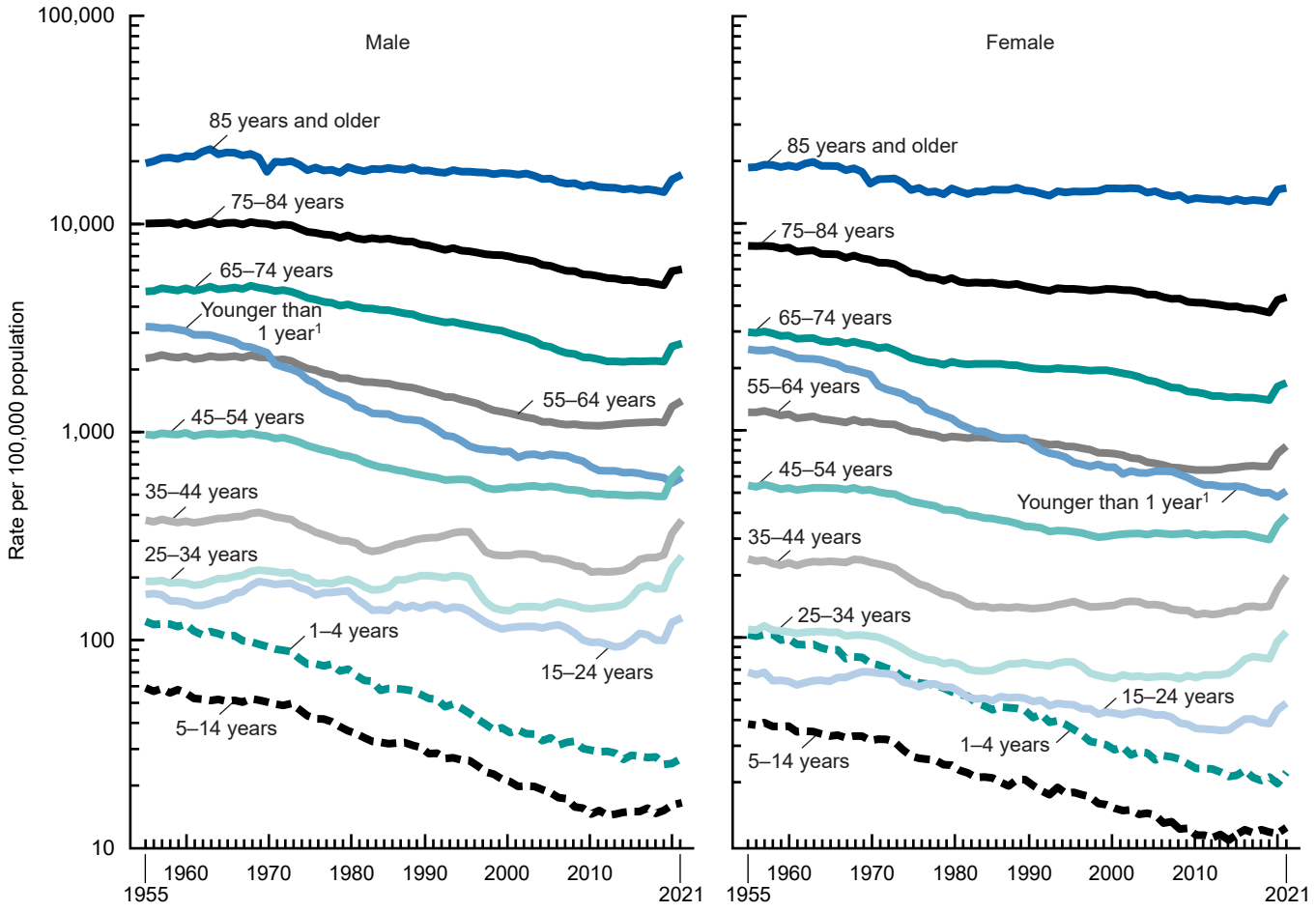
Death rates by age and sex

For the total population, age-specific death rates increased significantly from 2020 to 2021 for every age group (Tables 6 and 8; Figure 2).

The age-adjusted death rate for males was 1.4 times the rate for females in 2021 (Table B). The male-to-female death rate ratio was unchanged from the ratio in 2020.

Death rates for males increased significantly for age groups younger than 1, 15–24, 25–34, 35–44, 45–54, 55–64, 65–74, 75–84, and 85 and older. Changes in rates for males ages

Figure 2. Death rate, by age and sex: United States, 1955–2021



[1]Rates are based on population estimates, which differ from infant mortality rates (based on live births); see Figure 5 in this report for infant mortality rates and Technical Notes in this report for further discussion of the difference.
SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

1–4 and 5–14 were not statistically significant. Death rates for females increased significantly for every age group.

Race and ethnicity by sex—For the total Hispanic population, age-specific death rates increased from 2020 to 2021 for age groups younger than 1, 15–24, 25–34, 35–44, 45–54, and 55–64, and decreased for age groups 65–74, 75–84, and 85 and older. Rates for Hispanic males increased for age groups 25–34, 35–44, and 45–54, and decreased for age groups 65–74, 75–84, and 85 and older. For Hispanic females, rates increased for age groups younger than 1, 1–4, 15–24, 25–34, 35–44, 45–54, 55–64, and 65–74, and decreased for the age group 75–84.

For the total and male American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native) populations, age-specific death rates increased from 2020 to 2021 for age groups 15–24, 25–34, 35–44, 45–54, and 55–64. For American Indian and Alaska Native females, age-specific death rates increased for age groups 15–24, 35–44, 45–54, 55–64, and 65–74.

For the total Asian non-Hispanic (subsequently, Asian) population, age-specific rates increased from 2020 to 2021 for age groups younger than 1, 25–34, 35–44, and 45–54. For Asian males, rates increased for age groups younger than 1, 15–24, and 25–34, and decreased for the age group 65–74. Rates for Asian females increased for age groups younger than 1, 25–34, 35–44, and 75–84.

For the total Black non-Hispanic (subsequently, Black) population, age-specific death rates increased from 2020 to 2021 for age groups 1–4, 5–14, 15–24, 25–34, 35–44, 45–54, and 55–64, and decreased for age groups 65–74, 75–84, and 85 and older. Rates for Black males increased for age groups 15–24, 25–34, 35–44, and 45–54, and decreased for age groups 65–74, 75–84, and 85 and older. For Black females, rates increased for age groups 1–4, 5–14, 15–24, 25–34, 35–44, 45–54, and 55–64, and decreased for age groups 75–84 and 85 and older.

For the total Native Hawaiian or Other Pacific Islander non-Hispanic (subsequently, Native Hawaiian or Other Pacific Islander) population, age-specific death rates increased for age groups 15–24, 25–34, 35–44, 45–54, and 55–64. For Native Hawaiian or Other Pacific Islander males, rates increased for age groups 15–24, 25–34, 35–44, and 45–54. For Native Hawaiian or Other Pacific Islander females, rates increased for age groups 35–44, 45–54, and 55–64.

For the total, male, and female White non-Hispanic (subsequently, White) populations, age-specific death rates increased from 2020 to 2021 for age groups younger than 1, 15–24, 25–34, 35–44, 45–54, 55–64, 65–74, 75–84, and 85 and older (Tables A and 2).

Other observed changes from 2020 to 2021 in age-specific rates by race and ethnicity and sex were not statistically significant.

Expectation of life at birth and at specified ages

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

Life table data shown in this report for 2010–2021 are based on a revised methodology first presented with final data reported for 2008. The life table methodology was revised by changing the smoothing technique used to estimate the life table functions at the oldest ages. This revision improves on the methodologies used previously; see Technical Notes.

The methods used to produce life expectancies by Hispanic origin and race are based on death rates adjusted for Hispanic-origin and race misclassification on death certificates (Technical Notes). As noted in the Methods section, the age-specific and age-adjusted death rates shown in this report (with the exception of Table IV) are not adjusted for misclassification of Hispanic origin and race on death certificates. For further information on the effects of Hispanic-origin and race misclassification on death rates, see Technical Notes.

Life tables were generated for both sexes and by each sex for the following populations:

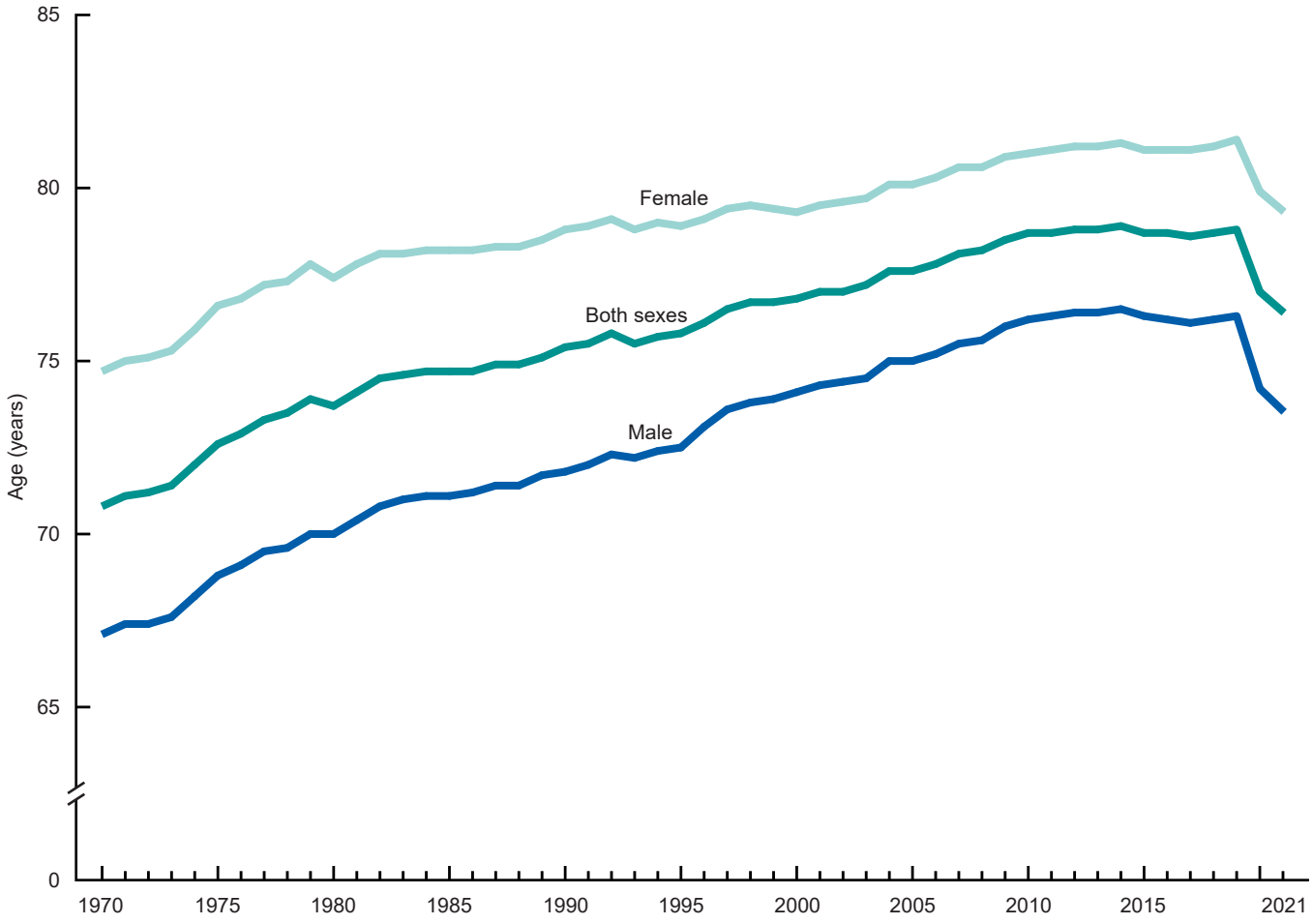
- Total U.S.
- Hispanic
- American Indian and Alaska Native non-Hispanic
- Asian non-Hispanic
- Black non-Hispanic
- White non-Hispanic

In 2021, life expectancy at birth for the U.S. population was 76.4 years, 0.6 year lower than 2020 (Tables 4 and 5). The single-year decreases in life expectancy observed in 2020 (1.8 years) and 2021 were the largest decreases since 1943. These decreases were mostly due to the effects of the COVID-19 pandemic and increases in unintentional injuries. Before this time, the general trend in U.S. life expectancy had been one of improvement since 1900. In 2021, life expectancy for males (73.5 years) was 0.7 year lower than in 2020. Life expectancy for females (79.3 years) was 0.6 year lower than in 2020. From 1900 through the late 1970s, the gap in life expectancy between the sexes widened (3) from 2.0 to 7.8 years. The gap between sexes has narrowed since its peak in the 1970s (Figure 3 and Table 5). In 2021, the difference in life expectancy between males and females was 5.8 years, an increase of 0.1 year from 2020.

Life expectancy figures for the Hispanic, Black non-Hispanic (subsequently, Black), and White non-Hispanic (subsequently, White) populations have been available starting with data for 2006 (19). Before 2006, life tables were produced for the Black and White populations, regardless of Hispanic origin. Life tables for the American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native) and Asian non-Hispanic (subsequently, Asian) populations were added to the Life Table Program beginning with data for 2019 (20).

Life expectancy for the American Indian and Alaska Native population decreased 1.5 years (from 67.1 years in 2020 to 65.6 in 2021).

Figure 3. Life expectancy at birth, by sex: United States, 1970–2021



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

Life expectancy decreased by 0.7 year for the White population (from 77.4 years in 2020 to 76.7 in 2021).

Life expectancy decreased by 0.3 year for the Black population (from 71.5 years in 2020 to 71.2 in 2021). The difference in life expectancy between the White and Black populations decreased 0.4 year from 5.9 years in 2020 to 5.5 years in 2021 (Table 5).

Life expectancy for the Hispanic population decreased by 0.1 year (from 77.9 years in 2020 to 77.8 in 2021) (Table 5). The difference in life expectancy between the Hispanic and White populations increased 0.6 year from 0.5 year in 2020 to 1.1 years in 2021 (Table 5).

Life expectancy declined by 0.1 year for the Asian population (from 83.6 years in 2020 to 83.5 in 2021).

Among the 10 major Hispanic-origin–race–sex groups in 2021, Asian females had the highest life expectancy at birth (85.6 years), followed by Asian males (81.2), Hispanic females (81.1), White females (79.5), Black females (75.0), Hispanic males (74.6), White males (74.0), American Indian and Alaska Native females (69.2), Black males (67.6), and American Indian and Alaska Native males (62.2) (Tables 4 and 5).

Life tables shown in this report may be used to compare life expectancies at selected ages from birth to 100 years. For example, based on mortality experienced in 2021 for the total population, a person age 50 could expect to live an average of 30.1 more years, for a total of 80.1 years. A person age 65 could expect to live an average of 18.4 more years, for a total of 83.4 years, and a person age 85 could expect to live an average of 6.3 more years, for a total of 91.3 years (Table 4). Life expectancy decreased at ages from birth through age 65 and increased at age 80 and older from 2020 to 2021 (Table 4) (3).

Leading causes of death

The 15 leading causes of death in 2021 accounted for 80.7% of all deaths in the United States (Table B). In 2021, the 15 leading causes of death remained the same as in 2020, although some changed ranks. Heart disease, cancer, and COVID-19 remained the top three leading causes in 2021. Of the remaining leading causes in 2020, six causes changed rank. Chronic liver disease and cirrhosis, the 11th leading cause in 2020, became the 9th leading cause in 2021. Suicide, the 12th leading cause in 2020, became the 11th. Hypertension, the 13th leading cause in 2020, became the 12th. Influenza and pneumonia, the 9th leading cause in 2020, became the 13th. Septicemia, the 15th

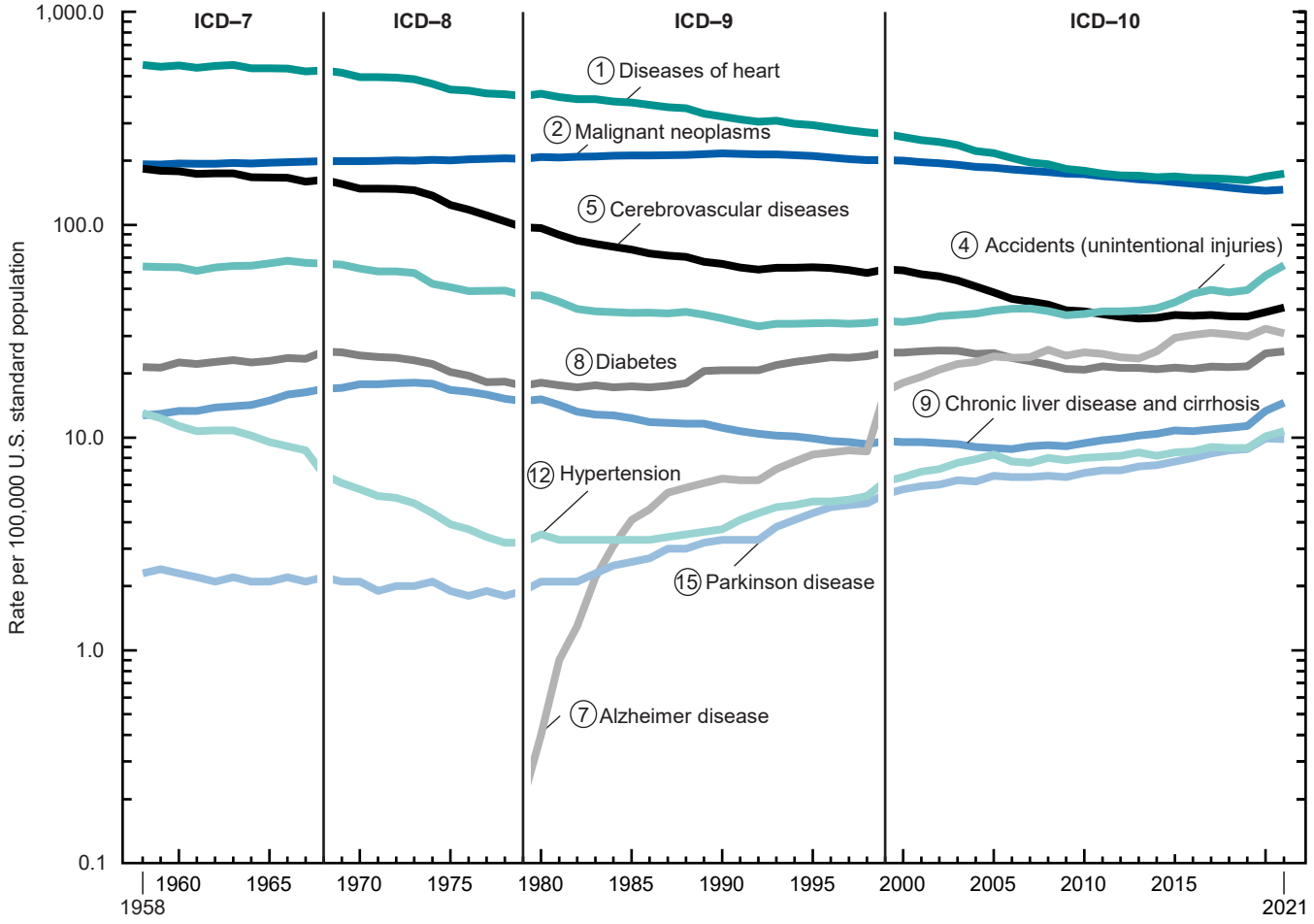
leading cause in 2020, became the 14th. Parkinson disease, the 14th leading cause in 2020, became the 15th. Causes of death are ranked according to the number of deaths; for ranking procedures, see Technical Notes. By rank, the 15 leading causes of death in 2021 were:

1. Diseases of heart (heart disease)
2. Malignant neoplasms (cancer)
3. COVID-19
4. Accidents (unintentional injuries)
5. Cerebrovascular diseases (stroke)
6. Chronic lower respiratory diseases
7. Alzheimer disease
8. Diabetes mellitus (diabetes)
9. Chronic liver disease and cirrhosis
10. Nephritis, nephrotic syndrome and nephrosis (kidney disease)
11. Intentional self-harm (suicide)
12. Essential hypertension and hypertensive renal disease (hypertension)
13. Influenza and pneumonia
14. Septicemia
15. Parkinson disease

Death rates vary greatly by age. As a result, the shifting age distribution of a population can significantly influence changes in crude death rates over time. Age-adjusted death rates, in contrast, eliminate the influence of such differences in the population age structure. Consequently, while causes of death are ranked according to the number of deaths, age-adjusted death rates are used to depict trends for leading causes of death in this report because they are better than crude rates for showing changes in mortality over time and among causes of death (Figure 4; Tables B and 6).

From 2020 through 2021, age-adjusted death rates increased significantly for 11 of the 15 leading causes of death and decreased for 3 of the 15 leading causes (Tables B and 6). The rate for the top leading cause of death, heart disease, increased 3.3% in 2021 from 2020 (Figure 4; Tables B and 6) (14). The rate for the second leading cause of death, cancer, increased for the first time since 1993, by 1.7% from 2020 to 2021. Deaths from these two diseases combined accounted for 37.5% of deaths in the United States in 2021 (Table B).

Figure 4. Age-adjusted death rate for selected leading causes of death: United States, 1958–2021



NOTES: ICD is the *International Classification of Diseases*. Circled numbers indicate ranking of conditions as leading causes of death in 2021.
SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

COVID-19, the third leading cause of death in 2021, accounted for 12.0% of deaths in the United States. In 2021, the age-adjusted death rate for COVID-19 increased 22.5%, from 85.0 per 100,000 standard population in 2020 to 104.1 in 2021. The rate for males (131.3) was 1.6 times higher than the rate for females (81.7) (Tables 1, 2, and 11). Among race and ethnicity groups, the rate was highest for the Native Hawaiian or Other Pacific Islander non-Hispanic (subsequently, Native Hawaiian or Other Pacific Islander) population (185.4), followed by the American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native) (184.0), Hispanic (151.8), Black non-Hispanic (subsequently, Black) (136.4), White non-Hispanic (subsequently, White) (93.5), and Asian non-Hispanic (subsequently, Asian) (61.9) populations (Tables 1 and 11).

Other leading causes of death that showed significant increases in 2021 from 2020 were unintentional injuries (12.3%), stroke (5.9%), diabetes (2.4%), Chronic liver disease and cirrhosis (9.0%), kidney disease (7.1%), suicide (4.4%), hypertension (5.9%), and Septicemia (5.2%).

The age-adjusted rate decreased significantly in 2021 from 2020 for Chronic lower respiratory diseases (4.7%), Alzheimer disease (4.3%), and Influenza and pneumonia (19.2%).

The age-adjusted death rate for Parkinson disease in 2021 was not significantly different from the rate in 2020.

The relative risk of death in one population group compared with another can be expressed as a ratio. Ratios based on age-adjusted death rates show that males have higher rates than females for 13 of the 15 leading causes of death (Table B), with rates for males being at least twice as great as those for females for 3 of these leading causes. The largest ratio was for suicide (4.0). Other high ratios were observed for unintentional injuries and Parkinson disease (2.2 each); Chronic liver disease and cirrhosis (1.8); heart disease, COVID-19, and diabetes (1.6 each); Influenza and pneumonia (1.5); kidney disease (1.4); cancer (1.3); and Chronic lower respiratory diseases, hypertension, and Septicemia (1.2 each). Age-adjusted rates were lower for males than for females for one leading cause, Alzheimer disease (0.7).

Age-adjusted death rates for the American Indian and Alaska Native population were higher than for the White population for 9 of the 15 leading causes of death (Tables B and 6). The largest ratio was for Chronic liver disease and cirrhosis (5.1). Other causes for which the ratio was high include diabetes (2.3), COVID-19 (2.0), unintentional injuries (1.8), suicide (1.6), Influenza and pneumonia (1.4), kidney disease (1.3), Septicemia (1.2), and hypertension (1.1). Age-adjusted rates for the American Indian and Alaska Native population were lower than for the White population for 6 of the 15 leading causes of death. The smallest American Indian and Alaska Native-to-White ratio was for Parkinson disease (0.5); that is, the risk of dying from Parkinson disease was two times greater for the White population than for the American Indian and Alaska Native population. Other causes with a low American Indian and Alaska Native-to-White ratio were Alzheimer disease (0.6), Chronic lower respiratory diseases and cancer (0.8 each), and heart disease and stroke (0.9 each).

Age-adjusted death rates for the Black population were higher than for the White population for 10 of the 15 leading causes of death (Tables B and 6). The largest ratio was for kidney disease (2.2). Other causes for which the ratio was high include diabetes and hypertension (2.1 each), Septicemia (1.8), COVID-19 and stroke (1.5 each), heart disease and Influenza and pneumonia (1.3 each), and cancer and unintentional injuries (1.1 each). For five of the leading causes, age-adjusted rates were lower for the Black population than for the White population. The smallest Black-to-White ratios were for suicide and Parkinson disease (0.5 each). Other causes with low Black-to-White ratios were Chronic lower respiratory diseases and Chronic liver disease and cirrhosis (0.7 each) and Alzheimer disease (0.9).

Age-adjusted death rates for the White population were higher than for the Hispanic population for 10 of the 15 leading causes of death (Tables B and 6). The largest ratio was for Chronic lower respiratory diseases (2.7). Other causes with high ratios include suicide (2.2); Parkinson disease (1.6); heart disease, cancer, and unintentional injuries (1.5 each); Septicemia (1.4); Alzheimer disease (1.2); and stroke and Influenza and pneumonia (1.1 each). Age-adjusted rates were lower for the White population than for the Hispanic population for 3 of the 15 leading causes. The smallest White-to-Hispanic ratio was for COVID-19 (0.6), followed by diabetes (0.8) and Chronic liver disease and cirrhosis (0.9).

Age-adjusted death rates for the White population were higher than for the Asian population for 14 of the 15 leading causes of death (Tables B and 6). The highest ratio was for Chronic lower respiratory diseases (4.4), followed by unintentional injuries (3.7), Chronic liver disease and cirrhosis (3.6), suicide (2.6), Septicemia (2.2), heart disease (2.1), Alzheimer disease (1.9), Parkinson disease (1.8), cancer (1.7), COVID-19 and kidney disease (1.5 each), Influenza and pneumonia (1.3), and stroke and diabetes (1.2 each).

Assault (homicide), the 16th leading cause of death in 2021, dropped from among the 15 leading causes of death in 2010. In 2021, the age-adjusted rate for homicide increased 5.1%, from 7.8 in 2020 to 8.2 per 100,000 standard population in 2021 (Table 11). Homicide remains a major issue for some age groups. Homicide was among the 15 leading causes of death in 2021 for age groups 1–4 (3rd), 5–14 (4th), 15–24 (2nd), 25–34 (3rd), 35–44 (7th), 45–54 (10th), and 55–64 (15th) (For leading causes of infant death, see "Infant mortality") (14).

Although Human immunodeficiency virus (HIV) disease has not been among the 15 leading causes of death since 1997 (21), it is still considered a major public health problem for some age groups. The age-adjusted death rate for HIV disease decreased 7.1% from 1.4 deaths per 100,000 U.S. standard population in 2020 to 1.3 in 2021 (Table 11). Historically, for all ages combined, HIV disease mortality reached its highest level in 1995 after a period of increase from 1987 through 1994. Subsequently, the rate for this disease decreased an average of 33.0% per year from 1995 through 1998, and 6.1% per year from 1999 through 2021 (14). In 2021, HIV disease was among the 15 leading causes of death for age groups 25–34 (11th), 35–44 (13th), and 45–54 (15th) (14). The greatest influence was among the age group 25–34 years, where HIV disease is ranked 9th for males, 8th for Black males, 9th for Black females, and 10th for Hispanic males.

Enterocolitis due to *Clostridium difficile* (*C. difficile*)—A predominantly antibiotic-associated inflammation of the intestines caused by *C. difficile*, a gram-positive, anaerobic, spore-forming bacillus—is often acquired in hospitals or other health care facilities with long-term patients or residents (22,23). The number of deaths from *C. difficile* climbed from 793 deaths in 1999 to a high of 8,085 deaths in 2011 (14). Since 2011, the number of deaths from this cause has trended downward. In 2021, the number of deaths from *C. difficile* was 4,105. The age-adjusted death rate in 2021 was unchanged from 2020, 1.0 deaths per 100,000 standard population. About 84.2% of deaths from *C. difficile* occurred among people age 65 and older (Table 7).

Leading causes of death in 2021 for the total population and for specific subpopulations are detailed further in a companion *National Vital Statistics Report* on leading causes by age, Hispanic origin and race, and sex (2).

Other selected causes

Dementia-related mortality

In 2021, 279,704 people died of dementia-related causes in the United States (Tables 7, 9, and 22). Deaths from dementia-related causes were presented for the first time in this report series in 2018 to provide a more comprehensive estimate of the burden of mortality from Alzheimer disease and other dementias in the United States.

Dementia-related causes include conditions with similar physical signs and symptoms that, collectively, are considered to be a good indicator of dementia mortality (24). Dementia is characterized by memory impairment and cognitive decline (25–27). 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. Alzheimer disease, the sixth leading cause of death, is the most common cause of dementia, but other dementias, including Lewy body dementia, frontotemporal degeneration, vascular dementia, and mixed dementias, are often indistinguishable from Alzheimer disease in their symptoms and outcomes and may coexist with Alzheimer disease (24–26).

Certification and coding rule changes can impact data analysis of component causes of dementia. In 2021, Alzheimer disease accounted for 42.7% of all dementia deaths; Unspecified dementia for 32.8%; Other degenerative diseases of nervous system, not elsewhere classified for 17.6%; and Vascular dementia for 6.9%. For detailed information, see CDC WONDER (14). Changes in the percentage of deaths assigned to individual causes comprising dementia may be the result of many factors (27). Combining the types of dementia provides a more comprehensive and stable measure of dementia mortality.

The age-adjusted death rate for dementia-related causes decreased 1.2% in 2021 from 2020 for the total population (from 73.3 to 72.4). The rate for males decreased 1.3% (60.5 to 59.7) and decreased for females 1.1% (81.1 to 80.2) (Tables 11 and 22).

Among race–ethnicity groups—Age-adjusted rates for the total, male, and female Black non-Hispanic (subsequently, Black) populations decreased 3.9% (74.7 to 71.8), 5.6% (66.4 to 62.7), and 2.9% (78.2 to 75.9), respectively. The rate for Hispanic males decreased 4.1% (46.1 to 44.2), but rates did not change significantly for the total and female Hispanic populations. Changes in age-adjusted death rates for dementia-related causes were not statistically significant for the American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native), Asian non-Hispanic (subsequently, Asian), Native Hawaiian or Other Pacific Islander non-Hispanic (subsequently, Native Hawaiian or Other Pacific Islander), and White non-Hispanic (subsequently, White) populations.

Drug-induced mortality

In 2021, a total of 111,219 people died of drug-induced causes in the United States (Tables 7, 9, and 23). The category of drug-induced causes includes deaths from drug overdose as well as from other medical conditions caused by use of legal or illegal drugs. In 2021, drug-overdose deaths accounted for 95.9% of all drug-induced deaths (Tables 7 and 9). The drug-induced category excludes deaths indirectly related to drug use, as well as newborn deaths due to the mother's drug use. (For a list of all drug-induced causes, including those specifically classified as drug-overdose causes, see Technical Notes.)

The age-adjusted death rate for drug-induced causes increased 13.9% for the total population from 29.5 in 2020 to 33.6 in 2021 (Tables 6, 11, and 23). For males in 2021, the age-adjusted death rate for drug-induced causes was 2.3 times the rate for females. The rate increased by 13.9% for males and by 14.0% for females from 2020 to 2021 (Tables 11 and 23).

Among race–ethnicity groups—Age-adjusted rates increased from 2020 and 2021 by 33.9% for the American Indian and Alaska Native population (36.2% for American Indian and Alaska Native males and 29.1% for American Indian and Alaska Native females), 22.8% for the Black population (21.8% for Black males and 23.9% for Black females), 19.0% for the Hispanic population (17.5% for Hispanic males and 22.8% for Hispanic females), 47.9% for the Native Hawaiian or Other Pacific Islander population (48.0% for Native Hawaiian or Other Pacific Islander males), and 10.7% for the White population (10.6% for White males and 10.7% for White females) (Tables 11 and 23). Changes in age-adjusted rates from 2020 to 2021 were not significant for the Asian population or Native Hawaiian or Other Pacific Islander females.

Alcohol-induced mortality

In 2021, a total of 54,258 people died of alcohol-induced causes in the United States (Tables 7, 9, and 24). This category includes deaths from dependent and nondependent use of alcohol, and deaths from accidental poisoning by alcohol. It excludes unintentional injuries, homicides, and other causes indirectly related to alcohol use, and deaths due to fetal alcohol syndrome. For a list of alcohol-induced causes, see Technical Notes.

The age-adjusted death rate for alcohol-induced causes increased 9.9%, from 13.1 in 2020 to 14.4 in 2021

(Tables 6, 11, and 24). For males in 2021, the age-adjusted death rate for alcohol-induced causes was 2.5 times the rate for females. The rate increased 8.9% for males and 10.7% for females from 2020 to 2021 (Tables 11 and 24).

Among race–ethnicity groups—Age-adjusted rates increased from 2020 to 2021 by 23.9% for the American Indian and Alaska Native population (30.6% for American Indian and Alaska Native males and 13.9% for American Indian and Alaska Native females), 15.5% for the Black population (10.7% for Black males and 21.8% for Black females), 7.9% for the Hispanic population (7.2% for Hispanic males), and 9.1% for the White population (7.9% for White males and 9.2% for White females) (Tables 11 and 24). The age-adjusted rate for alcohol-induced death did not change significantly from 2020 to 2021 for the Asian populations, Hispanic females, and Native Hawaiian or Other Pacific Islander populations.

Firearm-related mortality

In 2021, 48,830 people died from firearm-related injuries in the United States (Tables 7, 9, and 25). The age-adjusted death rate for firearm-related injuries for the total, male, and female populations increased significantly from 2020 to 2021 by 7.4%, 6.3%, and 10.5%, respectively (Tables 6, 11, and 25). For males in 2021, the age-adjusted death rate for firearm-related injuries was 6.0 times the rate for females.

Among race–ethnicity groups—The age-adjusted death rate increased from 2020 to 2021 by 8.8% for the Black population (6.8% for Black males and 23.3% for Black females), 12.7% for the Hispanic population (10.9% for Hispanic males and 21.1% for Hispanic females), and 6.0% for the White population (5.5% for White males and 5.4% for White females) (Tables 11 and 25). The age-adjusted death rates for firearm-related injuries did not change significantly from 2020 to 2021 for the American Indian and Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander populations.

Effect on life expectancy of changes in mortality by age and cause of death

Changes in mortality by age and cause of death can have a major effect on life expectancy. In other words, year-to-year changes in life expectancy may be influenced by changes in age-specific rates for certain causes, particularly for younger age groups. Life expectancy at birth for the total population decreased by 0.6 year (from 77.0 years in 2020 to 76.4 years in 2021) primarily because of increases in mortality from COVID-19, unintentional injuries, Chronic liver disease and cirrhosis, suicide, and homicide (Table 4). The decrease in life expectancy for the total population was slightly offset by decreases in mortality from Influenza and pneumonia, Chronic lower respiratory diseases, Alzheimer disease, and Parkinson disease. Life expectancy at birth for males decreased by 0.7 year (from 74.2 years in 2020 to 73.5 years in 2021) due to increases in mortality from COVID-19, unintentional injuries, Chronic liver disease and cirrhosis, suicide, and homicide. These increases were offset somewhat by decreases in mortality from cancer, Influenza and pneumonia, Chronic lower respiratory diseases, Alzheimer disease, and heart disease. For the female population, life expectancy decreased by 0.6 year (from 79.9 years in 2020 to 79.3 years in 2021) due to increases in mortality from COVID-19, unintentional injuries, Chronic liver disease and cirrhosis, stroke, and heart disease, which were offset by decreases in mortality from Influenza and pneumonia, Alzheimer disease, Chronic lower respiratory diseases, cancer, and Parkinson disease. (For a discussion of the major causes contributing to the change in life expectancy, see Technical Notes.)

Life expectancy for the American Indian and Alaska Native non-Hispanic (subsequently, American Indian and Alaska Native) population decreased by 1.5 years to 65.6 years. This decrease, the largest among race and ethnicity groups, was primarily due to increases in mortality due to unintentional injuries, COVID-19, Chronic liver disease and cirrhosis, suicide, and heart disease. The decline in life expectancy was offset by decreases in mortality due to Influenza and pneumonia, homicide, congenital malformations, Certain conditions originating in the perinatal period, and Alzheimer disease. Life expectancy for the American Indian and Alaska Native male population decreased 1.6 years to 62.2 years. This decrease, primarily due to increases in mortality from unintentional injuries, Chronic liver disease and cirrhosis, COVID-19, suicide, and heart disease, was offset somewhat by decreases in mortality from homicide, Certain conditions originating in the perinatal period, Influenza and pneumonia, diabetes, and congenital malformations.

Life expectancy for the White non-Hispanic (subsequently, White) population decreased 0.7 year in 2021 to 76.7 years. This decrease was due to increases in mortality from COVID-19, unintentional injuries, heart disease, Chronic liver disease and cirrhosis, and suicide. These increases in mortality were offset to some extent by decreases from Influenza and pneumonia, Chronic lower respiratory diseases, Alzheimer disease, cancer, and Parkinson disease. Life expectancy for the White male population decreased 0.8 year in 2021 to 74.0 years due to increases in mortality from COVID-19, unintentional injuries, Chronic liver disease and cirrhosis, suicide, and diabetes, which was offset somewhat by decreases in mortality from cancer, Chronic lower respiratory diseases, Influenza and pneumonia, Alzheimer disease, and Certain conditions originating in the perinatal period. Life expectancy for White females decreased 0.6 year in 2021 to 79.5 years due to increases in mortality from COVID-19, unintentional injuries, heart disease, stroke, and Chronic liver disease and cirrhosis, which were offset somewhat by decreases in mortality from Influenza and pneumonia, Alzheimer disease, Chronic lower respiratory diseases, Parkinson disease, and homicide.

Life expectancy for the Black non-Hispanic (subsequently, Black) population in 2021 decreased 0.3 year to 71.2 years. This decrease was due to increases in mortality from unintentional injuries, COVID-19, homicide, suicide, and Chronic liver disease and cirrhosis, which were offset by decreases in mortality from heart disease, cancer, Influenza and pneumonia, Chronic lower respiratory diseases, and Certain conditions originating in the perinatal period. Life expectancy for the Black male population in 2020 decreased 0.2 year to 67.6 years. This decrease was due

to increases in mortality from unintentional injuries, homicide, COVID-19, suicide, and Chronic liver disease and cirrhosis, which were offset by decreases in mortality from cancer, heart disease, Influenza and pneumonia, Chronic lower respiratory diseases, and diabetes. Life expectancy for the Black female population decreased 0.4 year in 2021 to 75.0 years due to increases in mortality from COVID-19, unintentional injuries, homicide, Chronic liver disease and cirrhosis, and stroke, which were offset somewhat by decreases from heart disease, cancer, Influenza and pneumonia, Chronic lower respiratory diseases, and Alzheimer disease.

Life expectancy for the Asian non-Hispanic (subsequently, Asian) population decreased 0.1 year to 83.5 years. The decrease, primarily due to increases in mortality due to cancer, unintentional injuries, Certain conditions originating in the perinatal period, stroke, and hypertension, was offset by decreases in mortality due to Influenza and pneumonia, Chronic lower respiratory diseases, diabetes, heart disease, and Alzheimer disease. Life expectancy for the Asian male population increased 0.1 year in 2021 to 81.2 years due to decreases in mortality from heart disease, Influenza and pneumonia, diabetes, Chronic lower respiratory diseases, and Alzheimer disease, which were offset somewhat by increases in mortality from Certain conditions originating in the perinatal period, unintentional injuries, suicide, hypertension, and COVID-19. Life expectancy for the Asian female population decreased by 0.3 year in 2021 to 85.6 years due to increases in mortality from cancer, COVID-19, Certain conditions originating in the perinatal period, stroke, and unintentional injuries, which were offset somewhat by decreases in mortality from Influenza and pneumonia, congenital malformations, Chronic lower respiratory diseases, atherosclerosis, and acute bronchitis.

Life expectancy for the Hispanic population decreased by 0.1 year to 77.8 years. This decrease was due to increases in mortality from unintentional injuries, COVID-19, homicide, Chronic liver disease and cirrhosis, and suicide, which were offset by decreases from heart disease, Influenza and pneumonia, Alzheimer disease, diabetes, and Chronic lower respiratory diseases. Life expectancy for the Hispanic male population in 2021 remained unchanged at 74.6 years due to increases in mortality from unintentional injuries, homicide, Chronic liver disease and cirrhosis, suicide, and Complications of medical and surgical care, which were offset by decreases in mortality from heart disease, Influenza and pneumonia, cancer, diabetes, and Chronic lower respiratory diseases. Life expectancy for the Hispanic female population decreased by 0.2 year in 2021 to 81.1 years due to increases in mortality from COVID-19, unintentional injuries, cancer, stroke, and Pregnancy, childbirth and the puerperium, which were offset somewhat by decreases in mortality from heart disease, Influenza and pneumonia, Alzheimer disease, diabetes, and Chronic lower respiratory diseases.

The difference in life expectancy between the male and female populations increased 0.1 year in 2021 to 5.8 years (Table 4). The widening in the male–female life expectancy gap was due primarily to greater increases in mortality for the male population for unintentional injuries, COVID-19, Alzheimer disease, suicide, and homicide (data not shown).

Injury mortality by mechanism and intent

In 2021, a total of 306,086 deaths were classified as injury-related (Table 12). Injury data are presented using the external cause-of-injury mortality matrix for ICD–10, as jointly conceived by the International Collaborative Effort on Injury Statistics and the Injury Control and Emergency Health Services section of the American Public Health Association (28,29). The ICD codes for injuries have two essential dimensions: the mechanism of the injury and its manner or intent. The mechanism involves the circumstances of the injury (such as fall, motor-vehicle traffic, or poisoning). The manner or intent involves whether the injury was purposefully inflicted (where it can be determined) and, when intentional, whether the injury was self-inflicted (suicide) or inflicted upon another person (assault). In other report tables showing cause of death, the focus is on manner or intent, with subcategories showing selected mechanisms. The matrix has two distinct advantages for the analysis of injury mortality data: It contains a comprehensive list of mechanisms, and data can be displayed by mechanism with subcategories of intent, or vice versa. Four major mechanisms of injury in 2021—poisoning, firearm, fall, and motor-vehicle traffic—accounted for 82.3% of all injury deaths (Table 12). A total of 111,830 deaths occurred as the result of poisonings in 2021, accounting for 36.5% of all injury deaths (Table 12). The age-adjusted death rate for poisoning increased significantly, by 13.4% from 29.8 deaths per 100,000 U.S. standard population in 2020 to 33.8 in 2021. Most poisoning deaths were either unintentional (91.2%) or suicides (5.0%). However, 3.6% of poisoning deaths were of undetermined intent. The age-adjusted death rate for unintentional poisoning increased 15.2%, from 26.9 in 2020 to 31.0 in 2021.

Firearm injuries resulted in 48,830 deaths in 2021 (Table 12), accounting for 16.0% of all injury deaths. The age-adjusted death rate for firearm injuries (all intents) in 2021 increased 7.4% from 2020. The two major component causes of firearm injury deaths in 2021 were suicide (53.9%) and homicide (42.9%). The age-adjusted death rate for firearm suicide increased 7.1%, from 7.0 in 2020 to 7.5 in 2021. The age-adjusted rate for firearm homicide increased 8.1%, from 6.2 in 2020 to 6.7 in 2021. A total of 45,988 people died as the result of falls in 2021, accounting for 15.0% of all injury deaths (Table 12). The age-adjusted death rate for falls in 2021 increased 11.3%, from 10.6 in 2020 to 11.8 in 2021. The overwhelming majority of fall-related deaths (97.2%) were unintentional. Motor vehicle traffic-related injuries in 2021 resulted in 45,404 deaths, accounting for 14.8% of all injury deaths (Table 12). The age-adjusted death rate for these injuries increased 10.8%, from 12.0 in 2020 to 13.3 in 2021.

Marital status

For those age 15 and older, the number of deaths in 2021 among people who were married was 1,279,442; widowed, 1,028,227; divorced, 601,216; and never married, 496,695 (Table 13); see Technical Notes. Those who were widowed had the highest age-adjusted death rate (2,036.2 per 100,000 U.S. standard population), followed by never-married people (1,729.3), divorced people (1,643.7), and married people

(898.6). Never-married people had an age-adjusted death rate 39.4% higher than those ever-married (92.4% higher than currently married people and 5.2% higher than divorced people). Widowed people had a rate more than twice that of married people, 23.9% higher than divorced people, and 17.7% higher than never-married people. Divorced people had a rate 1.8 times the rate of those who were married at the time of death.

For all age groups 15 and older, age-specific death rates for married people were much lower than those for never-married people. For those ages 15–24, divorced people had the highest death rate, whereas for those ages 25–34, 35–44, and 75 and older, widowed people had the highest death rate. Never-married people had the highest death rate among those ages 45–54, 55–64, and 65–74.

For each marital status group in 2021, males had higher age-adjusted death rates than females, ranging from 48.4% greater for those never married to 71.2% higher for those married at the time of death.

Educational attainment

Age-specific and age-adjusted death rates are shown by educational attainment for age groups in the range of 25–64 years (Table 14). In 2021, a total of 409,553 decedents ages 25–64 had received a high school diploma or equivalent, compared with 312,389 who had completed some college or collegiate degree and 159,086 who had achieved less than a high school diploma or equivalent. In 2021, age-adjusted death rates for those with less than a high school diploma or GED (778.2 per 100,000 U.S. standard population) and for those with a high school diploma or GED (817.1) were more than 3 times the rate for those with some college or collegiate degree (253.9).

Injury at work

Deaths, crude death rates, and age-adjusted death rates for injury at work are shown for those age 15 and older (Tables 15 and 16). Age-adjusted death rates for injury at work were computed using age-specific death rates and the 2000 U.S. standard population for those age 15 and older; see "Computing rates" in Technical Notes. Information on deaths attributed to injuries at work is derived from a separate item on the death certificate that asks the medical certifier whether the death resulted from an injury sustained at work. This item is on the death certificate of all states.

State of residence

Mortality patterns varied considerably by state (Tables 17 and 20). The state with the highest age-adjusted death rate in 2021 was West Virginia (1,229.1 deaths per 100,000 U.S. standard population), with a rate 39.7% above the national rate (879.7). The state with the lowest age-adjusted death rate was Hawaii (630.0), with a rate 28.4% below the national rate. The age-adjusted death rate for West Virginia was 95.1% higher than the rate for Hawaii.

Variations in mortality by state were associated with differences in socioeconomic status, racial and ethnic composition, as well as with differences in risk of specific causes of death (30).

Infant mortality

In 2021, a total of 19,920 deaths occurred in children younger than age 1 year (Tables C, D, 19, and 20). This number represents 338 more infant deaths in 2021 than in 2020. The ratio of male-to-female IMRs was 1.2, the same as in 2020. IMR was 5.44 infant deaths per 1,000 live births, the neonatal

Table C. Number of infant, neonatal, and postneonatal deaths and mortality rate, by sex: United States, 2020–2021

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

Age and sex	2021		2020		Percent change[1] from 2020 to 2021
	Number	Rate	Number	Rate	
Infant					
Total	19,920	5.44	19,582	5.42	0.4
Male	10,909	5.82	10,859	5.88	-1.0
Female	9,011	5.03	8,723	4.94	1.8
Neonatal					
Total	12,768	3.48	12,856	3.56	-2.2
Male	6,899	3.68	7,098	3.84	-4.2
Female	5,869	3.28	5,758	3.26	0.6
Postneonatal					
Total	7,152	1.95	6,726	1.86	4.8
Male	4,010	2.14	3,761	2.04	4.9
Female	3,142	1.75	2,965	1.68	4.2

[1]Based on a comparison of 2021 and 2020 mortality rates.

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

Table D. Number of infant deaths, percentage of total infant deaths, and infant mortality rate for 2021, and percent change in infant mortality rates from 2020 to 2021 for the 10 leading causes of infant death in 2021: United States

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

Rank[1]	Cause of death (based on *International Classification of Diseases, 10th Revision*)		Number	Percent of total deaths[2]	Rate	Percent change[3] from 2020 to 2021
…	All causes		19,920	100.0	543.6	0.3
1	Congenital malformations, deformations and chromosomal abnormalities	(Q00–Q99)	3,963	19.9	108.2	-3.3
2	Disorders related to short gestation and low birth weight, not elsewhere classified	(P07)	2,946	14.8	80.4	-7.5
3	Sudden infant death syndrome	(R95)	1,459	7.3	39.8	3.6
4	Accidents (unintentional injuries)	(V01–X59)	1,306	6.6	35.6	7.9
5	Newborn affected by maternal complications of pregnancy	(P01)	1,113	5.6	30.4	-1.6
6	Newborn affected by complications of placenta, cord and membranes	(P02)	672	3.4	18.3	-5.7
7	Bacterial sepsis of newborn	(P36)	557	2.8	15.2	1.3
8	Respiratory distress of newborn	(P22)	414	2.1	11.3	5.6
9	Diseases of the circulatory system	(I00–I99)	402	2.0	11.0	2.8
10	Intrauterine hypoxia and birth asphyxia	(P20–P21)	358	1.8	9.8	15.3
…	All other causes	(residual)	6,730	33.8	183.7	…

… Category not applicable.
[1]Based on number of deaths; see Technical Notes in this report.
[2]Percentages may not add to 100 due to rounding.
[3]Based on a comparison of the 2021 infant mortality rate with the 2020 infant mortality rate.

NOTE: Due to rounding, percent changes based on rates per 100,000 live births may differ from those computed using rates per 1,000 live births.

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

mortality rate (deaths of infants ages 0–27 days per 1,000 live births) was 3.48, and the postneonatal mortality rate (deaths of infants ages 28 days–11 months per 1,000 live births) was 1.95 in 2021 (Figure 5 and Tables C and 18; see Technical Notes for information on alternative data sources).

The postneonatal mortality rate increased 4.8% from 2020 to 2021. Changes in the infant and neonatal mortality rates from 2020 to 2021 were not statistically significant.

The 10 leading causes of infant death in 2021 accounted for 66.2% of all infant deaths in the United States (Table D). By rank, the 10 leading causes were:

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

The rankings of the top nine leading causes of infant death remained unchanged in 2021 from 2020 (31). The 10th leading cause in 2021, Intrauterine hypoxia and birth asphyxia, replaced Neonatal hemorrhage, which dropped from the list. Among the 10 leading causes, IMR decreased 7.5% from 2020 for low birth weight. Changes in rates among the other leading causes of infant death were not statistically significant (Table D).

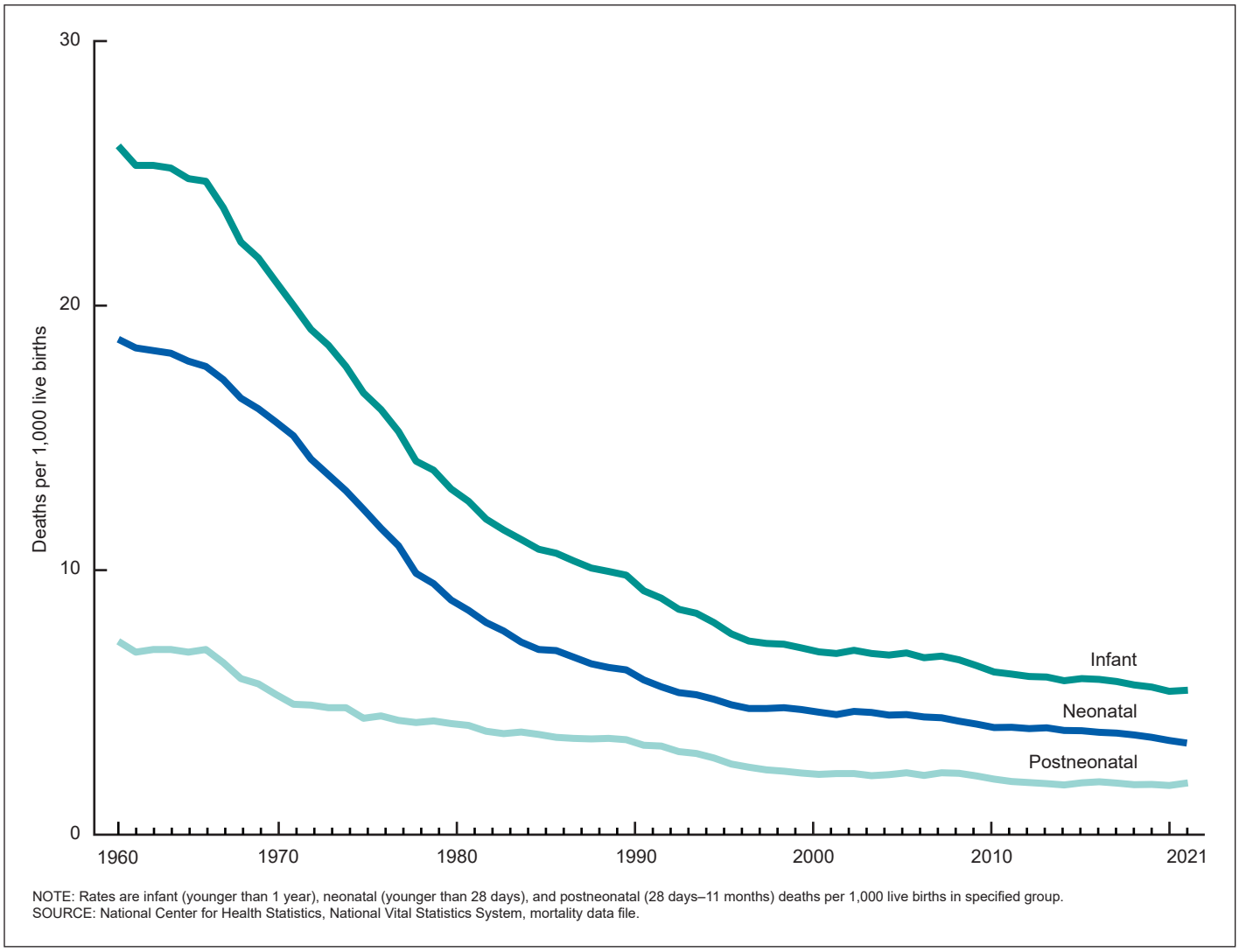
IMRs by race for non-Hispanic origin that are based on the mortality file may be somewhat understated and are better measured using data from the linked file of live births and infant deaths (32); see Technical Notes. Infant mortality data presented in this report use the general mortality file, not the linked file of live births and infant deaths. IMRs for the Hispanic population are not adjusted for misclassification; see Technical Notes. Because these rates are not adjusted, misclassification of Hispanic origin should be considered when interpreting rate disparities between Hispanic and non-Hispanic populations (16).

In 2021, the IMR for Asian non-Hispanic infants was 2.94 per 1,000 live births, an increase of 25.1% from 2.35 in 2020. In 2021, the IMR was 5.03 for Hispanic infants, 7.46 for American Indian and Alaska Native non-Hispanic infants, 10.97 for Black non-Hispanic infants, 7.24 for Native Hawaiian or Other Pacific Islander non-Hispanic infants, and 4.20 for White non-Hispanic infants (Table 18). The changes in IMRs in 2021 from 2020 for these groups were not statistically significant.

Maternal mortality

In 2021, a total of 1,205 women died of maternal causes in the United States—344 more deaths than in 2020 (Table 21) (31). The overall maternal mortality rate increased 38.2%, from 23.8 deaths per 100,000 live births in 2020 to 32.9 in 2021. COVID-19, listed on the death certificate as a contributing cause of death for 35.6% of maternal deaths in 2021, likely contributed to the rise in maternal mortality in 2021 (14). The maternal mortality rate in 2021 was highest for American Indian and Alaska Native non-Hispanic (subsequently, American

Figure 5. Infant, neonatal, and postneonatal mortality rates: United States, 1960–2021



NOTE: Rates are infant (younger than 1 year), neonatal (younger than 28 days), and postneonatal (28 days–11 months) deaths per 1,000 live births in specified group.
SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data file.

Indian and Alaska Native) women (118.7), followed by Black non-Hispanic (subsequently, Black) (69.9), Hispanic (28.0), White non-Hispanic (subsequently, White) (26.6), and Asian non-Hispanic (subsequently, Asian) (16.8) women. The maternal mortality rate increased 53.8% for Hispanic women (from 18.2 in 2020 to 28.0 in 2021), 26.4% for Black women (from 55.3 to 69.9), and 39.3% for White women (from 19.1 to 26.6). The change in maternal mortality rates for Asian women was not significant. For American Indian and Alaska Native women, the maternal mortality rate in 2021 is not comparable to the rate in 2020 because the number of deaths in 2020 did not meet National Center for Health Statistics standards of reliability. In 2021, the maternal mortality rate for Native Hawaiian or Other Pacific Islander women did not meet standards of reliability because the number of deaths is too low.

Maternal deaths and death rates shown in this report are based on a revised method for coding maternal deaths that was adopted by the National Center for Health Statistics starting with the 2018 data year, and a new coding change that was adopted in 2021 (33) (see Technical Notes). Maternal deaths include deaths of women, while pregnant or within 42 days of being pregnant, from any cause related to or aggravated by the pregnancy but exclude deaths from external causes (that is, accidents, homicides, and suicides); for more information, see "Maternal Mortality in the United States: Changes in Coding, Publication, and Data Release, 2018" (33) and Technical Notes.

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List of Detailed Tables

Table 1. Number of deaths, death rate, and age-adjusted death rate, by Hispanic origin and race and sex: United States, 1940, 1950, 1960, 1970, 1980, 1990, 2000, and 2010–2021

[Excludes deaths of nonresidents of the United States. Data for specified race or Hispanic-origin groups other than non-Hispanic White and non-Hispanic Black should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys, although misclassification is very minor for the Hispanic and non-Hispanic Asian or Pacific Islander populations; see Technical Notes in this report]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All origins and races[3]									
2021	3,464,231	1,838,108	1,626,123	1,043.8	1,118.2	970.8	879.7	1,048.0	733.3
2020	3,383,729	1,769,884	1,613,845	1,027.0	1,090.8	965.1	835.4	998.3	695.1
2019	2,854,838	1,473,823	1,381,015	869.7	911.7	829.0	715.2	846.7	602.7
2018	2,839,205	1,458,469	1,380,736	867.8	905.2	831.6	723.6	855.5	611.3
2017	2,813,503	1,439,111	1,374,392	863.8	897.2	831.4	731.9	864.5	619.7
2016	2,744,248	1,400,232	1,344,016	849.3	880.2	819.3	728.8	861.0	617.5
2015	2,712,630	1,373,404	1,339,226	844.0	868.0	820.7	733.1	863.2	624.2
2014	2,626,418	1,328,241	1,298,177	823.7	846.4	801.7	724.6	855.1	616.7
2013	2,596,993	1,306,034	1,290,959	821.5	839.1	804.4	731.9	863.6	623.5
2012	2,543,279	1,273,722	1,269,557	810.2	824.5	796.4	732.8	865.1	624.7
2011	2,515,458	1,254,978	1,260,480	807.3	818.7	796.3	741.3	875.3	632.4
2010	2,468,435	1,232,432	1,236,003	799.5	812.0	787.4	747.0	887.1	634.9
2000	2,403,351	1,177,578	1,225,773	854.0	853.0	855.0	869.0	1,053.8	731.4
1990	2,148,463	1,113,417	1,035,046	863.8	918.4	812.0	938.7	1,202.8	750.9
1980	1,989,841	1,075,078	914,763	878.3	976.9	785.3	1,039.1	1,348.1	817.9
1970	1,921,031	1,078,478	842,553	945.3	1,090.3	807.8	1,222.6	1,542.1	971.4
1960	1,711,982	975,648	736,334	954.7	1,104.5	809.2	1,339.2	1,609.0	1,105.3
1950	1,452,454	827,749	624,705	963.8	1,106.1	823.5	1,446.0	1,674.2	1,236.0
1940	1,417,269	791,003	626,266	1,076.4	1,197.4	954.6	1,785.0	1,976.0	1,599.4
Hispanic[4]									
2021	315,664	181,195	134,469	503.9	571.3	434.7	724.7	884.9	582.7
2020	305,708	175,585	130,123	498.6	567.8	428.2	723.6	903.8	570.1
2019	212,397	117,683	94,714	350.7	384.9	315.7	523.8	633.2	430.7
2018	204,719	113,045	91,674	341.9	373.9	309.3	524.1	633.1	431.7
2017	197,249	108,579	88,670	334.6	364.6	304.0	524.7	631.8	434.2
2016	188,254	103,532	84,722	327.6	356.8	297.7	525.8	631.8	436.4
2015	179,457	98,170	81,287	317.1	343.2	290.4	525.3	628.9	438.3
2014	169,387	92,474	76,913	305.8	330.1	281.0	523.3	626.8	437.5
2013	163,241	88,880	74,361	301.9	323.7	279.4	535.4	639.8	448.6
2012	156,419	85,238	71,181	295.0	316.5	272.7	539.1	643.9	452.5
2011	149,635	81,887	67,748	287.5	309.7	264.6	540.7	647.3	452.8
2010	144,490	79,622	64,868	286.2	310.8	260.9	558.6	677.7	463.4
2000	107,254	60,172	47,082	303.8	331.3	274.6	665.7	818.1	546.0
Non-Hispanic, single race[5]									
American Indian and Alaska Native:									
2021	26,972	14,724	12,248	1,100.0	1,216.9	986.2	1,109.2	1,282.7	946.6
2020	24,725	13,431	11,294	1,016.5	1,123.4	913.2	1,036.2	1,205.9	881.5
2019	18,057	9,732	8,325	741.6	812.1	673.3	782.5	901.9	673.3
2018	17,790	9,678	8,112	735.9	813.5	660.8	790.8	918.7	673.1
Asian:									
2021	92,432	48,386	44,046	469.5	511.7	430.5	461.7	554.9	386.3
2020	91,175	47,699	43,476	470.8	515.8	429.6	457.7	557.4	378.5
2019	70,532	35,914	34,618	373.1	398.7	349.8	372.8	442.4	317.2
2018	68,768	35,089	33,679	367.2	393.4	343.3	381.2	454.1	324.1
Black:									
2021	449,764	238,599	211,165	1,074.5	1,185.8	971.4	1,118.0	1,374.0	917.2
2020	449,213	237,703	211,510	1,084.3	1,200.0	978.4	1,119.0	1,399.0	905.2
2019	346,677	181,363	165,314	842.5	921.8	769.9	884.0	1,092.8	724.9
2018	341,408	177,958	163,450	834.7	909.8	765.9	892.6	1,102.8	733.7
Native Hawaiian or Other Pacific Islander:									
2021	5,223	2,906	2,317	834.0	917.5	748.6	924.3	1,042.8	806.0
2020	4,439	2,489	1,950	723.5	804.6	641.1	821.3	947.9	699.8
2019	3,491	1,938	1,553	585.8	646.5	524.4	679.0	769.0	589.5
2018	3,277	1,786	1,491	558.9	605.4	511.8	675.7	758.1	597.3

See footnotes at end of table.

Table 1. Number of deaths, death rate, and age-adjusted death rate, by Hispanic origin and race and sex: United States, 1940, 1950, 1960, 1970, 1980, 1990, 2000, and 2010–2021—Con.

[Excludes deaths of nonresidents of the United States. Data for specified race or Hispanic-origin groups other than non-Hispanic White and non-Hispanic Black should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys, although misclassification is very minor for the Hispanic and non-Hispanic Asian or Pacific Islander populations; see Technical Notes in this report]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hispanic, single race[5]—Con.									
White:									
2021	2,548,809	1,337,385	1,211,424	1,294.9	1,368.8	1,222.1	893.9	1,055.6	751.4
2020	2,484,072	1,278,612	1,205,460	1,262.4	1,317.7	1,208.6	834.7	985.0	703.1
2019	2,183,844	1,115,767	1,068,077	1,106.8	1,146.6	1,068.1	739.9	868.8	627.4
2018	2,182,552	1,108,848	1,073,704	1,104.8	1,138.2	1,072.3	748.7	878.0	636.5

[1]Rates are on an annual basis per 100,000 population in specified group; see Technical Notes.
[2]Age-adjusted rates are per 100,000 U.S. standard population. For method of computation, see Technical Notes.
[3]Includes origins and races not shown separately; see Technical Notes.
[4]Includes people of Hispanic origin of any race. The Hispanic-origin category is consistent with 1997 Office of Management and Budget (OMB) standards; see Technical Notes.
[5]Only one race was reported on the death certificate. Hispanic-origin and race categories are consistent with 1997 OMB standards; see Technical Notes.

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

Table 2. Number of deaths and death rate by age, and age-adjusted death rate, by Hispanic origin and race and sex: United States, 2021

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for specified categories other than Black non-Hispanic, single race and White non-Hispanic, single race should be interpreted with caution because of inconsistencies between reporting these items on death certificates and on censuses and surveys; see Technical Notes]

Hispanic origin and race and sex	All ages	Age group (years)											Age not stated	Age-adjusted rate[2]
		Younger than 1 year[1]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older		
	Number													
Total	3,464,231	19,920	3,816	5,975	38,307	82,274	124,939	216,037	478,171	724,266	829,653	940,780	93	…
Male	1,838,108	10,909	2,105	3,494	27,911	57,910	81,589	135,774	292,961	418,941	432,389	374,055	70	…
Female	1,626,123	9,011	1,711	2,481	10,396	24,364	43,350	80,263	185,210	305,325	397,264	566,725	23	…
Single race[3]	3,444,013	18,975	3,651	5,766	37,283	80,827	123,373	214,033	475,074	720,570	826,379	937,989	93	…
Male	1,826,819	10,409	2,008	3,383	27,215	56,905	80,587	134,528	291,125	416,861	430,763	372,965	70	…
Female	1,617,194	8,566	1,643	2,383	10,068	23,922	42,786	79,505	183,949	303,709	395,616	565,024	23	…
Two or more races[4]	20,218	945	165	209	1,024	1,447	1,566	2,004	3,097	3,696	3,274	2,791	–	…
Male	11,289	500	97	111	696	1,005	1,002	1,246	1,836	2,080	1,626	1,090	–	…
Female	8,929	445	68	98	328	442	564	758	1,261	1,616	1,648	1,701	–	…
Hispanic, total[5]	315,664	4,453	804	1,347	8,421	14,924	21,252	32,603	51,588	59,784	60,039	60,445	4	…
Male	181,195	2,421	416	750	6,273	11,248	15,205	22,205	33,385	34,921	30,574	23,793	4	…
Female	134,469	2,032	388	597	2,148	3,676	6,047	10,398	18,203	24,863	29,465	36,652	–	…
Hispanic, single race[3]	312,795	4,270	776	1,315	8,238	14,677	21,029	32,311	51,189	59,277	59,620	60,089	4	…
Male	179,564	2,329	402	734	6,153	11,063	15,056	22,020	33,149	34,637	30,361	23,656	4	…
Female	133,231	1,941	374	581	2,085	3,614	5,973	10,291	18,040	24,640	29,259	36,433	–	…
American Indian and Alaska Native	1,878	41	9	13	89	156	181	206	345	380	236	222	–	…
Male	1,090	26	5	4	62	106	122	128	195	221	137	84	–	…
Female	788	15	4	9	27	50	59	78	150	159	99	138	–	…
Asian	961	35	5	12	38	49	69	108	118	169	198	160	–	…
Male	515	20	3	6	30	34	47	68	73	89	96	49	–	…
Female	446	15	2	6	8	15	22	40	45	80	102	111	–	…
Black	5,232	257	55	64	297	426	423	514	737	843	817	799	–	…
Male	2,923	137	33	41	217	299	275	322	451	476	410	262	–	…
Female	2,309	120	22	23	80	127	148	192	286	367	407	537	–	…
Native Hawaiian or Other Pacific Islander	372	10	1	5	22	36	51	52	59	62	41	33	–	…
Male	241	7	–	3	18	31	34	40	45	28	20	15	–	…
Female	131	3	1	2	4	5	17	12	14	34	21	18	–	…
White	304,352	3,927	706	1,221	7,792	14,010	20,305	31,431	49,930	57,823	58,328	58,875	4	…
Male	174,795	2,139	361	680	5,826	10,593	14,578	21,462	32,385	33,823	29,698	23,246	4	…
Female	129,557	1,788	345	541	1,966	3,417	5,727	9,969	17,545	24,000	28,630	35,629	–	…
Hispanic, two or more races[4]	2,869	183	28	32	183	247	223	292	399	507	419	356	–	…
Male	1,631	92	14	16	120	185	149	185	236	284	213	137	–	…
Female	1,238	91	14	16	63	62	74	107	163	223	206	219	–	…

See footnotes at end of table.

Table 2. Number of deaths and death rate by age, and age-adjusted death rate, by Hispanic origin and race and sex: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for specified categories other than Black non-Hispanic, single race and White non-Hispanic, single race should be interpreted with caution because of inconsistencies between reporting these items on death certificates and on censuses and surveys; see Technical Notes]

Hispanic origin and race and sex	All ages	Age group (years)											Age not stated	Age-adjusted rate[2]
		Younger than 1 year[1]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older		
	Number—Con.													
Non-Hispanic, single race[3]	3,123,200	14,495	2,867	4,446	28,983	66,002	102,035	181,074	422,162	659,006	765,229	876,854	47	…
Male	1,642,000	7,973	1,603	2,645	21,019	45,740	65,300	112,056	256,678	380,628	399,474	348,850	34	…
Female	1,481,200	6,522	1,264	1,801	7,964	20,262	36,735	69,018	165,484	278,378	365,755	528,004	13	…
American Indian and Alaska Native	26,972	195	55	83	700	1,876	2,582	3,373	5,344	5,506	4,401	2,856	1	…
Male	14,724	105	34	41	465	1,204	1,574	2,030	3,140	2,886	2,165	1,079	1	…
Female	12,248	90	21	42	235	672	1,008	1,343	2,204	2,620	2,236	1,777	–	…
Asian	92,432	628	120	192	902	1,672	2,783	5,480	10,364	17,702	22,964	29,624	1	…
Male	48,386	352	65	111	622	1,158	1,821	3,453	6,477	10,155	12,175	11,996	1	…
Female	44,046	276	55	81	280	514	962	2,027	3,887	7,547	10,789	17,628	–	…
Black	449,764	5,682	1,064	1,514	10,211	19,442	25,938	41,975	85,176	105,401	83,750	69,602	9	…
Male	238,599	3,153	571	923	7,757	13,588	16,320	25,204	49,838	58,065	39,561	23,613	6	…
Female	211,165	2,529	493	591	2,454	5,854	9,618	16,771	35,338	47,336	44,189	45,989	3	…
Native Hawaiian or Other Pacific Islander	5,223	69	15	15	123	265	475	762	1,039	1,156	816	488	–	…
Male	2,906	46	6	10	91	189	293	460	583	640	389	199	–	…
Female	2,317	23	9	5	32	76	182	302	456	516	427	289	–	…
White	2,548,809	7,921	1,613	2,642	17,047	42,747	70,257	129,484	320,239	529,241	653,298	774,284	36	…
Male	1,337,385	4,317	927	1,560	12,084	29,601	45,292	80,909	196,640	308,882	345,184	311,963	26	…
Female	1,211,424	3,604	686	1,082	4,963	13,146	24,965	48,575	123,599	220,359	308,114	462,321	10	…
Non-Hispanic, two or more races[4]	17,316	760	136	176	841	1,195	1,341	1,707	2,693	3,184	2,849	2,434	–	…
Male	9,636	407	82	94	576	815	852	1,058	1,599	1,793	1,408	952	–	…
Female	7,680	353	54	82	265	380	489	649	1,094	1,391	1,441	1,482	–	…
Not stated or not classifiable origin[6]	8,051	212	9	6	62	153	311	653	1,728	2,292	1,536	1,047	42	…
Male	5,277	108	4	5	43	107	232	455	1,299	1,599	933	460	32	…
Female	2,774	104	5	1	19	46	79	198	429	693	603	587	10	…

See footnotes at end of table.

Table 2. Number of deaths and death rate by age, and age-adjusted death rate, by Hispanic origin and race and sex: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for specified categories other than Black non-Hispanic, single race and White non-Hispanic, single race should be interpreted with caution because of inconsistencies between reporting these items on death certificates and on censuses and surveys; see Technical Notes]

Hispanic origin and race and sex	All ages	Age group (years)											Age not stated	Age-adjusted rate[2]
		Younger than 1 year[1]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older		
		Rate[7]												
Total[8]	1,043.8	558.8	25.0	14.3	88.9	180.8	287.9	531.0	1,117.1	2,151.3	5,119.4	15,743.3	…	879.7
Male	1,118.2	598.9	27.0	16.4	126.9	251.2	373.3	668.4	1,397.5	2,640.0	6,031.8	17,190.5	…	1,048.0
Female	970.8	517.0	22.9	12.2	49.3	108.6	201.2	393.9	848.0	1,715.6	4,395.7	14,914.5	…	733.3
Single race[3]	1,069.2	570.5	25.6	14.7	90.5	183.3	290.8	535.2	1,124.7	2,163.3	5,147.3	15,834.6	…	885.7
Male	1,145.2	612.3	27.5	16.8	129.4	254.5	376.8	673.3	1,406.6	2,654.7	6,065.4	17,296.1	…	1,055.2
Female	994.7	526.8	23.5	12.4	50.0	110.1	203.4	397.3	853.8	1,725.1	4,419.0	14,998.1	…	738.0
Two or more races[5]	206.5	396.2	16.8	8.5	53.6	102.7	160.1	287.7	550.2	1,032.6	2,162.8	5,357.7	…	390.1
Male	232.2	411.1	19.3	8.9	71.9	144.0	213.6	375.1	688.5	1,251.5	2,444.9	5,564.6	…	461.5
Female	181.2	380.8	14.1	8.2	34.8	62.2	110.9	208.0	425.7	842.9	1,941.7	5,233.0	…	327.6
Hispanic, total[5]	503.9	472.4	20.3	12.5	81.7	155.7	236.3	433.1	932.7	1,894.0	4,328.7	11,953.4	…	724.7
Male	571.3	502.9	20.6	13.7	119.3	227.1	324.2	579.3	1,213.4	2,374.1	5,208.9	12,927.3	…	884.9
Female	434.7	440.6	20.0	11.3	42.6	79.3	140.4	281.5	654.9	1,475.0	3,683.0	11,396.2	…	582.7
Hispanic, single race[3]	515.8	477.5	20.6	12.8	83.0	158.0	240.1	438.5	944.0	1,912.5	4,368.0	12,048.3	…	732.1
Male	584.6	509.9	21.0	14.0	121.4	230.3	329.3	586.3	1,227.9	2,396.6	5,254.2	13,025.3	…	893.9
Female	445.1	443.7	20.3	11.6	42.9	80.5	142.6	284.8	662.6	1,489.5	3,717.4	11,488.8	…	588.4
American Indian and Alaska Native	98.0	97.1	*	*	29.6	54.8	66.2	93.3	218.0	475.5	823.6	2,534.0	…	163.7
Male	109.5	121.5	*	*	40.4	70.6	82.0	108.3	236.6	556.4	1,055.6	2,548.5	…	189.7
Female	85.6	*	*	*	18.4	37.2	47.4	76.0	197.8	395.6	631.6	2,525.2	…	138.4
Asian	144.6	224.3	*	*	36.3	49.7	76.7	151.9	236.5	621.0	1,827.4	4,604.3	…	264.6
Male	154.6	250.6	*	*	55.8	69.0	102.9	193.2	302.1	720.6	2,140.5	4,032.9	…	297.6
Female	134.6	*	*	*	*	*	49.7	111.5	174.9	538.2	1,606.3	4,911.5	…	232.9
Black	163.4	364.6	20.1	10.0	57.1	86.7	95.9	157.7	309.2	638.3	1,487.4	4,406.1	…	268.3
Male	184.8	381.3	23.8	12.6	81.6	120.2	128.5	210.1	402.7	797.6	1,805.1	4,168.7	…	318.7
Female	142.5	347.4	16.4	7.3	31.5	52.4	65.2	111.2	226.3	506.9	1,263.3	4,532.0	…	224.0
Native Hawaiian or Other Pacific Islander	157.1	*	*	*	61.5	97.8	140.0	203.5	348.4	764.5	1,336.4	3,552.2	…	272.3
Male	197.0	*	*	*	*	158.1	168.2	302.2	531.0	731.1	1,534.9	*	…	338.1
Female	114.5	*	*	*	*	*	*	*	*	794.4	1,189.8	*	…	209.3
White	557.1	516.4	21.8	13.4	86.9	167.2	256.4	467.3	1,006.9	2,027.3	4,602.0	12,595.4	…	773.1
Male	631.4	550.3	21.9	14.6	127.3	244.3	351.8	624.6	1,309.7	2,543.7	5,536.9	13,636.6	…	945.1
Female	480.8	480.9	21.7	12.2	44.8	84.5	151.7	303.0	705.7	1,576.3	3,916.1	11,997.7	…	620.1
Hispanic, two or more races[4]	143.5	378.0	14.2	6.5	48.3	84.1	94.9	184.3	367.5	889.4	1,898.9	5,131.9	…	320.9
Male	162.8	372.5	*	*	62.4	124.5	127.1	238.6	458.1	1,107.7	2,335.8	5,621.7	…	390.2
Female	124.1	383.8	*	*	33.8	42.8	62.8	132.3	285.6	710.9	1,591.2	4,866.7	…	264.3

See footnotes at end of table.

Table 2. Number of deaths and death rate by age, and age-adjusted death rate, by Hispanic origin and race and sex: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for specified categories other than Black non-Hispanic, single race and White non-Hispanic, single race should be interpreted with caution because of inconsistencies between reporting these items on death certificates and on censuses and surveys; see Technical Notes]

Hispanic origin and race and sex	All ages	Age group (years)											Age not stated	Age-adjusted rate[2]
		Younger than 1 year[1]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older		
							Rate[7]—Con.							
Non-Hispanic, single race[3]	1,194.5	596.1	27.3	15.3	92.7	189.7	303.1	555.1	1,146.6	2,181.5	5,209.3	16,163.4	…	903.0
Male	1,274.8	641.4	29.8	17.8	131.7	260.6	388.3	690.7	1,426.2	2,669.6	6,123.0	17,665.6	…	1,072.2
Female	1,116.6	548.7	24.6	12.7	52.1	117.5	218.0	420.9	879.3	1,745.2	4,479.2	15,303.6	…	756.3
American Indian and Alaska Native	1,100.0	722.6	47.5	24.2	193.9	498.0	819.4	1,191.9	1,771.6	2,613.2	4,938.0	10,070.5	…	1,109.2
Male	1,216.9	761.1	57.7	23.4	254.0	630.5	1,002.0	1,456.6	2,182.4	2,963.9	5,450.8	9,996.3	…	1,282.7
Female	986.2	682.4	37.0	24.9	132.1	361.9	637.8	935.0	1,397.0	2,311.9	4,525.7	10,116.1	…	946.6
Asian	469.5	328.1	13.9	8.5	38.4	53.1	87.0	198.5	468.8	1,082.0	3,014.3	9,945.8	…	461.7
Male	511.7	357.1	14.5	9.6	52.7	74.8	119.7	265.5	632.5	1,400.2	3,636.7	10,593.4	…	554.9
Female	430.5	297.4	13.1	7.4	24.0	32.1	57.3	138.9	327.6	828.6	2,526.3	9,548.6	…	386.3
Black	1,074.5	1,129.2	50.0	26.4	171.7	296.8	465.3	827.8	1,681.3	3,100.0	6,003.1	14,435.6	…	1,118.0
Male	1,185.8	1,231.7	53.0	31.7	257.9	416.3	608.6	1,050.9	2,118.4	3,935.6	7,251.9	15,908.6	…	1,374.0
Female	971.4	1,023.0	47.0	20.9	83.5	178.1	332.5	627.6	1,302.4	2,459.4	5,201.3	13,780.5	…	917.2
Native Hawaiian or Other Pacific Islander	834.0	846.7	*	*	143.1	262.2	488.9	1,012.4	1,546.9	2,665.6	4,469.3	8,062.1	…	924.3
Male	917.5	1,096.8	*	*	206.2	364.3	587.2	1,204.5	1,753.5	3,076.6	4,565.7	8,112.5	…	1,042.8
Female	748.6	581.5	*	*	76.6	154.5	385.1	814.5	1,344.3	2,286.6	4,384.9	8,027.8	…	806.0
White	1,294.9	465.4	21.9	12.8	75.7	173.7	287.0	529.9	1,097.8	2,123.9	5,257.7	16,793.9	…	893.9
Male	1,368.8	495.9	24.5	14.7	104.7	236.9	365.1	655.3	1,361.5	2,587.2	6,168.8	18,352.7	…	1,055.6
Female	1,222.1	433.4	19.1	10.8	45.3	108.5	206.8	401.9	839.1	1,697.7	4,511.3	15,883.6	…	751.4
Non-Hispanic, two or more races[4]	222.3	399.8	17.3	9.0	54.9	107.1	180.5	317.1	592.8	1,058.1	2,203.2	5,390.2	…	406.0
Male	249.6	419.9	20.4	9.4	74.3	148.3	242.1	415.5	743.3	1,275.6	2,453.5	5,550.7	…	479.3
Female	195.4	378.9	14.0	8.6	35.1	67.1	125.1	228.8	457.4	867.4	2,003.4	5,291.9	…	341.5

… Category not applicable.
– Quantity zero.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
[1]Death rates for ages younger than 1 year (based on population estimates) differ from infant mortality rates (based on live births); see Technical Notes.
[2]For method of computation, see Technical Notes.
[3]Only one race was reported on the death certificate; see Technical Notes.
[4]Two or more races were reported on the death certificate; see Technical Notes.
[5]Includes people of Hispanic origin of any race; see Technical Notes.
[6]Includes origin not stated or not classifiable; see Technical Notes.
[7]Data for age not stated included in all ages category but not distributed among age groups.
[8]Includes deaths with origin not stated and origin not classifiable; see Technical Notes.

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

Table 3. Number of deaths and death rate by age, and age-adjusted death rate, by specified Hispanic origin and sex: United States, 2021

[Rates are per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Populations used for computing death rates for Hispanic total are postcensal estimates based on the 2010 census estimated as of July 1, 2021; populations used for computing death rates for Mexican, Puerto Rican, Cuban, Central American, South American, Dominican, and Other and unknown Hispanic are estimates based on the 2021 1-year American Community Survey adjusted to control totals. The control totals are 2010-based postcensal estimates for the United States for July 1, 2021; see Technical Notes. Hispanic origin is reported separately on the death certificate. People of Hispanic origin may be of any race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see Technical Notes]

Hispanic origin and sex	All ages	Age group (years)											Age not stated	Age-adjusted rate[2]
		Younger than 1 year[1]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older		
	Number													
Hispanic	315,664	4,453	804	1,347	8,421	14,924	21,252	32,603	51,588	59,784	60,039	60,445	4	…
Male	181,195	2,421	416	750	6,273	11,248	15,205	22,205	33,385	34,921	30,574	23,793	4	…
Female	134,469	2,032	388	597	2,148	3,676	6,047	10,398	18,203	24,863	29,465	36,652	–	…
Central American	21,205	446	94	139	854	1,396	1,997	2,561	3,612	3,842	3,244	3,020	–	…
Male	12,339	255	51	74	705	1,128	1,517	1,862	2,318	2,096	1,442	891	–	…
Female	8,866	191	43	65	149	268	480	699	1,294	1,746	1,802	2,129	–	…
Cuban	21,675	99	18	25	152	310	405	933	2,330	3,191	5,587	8,625	–	…
Male	11,255	59	8	14	119	231	293	653	1,603	1,977	2,929	3,369	–	…
Female	10,420	40	10	11	33	79	112	280	727	1,214	2,658	5,256	–	…
Dominican	7,598	88	21	36	169	366	431	590	1,048	1,494	1,642	1,713	–	…
Male	4,003	48	11	18	133	268	302	367	596	851	823	586	–	…
Female	3,595	40	10	18	36	98	129	223	452	643	819	1,127	–	…
Mexican	174,828	2,566	426	785	5,094	8,690	12,799	20,272	30,378	34,076	31,238	28,503	1	…
Male	103,658	1,393	219	456	3,745	6,608	9,212	13,910	19,856	20,221	16,197	11,840	1	…
Female	71,170	1,173	207	329	1,349	2,082	3,587	6,362	10,522	13,855	15,041	16,663	–	…
Puerto Rican	35,727	403	75	120	643	1,448	2,195	3,303	5,719	6,903	7,789	7,128	1	…
Male	19,598	220	38	66	445	1,059	1,538	2,214	3,626	3,893	3,848	2,650	1	…
Female	16,129	183	37	54	198	389	657	1,089	2,093	3,010	3,941	4,478	–	…
South American	14,523	119	21	46	219	413	572	918	1,917	2,812	3,628	3,858	–	…
Male	7,590	68	11	20	163	297	397	606	1,199	1,568	1,767	1,494	–	…
Female	6,933	51	10	26	56	116	175	312	718	1,244	1,861	2,364	–	…
Other and unknown Hispanic	40,108	732	149	196	1,290	2,301	2,853	4,026	6,584	7,466	6,911	7,598	2	…
Male	22,752	378	78	102	963	1,657	1,946	2,593	4,187	4,315	3,568	2,963	2	…
Female	17,356	354	71	94	327	644	907	1,433	2,397	3,151	3,343	4,635	–	…

See footnotes at end of table.

Table 3. Number of deaths and death rate by age, and age-adjusted death rate, by specified Hispanic origin and sex: United States, 2021—Con.

[Rates are per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Populations used for computing death rates for Hispanic total are postcensal estimates based on the 2010 census estimated as of July 1, 2021; populations used for computing death rates for Mexican, Puerto Rican, Cuban, Central American, South American, Dominican, and Other and unknown Hispanic are estimates based on the 2021 1-year American Community Survey adjusted to control totals. The control totals are 2010-based postcensal estimates for the United States for July 1, 2021; see Technical Notes. Hispanic origin is reported separately on the death certificate. People of Hispanic origin may be of any race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see Technical Notes]

Hispanic origin and sex	All ages	Age group (years)											Age not stated	Age-adjusted rate[2]
		Younger than 1 year[1]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older		
		Rate[3]												
Hispanic	503.9	472.4	20.3	12.5	81.7	155.7	236.3	433.1	932.7	1,894.0	4,328.7	11,953.4	…	724.7
Male	571.3	502.9	20.6	13.7	119.3	227.1	324.2	579.3	1,213.4	2,374.1	5,208.9	12,927.3	…	884.9
Female	434.7	440.6	20.0	11.3	42.6	79.3	140.4	281.5	654.9	1,475.0	3,683.0	11,396.2	…	582.7
Central American	336.2	402.4	21.2	13.1	83.2	133.4	192.2	347.2	734.4	1,580.7	4,047.7	11,588.6	…	646.0
Male	382.0	425.2	22.0	13.8	133.2	207.6	267.4	482.4	974.8	2,047.4	5,127.1	13,500.0	…	823.8
Female	288.1	375.5	20.2	12.4	30.0	53.3	101.7	198.8	509.4	1,241.1	3,464.1	10,940.4	…	514.2
Cuban	903.1	400.4	*	9.7	57.0	90.6	129.5	269.0	704.7	1,549.8	4,196.5	12,811.9	…	636.0
Male	925.1	492.5	*	*	86.8	128.5	180.2	354.9	921.8	2,015.9	5,164.4	13,956.1	…	777.3
Female	880.4	313.8	*	*	25.5	48.7	74.6	171.9	463.8	1,125.8	3,478.1	12,172.3	…	511.6
Dominican	317.4	226.4	12.8	9.4	45.4	92.7	128.8	212.7	468.1	1,091.1	3,051.5	11,543.1	…	502.4
Male	355.0	256.5	*	*	68.9	140.6	194.6	305.1	637.8	1,522.0	4,259.8	12,070.0	…	641.4
Female	284.0	198.4	*	*	20.1	48.0	71.9	141.9	346.5	793.7	2,374.6	11,286.9	…	409.1
Mexican	469.5	467.6	17.9	11.5	77.4	152.4	243.0	463.0	1,018.0	2,056.3	4,531.2	12,709.0	…	767.4
Male	545.6	500.6	18.0	13.1	111.1	223.7	335.5	617.8	1,304.0	2,556.2	5,464.7	13,596.7	…	931.9
Female	390.3	433.6	17.7	9.9	41.9	75.8	142.3	299.1	720.0	1,599.6	3,827.1	12,145.5	…	616.4
Puerto Rican	616.2	503.3	21.2	12.5	73.6	166.2	273.8	483.9	996.5	1,865.3	4,636.4	11,714.1	…	752.1
Male	678.3	553.3	21.0	13.2	99.6	237.8	382.7	659.2	1,311.6	2,275.7	5,611.8	12,538.4	…	918.7
Female	554.5	454.0	21.5	11.7	46.4	91.4	164.4	314.0	703.6	1,512.6	3,963.8	11,275.3	…	610.9
South American	334.0	256.7	9.7	8.1	38.2	65.0	79.7	144.9	384.7	1,007.3	2,791.1	7,971.1	…	400.7
Male	360.9	264.8	*	7.0	57.0	95.7	111.2	200.9	513.1	1,309.2	3,296.0	8,593.6	…	483.6
Female	308.8	246.6	*	9.1	19.5	35.7	48.5	94.1	271.4	780.4	2,436.7	7,622.1	…	336.1
Other and unknown Hispanic	991.3	1,099.8	56.8	28.1	204.2	416.1	537.7	906.8	1,635.8	2,703.2	5,249.7	15,334.0	…	1,111.3
Male	1,102.6	1,126.3	56.6	28.3	290.8	564.4	665.0	1,148.8	2,200.7	3,428.4	6,496.1	17,491.1	…	1,383.6
Female	875.4	1,072.9	57.0	27.9	108.8	248.2	381.3	656.5	1,129.4	2,096.1	4,357.4	14,213.4	…	874.1

… Category not applicable.
– Quantity zero.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
[1]Death rates for ages younger than 1 year (based on population estimates) differ from infant mortality rates (based on live births); see Technical Notes.
[2]For method of computation, see Technical Notes.
[3]Figures for age not stated are included in all ages category but not distributed among age groups.

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

Table 4. Life expectancy at selected ages, by Hispanic origin and race and sex: United States, 2021

[Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards]

							Non-Hispanic, single race											
	Total[1]			Hispanic[2,3]			American Indian or Alaska Native[2,4]			Asian[2,4]			Black[2,4]			White[2,4]		
Exact age	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
0	76.4	73.5	79.3	77.8	74.6	81.1	65.6	62.2	69.2	83.5	81.2	85.6	71.2	67.6	75.0	76.7	74.0	79.5
1	75.8	73.0	78.7	77.2	74.0	80.5	65.1	61.7	68.8	82.8	80.5	84.9	71.0	67.4	74.7	76.0	73.4	78.8
5	71.9	69.1	74.8	73.3	70.1	76.5	61.2	57.8	64.9	78.8	76.5	80.9	67.1	63.5	70.8	72.1	69.4	74.8
10	66.9	64.1	69.8	68.3	65.1	71.5	56.3	52.9	59.9	73.9	71.6	75.9	62.2	58.6	65.9	67.1	64.5	69.9
15	62.0	59.2	64.9	63.4	60.2	66.6	51.3	48.0	55.0	68.9	66.6	71.0	57.3	53.7	61.0	62.1	59.5	64.9
20	57.1	54.4	60.0	58.5	55.4	61.7	46.7	43.4	50.3	64.0	61.7	66.0	52.7	49.2	56.1	57.3	54.7	60.0
25	52.5	49.8	55.2	53.8	50.8	56.9	42.4	39.2	45.8	59.2	56.9	61.1	48.2	44.9	51.4	52.6	50.1	55.2
30	47.8	45.4	50.4	49.2	46.3	52.1	38.3	35.3	41.5	54.3	52.1	56.2	43.8	40.7	46.8	47.9	45.6	50.4
35	43.3	41.0	45.7	44.6	41.9	47.3	34.5	31.7	37.5	49.5	47.3	51.3	39.5	36.6	42.3	43.4	41.2	45.7
40	38.8	36.6	41.1	40.1	37.5	42.6	31.0	28.4	33.7	44.7	42.6	46.4	35.3	32.5	37.8	38.9	36.8	41.1
45	34.4	32.3	36.5	35.6	33.2	37.9	27.5	25.1	30.0	39.9	37.9	41.6	31.1	28.6	33.5	34.5	32.5	36.5
50	30.1	28.2	32.1	31.2	28.9	33.3	24.5	22.3	26.7	35.2	33.3	36.8	27.1	24.8	29.3	30.2	28.3	32.1
55	26.0	24.2	27.8	27.0	24.9	28.9	21.5	19.6	23.4	30.7	28.8	32.1	23.3	21.1	25.3	26.0	24.3	27.8
60	22.1	20.5	23.7	23.0	21.1	24.7	18.8	17.2	20.3	26.2	24.6	27.5	19.8	17.8	21.6	22.1	20.5	23.7
65	18.4	17.0	19.7	19.3	17.6	20.6	16.3	15.0	17.3	21.9	20.5	23.0	16.7	14.9	18.1	18.4	17.0	19.7
70	14.9	13.7	16.0	15.8	14.4	16.8	13.6	12.6	14.4	17.9	16.7	18.7	13.7	12.3	14.9	14.9	13.7	15.9
75	11.6	10.6	12.5	12.4	11.3	13.2	11.2	10.4	11.7	14.0	13.0	14.6	11.0	9.8	11.8	11.5	10.6	12.4
80	8.7	7.9	9.4	9.4	8.5	9.9	9.1	8.5	9.4	10.5	9.7	10.9	8.5	7.6	9.1	8.7	7.8	9.3
85	6.3	5.6	6.7	6.9	6.1	7.1	7.2	6.8	7.3	7.5	6.9	7.7	6.4	5.6	6.7	6.2	5.6	6.6
90	4.4	3.9	4.6	4.8	4.3	4.9	5.6	5.4	5.6	5.0	4.7	5.1	4.7	4.2	4.9	4.3	3.8	4.5
95	3.0	2.7	3.2	3.4	3.0	3.3	4.5	4.3	4.3	3.4	3.1	3.3	3.4	3.1	3.5	3.0	2.6	3.1
100	2.2	1.9	2.2	2.4	2.2	2.3	3.6	3.5	3.4	2.3	2.2	2.2	2.6	2.4	2.6	2.1	1.9	2.2

[1]Includes origins and races not shown separately; see Technical Notes in this report.
[2]Based on death rates adjusted for Hispanic-origin and race misclassification on death certificates; see Technical Notes.
[3]Includes people of Hispanic origin of any race; see Technical Notes.
[4]Only one race was reported on the death certificate; see Technical Notes.

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

Table 5. Life expectancy at birth, by Hispanic origin and race and sex: United States, 1940, 1950, 1960, 1970, 1980, 1990, and 2000–2021

Hispanic origin and race and year	Both sexes	Male	Female
All origins and races[1]			
2021[2]	76.4	73.5	79.3
2020[2]	77.0	74.2	79.9
2019[2,3]	78.8	76.3	81.4
2018[2]	78.7	76.2	81.2
2017[2]	78.6	76.1	81.1
2016[2]	78.7	76.2	81.1
2015[2]	78.7	76.3	81.1
2014[2]	78.9	76.5	81.3
2013[2]	78.8	76.4	81.2
2012[2]	78.8	76.4	81.2
2011[2]	78.7	76.3	81.1
2010[2]	78.7	76.2	81.0
2009[2]	78.5	76.0	80.9
2008[2]	78.2	75.6	80.6
2007	78.1	75.5	80.6
2006	77.8	75.2	80.3
2005	77.6	75.0	80.1
2004	77.6	75.0	80.1
2003	77.2	74.5	79.7
2002	77.0	74.4	79.6
2001	77.0	74.3	79.5
2000	76.8	74.1	79.3
1990	75.4	71.8	78.8
1980	73.7	70.0	77.4
1970	70.8	67.1	74.7
1960	69.7	66.6	73.1
1950	68.2	65.6	71.1
1940	62.9	60.8	65.2
Hispanic[4–6]			
2021[2]	77.8	74.6	81.1
2020[2]	77.9	74.6	81.3
2019[2,3]	81.9	79.1	84.4
2018[2]	81.8	79.1	84.3
2017[2]	81.8	79.1	84.3
2016[2]	81.8	79.1	84.3
2015[2,7]	81.9	79.3	84.3
2014[2]	82.1	79.4	84.5
2013[2]	81.9	79.2	84.2
2012[2]	81.9	79.3	84.3
2011[2]	81.8	79.2	84.2
2010[2]	81.7	78.8	84.3
2009[2]	81.1	78.4	83.5
2008[2]	80.8	78.0	83.3
2007	80.7	77.8	83.2
2006	80.3	77.5	82.9

See footnotes at end of table.

Table 5. Life expectancy at birth, by Hispanic origin and race and sex: United States, 1940, 1950, 1960, 1970, 1980, 1990, and 2000–2021—Con.

Hispanic origin and race and year	Both sexes	Male	Female
Non-Hispanic, single race[6,8]			
American Indian and Alaska Native:			
2021[2]	65.6	62.2	69.2
2020[2]	67.1	63.8	70.7
2019[2,3]	71.8	68.6	75.0
2018[2]	---	---	---
Asian:			
2021[2]	83.5	81.2	85.6
2020[2]	83.6	81.1	85.9
2019[2,3]	85.6	83.5	87.4
2018[2]	---	---	---
Black:			
2021[2]	71.2	67.6	75.0
2020[2]	71.5	67.8	75.4
2019[2,3]	74.8	71.3	78.1
2018[2]	74.7	71.3	78.0
White:			
2021[2]	76.7	74.0	79.5
2020[2]	77.4	74.8	80.1
2019[2,3]	78.8	76.3	81.3
2018[2]	78.6	76.2	81.1

--- Data not available.
[1]Includes origins and races not shown separately; see Technical Notes in this report.
[2]Life expectancies for 2008–2021 were calculated using newly revised life table methodology described in the Technical Notes.
[3]Life expectancies were updated using final data; therefore, data may differ from preliminary data previously published; see Technical Notes.
[4]Includes people of Hispanic origin of any race. The Hispanic-origin category is consistent with 1997 Office of Management and Budget (OMB) standards; see Technical Notes.
[5]Data by Hispanic origin available beginning with data year 2006.
[6]Based on death rates adjusted for Hispanic-origin and race misclassification on death certificates; see Technical Notes.
[7]Life expectancies were revised using updated Medicare data; as a result, data may differ from those previously published; see Technical Notes.
[8]Only one race was reported on the death certificate. Hispanic-origin and race categories are consistent with 1997 OMB standards; see Technical Notes.

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

Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
All causes													
2021	1,043.8	558.8	25.0	14.3	88.9	180.8	287.9	531.0	1,117.1	2,151.3	5,119.4	15,743.3	879.7
2020	1,027.0	524.3	22.7	13.7	84.2	159.5	248.0	473.5	1,038.9	2,072.3	4,997.0	15,210.9	835.4
2019	869.7	553.0	23.3	13.4	69.7	128.8	199.2	392.4	883.3	1,764.6	4,308.3	13,228.6	715.2
2018	867.8	557.8	24.0	13.3	70.2	128.8	194.7	395.9	886.7	1,783.3	4,386.1	13,450.7	723.6
2017	863.8	567.0	24.3	13.6	74.0	132.8	195.2	401.5	885.8	1,790.9	4,472.6	13,573.6	731.9
2016	849.3	583.4	25.3	13.4	74.9	129.0	192.2	405.5	883.8	1,788.6	4,474.8	13,392.1	728.8
2015	844.0	589.6	24.9	13.2	69.5	116.7	180.1	404.0	875.3	1,796.8	4,579.2	13,673.9	733.1
2014	823.7	588.0	24.0	12.7	65.5	108.4	175.2	404.8	870.3	1,786.3	4,564.2	13,407.9	724.6
2013	821.5	594.7	25.5	13.0	64.8	106.1	172.0	406.1	860.0	1,802.1	4,648.1	13,660.4	731.9
2012	810.2	599.3	26.3	12.6	66.4	105.4	170.7	405.4	854.2	1,802.5	4,674.5	13,678.6	732.8
2011	807.3	600.1	26.3	13.2	67.7	104.7	172.0	409.8	849.4	1,846.2	4,753.0	13,779.3	741.3
2010	799.5	623.4	26.5	12.9	67.7	102.9	170.5	407.1	851.9	1,875.1	4,790.2	13,934.3	747.0
2009	794.5	659.7	27.4	13.8	69.8	104.4	180.0	418.1	856.7	1,888.7	4,820.2	13,660.1	749.6
2008	812.9	678.9	29.3	13.9	74.2	105.1	181.0	419.6	867.1	1,958.4	4,998.1	14,332.4	774.9
2007	804.6	702.5	29.4	15.2	78.8	107.2	186.0	420.3	866.7	1,976.0	4,987.1	14,160.9	775.3
2006	813.1	705.8	29.1	15.2	81.4	109.0	192.0	427.5	881.3	2,031.4	5,096.1	14,426.7	791.8
2005	828.4	710.2	29.9	16.3	80.7	106.8	194.9	431.9	898.5	2,109.7	5,251.8	14,982.4	815.0
2004	818.8	695.9	30.3	16.7	79.7	104.1	194.9	426.8	903.2	2,141.0	5,267.4	14,777.6	813.7
2003	843.9	704.9	31.8	16.9	81.1	105.2	202.6	433.1	937.3	2,235.0	5,451.3	15,401.4	843.5
2002	849.5	709.5	31.4	17.4	80.9	105.1	204.2	431.0	948.7	2,300.3	5,543.8	15,589.5	855.9
2001	848.0	687.0	33.4	17.2	80.2	105.6	203.5	426.7	972.5	2,344.2	5,573.7	15,432.6	858.8
2000	854.0	736.7	32.4	18.0	79.9	101.4	198.9	425.6	992.2	2,399.1	5,666.5	15,524.4	869.0
1999	857.0	736.0	34.2	18.6	79.3	102.2	198.0	418.2	1,005.0	2,457.3	5,714.5	15,554.6	875.6
Diseases of heart (I00–I09,I11,I13,I20–I51)													
2021	209.6	7.4	0.8	0.5	2.2	9.1	29.4	84.9	208.7	416.6	1,044.2	4,078.7	173.8
2020	211.5	6.5	0.7	0.4	2.0	8.6	28.9	84.6	208.8	414.2	1,017.2	3,822.1	168.2
2019	200.8	7.1	0.8	0.4	2.0	7.6	25.2	76.2	190.4	388.8	991.2	3,798.3	161.5
2018	200.3	7.5	0.7	0.4	2.1	7.8	25.5	77.4	191.7	392.4	1,008.3	3,844.8	163.6
2017	198.8	7.7	0.8	0.4	2.1	8.1	25.4	77.1	190.7	392.9	1,028.4	3,882.9	165.0
2016	196.6	7.4	0.7	0.5	2.2	7.7	25.9	79.5	189.6	392.5	1,037.1	3,873.4	165.5
2015	197.2	7.3	0.9	0.5	2.3	8.0	25.6	79.3	188.1	389.5	1,071.6	3,986.5	168.5
2014	192.7	8.0	0.9	0.5	2.2	7.7	25.6	80.1	185.8	385.2	1,070.2	3,920.9	167.0
2013	193.3	7.8	1.1	0.4	2.1	7.6	25.6	80.3	184.6	390.3	1,095.1	4,013.9	169.8
2012	191.0	8.5	1.0	0.4	2.2	7.6	25.9	79.7	184.6	388.3	1,103.7	4,046.1	170.5
2011	191.5	7.7	1.0	0.5	2.3	7.9	26.2	80.7	183.2	399.0	1,134.7	4,111.6	173.7
2010	193.6	8.3	1.0	0.5	2.4	7.8	25.8	81.6	186.6	409.2	1,172.0	4,285.2	179.1
2009	195.4	9.6	0.9	0.5	2.4	7.8	26.7	82.3	190.0	422.8	1,210.8	4,316.9	182.8
2008	202.8	9.6	1.2	0.6	2.5	8.1	26.9	85.2	195.3	441.4	1,271.7	4,598.4	192.1
2007	204.5	10.2	1.1	0.6	2.5	8.1	27.7	85.2	197.8	454.8	1,308.6	4,668.1	196.1
2006	211.7	8.6	1.0	0.6	2.5	8.4	28.5	88.0	205.1	483.0	1,378.0	4,877.6	205.5
2005	220.7	8.9	0.9	0.6	2.6	8.3	29.2	89.7	212.8	512.3	1,458.5	5,188.3	216.8
2004	222.8	10.5	1.2	0.6	2.5	8.1	29.5	90.2	217.1	535.7	1,504.1	5,233.8	221.6
2003	236.1	11.0	1.2	0.6	2.7	8.3	30.8	92.4	232.3	579.8	1,607.7	5,570.7	236.3
2002	242.3	12.7	1.1	0.6	2.5	8.0	30.7	93.9	240.5	612.0	1,673.2	5,726.3	244.6
2001	245.7	11.9	1.5	0.7	2.5	8.0	29.6	92.4	248.9	632.6	1,723.0	5,784.1	249.5
2000	252.6	13.0	1.2	0.7	2.6	7.4	29.2	94.2	261.2	665.6	1,780.3	5,926.1	257.6
1999	259.9	13.8	1.2	0.7	2.8	7.6	30.2	95.7	269.9	701.7	1,849.9	6,063.0	266.5

See footnotes at end of table.

Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Malignant neoplasms (C00–C97)													
2021	182.4	1.5	1.8	1.9	3.1	7.9	25.8	82.5	252.4	532.1	1,017.2	1,712.9	146.6
2020	182.8	1.4	2.0	1.9	3.1	7.8	25.5	85.7	260.0	539.1	990.0	1,538.1	144.1
2019	182.7	1.5	1.8	1.9	3.3	7.8	25.7	87.1	263.3	543.3	1,005.9	1,571.0	146.2
2018	183.2	1.3	2.0	2.1	3.2	8.1	25.8	89.6	269.6	554.4	1,031.5	1,577.7	149.1
2017	183.9	1.4	2.0	2.1	3.2	8.0	26.7	92.7	273.4	567.5	1,060.2	1,600.3	152.5
2016	185.1	1.7	2.4	2.1	3.3	8.5	26.9	96.5	280.6	578.3	1,081.7	1,620.3	155.8
2015	185.4	1.3	2.2	2.1	3.4	8.4	26.9	99.7	284.1	594.3	1,100.8	1,628.6	158.5
2014	185.6	1.3	2.0	2.1	3.6	8.3	27.8	103.2	287.6	603.1	1,125.9	1,632.9	161.2
2013	185.0	1.6	2.1	2.2	3.4	8.6	28.1	105.5	288.2	616.9	1,139.4	1,635.4	163.2
2012	185.6	1.6	2.4	2.2	3.6	8.7	28.0	108.5	293.2	632.2	1,161.7	1,658.9	166.5
2011	185.1	1.8	2.2	2.1	3.7	8.4	28.8	109.3	295.8	647.6	1,179.1	1,676.2	169.0
2010	186.2	1.6	2.1	2.2	3.7	8.8	28.8	111.6	300.1	666.1	1,202.2	1,729.5	172.8
2009	185.0	1.8	2.2	2.2	3.8	9.0	30.2	112.8	301.7	668.2	1,213.0	1,699.3	173.5
2008	186.0	1.7	2.4	2.2	3.8	8.8	30.1	113.4	304.7	688.4	1,230.9	1,724.6	176.4
2007	186.9	1.7	2.3	2.4	3.8	8.7	31.0	114.2	311.4	702.9	1,250.1	1,739.4	179.3
2006	187.6	1.9	2.4	2.2	3.8	9.3	32.2	116.3	317.7	716.3	1,259.2	1,748.3	181.8
2005	189.3	1.9	2.4	2.5	4.0	9.2	33.5	118.6	323.9	733.2	1,272.8	1,778.2	185.1
2004	189.2	1.8	2.5	2.5	4.1	9.3	33.6	119.0	330.8	746.8	1,278.6	1,767.4	186.8
2003	192.0	1.9	2.5	2.6	4.0	9.5	35.1	122.1	341.6	763.5	1,299.7	1,792.3	190.9
2002	193.7	1.9	2.6	2.6	4.2	9.8	36.0	124.1	349.7	787.2	1,308.8	1,812.4	194.3
2001	194.3	1.6	2.7	2.4	4.2	10.1	36.8	125.8	359.4	799.7	1,313.7	1,802.9	196.5
2000	196.5	2.4	2.7	2.5	4.4	9.8	36.6	127.5	366.7	816.3	1,335.6	1,819.4	199.6
1999	197.0	1.8	2.7	2.5	4.5	10.0	37.1	127.6	374.6	827.1	1,331.5	1,805.8	200.8
COVID-19 (U07.1)[4]													
2021	125.6	2.6	0.4	0.3	3.3	13.5	36.9	90.6	172.2	305.1	609.7	1,354.4	104.1
2020	106.5	0.9	*	0.1	1.2	4.9	14.4	42.0	99.3	234.3	589.8	1,645.0	85.0
Accidents (unintentional injuries) (V01–X59,Y85–Y86)													
2021	67.8	36.6	8.5	4.2	36.7	75.7	84.0	77.2	78.2	64.7	126.8	446.0	64.7
2020	61.0	32.0	7.4	3.8	35.5	68.0	73.7	68.9	68.2	57.2	113.3	383.6	57.6
2019	52.7	33.5	7.3	3.6	27.5	53.4	57.8	57.1	58.6	54.5	115.5	377.4	49.3
2018	51.1	30.4	7.7	3.5	28.0	53.9	54.9	55.4	56.0	52.3	111.3	368.6	48.0
2017	52.2	33.4	7.9	3.8	31.1	56.6	55.8	57.7	55.7	50.7	113.3	374.9	49.4
2016	49.9	30.7	7.9	4.0	31.9	53.7	51.8	54.6	52.7	49.1	110.7	365.7	47.4
2015	45.6	32.5	7.8	3.7	28.5	44.8	43.9	49.8	47.7	47.0	111.5	364.5	43.2
2014	42.6	29.4	7.6	3.6	26.8	39.8	39.6	47.4	44.9	45.1	108.7	349.1	40.5
2013	41.3	29.3	8.3	3.7	26.4	37.8	38.0	46.5	43.4	43.5	107.4	340.0	39.4
2012	40.7	29.6	8.4	3.8	27.1	37.5	37.1	46.1	41.0	44.0	107.8	336.9	39.1
2011	40.6	29.1	8.5	4.0	28.2	37.1	37.5	46.4	39.8	44.5	107.0	333.8	39.1
2010	39.1	28.1	8.6	4.0	28.3	35.5	36.0	43.7	38.4	43.3	106.1	328.4	38.0
2009	38.5	29.5	9.0	4.1	28.6	34.5	36.4	44.5	36.5	42.1	103.5	310.9	37.5
2008	40.1	31.8	9.1	4.6	32.5	36.3	38.1	45.8	37.4	43.9	105.7	318.3	39.2
2007	41.1	31.0	9.9	5.4	36.8	37.7	39.6	46.2	36.8	44.4	105.0	313.6	40.4
2006	40.8	28.4	10.1	5.6	37.9	38.0	40.5	45.5	35.8	43.8	104.7	299.2	40.2
2005	39.9	27.0	10.5	5.9	37.1	35.7	38.9	43.2	35.4	45.7	106.0	303.5	39.5
2004	38.3	26.2	10.4	6.5	36.8	33.2	37.6	40.7	32.9	43.5	103.6	295.8	38.1
2003	37.7	23.8	11.0	6.4	36.9	32.0	38.0	38.8	32.7	43.7	101.6	294.3	37.6
2002	37.1	23.9	10.6	6.6	37.7	31.9	37.4	36.7	31.3	44.0	101.1	289.6	37.1
2001	35.6	24.3	11.2	6.9	35.8	30.0	35.4	33.9	30.5	42.6	100.7	282.2	35.7
2000	34.8	23.1	11.9	7.3	36.0	29.5	34.1	32.6	30.9	41.9	95.1	273.5	34.9
1999	35.1	22.3	12.4	7.6	35.3	29.6	33.8	31.8	30.6	44.6	100.5	282.4	35.3

See footnotes at end of table.

Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Cerebrovascular diseases (I60–I69)													
2021	49.1	2.7	0.4	0.2	0.4	1.4	5.0	14.1	34.2	84.1	274.8	1,111.1	41.1
2020	48.6	2.8	0.4	0.2	0.4	1.3	4.8	14.1	33.4	81.0	262.9	1,017.9	38.8
2019	45.7	2.7	0.3	0.2	0.4	1.3	4.2	12.6	30.5	76.4	254.2	977.3	37.0
2018	45.2	2.5	0.3	0.2	0.3	1.2	4.1	12.3	30.3	76.8	256.0	984.3	37.1
2017	44.9	2.5	0.4	0.2	0.4	1.3	4.4	12.3	30.3	76.4	263.1	993.5	37.6
2016	44.0	3.1	0.3	0.2	0.3	1.3	4.6	12.5	29.7	76.0	265.5	972.9	37.3
2015	43.7	2.2	0.3	0.2	0.4	1.3	4.4	12.3	29.6	75.5	273.0	975.8	37.6
2014	41.7	2.4	0.2	0.2	0.4	1.3	4.3	12.3	29.3	74.5	265.7	929.7	36.5
2013	40.8	2.7	0.2	0.2	0.3	1.2	4.2	12.4	28.9	74.2	268.9	906.0	36.2
2012	40.9	2.6	0.3	0.2	0.4	1.3	4.3	12.8	28.7	75.7	272.2	931.2	36.9
2011	41.4	3.4	0.3	0.2	0.4	1.3	4.2	12.8	29.4	78.2	285.4	943.7	37.9
2010	41.9	3.3	0.3	0.2	0.4	1.3	4.6	13.1	29.3	81.7	288.3	993.8	39.1
2009	42.0	3.7	0.3	0.2	0.4	1.3	4.6	13.7	29.7	82.8	294.9	992.2	39.6
2008	44.1	3.4	0.4	0.2	0.4	1.3	4.8	13.7	30.6	87.3	313.3	1,071.0	42.1
2007	45.1	3.2	0.3	0.2	0.5	1.3	5.0	14.5	31.7	91.4	320.8	1,110.7	43.5
2006	46.0	3.5	0.3	0.2	0.5	1.3	5.1	14.6	32.9	94.9	333.9	1,131.7	44.8
2005	48.6	3.1	0.4	0.2	0.5	1.4	5.2	15.0	32.7	99.8	358.4	1,239.7	48.0
2004	51.3	3.2	0.3	0.2	0.5	1.4	5.4	14.8	34.0	106.6	385.6	1,331.9	51.2
2003	54.4	2.5	0.3	0.2	0.5	1.5	5.6	15.0	35.5	111.9	409.8	1,446.0	54.6
2002	56.6	3.0	0.3	0.2	0.4	1.4	5.4	15.1	37.1	119.6	430.0	1,520.1	57.2
2001	57.4	2.7	0.4	0.2	0.5	1.5	5.5	15.0	38.3	122.9	443.3	1,532.0	58.4
2000	59.6	3.3	0.3	0.2	0.5	1.5	5.8	16.0	41.0	128.6	461.3	1,589.2	60.9
1999	60.0	2.7	0.3	0.2	0.5	1.4	5.7	15.2	40.6	130.8	469.8	1,614.8	61.6
Chronic lower respiratory diseases (J40–J47)													
2021	42.9	*	0.2	0.2	0.4	0.8	1.7	7.8	41.2	112.7	285.9	600.6	34.7
2020	46.3	*	*	0.4	0.5	0.9	1.9	8.8	44.4	118.5	300.1	612.6	36.4
2019	47.8	*	0.2	0.4	0.4	0.8	1.6	8.8	44.2	124.6	318.0	654.3	38.2
2018	48.7	*	0.3	0.3	0.4	0.7	1.6	9.1	44.5	128.6	335.7	682.4	39.7
2017	49.2	*	0.2	0.3	0.4	0.7	1.7	9.4	44.4	133.8	347.6	700.6	40.9
2016	47.8	0.7	0.3	0.3	0.5	0.8	1.7	10.1	43.0	134.1	347.2	676.9	40.6
2015	48.2	0.7	0.3	0.4	0.5	0.7	1.7	10.1	42.7	136.6	357.9	705.1	41.6
2014	46.1	*	0.3	0.3	0.4	0.8	1.9	10.1	41.2	134.9	349.0	670.5	40.5
2013	47.2	0.6	0.4	0.4	0.4	0.7	1.9	10.6	40.5	141.2	367.0	699.3	42.1
2012	45.7	0.5	0.3	0.3	0.3	0.7	1.8	10.2	39.4	140.0	364.0	687.8	41.5
2011	45.9	0.8	0.3	0.3	0.4	0.6	1.8	10.4	39.5	144.3	374.9	697.9	42.5
2010	44.7	0.9	0.3	0.3	0.3	0.7	1.7	9.9	39.0	146.3	369.9	690.7	42.2
2009	44.8	0.7	0.4	0.3	0.4	0.7	1.8	10.4	40.0	147.5	376.4	684.9	42.7
2008	46.4	0.8	0.3	0.3	0.4	0.6	1.9	9.9	41.1	155.9	395.4	722.7	44.7
2007	42.5	1.0	0.4	0.3	0.3	0.7	1.9	9.5	38.6	145.5	367.1	652.0	41.4
2006	41.8	0.7	0.3	0.3	0.4	0.6	1.9	9.1	38.8	147.0	362.0	641.3	41.0
2005	44.3	0.8	0.4	0.3	0.3	0.7	2.0	9.4	41.6	158.4	385.0	691.9	43.9
2004	41.7	0.9	0.3	0.3	0.4	0.6	2.0	8.4	40.1	152.1	366.2	643.2	41.6
2003	43.6	0.8	0.4	0.3	0.5	0.7	2.2	8.7	43.1	161.7	382.2	670.2	43.7
2002	43.4	1.0	0.4	0.3	0.5	0.8	2.3	8.7	42.2	162.0	385.8	670.3	43.9
2001	43.2	1.0	0.3	0.3	0.4	0.7	2.2	8.4	44.5	167.3	379.3	658.3	43.9
2000	43.4	0.9	0.3	0.3	0.5	0.7	2.1	8.6	44.2	169.4	386.1	648.6	44.2
1999	44.5	0.9	0.4	0.3	0.5	0.8	2.0	8.5	47.5	177.2	397.8	646.0	45.4

See footnotes at end of table.

Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Alzheimer disease (G30)													
2021	36.0	*	*	*	*	*	*	0.3	3.2	26.4	214.3	1,243.6	31.0
2020	40.7	*	*	*	*	*	*	0.2	3.3	28.6	229.3	1,287.3	32.4
2019	37.0	*	*	*	*	*	*	0.3	3.0	24.9	210.2	1,191.3	29.8
2018	37.3	*	*	*	*	*	*	0.3	2.9	24.7	213.9	1,225.3	30.5
2017	37.3	*	*	*	*	*	*	0.2	2.8	24.5	219.7	1,244.7	31.0
2016	35.9	*	*	*	*	*	*	0.2	2.7	23.6	214.1	1,216.9	30.3
2015	34.4	*	*	*	*	*	*	0.2	2.4	22.4	211.9	1,174.2	29.4
2014	29.3	*	*	*	*	*	*	0.2	2.1	19.6	185.6	1,006.8	25.4
2013	26.8	*	*	*	*	*	*	0.2	2.2	18.1	171.6	929.5	23.5
2012	26.6	*	*	*	*	*	*	0.2	2.2	17.9	175.4	936.1	23.8
2011	27.3	*	*	*	*	*	*	0.2	2.2	19.2	183.9	967.1	24.7
2010	27.0	*	*	*	*	*	*	0.3	2.1	19.8	184.5	987.1	25.1
2009	25.8	*	*	*	*	*	*	0.2	2.0	19.4	179.1	945.3	24.2
2008	27.1	*	*	*	*	*	*	0.2	2.2	21.1	192.5	1,002.2	25.8
2007	24.8	*	*	*	*	*	*	0.2	2.2	20.2	175.8	928.7	23.8
2006	24.3	*	*	*	*	*	*	0.2	2.1	19.9	175.0	923.4	23.7
2005	24.2	*	*	*	*	*	*	0.2	2.1	20.2	177.0	935.5	24.0
2004	22.5	*	*	*	*	*	*	0.2	1.8	19.5	168.5	875.3	22.6
2003	21.9	*	*	*	*	*	*	0.2	2.0	20.7	164.1	846.8	22.1
2002	20.5	*	*	*	*	*	*	0.1	1.9	19.6	157.7	790.9	20.8
2001	18.9	*	*	*	*	*	*	0.2	2.1	18.6	147.2	725.4	19.3
2000	17.6	*	*	*	*	*	*	0.2	2.0	18.7	139.6	667.7	18.1
1999	16.0	*	*	*	*	*	*	0.2	1.9	17.4	129.5	601.3	16.5
Diabetes mellitus (E10–E14)													
2021	31.1	*	*	0.1	0.8	2.8	6.8	18.7	43.5	83.0	160.4	309.9	25.4
2020	31.0	*	*	0.1	0.7	2.5	6.9	18.7	42.5	83.6	154.7	293.4	24.8
2019	26.7	*	*	0.1	0.6	1.9	5.3	15.5	36.5	73.3	138.9	259.5	21.6
2018	26.0	*	*	0.1	0.6	1.8	5.5	15.4	35.3	72.1	137.5	260.4	21.4
2017	25.7	*	*	0.1	0.6	1.8	5.2	15.1	35.5	71.9	140.8	262.4	21.5
2016	24.8	*	*	0.1	0.5	1.8	5.1	14.6	34.4	69.9	137.9	263.6	21.0
2015	24.7	*	*	0.1	0.4	1.8	4.9	14.4	34.7	70.6	143.0	267.0	21.3
2014	24.0	*	*	0.1	0.4	1.6	4.9	13.9	33.3	69.0	141.8	268.6	20.9
2013	23.9	*	*	0.1	0.4	1.6	4.8	13.5	33.2	68.5	145.7	279.5	21.2
2012	23.6	*	*	0.1	0.4	1.5	4.6	13.0	32.5	69.7	145.8	285.7	21.2
2011	23.7	*	*	0.1	0.4	1.6	4.5	13.4	33.3	72.0	148.8	289.5	21.6
2010	22.4	*	*	0.1	0.4	1.5	4.4	12.5	32.0	67.6	144.1	285.5	20.8
2009	22.4	*	*	0.1	0.4	1.5	4.5	12.8	32.1	69.6	145.8	282.6	21.0
2008	23.2	*	*	0.1	0.5	1.4	4.4	12.6	33.3	74.7	153.2	298.9	22.0
2007	23.7	*	*	0.1	0.4	1.5	4.6	13.1	34.1	76.7	161.9	302.2	22.8
2006	24.3	*	*	0.1	0.4	1.7	4.8	13.1	35.8	80.6	166.2	310.4	23.6
2005	25.4	*	*	0.1	0.5	1.6	4.7	13.4	36.9	85.7	177.0	338.8	24.9
2004	25.0	*	*	0.1	0.4	1.5	4.6	13.4	36.8	86.2	176.6	328.2	24.7
2003	25.6	*	*	0.1	0.4	1.7	4.6	13.9	38.3	90.0	180.7	335.1	25.5
2002	25.5	*	*	0.1	0.4	1.6	4.8	13.7	37.5	90.9	182.4	337.0	25.6
2001	25.0	*	*	0.1	0.4	1.5	4.3	13.6	38.1	91.0	181.1	328.6	25.4
2000	24.6	*	*	0.1	0.4	1.6	4.3	13.1	37.8	90.7	179.5	319.7	25.0
1999	24.5	*	*	0.1	0.4	1.4	4.3	12.9	38.3	91.8	178.0	317.2	25.0

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Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021—Con.

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Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Chronic liver disease and cirrhosis (K70,K73–K74)													
2021	17.0	*	*	*	0.1	4.0	13.4	25.8	41.3	38.4	36.4	31.0	14.5
2020	15.7	*	*	*	0.1	3.5	11.7	23.5	38.1	36.5	34.5	27.0	13.3
2019	13.5	*	*	*	0.1	2.4	8.2	19.8	33.9	33.1	32.2	26.5	11.3
2018	13.1	*	*	*	0.1	2.2	7.5	19.6	33.0	32.5	32.5	25.5	11.1
2017	12.8	*	*	*	0.1	2.0	7.3	19.6	32.7	31.7	31.3	26.8	10.9
2016	12.5	*	*	*	0.1	2.1	7.0	19.5	32.4	30.7	31.9	24.5	10.7
2015	12.5	*	*	*	0.1	1.9	7.0	20.5	32.5	30.5	31.9	25.1	10.8
2014	12.0	*	*	*	0.1	1.7	6.4	19.9	31.9	29.6	30.4	23.4	10.4
2013	11.5	*	*	*	0.1	1.6	6.2	20.1	30.4	28.1	29.9	23.0	10.2
2012	11.1	*	*	*	0.1	1.4	6.1	20.1	29.1	27.6	29.3	21.4	9.9
2011	10.8	*	*	*	0.1	1.2	6.0	19.8	28.2	26.3	29.3	22.1	9.7
2010	10.3	*	*	*	0.1	1.2	5.9	19.2	26.8	26.3	27.7	21.8	9.4
2009	10.0	*	*	*	0.1	1.1	6.0	18.7	25.9	25.4	27.2	21.1	9.1
2008	9.9	*	*	*	0.1	1.1	6.1	18.5	25.0	26.3	28.0	21.9	9.2
2007	9.7	*	*	*	0.1	1.0	6.0	18.7	24.2	26.2	28.2	21.7	9.1
2006	9.2	*	*	*	0.1	0.8	5.9	17.8	22.6	25.6	28.9	21.1	8.8
2005	9.3	*	*	*	0.1	0.8	6.2	17.7	23.3	26.8	28.9	21.3	8.9
2004	9.2	*	*	*	*	0.8	6.4	18.0	22.4	27.4	28.7	21.1	9.0
2003	9.5	*	*	*	*	0.9	6.8	18.3	22.9	29.2	29.9	21.2	9.3
2002	9.5	*	*	*	0.1	1.0	7.1	18.0	22.8	29.3	31.3	22.5	9.4
2001	9.5	*	*	*	0.1	1.0	7.4	18.4	22.9	29.8	30.2	22.7	9.5
2000	9.4	*	*	*	0.1	1.0	7.5	17.7	23.8	29.8	31.0	23.1	9.5
1999	9.4	*	*	*	0.1	1.0	7.3	17.4	23.7	30.6	31.9	23.2	9.6
Nephritis, nephrotic syndrome and nephrosis (N00–N07,N17–N19,N25–N27)													
2021	16.4	1.3	*	*	0.1	0.8	2.2	6.2	14.9	36.4	96.1	271.1	13.6
2020	15.9	1.2	*	*	0.2	0.7	2.0	5.8	14.7	35.2	89.3	248.1	12.7
2019	15.7	1.6	*	*	0.2	0.7	1.8	5.6	13.8	34.7	92.2	250.9	12.7
2018	15.7	2.0	*	*	0.1	0.6	1.8	5.4	13.6	35.6	94.3	257.9	12.9
2017	15.5	2.0	*	*	0.1	0.6	1.7	5.2	13.5	34.7	95.8	267.1	13.0
2016	15.5	1.6	*	*	0.1	0.6	1.8	5.0	13.6	34.6	98.1	270.1	13.1
2015	15.5	2.1	*	*	0.1	0.6	1.7	4.9	13.3	35.1	99.7	281.8	13.4
2014	15.1	2.3	*	*	0.2	0.5	1.7	4.7	12.6	34.3	98.6	282.4	13.2
2013	14.9	2.2	*	*	0.1	0.6	1.5	4.6	12.6	33.8	99.0	285.4	13.2
2012	14.5	2.1	*	*	0.2	0.5	1.6	4.7	12.3	33.3	99.9	280.0	13.1
2011	14.6	1.9	*	*	0.2	0.5	1.6	4.4	12.5	34.2	101.4	292.1	13.4
2010	16.3	2.7	*	0.1	0.2	0.6	1.8	4.9	13.9	39.3	115.7	333.8	15.3
2009	16.0	2.8	*	*	0.2	0.7	2.0	5.2	13.5	38.7	115.1	321.4	15.1
2008	15.9	3.5	*	*	0.2	0.6	1.8	5.0	14.1	39.9	113.3	325.6	15.1
2007	15.4	3.5	0.1	0.1	0.2	0.7	1.8	5.1	13.4	39.4	112.4	317.9	14.9
2006	15.2	4.0	*	*	0.2	0.7	1.8	5.2	13.7	38.8	111.0	316.2	14.8
2005	14.9	4.0	*	0.1	0.2	0.7	1.7	4.8	13.5	38.8	110.2	313.1	14.7
2004	14.5	4.3	*	0.1	0.2	0.6	1.8	5.0	13.5	38.1	108.2	306.4	14.5
2003	14.6	4.6	*	0.1	0.2	0.7	1.8	4.9	13.6	39.7	109.3	309.3	14.7
2002	14.2	4.4	*	0.1	0.2	0.7	1.7	4.7	12.9	39.0	108.9	303.4	14.4
2001	13.9	3.3	*	*	0.2	0.6	1.7	4.6	13.1	40.0	104.0	293.8	14.1
2000	13.2	4.3	*	0.1	0.2	0.6	1.6	4.4	12.8	38.0	100.8	277.8	13.5
1999	12.7	4.4	*	0.1	0.2	0.6	1.6	4.0	12.0	37.1	97.6	268.9	13.0

See footnotes at end of table.

Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)													
2021	14.5	…	…	1.5	15.2	19.5	18.1	18.2	17.0	15.3	19.6	22.4	14.1
2020	14.0	…	…	1.5	14.2	18.4	17.4	18.0	16.9	14.5	18.4	20.9	13.5
2019	14.5	…	…	1.3	13.9	17.5	18.1	19.6	19.4	15.5	18.6	20.1	13.9
2018	14.8	…	…	1.5	14.5	17.6	18.2	20.0	20.2	16.3	18.7	19.1	14.2
2017	14.5	…	…	1.3	14.5	17.5	17.9	20.2	19.0	15.6	18.0	20.1	14.0
2016	13.9	…	…	1.1	13.2	16.5	17.4	19.7	18.7	15.4	18.2	19.0	13.5
2015	13.7	…	…	1.0	12.5	15.7	17.1	20.3	18.9	15.2	17.9	19.4	13.3
2014	13.4	…	…	1.0	11.6	15.1	16.6	20.2	18.8	15.6	17.5	19.3	13.0
2013	13.0	…	…	1.0	11.1	14.8	16.2	19.7	18.1	15.0	17.1	18.6	12.6
2012	12.9	…	…	0.8	11.1	14.7	16.7	20.0	18.0	14.0	16.8	17.8	12.6
2011	12.7	…	…	0.7	11.0	14.6	16.2	19.8	17.1	14.1	16.5	16.9	12.3
2010	12.4	…	…	0.7	10.5	14.0	16.0	19.6	17.5	13.7	15.7	17.6	12.1
2009	12.0	…	…	0.6	10.0	13.1	16.1	19.2	16.4	13.7	15.8	16.4	11.8
2008	11.8	…	…	0.5	9.9	13.2	15.9	18.6	16.0	13.6	16.1	16.4	11.6
2007	11.5	…	…	0.5	9.6	13.3	15.7	17.7	15.3	12.4	16.2	17.0	11.3
2006	11.2	…	…	0.5	9.8	12.7	15.2	17.2	14.4	12.4	15.8	17.3	11.0
2005	11.0	…	…	0.7	9.9	12.7	15.1	16.5	13.7	12.4	16.8	18.3	10.9
2004	11.1	…	…	0.7	10.3	12.9	15.2	16.6	13.7	12.2	16.3	17.6	11.0
2003	10.9	…	…	0.6	9.6	12.9	15.0	15.9	13.7	12.6	16.4	17.9	10.8
2002	11.0	…	…	0.6	9.8	12.8	15.3	15.8	13.5	13.4	17.7	18.9	10.9
2001[5]	10.7	…	…	0.7	9.9	12.8	14.7	15.1	13.2	13.2	17.4	17.8	10.7
2000	10.4	…	…	0.7	10.2	12.0	14.5	14.4	12.1	12.5	17.6	19.6	10.4
1999	10.5	…	…	0.6	10.1	12.7	14.3	13.9	12.2	13.4	18.1	19.3	10.5
Essential hypertension and hypertensive renal disease (I10,I12,I15)													
2021	12.9	*	*	*	0.1	0.4	1.5	4.8	12.1	24.9	63.2	270.8	10.7
2020	12.7	*	*	*	0.1	0.3	1.4	4.5	11.8	23.9	60.3	250.3	10.1
2019	11.1	*	*	*	*	0.3	1.2	3.6	9.8	20.9	54.3	227.1	8.9
2018	11.0	*	*	*	*	0.3	1.2	3.7	9.7	20.2	54.4	229.4	8.9
2017	10.8	*	*	*	*	0.3	1.3	3.9	9.5	19.7	55.8	231.4	9.0
2016	10.3	*	*	*	*	0.3	1.1	3.8	9.0	19.0	53.7	222.3	8.6
2015	10.0	*	*	*	*	0.3	1.2	3.4	8.8	18.1	54.1	222.7	8.5
2014	9.5	*	*	*	0.0	0.2	1.1	3.3	8.4	16.9	51.3	217.0	8.2
2013	9.7	*	*	*	0.1	0.3	1.0	3.5	8.0	17.3	53.7	231.6	8.5
2012	9.3	*	*	*	*	0.2	0.8	3.0	7.8	16.1	51.7	230.7	8.2
2011	8.9	*	*	*	*	0.2	1.0	3.1	7.0	16.6	51.4	222.7	8.1
2010	8.6	*	*	*	0.0	0.3	1.0	3.1	7.3	16.7	51.8	212.0	8.0
2009	8.4	*	*	*	0.1	0.3	1.0	3.1	7.1	16.3	51.0	208.0	7.8
2008	8.5	*	*	*	0.1	0.3	1.0	3.0	7.2	16.5	51.9	215.3	8.0
2007	8.0	*	*	*	0.1	0.2	0.9	2.8	6.4	15.9	49.2	209.1	7.6
2006	8.0	*	*	*	0.0	0.3	0.9	3.0	6.8	16.5	50.8	206.1	7.7
2005	8.4	*	*	*	0.1	0.2	0.9	2.7	6.4	17.5	55.5	228.0	8.3
2004	7.9	*	*	*	0.1	0.3	0.8	2.7	6.3	16.9	52.5	212.2	7.9
2003	7.6	*	*	*	0.1	0.2	0.8	2.5	6.3	16.8	51.6	199.4	7.6
2002	7.0	*	*	*	0.1	0.2	0.8	2.3	5.7	15.9	48.1	189.6	7.1
2001	6.8	*	*	*	0.1	0.3	0.7	2.4	5.8	15.4	47.6	175.6	6.9
2000	6.4	*	*	*	*	0.2	0.8	2.3	5.9	15.1	45.5	162.9	6.5
1999	6.1	*	*	*	*	0.2	0.7	2.2	5.5	15.2	43.6	152.1	6.2

See footnotes at end of table.

Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Influenza and pneumonia (J09–J18)													
2021	12.6	3.5	0.3	0.1	0.3	0.9	1.9	4.4	11.3	25.3	69.9	231.8	10.5
2020	16.3	3.3	0.5	0.3	0.4	1.3	2.7	6.2	14.8	32.1	84.1	273.6	13.0
2019	15.2	4.1	0.8	0.3	0.4	1.0	2.3	5.1	12.5	27.3	77.2	294.7	12.3
2018	18.1	4.6	0.8	0.3	0.5	1.0	2.3	5.6	13.9	31.7	94.2	377.6	14.9
2017	17.1	4.0	0.7	0.3	0.4	0.9	1.9	4.8	12.0	29.6	93.8	375.3	14.3
2016	15.9	4.2	0.6	0.2	0.4	1.0	2.2	5.0	12.1	28.5	88.5	340.3	13.5
2015	17.8	4.4	0.6	0.2	0.4	0.9	1.7	4.7	11.3	29.5	101.6	421.4	15.2
2014	17.3	4.7	0.7	0.2	0.5	1.3	2.8	6.3	13.4	29.8	96.4	385.9	15.1
2013	18.0	4.5	0.6	0.3	0.4	1.0	2.2	5.1	12.2	29.5	103.7	441.0	15.9
2012	16.1	4.0	0.6	0.2	0.3	0.8	1.7	4.1	10.2	26.1	98.2	408.4	14.4
2011	17.3	5.2	0.7	0.3	0.5	1.2	2.1	5.0	11.0	28.9	104.0	439.2	15.7
2010	16.2	4.9	0.6	0.2	0.4	0.9	1.9	4.3	9.9	27.9	102.4	426.2	15.1
2009	17.5	6.3	0.9	0.6	1.0	2.0	3.2	6.5	11.7	29.5	107.0	433.8	16.5
2008	18.5	5.5	0.9	0.2	0.5	0.9	2.1	5.1	10.9	30.5	118.6	512.3	17.6
2007	17.5	5.4	0.7	0.3	0.4	0.8	1.8	4.3	9.5	28.2	113.5	506.7	16.8
2006	18.9	6.5	0.8	0.2	0.4	0.9	1.9	4.6	9.9	31.6	127.3	547.0	18.4
2005	21.3	6.6	0.7	0.3	0.4	0.9	2.1	5.1	11.2	35.1	142.0	644.9	21.0
2004	20.4	6.8	0.8	0.2	0.4	0.8	2.0	4.6	10.8	34.2	139.1	622.8	20.4
2003	22.5	8.1	1.0	0.4	0.5	1.0	2.2	5.2	11.2	36.9	150.8	703.0	22.6
2002	22.8	6.7	0.7	0.2	0.4	0.9	2.2	4.8	11.2	37.2	156.6	732.4	23.2
2001	21.8	7.5	0.7	0.2	0.5	0.9	2.2	4.6	10.8	36.2	148.3	700.1	22.2
2000	23.2	7.6	0.7	0.2	0.5	0.9	2.4	4.7	11.9	39.1	160.3	744.1	23.7
1999	22.8	8.4	0.8	0.2	0.5	0.8	2.4	4.6	11.0	37.2	157.0	751.8	23.5
Septicemia (A40–A41)													
2021	12.4	3.2	0.2	0.1	0.2	0.9	2.6	6.0	15.1	31.1	67.4	153.3	10.2
2020	12.2	3.1	0.3	0.1	0.2	0.8	2.3	6.2	14.7	29.7	63.5	143.1	9.7
2019	11.7	3.5	0.3	0.2	0.3	0.8	1.9	5.3	13.4	28.0	64.5	150.2	9.5
2018	12.4	3.9	0.3	0.1	0.2	0.9	2.0	5.7	14.1	30.0	69.4	167.4	10.2
2017	12.6	3.7	0.3	0.1	0.3	0.9	2.1	5.8	13.9	30.9	72.4	173.3	10.6
2016	12.6	4.8	0.4	0.2	0.3	0.9	2.2	5.8	14.3	30.6	73.9	174.2	10.7
2015	12.7	4.5	0.3	0.2	0.3	0.9	2.0	5.9	14.1	31.4	75.3	185.8	11.0
2014	12.2	4.0	0.3	0.2	0.3	0.8	2.1	5.8	14.2	31.1	73.1	176.9	10.7
2013	12.1	3.9	0.3	0.1	0.3	0.8	2.0	5.6	13.6	30.5	76.4	179.6	10.7
2012	11.4	4.5	0.4	0.1	0.3	0.8	1.9	5.3	12.9	29.2	73.9	173.4	10.3
2011	11.5	4.5	0.4	0.2	0.3	0.8	2.0	5.5	13.0	29.5	74.4	179.7	10.5
2010	11.3	5.5	0.4	0.2	0.3	0.8	1.9	5.2	12.6	30.1	76.0	179.0	10.6
2009	11.6	5.5	0.4	0.2	0.3	0.9	2.2	5.4	13.1	31.4	79.2	182.4	11.0
2008	11.8	7.0	0.6	0.2	0.3	0.9	2.1	5.7	13.3	31.4	82.0	189.8	11.3
2007	11.6	6.8	0.5	0.2	0.4	0.7	2.1	5.5	12.8	32.2	79.5	190.8	11.2
2006	11.5	6.7	0.6	0.2	0.3	0.7	2.0	5.2	12.6	31.6	82.1	193.0	11.2
2005	11.6	7.5	0.5	0.2	0.3	0.8	1.9	5.2	12.8	32.2	81.3	203.4	11.4
2004	11.4	6.8	0.5	0.2	0.3	0.8	1.9	5.4	12.8	32.1	81.5	199.6	11.3
2003	11.7	7.0	0.5	0.2	0.4	0.8	2.1	5.3	13.0	32.3	84.8	213.7	11.8
2002	11.8	7.5	0.5	0.2	0.3	0.8	1.9	5.2	12.6	34.5	86.3	213.4	11.9
2001	11.3	7.8	0.7	0.2	0.3	0.7	1.8	5.0	12.4	32.6	82.2	210.3	11.5
2000	11.1	7.2	0.6	0.2	0.3	0.7	1.9	4.9	11.9	31.0	80.4	215.7	11.3
1999	11.0	7.5	0.6	0.2	0.3	0.7	1.8	4.6	11.4	31.2	79.4	220.7	11.3

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Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Parkinson disease (G20–G21)													
2021	11.6	*	*	*	*	*	*	0.2	2.0	18.6	102.5	246.0	9.8
2020	12.2	*	*	*	*	*	*	0.2	2.1	19.0	105.3	237.4	9.9
2019	10.8	*	*	*	*	*	*	0.2	1.9	16.8	93.3	215.9	8.8
2018	10.3	*	*	*	*	*	*	0.2	1.8	16.2	91.0	214.6	8.7
2017	9.8	*	*	*	*	*	*	0.1	1.7	15.7	89.6	206.3	8.4
2016	9.2	*	*	*	*	*	*	0.2	1.6	14.3	85.5	198.6	8.0
2015	8.7	*	*	*	*	*	*	0.2	1.5	13.8	82.4	190.6	7.7
2014	8.2	*	*	*	*	*	*	0.2	1.4	13.0	79.2	182.0	7.4
2013	8.0	*	*	*	*	*	*	0.2	1.5	12.7	78.5	178.2	7.3
2012	7.6	*	*	*	*	*	*	0.1	1.4	12.3	76.2	172.3	7.0
2011	7.4	*	*	*	*	*	*	0.1	1.3	12.8	76.0	168.1	7.0
2010	7.1	*	*	*	*	*	*	0.2	1.3	11.8	74.8	165.9	6.8
2009	6.7	*	*	*	*	*	*	0.2	1.3	11.2	70.8	157.0	6.5
2008	6.7	*	*	*	*	*	*	0.2	1.2	12.3	71.2	157.4	6.6
2007	6.7	*	*	*	*	*	*	0.1	1.2	11.7	71.5	157.0	6.5
2006	6.6	*	*	*	*	*	*	0.2	1.2	12.0	69.5	157.6	6.5
2005	6.6	*	*	*	*	*	*	0.2	1.4	12.8	71.1	156.0	6.6
2004	6.1	*	*	*	*	*	*	0.2	1.2	11.9	67.4	145.1	6.2
2003	6.2	*	*	*	*	*	*	0.2	1.3	12.6	67.6	145.8	6.3
2002	5.9	*	*	*	*	*	*	0.1	1.2	12.1	63.8	142.2	6.0
2001	5.8	*	*	*	*	*	*	0.1	1.2	11.7	64.5	137.0	5.9
2000	5.6	*	*	*	*	*	*	0.1	1.1	11.5	61.9	131.9	5.7
1999	5.2	*	*	*	*	*	*	0.1	1.0	11.0	58.2	124.4	5.4
Dementia-related causes[6]													
2021	84.3	*	*	0.1	*	0.0	0.2	0.9	8.6	65.0	477.6	2,949.3	72.4
2020	92.3	*	*	*	*	0.0	0.1	0.8	8.7	68.1	495.1	2,946.9	73.3
2019	82.8	*	*	0.1	*	0.1	0.1	0.9	8.2	59.3	448.6	2,688.9	66.6
2018	81.6	*	*	*	*	0.1	0.1	0.8	7.8	57.9	447.0	2,700.3	66.6
2017	80.4	*	*	0.0	*	*	0.1	0.7	7.5	56.9	450.9	2,707.3	66.7
2016	77.2	*	*	0.1	*	0.1	0.1	0.8	7.3	54.7	441.6	2,626.4	64.9
2015	76.5	*	*	0.1	*	*	0.1	0.8	6.8	53.0	447.2	2,637.4	65.2
2014	75.2	*	0.1	0.1	*	*	0.1	0.8	6.9	52.7	450.6	2,611.3	64.9
2013	74.1	*	*	*	*	*	0.1	0.9	7.4	52.2	449.7	2,601.8	64.8
2012	71.2	*	0.2	*	*	*	0.1	0.9	6.8	50.3	445.2	2,532.7	63.3
2011	68.3	*	0.1	0.1	*	*	0.1	0.8	6.5	50.4	436.6	2,458.6	61.8
2010	63.6	*	*	*	*	*	0.1	0.9	6.3	48.3	412.1	2,352.4	58.8
2009	57.9	*	0.1	0.1	*	0.1	0.2	0.8	5.7	45.2	383.3	2,151.3	54.2
2008	58.9	*	0.2	0.1	*	*	0.1	0.9	6.0	46.4	396.7	2,213.2	55.9
2007	51.8	*	0.2	0.1	*	*	0.1	0.8	5.5	42.3	350.0	1,976.0	49.8
2006	50.8	*	0.1	0.1	*	*	0.1	0.8	5.5	42.4	346.2	1,967.0	49.5
2005	43.8	*	0.2	*	*	*	0.1	0.6	4.5	36.3	302.1	1,735.4	43.4
2004	39.0	*	0.2	0.1	*	*	0.1	0.6	3.9	33.1	275.4	1,556.9	39.1
2003	38.1	*	0.2	0.1	*	*	0.1	0.6	4.0	34.1	269.5	1,523.1	38.4
2002	35.5	*	0.2	0.1	*	*	0.1	0.4	3.6	31.9	254.9	1,428.9	36.1
2001	32.5	*	0.2	0.0	*	0.1	0.1	0.5	3.8	30.5	234.6	1,299.3	33.1
2000	29.7	*	0.2	0.1	0.1	0.1	0.1	0.5	3.6	29.4	218.5	1,180.9	30.5
1999	26.7	*	0.2	0.1	*	*	0.1	0.4	3.4	27.0	197.9	1,062.5	27.5

See footnotes at end of table.

Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Drug-induced causes[6]													
2021	33.5	2.1	0.8	0.3	17.5	54.2	64.0	56.2	48.0	18.5	6.0	5.3	33.6
2020	29.2	1.7	0.4	0.3	17.0	48.8	55.8	49.1	39.9	14.7	4.9	5.1	29.5
2019	22.7	1.3	0.3	0.2	11.5	36.9	42.3	38.9	32.7	12.6	5.2	4.6	22.8
2018	21.7	0.8	0.2	0.1	11.0	36.8	40.0	37.3	30.4	11.4	4.8	5.1	21.8
2017	22.7	0.9	0.2	0.2	13.0	39.8	40.6	39.8	30.0	10.5	4.5	5.3	22.8
2016	20.8	0.9	0.3	0.1	12.8	35.9	36.6	36.5	27.7	9.2	4.1	5.3	20.8
2015	17.2	0.7	0.4	0.1	10.0	28.0	29.6	31.9	23.3	8.1	4.4	5.6	17.2
2014	15.6	0.6	0.3	0.1	8.9	24.0	26.2	29.8	21.7	7.6	4.4	5.0	15.5
2013	14.7	0.8	0.3	0.1	8.6	21.7	24.1	29.0	20.6	7.1	4.4	5.3	14.6
2012	14.0	0.8	0.2	0.1	8.3	20.9	23.1	28.3	17.9	6.5	4.0	5.1	13.8
2011	14.0	0.6	0.2	0.1	8.9	20.9	23.4	28.2	17.1	6.0	4.0	4.9	13.9
2010	13.1	0.6	0.3	0.2	8.4	19.2	21.7	26.5	16.2	5.2	4.0	5.5	12.9
2009	12.8	0.8	0.2	0.1	8.0	17.8	21.5	26.9	14.9	5.4	4.5	5.1	12.6
2008	12.7	0.5	0.3	0.1	8.3	17.4	22.2	26.8	14.0	5.2	4.0	5.0	12.6
2007	12.7	0.8	0.3	0.2	8.5	17.5	22.6	26.8	13.4	4.6	3.9	5.2	12.6
2006	12.9	1.1	0.2	0.1	8.5	17.2	23.5	26.7	12.1	5.2	6.0	8.8	12.8
2005	11.3	0.9	0.2	0.1	7.3	14.6	21.5	23.6	10.6	4.7	5.4	8.3	11.3
2004	10.5	0.7	0.2	0.2	6.9	12.9	21.1	21.7	9.0	4.2	4.8	6.7	10.5
2003	9.9	0.6	0.2	0.1	6.3	12.3	20.7	20.0	8.0	4.1	4.2	6.3	9.9
2002	9.1	0.7	0.2	0.1	5.4	11.3	19.8	18.0	6.8	3.6	3.8	6.0	9.1
2001	7.6	0.5	0.2	0.1	4.5	9.5	17.0	14.7	5.4	3.0	3.5	5.2	7.6
2000	7.0	*	*	0.1	4.0	8.8	16.0	13.2	4.9	2.6	3.5	5.7	7.0
1999	6.9	0.6	0.2	0.1	3.5	8.9	15.7	12.6	4.9	3.0	3.8	4.8	6.8
Alcohol-induced causes[6]													
2021	16.3	*	*	*	0.5	6.7	18.0	30.3	42.0	29.6	15.4	7.8	14.4
2020	14.9	*	*	*	0.4	6.0	16.0	27.5	39.3	27.1	14.4	6.5	13.1
2019	11.9	*	*	*	0.4	4.2	11.1	22.0	32.5	22.5	12.6	6.4	10.4
2018	11.4	*	*	*	0.3	3.7	10.0	21.6	31.5	22.2	12.4	6.1	9.9
2017	11.0	*	*	*	0.3	3.4	9.4	21.8	30.2	20.9	11.7	6.4	9.6
2016	10.8	*	*	*	0.4	3.6	9.2	21.4	29.7	20.3	11.8	6.3	9.5
2015	10.3	*	*	*	0.4	3.2	8.7	21.6	28.2	19.1	11.2	5.8	9.1
2014	9.6	*	*	*	0.3	2.8	8.0	20.4	26.8	17.6	10.5	5.6	8.5
2013	9.2	*	*	*	0.3	2.5	7.7	20.1	25.3	16.6	10.3	4.9	8.2
2012	8.8	*	*	*	0.4	2.4	7.4	20.0	24.1	15.8	10.3	5.0	8.0
2011	8.6	*	*	*	0.4	2.1	7.6	19.8	22.7	15.2	9.6	5.1	7.7
2010	8.3	*	*	*	0.3	2.2	7.5	19.1	21.9	15.8	9.6	5.3	7.6
2009	8.0	*	*	*	0.4	1.8	7.6	18.7	20.8	15.1	9.2	4.8	7.4
2008	8.0	*	*	*	0.4	2.0	7.6	18.6	20.7	15.3	9.4	5.2	7.4
2007	7.7	*	*	*	0.4	1.9	7.3	18.2	19.9	15.2	9.6	5.0	7.2
2006	7.4	*	*	*	0.3	1.6	7.5	17.5	19.2	14.5	9.7	5.3	7.0
2005	7.3	*	*	*	0.4	1.4	7.5	17.6	19.4	14.9	9.2	5.0	7.0
2004	7.2	*	*	*	0.3	1.6	7.7	17.3	18.6	15.5	9.2	4.6	7.0
2003	7.1	*	*	*	0.3	1.5	8.1	17.3	18.5	15.0	9.2	4.3	7.0
2002	7.0	*	*	*	0.3	1.5	8.1	16.9	18.3	15.4	9.3	4.6	6.9
2001	7.1	*	*	*	0.3	1.6	8.3	17.1	18.3	15.5	9.6	5.1	7.0
2000	7.0	*	*	*	0.2	1.6	8.5	16.3	18.7	15.8	9.9	5.4	7.0
1999	7.0	*	*	*	0.3	1.6	8.5	16.4	18.7	15.9	10.6	5.5	7.1

See footnotes at end of table.

Table 6. Death rate by age, and age-adjusted death rate, for the 15 leading causes of death in 2021, dementia-related causes, drug-induced causes, alcohol-induced causes, and injury by firearms: United States, 1999–2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10) and year	All ages[1]	Age group (years)											Age-adjusted rate[3]
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	
Injury by firearms[6]													
2021	14.7	*	0.9	1.6	23.5	24.8	18.1	14.5	12.1	11.7	16.2	18.3	14.6
2020	13.7	*	0.8	1.5	22.2	22.7	16.7	13.3	11.8	10.9	15.3	16.2	13.6
2019	12.1	*	0.5	1.0	17.4	18.1	14.6	12.7	12.3	11.1	15.0	16.1	11.9
2018	12.1	*	0.6	1.1	17.2	17.7	14.6	12.8	12.7	12.0	15.4	14.7	11.9
2017	12.2	*	0.5	1.1	17.7	18.5	14.4	13.1	12.3	11.4	14.8	15.6	12.0
2016	12.0	*	0.6	0.9	17.2	18.2	14.5	12.8	11.9	11.4	14.7	14.3	11.8
2015	11.3	*	0.5	0.9	15.7	16.8	13.1	12.4	11.7	11.3	14.5	14.5	11.1
2014	10.5	*	0.4	0.9	14.0	14.7	12.1	12.2	11.4	11.5	13.9	15.0	10.3
2013	10.6	*	0.4	0.8	14.1	15.3	12.3	12.3	11.5	11.3	14.1	13.9	10.4
2012	10.7	*	0.4	0.8	14.7	15.3	12.4	12.4	11.6	10.8	14.1	13.6	10.5
2011	10.4	*	0.5	0.8	14.4	15.0	11.7	12.2	11.0	10.9	13.7	13.1	10.2
2010	10.3	*	0.4	0.7	14.2	15.0	11.7	12.0	11.1	10.7	12.7	13.2	10.1
2009	10.2	*	0.4	0.7	14.4	14.5	11.9	11.8	10.8	10.9	13.3	12.5	10.1
2008	10.4	*	0.5	0.7	15.4	15.4	11.8	11.5	10.8	10.7	13.2	12.5	10.3
2007	10.4	*	0.4	0.8	16.0	15.9	12.0	11.1	10.1	9.8	13.1	12.7	10.3
2006	10.4	*	0.4	0.9	16.7	15.7	11.6	11.2	9.7	9.9	12.9	12.5	10.3
2005	10.4	*	0.4	0.8	16.1	16.1	11.7	11.2	9.7	10.2	13.6	13.0	10.3
2004	10.1	*	0.3	0.7	15.6	15.3	11.4	11.0	9.8	10.1	13.3	12.7	10.0
2003	10.4	*	0.3	0.8	16.5	15.8	11.6	11.1	10.0	10.3	13.4	13.2	10.3
2002	10.5	*	0.4	0.8	16.6	15.6	12.2	10.8	10.2	10.8	14.4	13.2	10.5
2001	10.4	*	0.5	0.8	16.6	15.5	11.7	10.5	10.1	10.9	14.3	13.1	10.3
2000	10.2	*	0.3	0.9	16.8	14.5	11.9	10.5	9.4	10.6	13.9	14.2	10.2
1999	10.3	*	0.4	1.0	17.6	14.9	11.6	10.2	9.7	11.0	14.2	13.5	10.3

* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
… Category not applicable.
[1]Figures for age not stated included in all ages category but not distributed among age groups.
[2]Death rates for younger than 1 year (based on population estimates) differ from infant mortality rates (based on live births); see Technical Notes.
[3]For method of computation, see Technical Notes.
[4]COVID-19 became an official cause of death in 2020; rates for years before 2020 are not applicable.
[5]Figures include September 11, 2001, related deaths for which death certificates were filed as of October 24, 2002; see Technical Notes from "Deaths: Final Data for 2001. *National Vital Statistics Report*s, vol 53, no 3."
[6]For the list of ICD–10 codes included, see Technical Notes.

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

Table 7. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021

[An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	All ages	Age group (years)											
		Younger than 1 year	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	Age not stated
All causes	3,464,231	19,920	3,816	5,975	38,307	82,274	124,939	216,037	478,171	724,266	829,653	940,780	93
Salmonella infections (A01–A02)	72	9	3	2	–	–	2	4	9	22	12	9	–
Shigellosis and amebiasis (A03,A06)	7	–	–	1	–	–	–	–	3	1	2	–	–
Certain other intestinal infections (A04,A07–A09)	7,036	160	9	13	15	33	112	261	789	1,585	2,070	1,989	–
Tuberculosis (A16–A19)	602	2	–	2	3	15	38	52	114	165	127	84	–
Respiratory tuberculosis (A16)	435	–	–	1	3	12	25	31	80	120	88	75	–
Other tuberculosis (A17–A19)	167	2	–	1	–	3	13	21	34	45	39	9	–
Whooping cough (A37)	4	1	–	1	–	–	–	1	–	–	1	–	–
Scarlet fever and erysipelas (A38,A46)	–	–	–	–	–	–	–	–	–	–	–	–	–
Meningococcal infection (A39)	21	2	1	–	1	2	5	2	3	2	1	2	–
Septicemia (A40–A41)	41,281	113	34	45	107	426	1,108	2,426	6,477	10,466	10,919	9,160	–
Syphilis (A50–A53)	43	5	–	–	–	–	2	3	8	14	8	3	–
Acute poliomyelitis (A80)	–	–	–	–	–	–	–	–	–	–	–	–	–
Arthropod-borne viral encephalitis (A83–A84,A85.2)	6	–	–	–	–	–	1	–	2	1	2	–	–
Measles (B05)	–	–	–	–	–	–	–	–	–	–	–	–	–
Viral hepatitis (B15–B19)	3,589	2	–	–	4	33	175	453	1,332	1,138	346	106	–
Human immunodeficiency virus (HIV) disease (B20–B24)	4,977	1	–	–	33	510	738	1,058	1,549	831	217	40	–
Malaria (B50–B54)	6	–	–	–	–	–	–	2	1	1	–	2	–
Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20–A36,A42–A44, A48–A49,A54–A79,A81–A82, A85.0–A85.1,A85.8,A86–B04,B06–B09, B25–B49,B55–B99,U07.1)	427,811	242	168	231	1,478	6,311	16,411	37,642	75,512	105,487	101,412	82,913	4
Malignant neoplasms (C00–C97)	605,213	52	282	796	1,323	3,615	11,194	33,567	108,023	179,145	164,850	102,359	7
Malignant neoplasms of lip, oral cavity and pharynx (C00–C14)	11,394	–	–	2	10	52	216	886	2,675	3,587	2,515	1,450	1
Malignant neoplasm of esophagus (C15)	15,743	–	1	–	3	37	235	999	3,665	5,369	3,761	1,673	–
Malignant neoplasm of stomach (C16)	10,894	–	1	1	17	131	403	951	2,053	3,012	2,680	1,644	1
Malignant neoplasms of colon, rectum and anus (C18–C21)	54,121	–	–	4	42	356	1,672	4,846	10,478	14,008	12,631	10,082	2
Malignant neoplasms of liver and intrahepatic bile ducts (C22)	28,719	4	15	17	26	108	346	1,401	6,488	10,556	6,743	3,014	1
Malignant neoplasm of pancreas (C25)	47,906	–	–	4	5	59	495	2,358	8,907	15,643	13,543	6,892	–
Malignant neoplasm of larynx (C32)	3,887	–	–	1	–	4	22	245	1,004	1,340	858	413	–
Malignant neoplasms of trachea, bronchus and lung (C33–C34)	134,592	–	–	1	17	119	774	4,859	25,908	45,284	40,331	17,297	2
Malignant melanoma of skin (C43)	8,224	–	–	1	19	81	287	576	1,444	2,208	2,075	1,533	–
Malignant neoplasm of breast (C50)	42,810	–	–	–	7	371	1,873	4,169	8,474	10,892	9,419	7,605	–
Malignant neoplasm of cervix uteri (C53)	4,366	–	–	–	–	234	649	852	1,004	853	523	251	–
Malignant neoplasms of corpus uteri and uterus, part unspecified (C54–C55)	12,208	–	–	–	4	50	232	741	2,480	4,313	2,948	1,440	–
Malignant neoplasm of ovary (C56)	13,430	–	–	2	28	95	286	1,050	2,754	4,099	3,444	1,672	–

See footnotes at end of table.

Table 7. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	All ages	Age group (years)											
		Younger than 1 year	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	Age not stated
Malignant neoplasm of prostate (C61)	32,563	–	–	–	1	3	18	335	2,783	8,224	11,011	10,188	–
Malignant neoplasms of kidney and renal pelvis (C64–C65)	14,163	1	14	24	17	61	218	832	2,625	4,171	3,791	2,409	–
Malignant neoplasm of bladder (C67)	16,840	–	–	2	1	8	73	345	1,723	3,854	5,429	5,405	–
Malignant neoplasms of meninges, brain and other parts of central nervous system (C70–C72)	17,857	12	71	308	242	419	834	1,735	4,003	5,286	3,558	1,389	–
Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81–C96)	57,375	14	77	209	346	569	942	2,160	6,867	14,978	18,576	12,637	–
Hodgkin disease (C81)	1,003	–	–	1	17	46	49	60	156	259	271	144	–
Non-Hodgkin lymphoma (C82–C85)	20,020	–	7	25	53	154	307	766	2,440	5,088	6,622	4,558	–
Leukemia (C91–C95)	23,271	14	70	183	274	363	503	875	2,522	5,996	7,263	5,208	–
Multiple myeloma and immunoproliferative neoplasms (C88,C90)	12,933	–	–	–	1	5	82	446	1,739	3,606	4,368	2,686	–
Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96)	148	–	–	–	1	1	1	13	10	29	52	41	–
All other and unspecified malignant neoplasms (C17,C23–C24,C26–C31, C37–C41,C44–C49,C51–C52,C57–C60, C62–C63,C66,C68–C69,C73–C80,C97)	78,121	21	103	220	538	858	1,619	4,227	12,688	21,468	21,014	15,365	–
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00–D48)	16,237	26	37	54	83	126	240	547	1,440	3,439	5,079	5,166	–
Anemias (D50–D64)	5,987	12	10	19	61	148	239	320	583	1,086	1,426	2,083	–
Diabetes mellitus (E10–E14)	103,294	2	2	48	345	1,285	2,961	7,597	18,603	27,945	25,989	18,517	–
Nutritional deficiencies (E40–E64)	17,505	12	5	2	25	53	98	279	890	2,198	4,308	9,635	–
Malnutrition (E40–E46)	17,106	11	4	1	24	51	91	267	821	2,112	4,238	9,486	–
Other nutritional deficiencies (E50–E64)	399	1	1	1	1	2	7	12	69	86	70	149	–
Meningitis (G00,G03)	534	55	13	9	7	25	40	56	97	86	106	40	–
Parkinson disease (G20–G21)	38,536	–	–	–	2	4	13	99	850	6,252	16,615	14,701	–
Alzheimer disease (G30)	119,399	–	–	–	–	2	13	108	1,353	8,886	34,724	74,312	1
Major cardiovascular diseases (I00–I78)	925,923	379	174	299	1,202	5,147	16,178	43,496	112,152	182,530	230,520	333,820	26
Diseases of heart (I00–I09,I11,I13,I20–I51)	695,547	265	116	198	944	4,155	12,754	34,535	89,342	140,250	169,231	243,733	24
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	3,907	2	1	2	12	84	124	172	411	755	1,003	1,341	–
Hypertensive heart disease (I11)	67,774	–	–	2	66	569	2,160	5,049	10,443	12,760	12,985	23,736	4
Hypertensive heart and renal disease (I13)	13,918	–	–	–	5	51	166	396	989	2,087	3,505	6,717	2
Ischemic heart diseases (I20–I25)	375,476	15	6	13	115	1,057	5,335	18,382	53,321	83,934	94,650	118,636	12
Acute myocardial infarction (I21–I22)	109,097	7	3	3	44	437	2,025	6,729	18,297	27,039	27,224	27,288	1
Other acute ischemic heart diseases (I24)	4,748	2	–	2	3	19	88	312	826	1,136	1,171	1,188	1
Other forms of chronic ischemic heart disease (I20,I25)	261,631	6	3	8	68	601	3,222	11,341	34,198	55,759	66,255	90,160	10
Atherosclerotic cardiovascular disease, so described (I25.0)	78,175	–	–	1	23	321	1,822	6,084	16,797	20,676	15,986	16,456	9

See footnotes at end of table.

Table 7. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	All ages	Age group (years)											
		Younger than 1 year	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	Age not stated
All other forms of chronic ischemic heart disease (I20,I25.1–I25.9)	183,456	6	3	7	45	280	1,400	5,257	17,401	35,083	50,269	73,704	1
Other heart diseases (I26–I51)	234,472	248	109	181	746	2,394	4,969	10,536	24,178	40,714	57,088	93,303	6
Acute and subacute endocarditis (I33)	1,767	–	–	1	15	144	191	214	329	381	327	165	–
Diseases of pericardium and acute myocarditis (I30–I31,I40)	1,237	12	5	14	23	38	66	125	187	250	281	236	–
Heart failure (I50)	85,037	16	9	9	36	220	702	2,032	5,767	12,444	21,777	42,024	1
All other forms of heart disease (I26–I28, I34–I38,I42–I49,I51)	146,431	220	95	157	672	1,992	4,010	8,165	17,895	27,639	34,703	50,878	5
Essential hypertension and hypertensive renal disease (I10,I12,I15)	42,816	1	–	1	24	171	668	1,965	5,187	8,369	10,244	16,185	1
Cerebrovascular diseases (I60–I69)	162,890	97	55	88	190	624	2,189	5,755	14,634	28,327	44,533	66,397	1
Atherosclerosis (I70)	4,214	3	–	–	–	4	16	89	335	693	1,082	1,992	–
Other diseases of circulatory system (I71–I78)	20,456	13	3	12	44	193	551	1,152	2,654	4,891	5,430	5,513	–
Aortic aneurysm and dissection (I71)	10,037	–	1	10	25	121	395	713	1,382	2,422	2,680	2,288	–
Other diseases of arteries, arterioles and capillaries (I72–I78)	10,419	13	2	2	19	72	156	439	1,272	2,469	2,750	3,225	–
Other disorders of circulatory system (I80–I99)	5,655	23	6	3	61	223	455	779	1,076	1,140	943	946	–
Influenza and pneumonia (J09–J18)	41,917	125	47	49	128	400	842	1,783	4,845	8,518	11,327	13,852	1
Influenza (J09–J11)	608	5	1	4	8	11	17	32	94	149	157	130	–
Pneumonia (J12–J18)	41,309	120	46	45	120	389	825	1,751	4,751	8,369	11,170	13,722	1
Other acute lower respiratory infections (J20–J22,U04)	189	27	15	3	1	3	10	7	15	35	28	45	–
Acute bronchitis and bronchiolitis (J20–J21)	128	27	15	2	–	3	5	4	10	22	13	27	–
Other and unspecified acute lower respiratory infections (J22,U04)	61	–	–	1	1	–	5	3	5	13	15	18	–
Chronic lower respiratory diseases (J40–J47)	142,342	13	31	99	158	360	733	3,174	17,620	37,932	46,328	35,892	2
Bronchitis, chronic and unspecified (J40–J42)	335	6	6	1	3	3	8	18	36	75	69	110	–
Emphysema (J43)	7,336	–	1	–	1	7	25	170	999	2,133	2,364	1,636	–
Asthma (J45–J46)	3,517	3	23	92	140	293	374	453	626	579	481	453	–
Other chronic lower respiratory diseases (J44,J47)	131,154	4	1	6	14	57	326	2,533	15,959	35,145	43,414	33,693	2
Pneumoconioses and chemical effects (J60–J66, J68,U07.0)	564	–	–	1	4	2	7	8	37	123	193	189	–
Pneumonitis due to solids and liquids (J69)	19,969	5	6	8	52	133	296	597	1,971	3,758	5,480	7,663	–
Other diseases of respiratory system (J00–J06, J30–J39,J67,J70–J98)	45,888	173	91	72	129	284	635	1,679	5,089	10,773	14,452	12,511	–
Peptic ulcer (K25–K28)	4,008	2	2	1	6	52	119	280	668	928	1,002	948	–
Diseases of appendix (K35–K38)	449	3	6	10	10	12	18	29	69	96	102	94	–
Hernia (K40–K46)	2,488	15	3	4	2	7	50	92	279	478	655	902	1
Chronic liver disease and cirrhosis (K70,K73–K74)	56,585	2	2	2	59	1,833	5,833	10,501	17,664	12,934	5,900	1,853	2
Alcoholic liver disease (K70)	33,098	–	–	–	46	1,536	4,600	7,636	11,348	6,140	1,541	250	1

See footnotes at end of table.

Table 7. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	All ages	Age group (years)											
		Younger than 1 year	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	Age not stated
Other chronic liver disease and cirrhosis (K73–K74)	23,487	2	2	2	13	297	1,233	2,865	6,316	6,794	4,359	1,603	1
Cholelithiasis and other disorders of gallbladder (K80–K82)	4,490	–	–	–	4	21	58	131	370	958	1,300	1,648	–
Nephritis, nephrotic syndrome and nephrosis (N00–N07,N17–N19,N25–N27)	54,358	48	5	7	54	369	972	2,516	6,374	12,245	15,569	16,199	–
Acute and rapidly progressive nephritic and nephrotic syndrome (N00–N01,N04)	781	7	–	1	1	10	8	34	72	155	235	258	–
Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02–N03,N05–N07,N26)	290	–	1	1	2	14	13	31	43	71	76	38	–
Renal failure (N17–N19)	53,261	41	4	5	51	342	951	2,448	6,256	12,013	15,252	15,898	–
Other disorders of kidney (N25,N27)	26	–	–	–	–	3	–	3	3	6	6	5	–
Infections of kidney (N10–N12,N13.6,N15.1)	1,248	4	4	–	7	12	57	81	208	291	322	262	–
Hyperplasia of prostate (N40)	715	–	–	–	–	–	–	4	35	96	218	362	–
Inflammatory diseases of female pelvic organs (N70–N76)	214	–	–	–	3	9	23	10	36	51	45	37	–
Pregnancy, childbirth and the puerperium (O00–O99)	1,687	…	…	4	214	797	654	17	1	–	–	–	–
Pregnancy with abortive outcome (O00–O07)	48	…	…	1	11	25	10	1	–	–	–	–	–
Other complications of pregnancy, childbirth and the puerperium (O10–O99)	1,639	…	…	3	203	772	644	16	1	–	–	–	–
Certain conditions originating in the perinatal period (P00–P96)	9,579	9,434	68	35	19	7	3	6	4	1	1	–	1
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	9,664	3,963	412	350	419	459	513	765	1,249	734	450	349	1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	34,503	2,714	273	140	603	1,374	1,851	2,165	3,816	4,813	5,878	10,860	16
All other diseases (residual)	397,499	611	375	725	2,028	5,707	11,321	20,164	42,223	67,115	95,068	152,157	5
Accidents (unintentional injuries) (V01–X59,Y85–Y86)	224,935	1,306	1,299	1,742	15,792	34,452	36,444	31,407	33,471	21,797	20,557	26,649	19
Transport accidents (V01–V99,Y85)	49,845	108	389	1,020	7,654	9,235	7,607	6,649	7,352	5,289	3,124	1,414	4
Motor vehicle accidents (V02–V04,V09.0, V09.2,V12–V14,V19.0–V19.2,V19.4–V19.6, V20–V79,V80.3–V80.5,V81.0–V81.1,V82.0–V82.1, V83–V86,V87.0–V87.8,V88.0–V88.8, V89.0,V89.2)	46,980	107	373	979	7,425	8,897	7,143	6,228	6,722	4,783	2,943	1,376	4
Other land transport accidents (V01,V05–V06,V09.1,V09.3–V09.9, V10–V11,V15–V18,V19.3,V19.8–V19.9, V80.0–V80.2,V80.6–V80.9,V81.2–V81.9, V82.2–V82.9,V87.9, V88.9,V89.1,V89.3,V89.9)	1,179	1	14	17	98	166	201	168	216	190	91	17	–
Water, air and space, and other and unspecified transport accidents and their sequelae (V90–V99,Y85)	1,686	–	2	24	131	172	263	253	414	316	90	21	–

See footnotes at end of table.

Table 7. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	All ages	Age group (years)											
		Younger than 1 year	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	Age not stated
Nontransport accidents (W00–X59,Y86)	175,090	1,198	910	722	8,138	25,217	28,837	24,758	26,119	16,508	17,433	25,235	15
Falls (W00–W19)	44,686	8	21	35	150	404	714	1,333	3,278	6,409	12,136	20,197	1
Accidental discharge of firearms (W32–W34)	549	3	51	53	125	81	76	46	44	46	20	4	–
Accidental drowning and submersion (W65–W74)	4,337	38	475	238	423	561	599	460	587	490	321	145	–
Accidental exposure to smoke, fire and flames (X00–X09)	3,389	15	100	150	105	188	227	328	662	793	559	261	1
Accidental poisoning and exposure to noxious substances (X40–X49)	102,001	27	34	80	6,929	23,167	26,070	21,011	18,596	5,251	615	212	9
Other and unspecified nontransport accidents and their sequelae (W20–W31,W35–W64, W75–W99,X10–X39,X50–X59,Y86)	20,128	1,107	229	166	406	816	1,151	1,580	2,952	3,519	3,782	4,416	4
Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)	48,183	…	…	607	6,528	8,862	7,862	7,401	7,267	5,144	3,170	1,338	4
Intentional self-harm (suicide) by discharge of firearms (X72–X74)	26,328	…	…	236	3,590	4,221	3,644	3,717	3,984	3,430	2,470	1,035	1
Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60–X71,X75–X84,Y87.0)	21,855	…	…	371	2,938	4,641	4,218	3,684	3,283	1,714	700	303	3
Assault (homicide) (*U01–*U02,X85–Y09,Y87.1)	26,031	267	309	486	6,635	7,571	4,863	2,768	1,828	882	316	105	1
Assault (homicide) by discharge of firearms (*U01.4,X93–X95)	20,958	15	72	359	6,207	6,679	3,931	2,024	1,096	413	115	47	–
Assault (homicide) by other and unspecified means and their sequelae (*U01.0–*U01.3, *U01.5–*U01.9,*U02,X85–X92,X96–Y09,Y87.1)	5,073	252	237	127	428	892	932	744	732	469	201	58	1
Legal intervention (Y35,Y89.0)	669	–	–	2	101	245	170	85	46	11	6	3	–
Events of undetermined intent (Y10–Y34,Y87.2,Y89.9)	6,259	98	107	80	528	1,205	1,338	1,139	1,041	444	182	95	2
Discharge of firearms, undetermined intent (Y22–Y24)	458	1	11	22	140	98	64	42	31	24	19	6	–
Other and unspecified events of undetermined intent and their sequelae (Y10–Y21,Y25–Y34, Y87.2,Y89.9)	5,801	97	96	58	388	1,107	1,274	1,097	1,010	420	163	89	2
Operations of war and their sequelae (Y36,Y89.1)	9	–	–	–	–	1	–	2	–	4	1	1	–
Complications of medical and surgical care (Y40–Y84,Y88)	6,051	12	17	23	73	139	244	474	1,079	1,685	1,426	879	–

See footnotes at end of table.

Table 7. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	All ages	Age group (years)											
		Younger than 1 year	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older	Age not stated
Enterocolitis due to *Clostridium difficile*. . . . . (A04.7)[1]	4,105	1	–	1	–	11	53	145	438	960	1,317	1,179	–
COVID-19. . . . . (U07.1)[1]	416,893	91	54	142	1,401	6,133	16,006	36,881	73,725	102,716	98,807	80,934	3
Dementia-related causes[1]	279,704	4	14	22	16	20	69	351	3,668	21,885	77,408	176,245	2
Drug-induced deaths[1]	111,219	76	126	108	7,527	24,664	27,771	22,864	20,532	6,243	980	318	10
Drug overdose deaths[1].	106,699	75	126	108	7,426	24,070	26,908	21,875	19,399	5,646	800	256	10
Alcohol-induced deaths[1]	54,258	–	–	2	214	3,027	7,797	12,313	17,960	9,978	2,500	464	3
Firearm-related injuries[1].	48,830	19	134	672	10,132	11,278	7,862	5,898	5,189	3,923	2,627	1,095	1

– Quantity zero.
… Category not applicable.
[1]Included in selected categories above. For the list of ICD–10 codes included, see Technical Notes.

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

Table 8. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	All ages[1]	Age group (years)										
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older
All causes	1,043.8	558.8	25.0	14.3	88.9	180.8	287.9	531.0	1,117.1	2,151.3	5,119.4	15,743.3
Salmonella infections (A01–A02)	0.0	*	*	*	*	*	*	*	*	0.1	*	*
Shigellosis and amebiasis (A03,A06)	*	*	*	*	*	*	*	*	*	*	*	*
Certain other intestinal infections (A04,A07–A09)	2.1	4.5	*	*	*	0.1	0.3	0.6	1.8	4.7	12.8	33.3
Tuberculosis (A16–A19)	0.2	*	*	*	*	*	0.1	0.1	0.3	0.5	0.8	1.4
Respiratory tuberculosis (A16)	0.1	*	*	*	*	*	0.1	0.1	0.2	0.4	0.5	1.3
Other tuberculosis (A17–A19)	0.1	*	*	*	*	*	*	0.1	0.1	0.1	0.2	*
Whooping cough (A37)	*	*	*	*	*	*	*	*	*	*	*	*
Scarlet fever and erysipelas (A38,A46)	*	*	*	*	*	*	*	*	*	*	*	*
Meningococcal infection (A39)	0.0	*	*	*	*	*	*	*	*	*	*	*
Septicemia (A40–A41)	12.4	3.2	0.2	0.1	0.2	0.9	2.6	6.0	15.1	31.1	67.4	153.3
Syphilis (A50–A53)	0.0	*	*	*	*	*	*	*	*	*	*	*
Acute poliomyelitis (A80)	*	*	*	*	*	*	*	*	*	*	*	*
Arthropod-borne viral encephalitis (A83–A84,A85.2)	*	*	*	*	*	*	*	*	*	*	*	*
Measles (B05)	*	*	*	*	*	*	*	*	*	*	*	*
Viral hepatitis (B15–B19)	1.1	*	*	*	*	0.1	0.4	1.1	3.1	3.4	2.1	1.8
Human immunodeficiency virus (HIV) disease (B20–B24)	1.5	*	*	*	0.1	1.1	1.7	2.6	3.6	2.5	1.3	0.7
Malaria (B50–B54)	*	*	*	*	*	*	*	*	*	*	*	*
Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05, A20–A36,A42–A44,A48–A49,A54–A79,A81–A82,A85.0–A85.1, A85.8,A86–B04,B06–B09,B25–B49,B55–B99,U07.1)	128.9	6.8	1.1	0.6	3.4	13.9	37.8	92.5	176.4	313.3	625.8	1,387.5
Malignant neoplasms (C00–C97)	182.4	1.5	1.8	1.9	3.1	7.9	25.8	82.5	252.4	532.1	1,017.2	1,712.9
Malignant neoplasms of lip, oral cavity and pharynx (C00–C14)	3.4	*	*	*	*	0.1	0.5	2.2	6.2	10.7	15.5	24.3
Malignant neoplasm of esophagus (C15)	4.7	*	*	*	*	0.1	0.5	2.5	8.6	15.9	23.2	28.0
Malignant neoplasm of stomach (C16)	3.3	*	*	*	*	0.3	0.9	2.3	4.8	8.9	16.5	27.5
Malignant neoplasms of colon, rectum and anus (C18–C21)	16.3	*	*	*	0.1	0.8	3.9	11.9	24.5	41.6	77.9	168.7
Malignant neoplasms of liver and intrahepatic bile ducts (C22)	8.7	*	*	*	0.1	0.2	0.8	3.4	15.2	31.4	41.6	50.4
Malignant neoplasm of pancreas (C25)	14.4	*	*	*	*	0.1	1.1	5.8	20.8	46.5	83.6	115.3
Malignant neoplasm of larynx (C32)	1.2	*	*	*	*	*	0.1	0.6	2.3	4.0	5.3	6.9
Malignant neoplasms of trachea, bronchus and lung (C33–C34)	40.6	*	*	*	*	0.3	1.8	11.9	60.5	134.5	248.9	289.5
Malignant melanoma of skin (C43)	2.5	*	*	*	*	0.2	0.7	1.4	3.4	6.6	12.8	25.7
Malignant neoplasm of breast (C50)	12.9	*	*	*	*	0.8	4.3	10.2	19.8	32.4	58.1	127.3
Malignant neoplasm of cervix uteri (C53)	1.3	*	*	*	*	0.5	1.5	2.1	2.3	2.5	3.2	4.2
Malignant neoplasms of corpus uteri and uterus, part unspecified (C54–C55)	3.7	*	*	*	*	0.1	0.5	1.8	5.8	12.8	18.2	24.1
Malignant neoplasm of ovary (C56)	4.0	*	*	*	0.1	0.2	0.7	2.6	6.4	12.2	21.3	28.0
Malignant neoplasm of prostate (C61)	9.8	*	*	*	*	*	*	0.8	6.5	24.4	67.9	170.5
Malignant neoplasms of kidney and renal pelvis (C64–C65)	4.3	*	*	0.1	*	0.1	0.5	2.0	6.1	12.4	23.4	40.3
Malignant neoplasm of bladder (C67)	5.1	*	*	*	*	*	0.2	0.8	4.0	11.4	33.5	90.4
Malignant neoplasms of meninges, brain and other parts of central nervous system (C70–C72)	5.4	*	0.5	0.7	0.6	0.9	1.9	4.3	9.4	15.7	22.0	23.2

See footnotes at end of table.

Table 8. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	All ages[1]	Age group (years)										
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older
Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81–C96)	17.3	*	0.5	0.5	0.8	1.3	2.2	5.3	16.0	44.5	114.6	211.5
Hodgkin disease (C81)	0.3	*	*	*	*	0.1	0.1	0.1	0.4	0.8	1.7	2.4
Non-Hodgkin lymphoma (C82–C85)	6.0	*	*	0.1	0.1	0.3	0.7	1.9	5.7	15.1	40.9	76.3
Leukemia (C91–C95)	7.0	*	0.5	0.4	0.6	0.8	1.2	2.2	5.9	17.8	44.8	87.2
Multiple myeloma and immunoproliferative neoplasms (C88,C90)	3.9	*	*	*	*	*	0.2	1.1	4.1	10.7	27.0	44.9
Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96)	0.0	*	*	*	*	*	*	*	*	0.1	0.3	0.7
All other and unspecified malignant neoplasms (C17, C23–C24,C26–C31,C37–C41,C44–C49,C51–C52,C57–C60, C62–C63,C66,C68–C69,C73–C80,C97)	23.5	0.6	0.7	0.5	1.2	1.9	3.7	10.4	29.6	63.8	129.7	257.1
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00–D48)	4.9	0.7	0.2	0.1	0.2	0.3	0.6	1.3	3.4	10.2	31.3	86.4
Anemias (D50–D64)	1.8	*	*	*	0.1	0.3	0.6	0.8	1.4	3.2	8.8	34.9
Diabetes mellitus (E10–E14)	31.1	*	*	0.1	0.8	2.8	6.8	18.7	43.5	83.0	160.4	309.9
Nutritional deficiencies (E40–E64)	5.3	*	*	*	0.1	0.1	0.2	0.7	2.1	6.5	26.6	161.2
Malnutrition (E40–E46)	5.2	*	*	*	0.1	0.1	0.2	0.7	1.9	6.3	26.2	158.7
Other nutritional deficiencies (E50–E64)	0.1	*	*	*	*	*	*	*	0.2	0.3	0.4	2.5
Meningitis (G00,G03)	0.2	1.5	*	*	*	0.1	0.1	0.1	0.2	0.3	0.7	0.7
Parkinson disease (G20–G21)	11.6	*	*	*	*	*	*	0.2	2.0	18.6	102.5	246.0
Alzheimer disease (G30)	36.0	*	*	*	*	*	*	0.3	3.2	26.4	214.3	1,243.6
Major cardiovascular diseases (I00–I78)	279.0	10.6	1.1	0.7	2.8	11.3	37.3	106.9	262.0	542.2	1,422.4	5,586.2
Diseases of heart (I00–I09,I11,I13,I20–I51)	209.6	7.4	0.8	0.5	2.2	9.1	29.4	84.9	208.7	416.6	1,044.2	4,078.7
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	1.2	*	*	*	*	0.2	0.3	0.4	1.0	2.2	6.2	22.4
Hypertensive heart disease (I11)	20.4	*	*	*	0.2	1.3	5.0	12.4	24.4	37.9	80.1	397.2
Hypertensive heart and renal disease (I13)	4.2	*	*	*	*	0.1	0.4	1.0	2.3	6.2	21.6	112.4
Ischemic heart diseases (I20–I25)	113.1	*	*	*	0.3	2.3	12.3	45.2	124.6	249.3	584.0	1,985.3
Acute myocardial infarction (I21–I22)	32.9	*	*	*	0.1	1.0	4.7	16.5	42.7	80.3	168.0	456.6
Other acute ischemic heart diseases (I24)	1.4	*	*	*	*	*	0.2	0.8	1.9	3.4	7.2	19.9
Other forms of chronic ischemic heart disease (I20,I25)	78.8	*	*	*	0.2	1.3	7.4	27.9	79.9	165.6	408.8	1,508.8
Atherosclerotic cardiovascular disease, so described (I25.0)	23.6	*	*	*	0.1	0.7	4.2	15.0	39.2	61.4	98.6	275.4
All other forms of chronic ischemic heart disease (I20,I25.1–I25.9)	55.3	*	*	*	0.1	0.6	3.2	12.9	40.7	104.2	310.2	1,233.4
Other heart diseases (I26–I51)	70.6	7.0	0.7	0.4	1.7	5.3	11.4	25.9	56.5	120.9	352.3	1,561.4
Acute and subacute endocarditis (I33)	0.5	*	*	*	*	0.3	0.4	0.5	0.8	1.1	2.0	2.8
Diseases of pericardium and acute myocarditis (I30–I31,I40)	0.4	*	*	*	0.1	0.1	0.2	0.3	0.4	0.7	1.7	3.9
Heart failure (I50)	25.6	*	*	*	0.1	0.5	1.6	5.0	13.5	37.0	134.4	703.2

See footnotes at end of table.

Table 8. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	All ages[1]	Age group (years)										
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older
All other forms of heart disease (I26–I28,I34–I38,I42–I49,I51)	44.1	6.2	0.6	0.4	1.6	4.4	9.2	20.1	41.8	82.1	214.1	851.4
Essential hypertension and hypertensive renal disease (I10,I12,I15)	12.9	*	*	*	0.1	0.4	1.5	4.8	12.1	24.9	63.2	270.8
Cerebrovascular diseases (I60–I69)	49.1	2.7	0.4	0.2	0.4	1.4	5.0	14.1	34.2	84.1	274.8	1,111.1
Atherosclerosis (I70)	1.3	*	*	*	*	*	*	0.2	0.8	2.1	6.7	33.3
Other diseases of circulatory system (I71–I78)	6.2	*	*	*	0.1	0.4	1.3	2.8	6.2	14.5	33.5	92.3
Aortic aneurysm and dissection (I71)	3.0	*	*	*	0.1	0.3	0.9	1.8	3.2	7.2	16.5	38.3
Other diseases of arteries, arterioles and capillaries (I72–I78)	3.1	*	*	*	*	0.2	0.4	1.1	3.0	7.3	17.0	54.0
Other disorders of circulatory system (I80–I99)	1.7	0.6	*	*	0.1	0.5	1.0	1.9	2.5	3.4	5.8	15.8
Influenza and pneumonia (J09–J18)	12.6	3.5	0.3	0.1	0.3	0.9	1.9	4.4	11.3	25.3	69.9	231.8
Influenza (J09–J11)	0.2	*	*	*	*	*	*	0.1	0.2	0.4	1.0	2.2
Pneumonia (J12–J18)	12.4	3.4	0.3	0.1	0.3	0.9	1.9	4.3	11.1	24.9	68.9	229.6
Other acute lower respiratory infections (J20–J22,U04)	0.1	0.8	*	*	*	*	*	*	*	0.1	0.2	0.8
Acute bronchitis and bronchiolitis (J20–J21)	0.0	0.8	*	*	*	*	*	*	*	0.1	*	0.5
Other and unspecified acute lower respiratory infections (J22,U04)	0.0	*	*	*	*	*	*	*	*	*	*	*
Chronic lower respiratory diseases (J40–J47)	42.9	*	0.2	0.2	0.4	0.8	1.7	7.8	41.2	112.7	285.9	600.6
Bronchitis, chronic and unspecified (J40–J42)	0.1	*	*	*	*	*	*	*	0.1	0.2	0.4	1.8
Emphysema (J43)	2.2	*	*	*	*	*	0.1	0.4	2.3	6.3	14.6	27.4
Asthma (J45–J46)	1.1	*	0.2	0.2	0.3	0.6	0.9	1.1	1.5	1.7	3.0	7.6
Other chronic lower respiratory diseases (J44,J47)	39.5	*	*	*	*	0.1	0.8	6.2	37.3	104.4	267.9	563.8
Pneumoconioses and chemical effects (J60–J66,J68,U07.0)	0.2	*	*	*	*	*	*	*	0.1	0.4	1.2	3.2
Pneumonitis due to solids and liquids (J69)	6.0	*	*	*	0.1	0.3	0.7	1.5	4.6	11.2	33.8	128.2
Other diseases of respiratory system (J00–J06,J30–J39,J67,J70–J98)	13.8	4.9	0.6	0.2	0.3	0.6	1.5	4.1	11.9	32.0	89.2	209.4
Peptic ulcer (K25–K28)	1.2	*	*	*	*	0.1	0.3	0.7	1.6	2.8	6.2	15.9
Diseases of appendix (K35–K38)	0.1	*	*	*	*	*	*	0.1	0.2	0.3	0.6	1.6
Hernia (K40–K46)	0.7	*	*	*	*	*	0.1	0.2	0.7	1.4	4.0	15.1
Chronic liver disease and cirrhosis (K70,K73–K74)	17.0	*	*	*	0.1	4.0	13.4	25.8	41.3	38.4	36.4	31.0
Alcoholic liver disease (K70)	10.0	*	*	*	0.1	3.4	10.6	18.8	26.5	18.2	9.5	4.2
Other chronic liver disease and cirrhosis (K73–K74)	7.1	*	*	*	*	0.7	2.8	7.0	14.8	20.2	26.9	26.8
Cholelithiasis and other disorders of gallbladder (K80–K82)	1.4	*	*	*	*	0.0	0.1	0.3	0.9	2.8	8.0	27.6
Nephritis, nephrotic syndrome and nephrosis (N00–N07,N17–N19,N25–N27)	16.4	1.3	*	*	0.1	0.8	2.2	6.2	14.9	36.4	96.1	271.1
Acute and rapidly progressive nephritic and nephrotic syndrome (N00–N01,N04)	0.2	*	*	*	*	*	*	0.1	0.2	0.5	1.5	4.3
Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02–N03,N05–N07,N26)	0.1	*	*	*	*	*	*	0.1	0.1	0.2	0.5	0.6
Renal failure (N17–N19)	16.0	1.2	*	*	0.1	0.8	2.2	6.0	14.6	35.7	94.1	266.0
Other disorders of kidney (N25,N27)	0.0	*	*	*	*	*	*	*	*	*	*	*

See footnotes at end of table.

Table 8. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	All ages[1]	Age group (years)										
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older
Infections of kidney (N10–N12,N13.6,N15.1)	0.4	*	*	*	*	*	0.1	0.2	0.5	0.9	2.0	4.4
Hyperplasia of prostate (N40)	0.2	*	*	*	*	*	*	*	0.1	0.3	1.3	6.1
Inflammatory diseases of female pelvic organs (N70–N76)	0.1	*	*	*	*	*	0.1	*	0.1	0.2	0.3	0.6
Pregnancy, childbirth and the puerperium (O00–O99)	0.5	…	…	*	0.5	1.8	1.5	*	*	*	*	*
Pregnancy with abortive outcome (O00–O07)	0.0	…	…	*	*	0.1	*	*	*	*	*	*
Other complications of pregnancy, childbirth and the puerperium (O10–O99)	0.5	…	…	*	0.5	1.7	1.5	*	*	*	*	*
Certain conditions originating in the perinatal period (P00–P96)	2.9	264.7	0.4	0.1	*	*	*	*	*	*	*	*
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	2.9	111.2	2.7	0.8	1.0	1.0	1.2	1.9	2.9	2.2	2.8	5.8
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	10.4	76.1	1.8	0.3	1.4	3.0	4.3	5.3	8.9	14.3	36.3	181.7
All other diseases (residual)	119.8	17.1	2.5	1.7	4.7	12.5	26.1	49.6	98.6	199.4	586.6	2,546.2
Accidents (unintentional injuries) (V01–X59,Y85–Y86)	67.8	36.6	8.5	4.2	36.7	75.7	84.0	77.2	78.2	64.7	126.8	446.0
Transport accidents (V01–V99,Y85)	15.0	3.0	2.5	2.4	17.8	20.3	17.5	16.3	17.2	15.7	19.3	23.7
Motor vehicle accidents (V02–V04,V09.0, V09.2,V12–V14,V19.0–V19.2,V19.4–V19.6, V20–V79, V80.3–V80.5,V81.0–V81.1,V82.0–V82.1, V83–V86,V87.0–V87.8,V88.0–V88.8, V89.0,V89.2)	14.2	3.0	2.4	2.3	17.2	19.6	16.5	15.3	15.7	14.2	18.2	23.0
Other land transport accidents (V01,V05–V06,V09.1,V09.3–V09.9,V10–V11, V15–V18,V19.3,V19.8–V19.9,V80.0–V80.2, V80.6–V80.9,V81.2–V81.9,V82.2–V82.9,V87.9, V88.9, V89.1,V89.3,V89.9)	0.4	*	*	*	0.2	0.4	0.5	0.4	0.5	0.6	0.6	*
Water, air and space, and other and unspecified transport accidents and their sequelae (V90–V99,Y85)	0.5	*	*	0.1	0.3	0.4	0.6	0.6	1.0	0.9	0.6	0.4
Nontransport accidents (W00–X59,Y86)	52.8	33.6	6.0	1.7	18.9	55.4	66.4	60.8	61.0	49.0	107.6	422.3
Falls (W00–W19)	13.5	*	0.1	0.1	0.3	0.9	1.6	3.3	7.7	19.0	74.9	338.0
Accidental discharge of firearms (W32–W34)	0.2	*	0.3	0.1	0.3	0.2	0.2	0.1	0.1	0.1	0.1	*
Accidental drowning and submersion (W65–W74)	1.3	1.1	3.1	0.6	1.0	1.2	1.4	1.1	1.4	1.5	2.0	2.4
Accidental exposure to smoke, fire and flames (X00–X09)	1.0	*	0.7	0.4	0.2	0.4	0.5	0.8	1.5	2.4	3.4	4.4
Accidental poisoning and exposure to noxious substances (X40–X49)	30.7	0.8	0.2	0.2	16.1	50.9	60.1	51.6	43.4	15.6	3.8	3.5
Other and unspecified nontransport accidents and their sequelae (W20–W31,W35–W64, W75–W99,X10–X39,X50–X59,Y86)	6.1	31.1	1.5	0.4	0.9	1.8	2.7	3.9	6.9	10.5	23.3	73.9
Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)	14.5	…	…	1.5	15.2	19.5	18.1	18.2	17.0	15.3	19.6	22.4
Intentional self-harm (suicide) by discharge of firearms (X72–X74)	7.9	…	…	0.6	8.3	9.3	8.4	9.1	9.3	10.2	15.2	17.3

See footnotes at end of table.

Table 8. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by age: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	All ages[1]	Age group (years)										
		Younger than 1 year[2]	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older
Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60–X71,X75–X84,Y87.0)	6.6	…	…	0.9	6.8	10.2	9.7	9.1	7.7	5.1	4.3	5.1
Assault (homicide) (*U01–*U02,X85–Y09,Y87.1)	7.8	7.5	2.0	1.2	15.4	16.6	11.2	6.8	4.3	2.6	1.9	1.8
Assault (homicide) by discharge of firearms (*U01.4,X93–X95)	6.3	*	0.5	0.9	14.4	14.7	9.1	5.0	2.6	1.2	0.7	0.8
Assault (homicide) by other and unspecified means and their sequelae (*U01.0–*U01.3,*U01.5–*U01.9, *U02,X85–X92,X96–Y09,Y87.1)[3]	1.5	7.1	1.6	0.3	1.0	2.0	2.1	1.8	1.7	1.4	1.2	1.0
Legal intervention (Y35,Y89.0)	0.2	*	*	*	0.2	0.5	0.4	0.2	0.1	*	*	*
Events of undetermined intent19 (Y10–Y34,Y87.2,Y89.9)	1.9	2.7	0.7	0.2	1.2	2.6	3.1	2.8	2.4	1.3	1.1	1.6
Discharge of firearms, undetermined intent (Y22–Y24)	0.1	*	*	0.1	0.3	0.2	0.1	0.1	0.1	0.1	*	*
Other and unspecified events of undetermined intent and their sequelae (Y10–Y21,Y25–Y34,Y87.2,Y89.9)	1.7	2.7	0.6	0.1	0.9	2.4	2.9	2.7	2.4	1.2	1.0	1.5
Operations of war and their sequelae (Y36,Y89.1)	*	*	*	*	*	*	*	*	*	*	*	*
Complications of medical and surgical care (Y40–Y84,Y88)	1.8	*	*	0.1	0.2	0.3	0.6	1.2	2.5	5.0	8.8	14.7
Enterocolitis due to *Clostridium difficile* (A04.7)[3]	1.2	*	*	*	*	*	0.1	0.4	1.0	2.9	8.1	19.7
COVID-19 (U07.1)[3]	125.6	2.6	0.4	0.3	3.3	13.5	36.9	90.6	172.2	305.1	609.7	1,354.4
Dementia-related causes[3]	84.3	*	*	0.1	*	0.0	0.2	0.9	8.6	65.0	477.6	2,949.3
Drug-induced deaths[3]	33.5	2.1	0.8	0.3	17.5	54.2	64.0	56.2	48.0	18.5	6.0	5.3
Drug overdose deaths[3]	32.1	2.1	0.8	0.3	17.2	52.9	62.0	53.8	45.3	16.8	4.9	4.3
Alcohol-induced deaths[3]	16.3	*	*	*	0.5	6.7	18.0	30.3	42.0	29.6	15.4	7.8
Firearm-related injuries[3]	14.7	*	0.9	1.6	23.5	24.8	18.1	14.5	12.1	11.7	16.2	18.3

0.0 Quantity more than zero but less than 0.05.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
… Category not applicable.
[1]Data for age not stated included in "all ages" but not distributed among age groups.
[2]Death rates for younger than 1 year (based on population estimates) differ from infant mortality rates (based on live births); see Technical Notes.
[3]Included in selected categories above. For the list of ICD–10 codes included, see Technical Notes.

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

Table 9. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021

[Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All causes	3,464,231	1,838,108	1,626,123	315,664	181,195	134,469	26,972	14,724	12,248	92,432	48,386	44,046	449,764	238,599	211,165	5,223	2,906	2,317	2,548,809	1,337,385	1,211,424
Salmonella infections (A01–A02)	72	42	30	12	5	7	1	–	1	4	3	1	12	8	4	1	1	–	41	25	16
Shigellosis and amebiasis (A03,A06)	7	1	6	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	6	1	5
Certain other intestinal infections (A04, A07–A09)	7,036	2,925	4,111	596	282	314	46	23	23	151	69	82	774	353	421	10	4	6	5,408	2,172	3,236
Tuberculosis (A16–A19)	602	392	210	108	71	37	7	4	3	138	94	44	93	62	31	3	–	3	248	158	90
Respiratory tuberculosis (A16)	435	293	142	77	53	24	6	3	3	121	81	40	70	49	21	3	–	3	157	107	50
Other tuberculosis (A17–A19)	167	99	68	31	18	13	1	1	–	17	13	4	23	13	10	–	–	–	91	51	40
Whooping cough (A37)	4	3	1	1	1	–	–	–	–	–	–	–	1	1	–	–	–	–	2	1	1
Scarlet fever and erysipelas (A38,A46)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Meningococcal infection (A39)	21	10	11	4	3	1	1	1	–	1	1	–	5	1	4	–	–	–	9	3	6
Septicemia (A40–A41)	41,281	20,529	20,752	3,163	1,638	1,525	292	153	139	885	453	432	7,159	3,404	3,755	61	32	29	29,455	14,704	14,751
Syphilis (A50–A53)	43	31	12	10	8	2	1	–	1	1	1	–	21	14	7	–	–	–	10	8	2
Acute poliomyelitis (A80)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arthropod-borne viral encephalitis (A83–A84, A85.2)	6	4	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6	4	2
Measles (B05)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Viral hepatitis (B15–B19)	3,589	2,317	1,272	529	370	159	60	35	25	200	126	74	512	314	198	22	15	7	2,217	1,426	791
Human immunodeficiency virus (HIV) disease (B20–B24)	4,977	3,800	1,177	764	641	123	38	26	12	71	60	11	2,438	1,674	764	7	7	–	1,574	1,328	246
Malaria (B50–B54)	6	3	3	1	–	1	–	–	–	–	–	–	2	1	1	–	–	–	3	2	1

See footnotes at end of table.

Table 9. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

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							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Other and unspecified infectious and parasitic diseases and their sequelae (A00, A05,A20–A36,A42–A44, A48–A49,A54–A79, A81–A82,A85.0–A85.1, A85.8,A86–B04, B06–B09,B25–B49, B55–B99,U07.1)	427,811	242,562	185,249	69,681	42,651	27,030	4,756	2,500	2,256	13,080	7,786	5,294	57,524	28,412	29,112	1,113	609	504	279,037	159,045	119,992
Malignant neoplasms (C00–C97)	605,213	318,670	286,543	45,544	23,330	22,214	3,162	1,599	1,563	19,271	9,528	9,743	70,036	35,235	34,801	840	375	465	462,601	246,599	216,002
Malignant neoplasms of lip, oral cavity and pharynx (C00–C14)	11,394	8,141	3,253	680	495	185	45	26	19	449	296	153	1,095	804	291	25	19	6	9,013	6,443	2,570
Malignant neoplasm of esophagus (C15)	15,743	12,558	3,185	779	634	145	89	78	11	339	253	86	1,167	805	362	11	7	4	13,278	10,715	2,563
Malignant neoplasm of stomach (C16)	10,894	6,592	4,302	1,964	1,092	872	96	57	39	880	476	404	1,860	1,110	750	30	20	10	5,991	3,792	2,199
Malignant neoplasms of colon, rectum and anus (C18–C21)	54,121	28,911	25,210	4,810	2,695	2,115	324	186	138	1,976	1,010	966	7,135	3,860	3,275	83	45	38	39,425	20,893	18,532
Malignant neoplasms of liver and intrahepatic bile ducts (C22)	28,719	18,828	9,891	3,907	2,500	1,407	263	162	101	1,765	1,118	647	3,505	2,355	1,150	57	39	18	19,016	12,511	6,505
Malignant neoplasm of pancreas (C25)	47,906	24,912	22,994	3,745	1,844	1,901	213	104	109	1,690	818	872	5,857	2,824	3,033	68	27	41	36,095	19,170	16,925
Malignant neoplasm of larynx (C32)	3,887	3,126	761	235	210	25	17	11	6	59	53	6	612	486	126	2	2	–	2,937	2,343	594
Malignant neoplasms of trachea, bronchus and lung (C33–C34)	134,592	71,601	62,991	5,781	3,208	2,573	668	330	338	3,779	2,058	1,721	14,248	8,003	6,245	133	63	70	109,126	57,487	51,639
Malignant melanoma of skin (C43)	8,224	5,363	2,861	295	179	116	18	13	5	42	21	21	131	62	69	2	1	1	7,703	5,063	2,640
Malignant neoplasm of breast (C50)	42,810	500	42,310	3,405	26	3,379	201	1	200	1,368	12	1,356	6,326	84	6,242	93	–	93	31,134	374	30,760
Malignant neoplasm of cervix uteri (C53)	4,366	…	4,366	611	…	611	53	…	53	202	…	202	762	…	762	19	…	19	2,680	…	2,680

See footnotes at end of table.

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	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Malignant neoplasms of corpus uteri and uterus, part unspecified (C54–C55)	12,208	…	12,208	1,115	…	1,115	66	…	66	412	…	412	2,509	…	2,509	61	…	61	7,974	…	7,974
Malignant neoplasm of ovary (C56)	13,430	…	13,430	1,217	…	1,217	82	…	82	518	…	518	1,343	…	1,343	17	…	17	10,180	…	10,180
Malignant neoplasm of prostate (C61)	32,563	32,563	…	2,284	2,284	…	136	136	…	670	670	…	5,292	5,292	…	43	43	…	23,941	23,941	…
Malignant neoplasms of kidney and renal pelvis (C64–C65)	14,163	9,370	4,793	1,435	917	518	124	84	40	299	189	110	1,291	809	482	9	4	5	10,912	7,297	3,615
Malignant neoplasm of bladder (C67)	16,840	12,196	4,644	844	570	274	50	35	15	300	201	99	1,270	789	481	9	7	2	14,297	10,547	3,750
Malignant neoplasms of meninges, brain and other parts of central nervous system (C70–C72)	17,857	10,098	7,759	1,551	908	643	66	40	26	477	258	219	1,142	597	545	15	10	5	14,487	8,217	6,270
Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81–C96)	57,375	32,988	24,387	4,721	2,586	2,135	232	125	107	1,680	917	763	5,989	3,159	2,830	63	36	27	44,368	25,981	18,387
Hodgkin disease (C81)	1,003	596	407	130	78	52	6	4	2	21	8	13	125	81	44	1	1	–	713	418	295
Non-Hodgkin lymphoma (C82–C85)	20,020	11,519	8,501	1,739	931	808	80	45	35	731	412	319	1,476	829	647	19	9	10	15,850	9,220	6,630
Leukemia (C91–C95)	23,271	13,540	9,731	1,832	1,012	820	94	46	48	639	342	297	1,964	1,029	935	30	18	12	18,584	11,019	7,565
Multiple myeloma and immunoproliferative neoplasms (C88,C90)	12,933	7,244	5,689	1,011	558	453	50	30	20	286	154	132	2,412	1,213	1,199	12	8	4	9,100	5,250	3,850
Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96)	148	89	59	9	7	2	2	–	2	3	1	2	12	7	5	1	–	1	121	74	47

See footnotes at end of table.

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							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All other and unspecified malignant neoplasms (C17, C23–C24,C26–C31, C37–C41,C44–C49, C51–C52,C57–C60, C62–C63,C66, C68–C69, C73–C80,C97)	78,121	40,923	37,198	6,165	3,182	2,983	419	211	208	2,366	1,178	1,188	8,502	4,196	4,306	100	52	48	60,044	31,825	28,219
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00–D48)	16,237	8,720	7,517	1,039	529	510	57	37	20	500	262	238	1,520	713	807	18	11	7	13,021	7,122	5,899
Anemias (D50–D64)	5,987	2,720	3,267	414	194	220	34	17	17	164	84	80	1,240	547	693	6	2	4	4,099	1,859	2,240
Diabetes mellitus (E10–E14)	103,294	58,628	44,666	12,489	7,029	5,460	1,269	689	580	3,639	1,963	1,676	18,968	9,843	9,125	314	175	139	65,789	38,428	27,361
Nutritional deficiencies (E40–E64)	17,505	6,605	10,900	1,047	423	624	95	42	53	374	148	226	1,872	747	1,125	10	2	8	14,019	5,206	8,813
Malnutrition (E40–E46)	17,106	6,428	10,678	1,025	412	613	90	40	50	371	148	223	1,822	726	1,096	10	2	8	13,704	5,065	8,639
Other nutritional deficiencies (E50–E64)	399	177	222	22	11	11	5	2	3	3	–	3	50	21	29	–	–	–	315	141	174
Meningitis (G00,G03)	534	314	220	83	45	38	11	7	4	21	11	10	94	51	43	2	1	1	314	193	121
Parkinson disease (G20–G21)	38,536	23,567	14,969	2,369	1,365	1,004	123	62	61	1,169	683	486	1,893	1,095	798	21	11	10	32,818	20,268	12,550
Alzheimer disease (G30)	119,399	36,975	82,424	9,142	2,775	6,367	370	101	269	3,203	968	2,235	9,638	2,791	6,847	85	29	56	96,522	30,170	66,352
Major cardiovascular diseases (I00–I78)	925,923	488,914	437,009	66,425	36,411	30,014	4,928	2,757	2,171	25,918	13,422	12,496	124,348	65,454	58,894	1,344	788	556	696,709	366,401	330,308
Diseases of heart (I00–I09,I11, I13,I20–I51)	695,547	384,886	310,661	47,345	27,211	20,134	3,760	2,234	1,526	17,009	9,383	7,626	90,507	49,490	41,017	1,002	617	385	531,162	292,973	238,189
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	3,907	1,382	2,525	266	95	171	25	10	15	117	37	80	333	114	219	16	5	11	3,119	1,110	2,009
Hypertensive heart disease (I11)	67,774	34,520	33,254	4,726	2,622	2,104	509	306	203	1,499	739	760	12,800	7,073	5,727	98	64	34	47,536	23,338	24,198

See footnotes at end of table.

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							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Hypertensive heart and renal disease (I13)	13,918	6,473	7,445	949	441	508	119	61	58	310	130	180	2,268	1,117	1,151	17	13	4	10,166	4,658	5,508
Ischemic heart diseases (I20–I25)	375,476	226,452	149,024	28,094	17,095	10,999	2,012	1,250	762	10,547	6,305	4,242	44,468	25,543	18,925	543	349	194	287,088	174,148	112,940
Acute myocardial infarction (I21–I22)	109,097	65,673	43,424	8,388	5,051	3,337	601	373	228	3,238	1,942	1,296	12,933	7,295	5,638	147	82	65	83,165	50,529	32,636
Other acute ischemic heart diseases (I24)	4,748	2,704	2,044	269	162	107	26	10	16	112	64	48	738	420	318	5	3	2	3,571	2,029	1,542
Other forms of chronic ischemic heart disease (I20,I25)	261,631	158,075	103,556	19,437	11,882	7,555	1,385	867	518	7,197	4,299	2,898	30,797	17,828	12,969	391	264	127	200,352	121,590	78,762
Atherosclerotic cardiovascular disease, so described (I25.0)	78,175	49,832	28,343	6,670	4,549	2,121	509	327	182	2,051	1,302	749	12,322	7,736	4,586	123	86	37	55,640	35,236	20,404
All other forms of chronic ischemic heart disease (I20,I25.1–I25.9)	183,456	108,243	75,213	12,767	7,333	5,434	876	540	336	5,146	2,997	2,149	18,475	10,092	8,383	268	178	90	144,712	86,354	58,358
Other heart diseases (I26–I51)	234,472	116,059	118,413	13,310	6,958	6,352	1,095	607	488	4,536	2,172	2,364	30,638	15,643	14,995	328	186	142	183,253	89,719	93,534
Acute and subacute endocarditis (I33)	1,767	1,072	695	166	106	60	27	16	11	33	21	12	243	147	96	2	1	1	1,280	770	510
Diseases of pericardium and acute myocarditis (I30–I31,I40)	1,237	639	598	109	55	54	7	1	6	26	12	14	168	95	73	4	3	1	911	464	447
Heart failure (I50)	85,037	40,344	44,693	4,647	2,249	2,398	363	211	152	1,603	734	869	10,110	4,902	5,208	82	47	35	67,866	31,993	35,873
All other forms of heart disease (I26–I28, I34–I38,I42–I49,I51)	146,431	74,004	72,427	8,388	4,548	3,840	698	379	319	2,874	1,405	1,469	20,117	10,499	9,618	240	135	105	113,196	56,492	56,704

See footnotes at end of table.

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							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Essential hypertension and hypertensive renal disease (I10,I12,I15)	42,816	20,086	22,730	3,718	1,846	1,872	256	129	127	1,828	858	970	7,868	3,875	3,993	65	29	36	28,798	13,214	15,584
Cerebrovascular diseases (I60–I69)	162,890	70,852	92,038	13,776	6,433	7,343	799	351	448	6,428	2,848	3,580	22,837	10,428	12,409	247	124	123	117,809	50,219	67,590
Atherosclerosis (I70)	4,214	2,008	2,206	247	119	128	17	5	12	136	64	72	448	213	235	3	1	2	3,320	1,580	1,740
Other diseases of circulatory system (I71–I78)	20,456	11,082	9,374	1,339	802	537	96	38	58	517	269	248	2,688	1,448	1,240	27	17	10	15,620	8,415	7,205
Aortic aneurysm and dissection (I71)	10,037	6,039	3,998	580	412	168	27	10	17	319	193	126	1,150	700	450	18	14	4	7,844	4,649	3,195
Other diseases of arteries, arterioles and capillaries (I72–I78)	10,419	5,043	5,376	759	390	369	69	28	41	198	76	122	1,538	748	790	9	3	6	7,776	3,766	4,010
Other disorders of circulatory system (I80–I99)	5,655	2,935	2,720	471	269	202	39	20	19	86	46	40	1,160	590	570	11	2	9	3,848	1,982	1,866
Influenza and pneumonia (J09–J18)	41,917	22,373	19,544	3,664	2,022	1,642	333	189	144	1,586	880	706	5,310	2,786	2,524	57	39	18	30,673	16,286	14,387
Influenza (J09–J11)	608	294	314	61	24	37	10	5	5	16	10	6	73	38	35	1	–	1	445	216	229
Pneumonia (J12–J18)	41,309	22,079	19,230	3,603	1,998	1,605	323	184	139	1,570	870	700	5,237	2,748	2,489	56	39	17	30,228	16,070	14,158
Other acute lower respiratory infections (J20–J22,U04)	189	88	101	26	14	12	2	2	–	4	4	–	30	11	19	–	–	–	123	56	67
Acute bronchitis and bronchiolitis (J20–J21)	128	56	72	19	9	10	2	2	–	3	3	–	23	7	16	–	–	–	77	34	43
Other and unspecified acute lower respiratory infections (J22,U04)	61	32	29	7	5	2	–	–	–	1	1	–	7	4	3	–	–	–	46	22	24
Chronic lower respiratory diseases (J40–J47)	142,342	67,528	74,814	5,479	2,749	2,730	825	372	453	1,754	1,046	708	11,218	5,586	5,632	90	51	39	122,054	57,231	64,823
Bronchitis, chronic and unspecified (J40–J42)	335	141	194	26	11	15	4	1	3	7	2	5	51	29	22	1	–	1	244	97	147
Emphysema (J43)	7,336	3,945	3,391	226	146	80	50	23	27	87	70	17	504	288	216	3	2	1	6,405	3,376	3,029
Asthma (J45–J46)	3,517	1,430	2,087	366	156	210	19	5	14	133	68	65	1,020	469	551	6	3	3	1,929	711	1,218
Other chronic lower respiratory diseases (J44,J47)	131,154	62,012	69,142	4,861	2,436	2,425	752	343	409	1,527	906	621	9,643	4,800	4,843	80	46	34	113,476	53,047	60,429

See footnotes at end of table.

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							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Pneumoconioses and chemical effects (J60–J66,J68,U07.0)	564	527	37	27	23	4	3	3	–	2	1	1	26	24	2	–	–	–	505	475	30
Pneumonitis due to solids and liquids (J69)	19,969	11,663	8,306	1,276	726	550	105	63	42	612	356	256	2,399	1,298	1,101	16	7	9	15,447	9,135	6,312
Other diseases of respiratory system (J00–J06, J30–J39,J67,J70–J98)	45,888	24,205	21,683	3,750	2,008	1,742	332	173	159	1,161	625	536	4,775	2,257	2,518	35	16	19	35,586	18,976	16,610
Peptic ulcer (K25–K28)	4,008	2,092	1,916	350	205	145	36	19	17	149	78	71	421	233	188	8	7	1	3,005	1,529	1,476
Diseases of appendix (K35–K38)	449	265	184	53	33	20	1	–	1	15	6	9	48	34	14	1	–	1	327	189	138
Hernia (K40–K46)	2,488	1,132	1,356	197	101	96	16	6	10	37	22	15	208	110	98	2	1	1	2,010	878	1,132
Chronic liver disease and cirrhosis (K70, K73–K74)	56,585	35,707	20,878	8,864	6,187	2,677	1,899	1,049	850	881	552	329	4,524	2,707	1,817	51	39	12	39,824	24,824	15,000
Alcoholic liver disease (K70)	33,098	22,598	10,500	5,276	4,206	1,070	1,503	855	648	417	325	92	2,624	1,644	980	26	21	5	22,873	15,295	7,578
Other chronic liver disease and cirrhosis (K73–K74)	23,487	13,109	10,378	3,588	1,981	1,607	396	194	202	464	227	237	1,900	1,063	837	25	18	7	16,951	9,529	7,422
Cholelithiasis and other disorders of gallbladder (K80–K82)	4,490	2,362	2,128	452	221	231	51	23	28	158	86	72	430	211	219	7	5	2	3,368	1,806	1,562
Nephritis, nephrotic syndrome and nephrosis (N00–N07, N17–N19,N25–N27)	54,358	28,589	25,769	5,021	2,712	2,309	395	185	210	1,639	856	783	10,434	5,189	5,245	117	57	60	36,444	19,406	17,038
Acute and rapidly progressive nephritic and nephrotic syndrome (N00–N01,N04)	781	380	401	62	35	27	6	3	3	16	7	9	118	51	67	1	1	–	576	282	294
Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02–N03, N05–N07,N26)	290	155	135	30	14	16	4	1	3	18	6	12	37	18	19	–	–	–	200	115	85

See footnotes at end of table.

Table 9. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Renal failure (N17–N19)	53,261	28,039	25,222	4,926	2,662	2,264	385	181	204	1,605	843	762	10,273	5,117	5,156	116	56	60	35,651	18,998	16,653
Other disorders of kidney (N25,N27)	26	15	11	3	1	2	–	–	–	–	–	–	6	3	3	–	–	–	17	11	6
Infections of kidney (N10–N12, N13.6,N15.1)	1,248	414	834	127	48	79	15	5	10	34	6	28	114	42	72	4	2	2	937	305	632
Hyperplasia of prostate (N40)	715	715	…	61	61	…	–	–	…	34	34	…	78	78	…	1	1	…	533	533	…
Inflammatory diseases of female pelvic organs (N70–N76)	214	…	214	17	…	17	3	…	3	5	…	5	43	…	43	–	…	–	144	…	144
Pregnancy, childbirth and the puerperium (O00–O99)	1,687	…	1,687	352	…	352	42	…	42	52	…	52	519	…	519	6	…	6	687	…	687
Pregnancy with abortive outcome (O00–O07)	48	…	48	11	…	11	1	…	1	2	…	2	18	…	18	–	…	–	15	…	15
Other complications of pregnancy, childbirth and the puerperium (O10–O99)	1,639	…	1,639	341	…	341	41	…	41	50	…	50	501	…	501	6	…	6	672	…	672
Certain conditions originating in the perinatal period (P00–P96)	9,579	5,276	4,303	2,237	1,239	998	57	25	32	390	222	168	2,807	1,559	1,248	27	17	10	3,557	1,941	1,616
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	9,664	5,014	4,650	1,678	871	807	83	43	40	235	127	108	1,424	707	717	17	11	6	5,986	3,126	2,860
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	34,503	17,237	17,266	2,916	1,796	1,120	306	179	127	687	341	346	5,407	2,926	2,481	52	25	27	24,678	11,683	12,995
All other diseases (residual)	397,499	175,191	222,308	27,500	13,171	14,329	3,020	1,530	1,490	8,432	3,674	4,758	45,773	20,443	25,330	397	203	194	309,852	134,877	174,975
Accidents (unintentional injuries) (V01–X59, Y85–Y86)	224,935	149,602	75,333	27,126	20,459	6,667	2,965	1,907	1,058	3,768	2,452	1,316	33,830	24,160	9,670	322	244	78	153,897	98,274	55,623
Transport accidents (V01–V99,Y85)	49,845	36,082	13,763	8,488	6,372	2,116	891	580	311	992	660	332	8,939	6,646	2,293	104	81	23	29,806	21,320	8,486

See footnotes at end of table.

Table 9. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

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Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Motor vehicle accidents . . . . (V02–V04,V09.0, V09.2,V12–V14, V19.0–V19.2, V19.4–V19.6, V20–V79, V80.3–V80.5, V81.0–V81.1, V82.0–V82.1, V83–V86, V87.0–V87.8, V88.0–V88.8, V89.0,V89.2)	46,980	33,757	13,223	8,143	6,095	2,048	833	530	303	932	614	318	8,583	6,335	2,248	93	72	21	27,805	19,714	8,091
Other land transport accidents. . . . . (V01, V05–V06,V09.1, V09.3–V09.9, V10–V11,V15–V18, V19.3,V19.8–V19.9, V80.0–V80.2, V80.6–V80.9, V81.2–V81.9, V82.2–V82.9, V87.9, V88.9, V89.1,V89.3,V89.9)	1,179	956	223	193	158	35	31	27	4	29	21	8	179	159	20	6	6	–	727	572	155
Water, air and space, and other and unspecified transport accidents and their sequelae . . . . . (V90–V99,Y85)	1,686	1,369	317	152	119	33	27	23	4	31	25	6	177	152	25	5	3	2	1,274	1,034	240
Nontransport accidents . . . . . (W00–X59,Y86)	175,090	113,520	61,570	18,638	14,087	4,551	2,074	1,327	747	2,776	1,792	984	24,891	17,514	7,377	218	163	55	124,091	76,954	47,137
Falls . . . . . (W00–W19)	44,686	22,907	21,779	2,768	1,714	1,054	246	135	111	1,206	670	536	2,160	1,258	902	41	28	13	38,059	18,979	19,080
Accidental discharge of firearms . . . . . (W32–W34)	549	482	67	65	58	7	7	6	1	7	4	3	150	133	17	1	1	–	310	275	35
Accidental drowning and submersion . . . . . (W65–W74)	4,337	3,236	1,101	623	490	133	55	45	10	217	153	64	736	582	154	17	13	4	2,610	1,894	716

See footnotes at end of table.

Table 9. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Accidental exposure to smoke, fire and flames (X00–X09)	3,389	2,101	1,288	268	172	96	47	25	22	56	28	28	701	428	273	4	3	1	2,273	1,418	855
Accidental poisoning and exposure to noxious substances (X40–X49)	102,001	72,515	29,486	13,071	10,390	2,681	1,463	935	528	862	689	173	18,368	13,396	4,972	126	99	27	66,277	45,689	20,588
Other and unspecified nontransport accidents and their sequelae (W20–W31, W35–W64,W75–W99, X10–X39, X50–X59,Y86)	20,128	12,279	7,849	1,843	1,263	580	256	181	75	428	248	180	2,776	1,717	1,059	29	19	10	14,562	8,699	5,863
Intentional self-harm (suicide) (*U03, X60–X84,Y87.0)	48,183	38,358	9,825	4,907	3,967	940	692	525	167	1,379	962	417	3,692	2,972	720	82	65	17	36,681	29,292	7,389
Intentional self-harm (suicide) by discharge of firearms (X72–X74)	26,328	22,936	3,392	2,037	1,795	242	241	209	32	352	310	42	2,165	1,885	280	27	25	2	21,197	18,448	2,749
Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60–X71, X75–X84,Y87.0)	21,855	15,422	6,433	2,870	2,172	698	451	316	135	1,027	652	375	1,527	1,087	440	55	40	15	15,484	10,844	4,640
Assault (homicide) (*U01–*U02, X85–Y09,Y87.1)	26,031	21,084	4,947	4,453	3,694	759	307	241	66	313	205	108	14,313	12,277	2,036	46	40	6	6,215	4,340	1,875
Assault (homicide) by discharge of firearms (*U01.4,X93–X95)	20,958	17,596	3,362	3,455	2,992	463	185	147	38	204	146	58	12,721	11,110	1,611	37	34	3	4,064	2,945	1,119

See footnotes at end of table.

Table 9. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Assault (homicide) by other and unspecified means and their sequelae . . . . . (*U01.0–*U01.3, *U01.5–*U01.9, *U02,X85–X92, X96–Y09,Y87.1)	5,073	3,488	1,585	998	702	296	122	94	28	109	59	50	1,592	1,167	425	9	6	3	2,151	1,395	756
Legal intervention . . . . . (Y35,Y89.0)	669	630	39	151	143	8	13	13	–	9	9	–	163	159	4	1	1	–	317	290	27
Events of undetermined intent . . . . . (Y10–Y34, Y87.2,Y89.9)	6,259	4,133	2,126	529	394	135	119	67	52	74	50	24	1,502	1,062	440	7	5	2	3,926	2,486	1,440
Discharge of firearms, undetermined intent . . . . . (Y22–Y24)	458	339	119	55	47	8	20	15	5	6	2	4	134	102	32	2	2	–	231	164	67
Other and unspecified events of undetermined intent and their sequelae . . . . . (Y10–Y21, Y25–Y34,Y87.2,Y89.9)	5,801	3,794	2,007	474	347	127	99	52	47	68	48	20	1,368	960	408	5	3	2	3,695	2,322	1,373
Operations of war and their sequelae. . . . . (Y36,Y89.1)	9	9	–	–	–	–	–	–	–	–	–	–	3	3	–	–	–	–	6	6	–
Complications of medical and surgical care . . . . . (Y40–Y84,Y88)	6,051	3,247	2,804	558	311	247	62	32	30	146	84	62	963	455	508	9	6	3	4,271	2,336	1,935

See footnotes at end of table.

Table 9. Number of deaths from 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

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Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Enterocolitis due to *Clostridium difficile* (A04.7)[4]	4,105	1,808	2,297	331	162	169	30	15	15	81	40	41	410	189	221	5	2	3	3,226	1,393	1,833
COVID-19 (U07.1)[4]	416,893	236,610	180,283	68,656	42,070	26,586	4,624	2,432	2,192	12,757	7,595	5,162	55,994	27,613	28,381	1,087	595	492	271,253	154,806	116,447
Dementia-related causes[4]	279,704	92,303	187,401	17,876	5,815	12,061	874	264	610	6,793	2,189	4,604	23,685	7,506	16,179	170	61	109	229,199	76,082	153,117
Drug-induced deaths[4]	111,219	77,309	33,910	13,436	10,513	2,923	1,448	876	572	1,017	757	260	19,944	14,457	5,487	137	106	31	73,225	49,176	24,049
Drug overdose deaths[4]	106,699	74,301	32,398	12,986	10,156	2,830	1,358	824	534	971	719	252	19,212	13,929	5,283	127	97	30	70,121	47,217	22,904
Alcohol-induced deaths[4]	54,258	38,700	15,558	7,533	6,148	1,385	2,221	1,377	844	638	504	134	5,023	3,477	1,546	40	33	7	38,117	26,671	11,446
Firearm-related injuries[4]	48,830	41,866	6,964	5,741	5,014	727	466	390	76	576	469	107	15,290	13,349	1,941	68	63	5	26,054	22,068	3,986

– Quantity zero.
… Category not applicable.
[1]Includes deaths with origin not stated, origin not classifiable, and two or more races reported; see Technical Notes.
[2]Includes people of Hispanic origin of any race; see Technical Notes.
[3]Only one race was reported on the death certificate; see Technical Notes.
[4]Included in selected categories above. For the list of ICD–10 codes included, see Technical Notes.

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

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

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							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All causes	1,043.8	1,118.2	970.8	503.9	571.3	434.7	1,100.0	1,216.9	986.2	469.5	511.7	430.5	1,074.5	1,185.8	971.4	834.0	917.5	748.6	1,294.9	1,368.8	1,222.1
Salmonella infections (A01–A02)	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.0	0.0	*
Shigellosis and amebiasis (A03,A06)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Certain other intestinal infections (A04,A07–A09)	2.1	1.8	2.5	1.0	0.9	1.0	1.9	1.9	1.9	0.8	0.7	0.8	1.8	1.8	1.9	*	*	*	2.7	2.2	3.3
Tuberculosis (A16–A19)	0.2	0.2	0.1	0.2	0.2	0.1	*	*	*	0.7	1.0	0.4	0.2	0.3	0.1	*	*	*	0.1	0.2	0.1
Respiratory tuberculosis (A16)	0.1	0.2	0.1	0.1	0.2	0.1	*	*	*	0.6	0.9	0.4	0.2	0.2	0.1	*	*	*	0.1	0.1	0.1
Other tuberculosis (A17–A19)	0.1	0.1	0.0	0.0	*	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.0	0.1	0.0
Whooping cough (A37)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Scarlet fever and erysipelas (A38,A46)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Meningococcal infection (A39)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Septicemia (A40–A41)	12.4	12.5	12.4	5.0	5.2	4.9	11.9	12.6	11.2	4.5	4.8	4.2	17.1	16.9	17.3	9.7	10.1	9.4	15.0	15.0	14.9
Syphilis (A50–A53)	0.0	0.0	*	*	*	*	*	*	*	*	*	*	0.1	*	*	*	*	*	*	*	*
Acute poliomyelitis (A80)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Arthropod-borne viral encephalitis (A83–A84,A85.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Measles (B05)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Viral hepatitis (B15–B19)	1.1	1.4	0.8	0.8	1.2	0.5	2.4	2.9	2.0	1.0	1.3	0.7	1.2	1.6	0.9	3.5	*	*	1.1	1.5	0.8
Human immunodeficiency virus (HIV) disease (B20–B24)	1.5	2.3	0.7	1.2	2.0	0.4	1.5	2.1	*	0.4	0.6	*	5.8	8.3	3.5	*	*	*	0.8	1.4	0.2
Malaria (B50–B54)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20–A36, A42–A44,A48–A49,A54–A79, A81–A82,A85.0–A85.1,A85.8, A86–B04,B06–B09,B25–B49, B55–B99,U07.1)	128.9	147.6	110.6	111.2	134.5	87.4	194.0	206.6	181.7	66.4	82.3	51.7	137.4	141.2	133.9	177.7	192.3	162.8	141.8	162.8	121.0
Malignant neoplasms (C00–C97)	182.4	193.9	171.1	72.7	73.6	71.8	129.0	132.2	125.9	97.9	100.8	95.2	167.3	175.1	160.1	134.1	118.4	150.2	235.0	252.4	217.9
Malignant neoplasms of lip, oral cavity and pharynx (C00–C14)	3.4	5.0	1.9	1.1	1.6	0.6	1.8	2.1	*	2.3	3.1	1.5	2.6	4.0	1.3	4.0	*	*	4.6	6.6	2.6
Malignant neoplasm of esophagus (C15)	4.7	7.6	1.9	1.2	2.0	0.5	3.6	6.4	*	1.7	2.7	0.8	2.8	4.0	1.7	*	*	*	6.7	11.0	2.6

See footnotes at end of table.

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

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							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Malignant neoplasm of stomach (C16)	3.3	4.0	2.6	3.1	3.4	2.8	3.9	4.7	3.1	4.5	5.0	3.9	4.4	5.5	3.5	4.8	6.3	*	3.0	3.9	2.2
Malignant neoplasms of colon, rectum and anus (C18–C21)	16.3	17.6	15.0	7.7	8.5	6.8	13.2	15.4	11.1	10.0	10.7	9.4	17.0	19.2	15.1	13.3	14.2	12.3	20.0	21.4	18.7
Malignant neoplasms of liver and intrahepatic bile ducts (C22)	8.7	11.5	5.9	6.2	7.9	4.5	10.7	13.4	8.1	9.0	11.8	6.3	8.4	11.7	5.3	9.1	12.3	*	9.7	12.8	6.6
Malignant neoplasm of pancreas (C25)	14.4	15.2	13.7	6.0	5.8	6.1	8.7	8.6	8.8	8.6	8.7	8.5	14.0	14.0	14.0	10.9	8.5	13.2	18.3	19.6	17.1
Malignant neoplasm of larynx (C32)	1.2	1.9	0.5	0.4	0.7	0.1	*	*	*	0.3	0.6	*	1.5	2.4	0.6	*	*	*	1.5	2.4	0.6
Malignant neoplasms of trachea, bronchus and lung (C33–C34)	40.6	43.6	37.6	9.2	10.1	8.3	27.2	27.3	27.2	19.2	21.8	16.8	34.0	39.8	28.7	21.2	19.9	22.6	55.4	58.8	52.1
Malignant melanoma of skin (C43)	2.5	3.3	1.7	0.5	0.6	0.4	*	*	*	0.2	0.2	0.2	0.3	0.3	0.3	*	*	*	3.9	5.2	2.7
Malignant neoplasm of breast (C50)	12.9	0.3	25.3	5.4	0.1	10.9	8.2	*	16.1	6.9	*	13.3	15.1	0.4	28.7	14.9	*	30.0	15.8	0.4	31.0
Malignant neoplasm of cervix uteri (C53)	1.3	…	2.6	1.0	…	2.0	2.2	…	4.3	1.0	…	2.0	1.8	…	3.5	*	…	*	1.4	…	2.7
Malignant neoplasms of corpus uteri and uterus, part unspecified (C54–C55)	3.7	…	7.3	1.8	…	3.6	2.7	…	5.3	2.1	…	4.0	6.0	…	11.5	9.7	…	19.7	4.1	…	8.0
Malignant neoplasm of ovary (C56)	4.0	…	8.0	1.9	…	3.9	3.3	…	6.6	2.6	…	5.1	3.2	…	6.2	*	…	*	5.2	…	10.3
Malignant neoplasm of prostate (C61)	9.8	19.8	…	3.6	7.2	…	5.5	11.2	…	3.4	7.1	…	12.6	26.3	…	6.9	13.6	…	12.2	24.5	…
Malignant neoplasms of kidney and renal pelvis (C64–C65)	4.3	5.7	2.9	2.3	2.9	1.7	5.1	6.9	3.2	1.5	2.0	1.1	3.1	4.0	2.2	*	*	*	5.5	7.5	3.6
Malignant neoplasm of bladder (C67)	5.1	7.4	2.8	1.3	1.8	0.9	2.0	2.9	*	1.5	2.1	1.0	3.0	3.9	2.2	*	*	*	7.3	10.8	3.8
Malignant neoplasms of meninges, brain and other parts of central nervous system (C70–C72)	5.4	6.1	4.6	2.5	2.9	2.1	2.7	3.3	2.1	2.4	2.7	2.1	2.7	3.0	2.5	*	*	*	7.4	8.4	6.3
Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81–C96)	17.3	20.1	14.6	7.5	8.2	6.9	9.5	10.3	8.6	8.5	9.7	7.5	14.3	15.7	13.0	10.1	11.4	8.7	22.5	26.6	18.5
Hodgkin disease (C81)	0.3	0.4	0.2	0.2	0.2	0.2	*	*	*	0.1	*	*	0.3	0.4	0.2	*	*	*	0.4	0.4	0.3

See footnotes at end of table.

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hodgkin lymphoma (C82–C85)	6.0	7.0	5.1	2.8	2.9	2.6	3.3	3.7	2.8	3.7	4.4	3.1	3.5	4.1	3.0	*	*	*	8.1	9.4	6.7
Leukemia (C91–C95)	7.0	8.2	5.8	2.9	3.2	2.7	3.8	3.8	3.9	3.2	3.6	2.9	4.7	5.1	4.3	4.8	*	*	9.4	11.3	7.6
Multiple myeloma and immunoproliferative neoplasms (C88,C90)	3.9	4.4	3.4	1.6	1.8	1.5	2.0	2.5	1.6	1.5	1.6	1.3	5.8	6.0	5.5	*	*	*	4.6	5.4	3.9
Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96)	0.0	0.1	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.1	0.1	0.0
All other and unspecified malignant neoplasms (C17, C23–C24,C26–C31,C37–C41, C44–C49,C51–C52,C57–C60, C62–C63,C66,C68–C69, C73–C80,C97)	23.5	24.9	22.2	9.8	10.0	9.6	17.1	17.4	16.7	12.0	12.5	11.6	20.3	20.9	19.8	16.0	16.4	15.5	30.5	32.6	28.5
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00–D48)	4.9	5.3	4.5	1.7	1.7	1.6	2.3	3.1	1.6	2.5	2.8	2.3	3.6	3.5	3.7	*	*	*	6.6	7.3	6.0
Anemias (D50–D64)	1.8	1.7	2.0	0.7	0.6	0.7	1.4	*	*	0.8	0.9	0.8	3.0	2.7	3.2	*	*	*	2.1	1.9	2.3
Diabetes mellitus (E10–E14)	31.1	35.7	26.7	19.9	22.2	17.7	51.8	56.9	46.7	18.5	20.8	16.4	45.3	48.9	42.0	50.1	55.3	44.9	33.4	39.3	27.6
Nutritional deficiencies (E40–E64)	5.3	4.0	6.5	1.7	1.3	2.0	3.9	3.5	4.3	1.9	1.6	2.2	4.5	3.7	5.2	*	*	*	7.1	5.3	8.9
Malnutrition (E40–E46)	5.2	3.9	6.4	1.6	1.3	2.0	3.7	3.3	4.0	1.9	1.6	2.2	4.4	3.6	5.0	*	*	*	7.0	5.2	8.7
Other nutritional deficiencies (E50–E64)	0.1	0.1	0.1	0.0	*	*	*	*	*	*	*	*	0.1	0.1	0.1	*	*	*	0.2	0.1	0.2
Meningitis (G00,G03)	0.2	0.2	0.1	0.1	0.1	0.1	*	*	*	0.1	*	*	0.2	0.3	0.2	*	*	*	0.2	0.2	0.1
Parkinson disease (G20–G21)	11.6	14.3	8.9	3.8	4.3	3.2	5.0	5.1	4.9	5.9	7.2	4.8	4.5	5.4	3.7	3.4	*	*	16.7	20.7	12.7
Alzheimer disease (G30)	36.0	22.5	49.2	14.6	8.7	20.6	15.1	8.3	21.7	16.3	10.2	21.8	23.0	13.9	31.5	13.6	9.2	18.1	49.0	30.9	66.9
Major cardiovascular diseases (I00–I78)	279.0	297.4	260.9	106.0	114.8	97.0	201.0	227.9	174.8	131.7	142.0	122.1	297.1	325.3	270.9	214.6	248.8	179.6	354.0	375.0	333.2
Diseases of heart (I00–I09, I11,I13,I20–I51)	209.6	234.1	185.5	75.6	85.8	65.1	153.3	184.6	122.9	86.4	99.2	74.5	216.2	246.0	188.7	160.0	194.8	124.4	269.9	299.9	240.3
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	1.2	0.8	1.5	0.4	0.3	0.6	1.0	*	*	0.6	0.4	0.8	0.8	0.6	1.0	*	*	*	1.6	1.1	2.0
Hypertensive heart disease (I11)	20.4	21.0	19.9	7.5	8.3	6.8	20.8	25.3	16.3	7.6	7.8	7.4	30.6	35.2	26.3	15.6	20.2	11.0	24.2	23.9	24.4
Hypertensive heart and renal disease (I13)	4.2	3.9	4.4	1.5	1.4	1.6	4.9	5.0	4.7	1.6	1.4	1.8	5.4	5.6	5.3	*	*	*	5.2	4.8	5.6

See footnotes at end of table.

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

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Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Ischemic heart diseases (I20–I25)	113.1	137.8	89.0	44.8	53.9	35.6	82.1	103.3	61.4	53.6	66.7	41.5	106.2	126.9	87.1	86.7	110.2	62.7	145.9	178.2	113.9
Acute myocardial infarction (I21–I22)	32.9	40.0	25.9	13.4	15.9	10.8	24.5	30.8	18.4	16.4	20.5	12.7	30.9	36.3	25.9	23.5	25.9	21.0	42.3	51.7	32.9
Other acute ischemic heart diseases (I24)	1.4	1.6	1.2	0.4	0.5	0.3	1.1	*	*	0.6	0.7	0.5	1.8	2.1	1.5	*	*	*	1.8	2.1	1.6
Other forms of chronic ischemic heart disease (I20,I25)	78.8	96.2	61.8	31.0	37.5	24.4	56.5	71.7	41.7	36.6	45.5	28.3	73.6	88.6	59.7	62.4	83.4	41.0	101.8	124.4	79.5
Atherosclerotic cardiovascular disease, so described (I25.0)	23.6	30.3	16.9	10.6	14.3	6.9	20.8	27.0	14.7	10.4	13.8	7.3	29.4	38.4	21.1	19.6	27.2	12.0	28.3	36.1	20.6
All other forms of chronic ischemic heart disease (I20,I25.1–I25.9)	55.3	65.8	44.9	20.4	23.1	17.6	35.7	44.6	27.1	26.1	31.7	21.0	44.1	50.2	38.6	42.8	56.2	29.1	73.5	88.4	58.9
Other heart diseases (I26–I51)	70.6	70.6	70.7	21.2	21.9	20.5	44.7	50.2	39.3	23.0	23.0	23.1	73.2	77.7	69.0	52.4	58.7	45.9	93.1	91.8	94.4
Acute and subacute endocarditis (I33)	0.5	0.7	0.4	0.3	0.3	0.2	1.1	*	*	0.2	0.2	*	0.6	0.7	0.4	*	*	*	0.7	0.8	0.5
Diseases of pericardium and acute myocarditis (I30–I31,I40)	0.4	0.4	0.4	0.2	0.2	0.2	*	*	*	0.1	*	*	0.4	0.5	0.3	*	*	*	0.5	0.5	0.5
Heart failure (I50)	25.6	24.5	26.7	7.4	7.1	7.8	14.8	17.4	12.2	8.1	7.8	8.5	24.2	24.4	24.0	13.1	14.8	11.3	34.5	32.7	36.2
All other forms of heart disease (I26–I28, I34–I38,I42–I49,I51)	44.1	45.0	43.2	13.4	14.3	12.4	28.5	31.3	25.7	14.6	14.9	14.4	48.1	52.2	44.2	38.3	42.6	33.9	57.5	57.8	57.2
Essential hypertension and hypertensive renal disease (I10,I12,I15)	12.9	12.2	13.6	5.9	5.8	6.1	10.4	10.7	10.2	9.3	9.1	9.5	18.8	19.3	18.4	10.4	9.2	11.6	14.6	13.5	15.7
Cerebrovascular diseases (I60–I69)	49.1	43.1	54.9	22.0	20.3	23.7	32.6	29.0	36.1	32.7	30.1	35.0	54.6	51.8	57.1	39.4	39.2	39.7	59.9	51.4	68.2
Atherosclerosis (I70)	1.3	1.2	1.3	0.4	0.4	0.4	*	*	*	0.7	0.7	0.7	1.1	1.1	1.1	*	*	*	1.7	1.6	1.8
Other diseases of circulatory system (I71–I78)	6.2	6.7	5.6	2.1	2.5	1.7	3.9	3.1	4.7	2.6	2.8	2.4	6.4	7.2	5.7	4.3	*	*	7.9	8.6	7.3
Aortic aneurysm and dissection (I71)	3.0	3.7	2.4	0.9	1.3	0.5	1.1	*	*	1.6	2.0	1.2	2.7	3.5	2.1	*	*	*	4.0	4.8	3.2
Other diseases of arteries, arterioles and capillaries (I72–I78)	3.1	3.1	3.2	1.2	1.2	1.2	2.8	2.3	3.3	1.0	0.8	1.2	3.7	3.7	3.6	*	*	*	4.0	3.9	4.0

See footnotes at end of table.

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

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Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Other disorders of circulatory system (I80–I99)	1.7	1.8	1.6	0.8	0.8	0.7	1.6	1.7	*	0.4	0.5	0.4	2.8	2.9	2.6	*	*	*	2.0	2.0	1.9
Influenza and pneumonia (J09–J18)	12.6	13.6	11.7	5.8	6.4	5.3	13.6	15.6	11.6	8.1	9.3	6.9	12.7	13.8	11.6	9.1	12.3	*	15.6	16.7	14.5
Influenza (J09–J11)	0.2	0.2	0.2	0.1	0.1	0.1	*	*	*	*	*	*	0.2	0.2	0.2	*	*	*	0.2	0.2	0.2
Pneumonia (J12–J18)	12.4	13.4	11.5	5.8	6.3	5.2	13.2	15.2	11.2	8.0	9.2	6.8	12.5	13.7	11.5	8.9	12.3	*	15.4	16.4	14.3
Other acute lower respiratory infections (J20–J22,U04)	0.1	0.1	0.1	0.0	*	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.1	0.1	0.1
Acute bronchitis and bronchiolitis (J20–J21)	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.0	0.0	0.0
Other and unspecified acute lower respiratory infections (J22,U04)	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.0	0.0	0.0
Chronic lower respiratory diseases (J40–J47)	42.9	41.1	44.7	8.7	8.7	8.8	33.6	30.7	36.5	8.9	11.1	6.9	26.8	27.8	25.9	14.4	16.1	12.6	62.0	58.6	65.4
Bronchitis, chronic and unspecified (J40–J42)	0.1	0.1	0.1	0.0	*	*	*	*	*	*	*	*	0.1	0.1	0.1	*	*	*	0.1	0.1	0.1
Emphysema (J43)	2.2	2.4	2.0	0.4	0.5	0.3	2.0	1.9	2.2	0.4	0.7	*	1.2	1.4	1.0	*	*	*	3.3	3.5	3.1
Asthma (J45–J46)	1.1	0.9	1.2	0.6	0.5	0.7	*	*	*	0.7	0.7	0.6	2.4	2.3	2.5	*	*	*	1.0	0.7	1.2
Other chronic lower respiratory diseases (J44,J47)	39.5	37.7	41.3	7.8	7.7	7.8	30.7	28.3	32.9	7.8	9.6	6.1	23.0	23.9	22.3	12.8	14.5	11.0	57.7	54.3	61.0
Pneumoconioses and chemical effects (J60–J66,J68,U07.0)	0.2	0.3	0.0	0.0	0.1	*	*	*	*	*	*	*	0.1	0.1	*	*	*	*	0.3	0.5	0.0
Pneumonitis due to solids and liquids (J69)	6.0	7.1	5.0	2.0	2.3	1.8	4.3	5.2	3.4	3.1	3.8	2.5	5.7	6.5	5.1	*	*	*	7.8	9.3	6.4
Other diseases of respiratory system (J00–J06, J30–J39,J67,J70–J98)	13.8	14.7	12.9	6.0	6.3	5.6	13.5	14.3	12.8	5.9	6.6	5.2	11.4	11.2	11.6	5.6	*	*	18.1	19.4	16.8
Peptic ulcer (K25–K28)	1.2	1.3	1.1	0.6	0.6	0.5	1.5	*	*	0.8	0.8	0.7	1.0	1.2	0.9	*	*	*	1.5	1.6	1.5
Diseases of appendix (K35–K38)	0.1	0.2	0.1	0.1	0.1	0.1	*	*	*	*	*	*	0.1	0.2	*	*	*	*	0.2	0.2	0.1
Hernia (K40–K46)	0.7	0.7	0.8	0.3	0.3	0.3	*	*	*	0.2	0.2	*	0.5	0.5	0.5	*	*	*	1.0	0.9	1.1
Chronic liver disease and cirrhosis (K70,K73–K74)	17.0	21.7	12.5	14.1	19.5	8.7	77.4	86.7	68.4	4.5	5.8	3.2	10.8	13.5	8.4	8.1	12.3	*	20.2	25.4	15.1
Alcoholic liver disease (K70)	10.0	13.7	6.3	8.4	13.3	3.5	61.3	70.7	52.2	2.1	3.4	0.9	6.3	8.2	4.5	4.2	6.6	*	11.6	15.7	7.6
Other chronic liver disease and cirrhosis (K73–K74)	7.1	8.0	6.2	5.7	6.2	5.2	16.2	16.0	16.3	2.4	2.4	2.3	4.5	5.3	3.9	4.0	*	*	8.6	9.8	7.5
Cholelithiasis and other disorders of gallbladder (K80–K82)	1.4	1.4	1.3	0.7	0.7	0.7	2.1	1.9	2.3	0.8	0.9	0.7	1.0	1.0	1.0	*	*	*	1.7	1.8	1.6

See footnotes at end of table.

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Nephritis, nephrotic syndrome and nephrosis (N00–N07, N17–N19,N25–N27)	16.4	17.4	15.4	8.0	8.6	7.5	16.1	15.3	16.9	8.3	9.1	7.7	24.9	25.8	24.1	18.7	18.0	19.4	18.5	19.9	17.2
Acute and rapidly progressive nephritic and nephrotic syndrome (N00–N01,N04)	0.2	0.2	0.2	0.1	0.1	0.1	*	*	*	*	*	*	0.3	0.3	0.3	*	*	*	0.3	0.3	0.3
Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02–N03,N05–N07,N26)	0.1	0.1	0.1	0.0	*	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.1	0.1	0.1
Renal failure (N17–N19)	16.0	17.1	15.1	7.9	8.4	7.3	15.7	15.0	16.4	8.2	8.9	7.4	24.5	25.4	23.7	18.5	17.7	19.4	18.1	19.4	16.8
Other disorders of kidney (N25,N27)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Infections of kidney (N10–N12,N13.6,N15.1)	0.4	0.3	0.5	0.2	0.2	0.3	*	*	*	0.2	*	0.3	0.3	0.2	0.3	*	*	*	0.5	0.3	0.6
Hyperplasia of prostate (N40)	0.2	0.4	…	0.1	0.2	…	*	*	…	0.2	0.4	…	0.2	0.4	…	*	*	…	0.3	0.5	…
Inflammatory diseases of female pelvic organs (N70–N76)	0.1	…	0.1	*	…	*	*	…	*	*	…	*	0.1	…	0.2	*	…	*	0.1	…	0.1
Pregnancy, childbirth and the puerperium (O00–O99)	0.5	…	1.0	0.6	…	1.1	1.7	…	3.4	0.3	…	0.5	1.2	…	2.4	*	…	*	0.3	…	0.7
Pregnancy with abortive outcome (O00–O07)	0.0	…	0.0	*	…	*	*	…	*	*	…	*	*	…	*	*	…	*	*	…	*
Other complications of pregnancy, childbirth and the puerperium (O10–O99)	0.5	…	1.0	0.5	…	1.1	1.7	…	3.3	0.3	…	0.5	1.2	…	2.3	*	…	*	0.3	…	0.7
Certain conditions originating in the perinatal period (P00–P96)	2.9	3.2	2.6	3.6	3.9	3.2	2.3	2.1	2.6	2.0	2.3	1.6	6.7	7.7	5.7	4.3	*	*	1.8	2.0	1.6
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	2.9	3.1	2.8	2.7	2.7	2.6	3.4	3.6	3.2	1.2	1.3	1.1	3.4	3.5	3.3	*	*	*	3.0	3.2	2.9
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	10.4	10.5	10.3	4.7	5.7	3.6	12.5	14.8	10.2	3.5	3.6	3.4	12.9	14.5	11.4	8.3	7.9	8.7	12.5	12.0	13.1
All other diseases (residual)	119.8	106.6	132.7	43.9	41.5	46.3	123.2	126.4	120.0	42.8	38.9	46.5	109.4	101.6	116.5	63.4	64.1	62.7	157.4	138.0	176.5
Accidents (unintentional injuries) (V01–X59,Y85–Y86)	67.8	91.0	45.0	43.3	64.5	21.6	120.9	157.6	85.2	19.1	25.9	12.9	80.8	120.1	44.5	51.4	77.0	25.2	78.2	100.6	56.1
Transport accidents (V01–V99,Y85)	15.0	21.9	8.2	13.5	20.1	6.8	36.3	47.9	25.0	5.0	7.0	3.2	21.4	33.0	10.5	16.6	25.6	7.4	15.1	21.8	8.6

See footnotes at end of table.

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Motor vehicle accidents (V02–V04,V09.0,V09.2, V12–V14,V19.0–V19.2, V19.4–V19.6,V20–V79, V80.3–V80.5,V81.0–V81.1, V82.0–V82.1,V83–V86, V87.0–V87.8,V88.0–V88.8, V89.0,V89.2)	14.2	20.5	7.9	13.0	19.2	6.6	34.0	43.8	24.4	4.7	6.5	3.1	20.5	31.5	10.3	14.9	22.7	6.8	14.1	20.2	8.2
Other land transport accidents (V01,V05–V06, V09.1,V09.3–V09.9,V10–V11, V15–V18,V19.3,V19.8–V19.9, V80.0–V80.2,V80.6–V80.9, V81.2–V81.9,V82.2–V82.9, V87.9,V88.9,V89.1, V89.3,V89.9)	0.4	0.6	0.1	0.3	0.5	0.1	1.3	2.2	*	0.1	0.2	*	0.4	0.8	0.1	*	*	*	0.4	0.6	0.2
Water, air and space, and other and unspecified transport accidents and their sequelae (V90–V99,Y85)	0.5	0.8	0.2	0.2	0.4	0.1	1.1	1.9	*	0.2	0.3	*	0.4	0.8	0.1	*	*	*	0.6	1.1	0.2
Nontransport accidents (W00–X59,Y86)	52.8	69.1	36.8	29.8	44.4	14.7	84.6	109.7	60.1	14.1	19.0	9.6	59.5	87.0	33.9	34.8	51.5	17.8	63.0	78.8	47.6
Falls (W00–W19)	13.5	13.9	13.0	4.4	5.4	3.4	10.0	11.2	8.9	6.1	7.1	5.2	5.2	6.3	4.1	6.5	8.8	*	19.3	19.4	19.2
Accidental discharge of firearms (W32–W34)	0.2	0.3	0.0	0.1	0.2	*	*	*	*	*	*	*	0.4	0.7	*	*	*	*	0.2	0.3	0.0
Accidental drowning and submersion (W65–W74)	1.3	2.0	0.7	1.0	1.5	0.4	2.2	3.7	*	1.1	1.6	0.6	1.8	2.9	0.7	*	*	*	1.3	1.9	0.7
Accidental exposure to smoke, fire and flames (X00–X09)	1.0	1.3	0.8	0.4	0.5	0.3	1.9	2.1	1.8	0.3	0.3	0.3	1.7	2.1	1.3	*	*	*	1.2	1.5	0.9
Accidental poisoning and exposure to noxious substances (X40–X49)	30.7	44.1	17.6	20.9	32.8	8.7	59.7	77.3	42.5	4.4	7.3	1.7	43.9	66.6	22.9	20.1	31.3	8.7	33.7	46.8	20.8
Other and unspecified nontransport accidents and their sequelae (W20–W31, W35–W64,W75–W99, X10–X39,X50–X59,Y86)	6.1	7.5	4.7	2.9	4.0	1.9	10.4	15.0	6.0	2.2	2.6	1.8	6.6	8.5	4.9	4.6	*	*	7.4	8.9	5.9

See footnotes at end of table.

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)	14.5	23.3	5.9	7.8	12.5	3.0	28.2	43.4	13.4	7.0	10.2	4.1	8.8	14.8	3.3	13.1	20.5	*	18.6	30.0	7.5
Intentional self-harm (suicide) by discharge of firearms (X72–X74)	7.9	14.0	2.0	3.3	5.7	0.8	9.8	17.3	2.6	1.8	3.3	0.4	5.2	9.4	1.3	4.3	7.9	*	10.8	18.9	2.8
Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60–X71, X75–X84,Y87.0)	6.6	9.4	3.8	4.6	6.8	2.3	18.4	26.1	10.9	5.2	6.9	3.7	3.6	5.4	2.0	8.8	12.6	*	7.9	11.1	4.7
Assault (homicide) (*U01–*U02,X85–Y09,Y87.1)	7.8	12.8	3.0	7.1	11.6	2.5	12.5	19.9	5.3	1.6	2.2	1.1	34.2	61.0	9.4	7.3	12.6	*	3.2	4.4	1.9
Assault (homicide) by discharge of firearms (*U01.4, X93–X95)	6.3	10.7	2.0	5.5	9.4	1.5	7.5	12.1	3.1	1.0	1.5	0.6	30.4	55.2	7.4	5.9	10.7	*	2.1	3.0	1.1
Assault (homicide) by other and unspecified means and their sequelae (*U01.0–*U01.3, *U01.5–*U01.9,*U02,X85–X92, X96–Y09,Y87.1)	1.5	2.1	0.9	1.6	2.2	1.0	5.0	7.8	2.3	0.6	0.6	0.5	3.8	5.8	2.0	*	*	*	1.1	1.4	0.8
Legal intervention (Y35,Y89.0)	0.2	0.4	0.0	0.2	0.5	*	*	*	*	*	*	*	0.4	0.8	*	*	*	*	0.2	0.3	0.0
Events of undetermined intent (Y10–Y34,Y87.2,Y89.9)	1.9	2.5	1.3	0.8	1.2	0.4	4.9	5.5	4.2	0.4	0.5	0.2	3.6	5.3	2.0	*	*	*	2.0	2.5	1.5
Discharge of firearms, undetermined intent (Y22–Y24)	0.1	0.2	0.1	0.1	0.1	*	0.8	*	*	*	*	*	0.3	0.5	0.1	*	*	*	0.1	0.2	0.1
Other and unspecified events of undetermined intent and their sequelae (Y10–Y21, Y25–Y34,Y87.2,Y89.9)	1.7	2.3	1.2	0.8	1.1	0.4	4.0	4.3	3.8	0.3	0.5	0.2	3.3	4.8	1.9	*	*	*	1.9	2.4	1.4
Operations of war and their sequelae (Y36,Y89.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Complications of medical and surgical care (Y40–Y84,Y88)	1.8	2.0	1.7	0.9	1.0	0.8	2.5	2.6	2.4	0.7	0.9	0.6	2.3	2.3	2.3	*	*	*	2.2	2.4	2.0

See footnotes at end of table.

Table 10. Death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Enterocolitis due to *Clostridium difficile* (A04.7)[4]	1.2	1.1	1.4	0.5	0.5	0.5	1.2	*	*	0.4	0.4	0.4	1.0	0.9	1.0	*	*	*	1.6	1.4	1.8
COVID-19 (U07.1)[4]	125.6	143.9	107.6	109.6	132.6	86.0	188.6	201.0	176.5	64.8	80.3	50.5	133.8	137.2	130.6	173.6	187.9	159.0	137.8	158.4	117.5
Dementia-related causes[4]	84.3	56.2	111.9	28.5	18.3	39.0	35.6	21.8	49.1	34.5	23.2	45.0	56.6	37.3	74.4	27.1	19.3	35.2	116.4	77.9	154.5
Drug-induced deaths[4]	33.5	47.0	20.2	21.4	33.1	9.5	59.1	72.4	46.1	5.2	8.0	2.5	47.6	71.8	25.2	21.9	33.5	10.0	37.2	50.3	24.3
Drug overdose deaths[4]	32.1	45.2	19.3	20.7	32.0	9.1	55.4	68.1	43.0	4.9	7.6	2.5	45.9	69.2	24.3	20.3	30.6	9.7	35.6	48.3	23.1
Alcohol-induced deaths[4]	16.3	23.5	9.3	12.0	19.4	4.5	90.6	113.8	68.0	3.2	5.3	1.3	12.0	17.3	7.1	6.4	10.4	*	19.4	27.3	11.5
Firearm-related injuries[4]	14.7	25.5	4.2	9.2	15.8	2.4	19.0	32.2	6.1	2.9	5.0	1.0	36.5	66.3	8.9	10.9	19.9	*	13.2	22.6	4.0

0.0 Quantity more than zero but less than 0.05.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
… Category not applicable.
[1]Includes deaths with origin not stated, origin not classifiable, and two or more races reported; see Technical Notes.
[2]Includes people of Hispanic origin of any race; see Technical Notes.
[3]Only one race was reported on the death certificate; see Technical Notes.
[4]Included in selected categories above. For the list of ICD–10 codes included, see Technical Notes.

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

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021

[Age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All causes	879.7	1,048.0	733.3	724.7	884.9	582.7	1,109.2	1,282.7	946.6	461.7	554.9	386.3	1,118.0	1,374.0	917.2	924.3	1,042.8	806.0	893.9	1,055.6	751.4
Salmonella infections (A01–A02)	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.0	0.0	*
Shigellosis and amebiasis (A03,A06)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Certain other intestinal infections (A04,A07–A09)	1.8	1.7	1.8	1.4	1.5	1.4	1.9	2.2	1.7	0.7	0.8	0.7	2.0	2.1	1.8	*	*	*	1.8	1.7	2.0
Tuberculosis (A16–A19)	0.1	0.2	0.1	0.2	0.3	0.2	*	*	*	0.7	1.1	0.4	0.2	0.3	0.1	*	*	*	0.1	0.1	0.0
Respiratory tuberculosis (A16)	0.1	0.2	0.1	0.2	0.2	0.1	*	*	*	0.6	0.9	0.3	0.2	0.3	0.1	*	*	*	0.0	0.1	0.0
Other tuberculosis (A17–A19)	0.0	0.0	0.0	0.1	*	*	*	*	*	*	*	*	0.0	*	*	*	*	*	0.0	0.0	0.0
Whooping cough (A37)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Scarlet fever and erysipelas (A38,A46)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Meningococcal infection (A39)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Septicemia (A40–A41)	10.2	11.4	9.3	7.4	8.5	6.6	11.8	13.2	10.6	4.5	5.3	3.8	17.6	20.2	16.0	10.5	11.6	9.6	10.0	11.2	9.2
Syphilis (A50–A53)	0.0	0.0	*	*	*	*	*	*	*	*	*	*	0.0	*	*	*	*	*	*	*	*
Acute poliomyelitis (A80)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Arthropod-borne viral encephalitis (A83–A84,A85.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Measles (B05)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Viral hepatitis (B15–B19)	0.8	1.1	0.6	1.0	1.5	0.6	2.2	2.7	1.7	0.9	1.3	0.6	1.1	1.5	0.8	3.4	*	*	0.8	1.0	0.6
Human immunodeficiency virus (HIV) disease (B20–B24)	1.3	2.1	0.6	1.4	2.3	0.5	1.5	2.1	*	0.3	0.6	*	5.5	8.0	3.3	*	*	*	0.6	1.1	0.2
Malaria (B50–B54)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other and unspecified infectious and parasitic diseases and their sequelae (A00,A05,A20–A36, A42–A44,A48–A49,A54–A79, A81–A82,A85.0–A85.1,A85.8, A86–B04,B06–B09,B25–B49, B55–B99,U07.1)	106.9	134.6	84.0	154.0	202.0	113.2	189.4	213.5	167.8	63.5	86.2	45.8	140.1	163.8	123.6	189.9	210.9	168.8	96.2	121.5	75.2
Malignant neoplasms (C00–C97)	146.6	172.0	127.7	105.1	122.1	93.3	124.9	138.5	114.3	92.9	105.4	83.7	167.4	203.9	144.5	144.6	132.1	156.9	153.7	180.1	133.6
Malignant neoplasms of lip, oral cavity and pharynx (C00–C14)	2.7	4.2	1.4	1.5	2.4	0.8	1.7	1.9	*	2.1	3.1	1.3	2.5	4.3	1.2	4.3	*	*	3.0	4.5	1.6
Malignant neoplasm of esophagus (C15)	3.7	6.4	1.4	1.7	3.1	0.6	3.3	6.3	*	1.6	2.6	0.7	2.6	4.3	1.5	*	*	*	4.3	7.6	1.5

See footnotes at end of table.

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Malignant neoplasm of stomach (C16)	2.7	3.5	2.0	4.4	5.4	3.6	3.9	5.3	2.7	4.2	5.2	3.4	4.5	6.5	3.2	5.1	6.6	*	2.0	2.8	1.4
Malignant neoplasms of colon, rectum and anus (C18–C21)	13.4	15.6	11.4	10.8	13.3	8.9	12.9	15.7	10.5	9.5	10.9	8.3	17.2	21.8	13.9	14.3	15.2	13.3	13.6	15.6	11.7
Malignant neoplasms of liver and intrahepatic bile ducts (C22)	6.7	9.4	4.3	8.8	12.1	6.1	9.4	12.4	6.8	8.3	11.8	5.6	7.8	12.0	4.6	9.4	13.4	*	6.1	8.6	4.0
Malignant neoplasm of pancreas (C25)	11.4	13.0	10.0	8.8	9.3	8.3	8.3	8.6	7.9	8.2	8.9	7.6	13.9	15.3	12.6	12.0	9.3	14.2	11.7	13.6	10.1
Malignant neoplasm of larynx (C32)	0.9	1.6	0.3	0.5	1.1	0.1	*	*	*	0.3	0.6	*	1.4	2.6	0.5	*	*	*	0.9	1.6	0.4
Malignant neoplasms of trachea, bronchus and lung (C33–C34)	31.7	37.4	27.3	14.2	18.1	11.3	26.3	28.5	24.5	18.3	23.0	14.8	33.4	45.0	25.4	23.5	22.9	24.0	35.1	40.4	30.9
Malignant melanoma of skin (C43)	2.0	2.9	1.3	0.7	0.9	0.5	*	*	*	0.2	0.2	0.2	0.3	0.4	0.3	*	*	*	2.6	3.8	1.7
Malignant neoplasm of breast (C50)	10.6	0.3	19.4	7.4	0.1	13.6	7.7	*	14.3	6.4	*	11.5	15.3	0.5	26.3	15.8	*	30.8	10.8	0.3	19.8
Malignant neoplasm of cervix uteri (C53)	1.2	…	2.3	1.2	…	2.3	2.1	…	4.1	1.0	…	1.7	1.8	…	3.3	*	…	*	1.1	…	2.2
Malignant neoplasms of corpus uteri and uterus, part unspecified (C54–C55)	2.9	…	5.3	2.4	…	4.5	2.5	…	4.7	1.9	…	3.4	5.7	…	9.8	10.2	…	20.1	2.6	…	4.9
Malignant neoplasm of ovary (C56)	3.3	…	6.0	2.7	…	4.9	3.2	…	5.9	2.4	…	4.3	3.2	…	5.5	*	…	*	3.4	…	6.4
Malignant neoplasm of prostate (C61)	8.0	19.0	…	6.1	14.9	…	5.8	13.5	…	3.4	8.2	…	13.5	35.4	…	8.3	18.1	…	7.8	18.4	…
Malignant neoplasms of kidney and renal pelvis (C64–C65)	3.4	5.0	2.1	3.3	4.6	2.2	4.8	6.9	3.0	1.4	2.1	1.0	3.1	4.6	2.0	*	*	*	3.6	5.3	2.2
Malignant neoplasm of bladder (C67)	4.1	7.1	2.0	2.2	3.6	1.3	2.2	3.6	*	1.5	2.4	0.9	3.3	5.3	2.1	*	*	*	4.7	8.1	2.2
Malignant neoplasms of meninges, brain and other parts of central nervous system (C70–C72)	4.4	5.4	3.6	3.2	3.9	2.5	2.6	3.3	1.8	2.3	2.7	1.9	2.7	3.2	2.3	*	*	*	5.2	6.2	4.3
Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81–C96)	14.2	18.5	10.9	11.1	13.4	9.2	9.8	11.4	8.5	8.3	10.3	6.7	14.8	18.9	12.1	10.8	12.4	9.2	14.9	19.6	11.1
Hodgkin disease (C81)	0.2	0.3	0.2	0.3	0.4	0.2	*	*	*	0.1	*	*	0.3	0.4	0.2	*	*	*	0.2	0.3	0.2

See footnotes at end of table.

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hodgkin lymphoma (C82–C85)	5.0	6.5	3.8	4.2	5.0	3.6	3.4	4.1	2.7	3.6	4.6	2.8	3.6	4.9	2.8	*	*	*	5.3	6.9	4.0
Leukemia (C91–C95)	5.8	7.7	4.4	4.0	4.9	3.4	4.1	4.3	3.9	3.2	3.9	2.7	4.8	6.1	4.0	5.3	*	*	6.3	8.4	4.7
Multiple myeloma and immunoproliferative neoplasms (C88,C90)	3.2	4.0	2.5	2.5	3.1	2.0	2.1	2.6	1.6	1.4	1.7	1.2	6.0	7.5	5.1	*	*	*	3.0	3.9	2.3
Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96)	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.0	0.1	0.0
All other and unspecified malignant neoplasms (C17, C23–C24,C26–C31,C37–C41, C44–C49,C51–C52,C57–C60, C62–C63,C66,C68–C69, C73–C80,C97)	19.1	22.5	16.6	14.1	16.0	12.5	17.1	18.9	15.6	11.5	13.1	10.3	20.4	24.0	18.0	17.4	17.7	16.8	20.2	23.8	17.4
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00–D48)	4.1	5.1	3.3	2.6	3.1	2.3	2.4	3.5	1.5	2.5	3.1	2.1	3.9	4.5	3.5	*	*	*	4.4	5.5	3.6
Anemias (D50–D64)	1.5	1.6	1.5	1.0	1.1	1.0	1.4	*	*	0.8	1.0	0.7	3.1	3.1	3.1	*	*	*	1.4	1.5	1.3
Diabetes mellitus (E10–E14)	25.4	31.8	20.0	29.4	35.8	24.0	51.0	57.9	44.4	18.1	22.4	14.7	46.3	55.9	38.9	54.4	62.8	46.8	22.4	28.6	17.0
Nutritional deficiencies (E40–E64)	4.5	4.1	4.7	3.0	3.0	3.0	4.3	4.3	4.2	2.0	1.9	2.0	5.3	5.3	5.1	*	*	*	4.7	4.2	5.0
Malnutrition (E40–E46)	4.4	4.0	4.6	2.9	2.9	2.9	4.1	4.0	4.0	2.0	1.9	2.0	5.1	5.2	5.0	*	*	*	4.6	4.1	4.9
Other nutritional deficiencies (E50–E64)	0.1	0.1	0.1	0.0	*	*	*	*	*	*	*	*	0.1	0.1	0.1	*	*	*	0.1	0.1	0.1
Meningitis (G00,G03)	0.1	0.2	0.1	0.1	0.2	0.1	*	*	*	0.1	*	*	0.2	0.3	0.2	*	*	*	0.1	0.2	0.1
Parkinson disease (G20–G21)	9.8	14.5	6.6	6.9	9.8	5.0	5.7	6.6	5.0	6.2	8.7	4.4	5.4	8.3	3.6	4.5	*	*	11.0	16.1	7.3
Alzheimer disease (G30)	31.0	24.0	35.4	27.7	21.3	31.6	18.3	11.4	22.8	17.0	13.0	19.6	29.4	23.7	32.3	20.1	15.2	23.6	32.6	25.3	37.5
Major cardiovascular diseases (I00–I78)	231.8	279.9	190.8	168.5	202.8	138.9	205.5	246.8	168.8	130.7	156.5	109.5	313.7	388.1	256.6	246.6	294.5	201.0	235.7	284.0	193.9
Diseases of heart (I00–I09, I11,I13,I20–I51)	173.8	219.5	135.6	119.0	149.9	92.9	155.2	197.7	118.1	85.5	108.6	66.8	226.2	289.9	177.8	182.5	228.7	138.6	179.8	226.7	140.1
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	1.0	0.8	1.1	0.6	0.4	0.7	1.1	*	*	0.6	0.4	0.7	0.8	0.6	0.9	*	*	*	1.1	0.9	1.2
Hypertensive heart disease (I11)	17.1	19.4	14.6	11.7	13.8	9.7	20.9	26.6	15.8	7.5	8.4	6.6	31.3	39.2	24.7	17.6	22.7	12.5	16.3	18.2	14.2
Hypertensive heart and renal disease (I13)	3.5	3.9	3.2	2.5	2.6	2.4	5.0	5.3	4.6	1.6	1.6	1.6	6.0	7.1	5.1	*	*	*	3.4	3.8	3.1

See footnotes at end of table.

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Ischemic heart diseases (I20–I25)	92.8	127.4	64.7	70.6	94.5	51.0	81.7	108.8	58.3	52.7	72.4	37.2	110.5	149.8	81.7	98.8	129.0	70.2	96.2	132.6	66.2
Acute myocardial infarction (I21–I22)	26.8	36.0	19.0	20.7	27.1	15.3	23.8	30.9	17.5	16.1	21.9	11.4	31.8	41.9	24.2	26.2	29.9	22.6	28.0	37.8	19.5
Other acute ischemic heart diseases (I24)	1.2	1.5	0.9	0.7	0.9	0.5	1.1	*	*	0.6	0.7	0.4	1.8	2.3	1.3	*	*	*	1.2	1.5	0.9
Other forms of chronic ischemic heart disease (I20,I25)	64.8	89.9	44.8	49.3	66.5	35.3	56.9	77.0	39.7	36.1	49.7	25.4	76.9	105.5	56.1	71.4	97.5	46.6	67.0	93.3	45.8
Atherosclerotic cardiovascular disease, so described (I25.0)	19.0	26.5	12.4	15.2	21.8	9.5	19.8	26.7	13.6	9.9	14.0	6.5	29.1	41.8	19.3	21.1	29.8	12.6	18.7	25.9	12.2
All other forms of chronic ischemic heart disease (I20,I25.1–I25.9)	45.8	63.4	32.4	34.0	44.7	25.8	37.0	50.3	26.1	26.1	35.7	18.9	47.8	63.8	36.7	50.3	67.7	34.0	48.4	67.4	33.6
Other heart diseases (I26–I51)	59.4	68.1	52.0	33.5	38.5	29.0	46.6	56.0	38.2	23.1	25.8	20.8	77.5	93.1	65.4	60.0	69.6	50.7	62.7	71.2	55.3
Acute and subacute endocarditis (I33)	0.4	0.6	0.3	0.3	0.4	0.2	1.0	*	*	0.1	0.2	*	0.6	0.7	0.4	*	*	*	0.5	0.6	0.4
Diseases of pericardium and acute myocarditis (I30–I31,I40)	0.3	0.4	0.3	0.2	0.2	0.2	*	*	*	0.1	*	*	0.4	0.5	0.3	*	*	*	0.3	0.4	0.3
Heart failure (I50)	21.6	24.5	19.3	12.6	14.1	11.4	15.8	20.5	11.9	8.3	9.1	7.6	26.6	31.5	23.0	16.1	19.2	13.1	22.8	25.8	20.5
All other forms of heart disease (I26–I28, I34–I38,I42–I49,I51)	37.1	42.6	32.1	20.3	23.8	17.2	29.5	34.2	25.1	14.5	16.4	12.9	49.9	60.3	41.7	42.8	49.0	37.0	39.0	44.4	34.1
Essential hypertension and hypertensive renal disease (I10,I12,I15)	10.7	11.4	9.9	9.6	10.5	8.7	10.7	11.9	9.8	9.4	10.3	8.5	20.1	23.4	17.5	12.0	10.7	12.9	9.7	10.2	9.0
Cerebrovascular diseases (I60–I69)	41.1	41.5	40.2	36.1	37.5	34.2	34.6	33.0	35.6	32.6	33.7	31.4	59.6	64.9	54.9	46.7	48.3	45.4	39.8	39.5	39.5
Atherosclerosis (I70)	1.1	1.2	0.9	0.7	0.8	0.6	*	*	*	0.7	0.8	0.6	1.2	1.5	1.0	*	*	*	1.1	1.2	1.0
Other diseases of circulatory system (I71–I78)	5.1	6.2	4.1	3.2	4.1	2.4	4.1	3.8	4.3	2.6	3.0	2.2	6.7	8.4	5.3	4.6	*	*	5.3	6.4	4.3
Aortic aneurysm and dissection (I71)	2.5	3.4	1.8	1.3	1.9	0.7	1.2	*	*	1.6	2.2	1.1	2.8	3.8	1.9	*	*	*	2.7	3.5	1.9
Other diseases of arteries, arterioles and capillaries (I72–I78)	2.6	2.8	2.4	1.9	2.2	1.7	2.9	2.8	3.0	1.0	0.9	1.1	3.9	4.6	3.4	*	*	*	2.6	2.8	2.4

See footnotes at end of table.

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

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Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Other disorders of circulatory system (I80–I99)	1.5	1.6	1.3	1.0	1.1	0.8	1.6	1.8	*	0.4	0.5	0.4	2.8	3.3	2.5	*	*	*	1.4	1.6	1.3
Influenza and pneumonia (J09–J18)	10.5	13.0	8.7	9.1	11.3	7.4	14.1	17.4	11.3	8.1	10.7	6.2	13.4	17.2	11.0	10.0	14.4	*	10.4	12.8	8.7
Influenza (J09–J11)	0.1	0.2	0.1	0.1	0.1	0.2	*	*	*	*	*	*	0.2	0.2	0.1	*	*	*	0.1	0.1	0.1
Pneumonia (J12–J18)	10.4	12.9	8.5	9.0	11.2	7.3	13.7	17.0	11.0	8.0	10.6	6.1	13.3	17.0	10.8	9.7	14.4	*	10.3	12.6	8.5
Other acute lower respiratory infections (J20–J22,U04)	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.0	0.0	0.0
Acute bronchitis and bronchiolitis (J20–J21)	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.0	0.0	0.0
Other and unspecified acute lower respiratory infections (J22,U04)	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.0	0.0	0.0
Chronic lower respiratory diseases (J40–J47)	34.7	37.6	32.5	14.7	17.6	12.7	33.6	34.0	33.5	9.1	13.0	6.3	27.9	34.5	23.7	18.1	21.7	14.9	39.9	42.1	38.3
Bronchitis, chronic and unspecified (J40–J42)	0.1	0.1	0.1	0.1	*	*	*	*	*	*	*	*	0.1	0.2	0.1	*	*	*	0.1	0.1	0.1
Emphysema (J43)	1.8	2.2	1.4	0.6	0.9	0.4	2.0	2.0	2.0	0.4	0.9	*	1.2	1.7	0.9	*	*	*	2.1	2.5	1.8
Asthma (J45–J46)	1.0	0.8	1.1	0.7	0.6	0.8	*	*	*	0.7	0.8	0.6	2.4	2.4	2.4	*	*	*	0.8	0.6	0.9
Other chronic lower respiratory diseases (J44,J47)	31.9	34.5	29.9	13.3	16.0	11.4	30.6	31.5	30.0	7.9	11.3	5.5	24.1	30.2	20.3	16.0	19.5	12.9	37.0	38.9	35.5
Pneumoconioses and chemical effects (J60–J66,J68,U07.0)	0.1	0.3	0.0	0.1	0.1	*	*	*	*	*	*	*	0.1	0.1	*	*	*	*	0.2	0.4	0.0
Pneumonitis due to solids and liquids (J69)	5.0	6.9	3.6	3.3	4.4	2.5	4.4	5.9	3.1	3.2	4.5	2.3	6.2	8.5	4.9	*	*	*	5.2	7.2	3.8
Other diseases of respiratory system (J00–J06, J30–J39,J67,J70–J98)	11.4	13.8	9.6	9.4	11.3	7.9	14.0	16.2	12.3	5.9	7.4	4.7	11.9	13.3	10.8	6.1	*	*	12.0	14.5	10.0
Peptic ulcer (K25–K28)	1.0	1.2	0.9	0.9	1.1	0.6	1.5	*	*	0.8	0.9	0.6	1.0	1.2	0.8	*	*	*	1.0	1.2	0.9
Diseases of appendix (K35–K38)	0.1	0.1	0.1	0.1	0.1	0.1	*	*	*	*	*	*	0.1	0.2	*	*	*	*	0.1	0.1	0.1
Hernia (K40–K46)	0.6	0.7	0.6	0.5	0.6	0.4	*	*	*	0.2	0.3	*	0.5	0.7	0.4	*	*	*	0.7	0.7	0.7
Chronic liver disease and cirrhosis (K70,K73–K74)	14.5	18.9	10.3	17.3	24.2	10.6	77.8	88.1	67.8	4.2	5.7	2.9	9.9	12.8	7.6	8.4	13.5	*	15.2	19.4	11.3
Alcoholic liver disease (K70)	8.7	12.1	5.5	9.6	15.6	3.8	62.2	72.3	52.6	1.9	3.2	0.8	5.7	7.7	4.1	4.1	6.8	*	9.3	12.4	6.3
Other chronic liver disease and cirrhosis (K73–K74)	5.7	6.8	4.8	7.7	8.6	6.8	15.5	15.7	15.2	2.2	2.4	2.1	4.2	5.2	3.4	4.3	*	*	5.9	7.0	4.9
Cholelithiasis and other disorders of gallbladder (K80–K82)	1.1	1.4	0.9	1.2	1.3	1.1	2.2	2.2	2.1	0.8	1.0	0.6	1.1	1.3	1.0	*	*	*	1.1	1.4	0.9

See footnotes at end of table.

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Nephritis, nephrotic syndrome and nephrosis (N00–N07, N17–N19,N25–N27)	13.6	16.4	11.4	12.3	14.8	10.3	16.3	17.1	15.8	8.3	10.3	6.9	26.5	32.1	22.6	20.3	22.0	19.3	12.3	15.1	10.2
Acute and rapidly progressive nephritic and nephrotic syndrome (N00–N01,N04)	0.2	0.2	0.2	0.1	0.2	0.1	*	*	*	*	*	*	0.3	0.3	0.3	*	*	*	0.2	0.2	0.2
Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02–N03,N05–N07,N26)	0.1	0.1	0.1	0.1	*	*	*	*	*	*	*	*	0.1	*	*	*	*	*	0.1	0.1	0.0
Renal failure (N17–N19)	13.3	16.1	11.1	12.1	14.6	10.1	15.9	16.7	15.3	8.1	10.1	6.7	26.1	31.7	22.3	20.0	21.4	19.3	12.0	14.8	10.0
Other disorders of kidney (N25,N27)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Infections of kidney (N10–N12,N13.6,N15.1)	0.3	0.2	0.4	0.3	0.2	0.3	*	*	*	0.1	*	0.2	0.3	0.2	0.3	*	*	*	0.3	0.2	0.4
Hyperplasia of prostate (N40)	0.2	0.4	…	0.2	0.4	…	*	*	…	0.2	0.4	…	0.2	0.6	…	*	*	…	0.2	0.4	…
Inflammatory diseases of female pelvic organs (N70–N76)	0.1	…	0.1	*	…	*	*	…	*	*	…	*	0.1	…	0.2	*	…	*	0.0	…	0.1
Pregnancy, childbirth and the puerperium (O00–O99)	0.6	…	1.1	0.5	…	1.1	1.9	…	3.8	0.3	…	0.5	1.2	…	2.5	*	…	*	0.4	…	0.8
Pregnancy with abortive outcome (O00–O07)	0.0	…	0.0	*	…	*	*	…	*	*	…	*	*	…	*	*	…	*	*	…	*
Other complications of pregnancy, childbirth and the puerperium (O10–O99)	0.5	…	1.1	0.5	…	1.1	1.9	…	3.8	0.2	…	0.5	1.2	…	2.4	*	…	*	0.4	…	0.8
Certain conditions originating in the perinatal period (P00–P96)	3.7	4.0	3.4	3.3	3.6	3.0	2.9	2.5	3.4	2.8	3.1	2.5	7.7	8.4	6.9	4.6	*	*	2.9	3.1	2.7
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	3.1	3.3	3.0	2.6	2.7	2.5	3.7	3.8	3.5	1.4	1.6	1.4	3.7	3.7	3.7	*	*	*	3.3	3.5	3.2
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	9.4	10.4	8.3	5.8	7.3	4.4	13.5	16.2	10.9	3.5	4.0	3.1	13.8	16.4	11.5	9.2	9.1	9.3	9.4	10.2	8.6
All other diseases (residual)	101.5	102.6	98.5	67.6	69.6	64.4	127.4	136.7	116.6	43.1	44.0	41.7	120.0	127.6	112.7	74.2	75.8	70.9	107.6	107.9	105.2
Accidents (unintentional injuries) (V01–X59,Y85–Y86)	64.7	89.8	40.4	47.3	70.4	24.0	122.8	160.1	86.6	18.8	26.6	11.9	79.6	120.8	43.4	53.1	79.3	26.6	70.0	94.2	46.1
Transport accidents (V01–V99,Y85)	14.6	21.4	8.0	13.8	20.6	6.9	36.2	47.3	25.4	4.8	6.8	3.0	20.9	32.5	10.4	16.4	25.2	7.4	14.2	20.4	8.0

See footnotes at end of table.

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Motor vehicle accidents (V02–V04,V09.0,V09.2, V12–V14,V19.0–V19.2, V19.4–V19.6,V20–V79, V80.3–V80.5,V81.0–V81.1, V82.0–V82.1,V83–V86, V87.0–V87.8,V88.0–V88.8, V89.0,V89.2)	13.8	20.1	7.7	13.2	19.7	6.7	33.8	43.2	24.8	4.5	6.4	2.9	20.1	31.0	10.2	14.7	22.4	6.7	13.3	19.0	7.6
Other land transport accidents (V01,V05–V06, V09.1,V09.3–V09.9,V10–V11, V15–V18,V19.3,V19.8–V19.9, V80.0–V80.2,V80.6–V80.9, V81.2–V81.9,V82.2–V82.9, V87.9,V88.9,V89.1, V89.3,V89.9)	0.3	0.6	0.1	0.4	0.5	0.1	1.3	2.3	*	0.2	0.2	*	0.4	0.8	0.1	*	*	*	0.3	0.5	0.1
Water, air and space, and other and unspecified transport accidents and their sequelae (V90–V99,Y85)	0.5	0.8	0.2	0.2	0.4	0.1	1.1	1.9	*	0.1	0.2	*	0.4	0.7	0.1	*	*	*	0.6	0.9	0.2
Nontransport accidents (W00–X59,Y86)	50.1	68.4	32.5	33.5	49.8	17.1	86.6	112.7	61.2	13.9	19.8	8.9	58.7	88.3	33.0	36.7	54.0	19.3	55.8	73.8	38.1
Falls (W00–W19)	11.4	13.8	9.4	6.9	9.2	5.0	10.7	12.4	9.1	6.2	8.1	4.7	5.7	8.1	4.0	8.0	11.3	*	13.0	15.4	11.1
Accidental discharge of firearms (W32–W34)	0.2	0.3	0.0	0.1	0.1	*	*	*	*	*	*	*	0.4	0.7	*	*	*	*	0.2	0.3	0.0
Accidental drowning and submersion (W65–W74)	1.3	1.9	0.6	1.0	1.5	0.4	2.4	4.0	*	1.1	1.7	0.6	1.8	2.9	0.7	*	*	*	1.3	1.8	0.7
Accidental exposure to smoke, fire and flames (X00–X09)	0.9	1.2	0.6	0.5	0.6	0.3	1.9	2.0	1.7	0.3	0.3	0.3	1.7	2.3	1.2	*	*	*	0.9	1.1	0.7
Accidental poisoning and exposure to noxious substances (X40–X49)	31.0	44.0	17.9	21.3	33.2	8.9	60.9	78.7	43.4	4.1	6.9	1.6	42.3	64.8	22.1	19.9	30.7	8.9	34.8	47.8	21.7
Other and unspecified nontransport accidents and their sequelae (W20–W31, W35–W64,W75–W99, X10–X39,X50–X59,Y86)	5.4	7.2	3.7	3.7	5.1	2.4	10.5	15.2	6.1	2.2	2.8	1.7	6.9	9.5	4.8	5.2	*	*	5.6	7.4	3.9

See footnotes at end of table.

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)	14.1	22.8	5.7	7.9	12.8	3.0	28.1	42.6	13.8	6.8	9.9	3.9	8.7	14.6	3.3	12.6	19.5	*	17.4	28.0	7.1
Intentional self-harm (suicide) by discharge of firearms (X72–X74)	7.5	13.5	2.0	3.3	5.9	0.8	9.7	16.9	2.7	1.7	3.2	0.4	5.1	9.3	1.3	4.1	7.5	*	9.7	17.1	2.6
Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60–X71, X75–X84,Y87.0)	6.5	9.3	3.8	4.6	6.9	2.2	18.4	25.7	11.1	5.0	6.7	3.5	3.6	5.3	2.0	8.5	12.1	*	7.7	10.9	4.5
Assault (homicide) (*U01–*U02,X85–Y09,Y87.1)	8.2	13.2	3.1	6.9	11.1	2.5	12.9	20.4	5.3	1.5	2.1	1.0	33.7	58.7	9.5	7.1	12.2	*	3.3	4.6	1.9
Assault (homicide) by discharge of firearms (*U01.4, X93–X95)	6.7	11.1	2.1	5.2	8.8	1.4	7.8	12.4	3.1	1.0	1.5	0.5	29.9	52.9	7.5	5.7	10.3	*	2.2	3.2	1.2
Assault (homicide) by other and unspecified means and their sequelae (*U01.0–*U01.3, *U01.5–*U01.9,*U02,X85–X92, X96–Y09,Y87.1)	1.5	2.1	1.0	1.6	2.3	1.0	5.1	8.0	2.2	0.5	0.6	0.5	3.8	5.7	2.0	*	*	*	1.1	1.4	0.8
Legal intervention (Y35,Y89.0)	0.2	0.4	0.0	0.2	0.4	*	*	*	*	*	*	*	0.4	0.8	*	*	*	*	0.2	0.3	0.0
Events of undetermined intent (Y10–Y34,Y87.2,Y89.9)	1.9	2.5	1.3	0.9	1.3	0.4	4.9	5.6	4.1	0.4	0.5	0.2	3.5	5.1	2.0	*	*	*	2.0	2.6	1.5
Discharge of firearms, undetermined intent (Y22–Y24)	0.1	0.2	0.1	0.1	0.1	*	0.8	*	*	*	*	*	0.3	0.5	0.2	*	*	*	0.1	0.2	0.1
Other and unspecified events of undetermined intent and their sequelae (Y10–Y21, Y25–Y34,Y87.2,Y89.9)	1.7	2.3	1.2	0.8	1.1	0.4	4.1	4.4	3.7	0.3	0.5	0.2	3.2	4.7	1.8	*	*	*	1.9	2.4	1.4
Operations of war and their sequelae (Y36,Y89.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Complications of medical and surgical care (Y40–Y84,Y88)	1.5	1.8	1.3	1.2	1.5	1.0	2.4	2.6	2.2	0.7	0.9	0.5	2.3	2.4	2.2	*	*	*	1.5	1.7	1.2

See footnotes at end of table.

Table 11. Age-adjusted death rate for 113 selected causes, Enterocolitis due to *Clostridium difficile*, COVID-19, dementia-related causes, drug-induced causes, alcohol-induced causes, and firearm-related injuries, by Hispanic origin and race and sex: United States, 2021—Con.

[Age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for some Hispanic-origin and race categories should be interpreted with caution because of inconsistencies in reporting these items on death certificates and surveys; see Technical Notes. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Cause of death (based on ICD–10)	Total[1]			Hispanic[2]			Non-Hispanic, single race[3]														
							American Indian and Alaska Native			Asian			Black			Native Hawaiian or Other Pacific Islander			White		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Enterocolitis due to *Clostridium difficile*. . . . . (A04.7)[4]	1.0	1.0	1.0	0.8	0.9	0.8	1.2	*	*	0.4	0.5	0.4	1.0	1.2	0.9	*	*	*	1.1	1.1	1.1
COVID-19. . . . . (U07.1)[4]	104.1	131.3	81.7	151.8	199.4	111.4	184.0	207.6	162.7	61.9	84.0	44.6	136.4	159.3	120.5	185.4	205.9	164.6	93.5	118.3	72.9
Dementia-related causes[4]	72.4	59.7	80.2	53.8	44.2	59.6	43.0	30.0	51.6	35.9	29.1	40.2	71.8	62.7	75.9	39.9	32.0	45.3	77.4	63.5	86.3
Drug-induced deaths[4]	33.6	46.8	20.4	21.9	33.5	9.7	60.4	73.8	47.0	4.9	7.6	2.4	45.8	69.8	24.4	21.6	32.7	10.2	38.2	51.2	24.9
Drug overdose deaths[4].	32.4	45.1	19.6	21.1	32.4	9.4	56.6	69.3	44.1	4.7	7.2	2.3	44.2	67.3	23.5	20.1	30.0	9.9	36.8	49.4	23.8
Alcohol-induced deaths[4]	14.4	20.9	8.3	13.6	22.4	4.9	91.7	116.0	68.7	2.9	5.0	1.2	11.2	16.6	6.7	6.4	10.8	*	15.6	21.8	9.5
Firearm-related injuries[4].	14.6	25.3	4.2	8.9	15.3	2.3	19.1	32.1	6.3	2.9	4.8	1.0	36.0	64.0	9.0	10.4	18.9	*	12.3	21.0	3.9

0.0 Quantity more than zero but less than 0.05.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
… Category not applicable.
[1]Includes deaths with origin not stated, origin not classifiable, and two or more races reported; see Technical Notes.
[2]Includes people of Hispanic origin of any race; see Technical Notes.
[3]Only one race was reported on the death certificate; see Technical Notes.
[4]Included in selected categories above. For the list of ICD–10 codes included, see Technical Notes..

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

Table 12. Number of deaths, death rate, and age-adjusted death rate for injury deaths, by mechanism and intent of death: United States, 2021

[Totals for selected causes of death differ from those shown in other tables that use standard mortality tabulation lists; see Technical Notes in this report. Rates are per 100,000 population; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes. Populations used for computing death rates are postcensal estimates based on the 2010 census estimated as of July 1, 2021; see Technical Notes. Numbers in brackets [ ] apply to the code or range of codes preceding them. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Mechanism and intent of death (based on ICD–10)	Number	Rate	Age-adjusted rate[1]
All injury (*U01–*U03,V01–Y36,Y85–Y87,Y89)	306,086	92.2	89.0
Unintentional (V01–X59,Y85–Y86)	224,935	67.8	64.7
Suicide (*U03,X60–X84,Y87.0)	48,183	14.5	14.1
Homicide (*U01–*U02,X85–Y09,Y87.1)	26,031	7.8	8.2
Undetermined (Y10–Y34,Y87.2,Y89.9)	6,259	1.9	1.9
Legal intervention/war (Y35–Y36,Y89[.0,.1])	678	0.2	0.2
Cut/pierce (W25–W29,W45–W46,X78,X99,Y28,Y35.4)	3,076	0.9	0.9
Unintentional (W25–W29,W45–W46)	174	0.1	0.0
Suicide (X78)	965	0.3	0.3
Homicide (X99)	1,895	0.6	0.6
Undetermined (Y28)	42	0.0	0.0
Legal intervention/war (Y35.4)	–	*	*
Drowning (W65–W74,X71,X92,Y21)	5,092	1.5	1.5
Unintentional (W65–W74)	4,337	1.3	1.3
Suicide (X71)	459	0.1	0.1
Homicide (X92)	24	0.0	0.0
Undetermined (Y21)	272	0.1	0.1
Fall (W00–W19,X80,Y01,Y30)	45,988	13.9	11.8
Unintentional (W00–W19)	44,686	13.5	11.4
Suicide (X80)	1,184	0.4	0.3
Homicide (Y01)	12	*	*
Undetermined (Y30)	106	0.0	0.0
Fire/hot object or substance (*U01.3,X00–X19,X76–X77,X97–X98,Y26–Y27,Y36.3)[2]	3,987	1.2	1.1
Unintentional (X00–X19)	3,484	1.0	0.9
Suicide (X76–X77)	195	0.1	0.1
Homicide (*U01.3,X97–X98)	109	0.0	0.0
Undetermined (Y26–Y27)	199	0.1	0.0
Legal intervention/war (Y36.3)	–	*	*
Fire/flame (X00–X09,X76,X97,Y26)	3,891	1.2	1.0
Unintentional (X00–X09)	3,389	1.0	0.9
Suicide (X76)	195	0.1	0.1
Homicide (X97)	108	0.0	0.0
Undetermined (Y26)	199	0.1	0.0
Hot object/substance (X10–X19,X77,X98,Y27)	96	0.0	0.0
Unintentional (X10–X19)	95	0.0	0.0
Suicide (X77)	–	*	*
Homicide (X98)	1	*	*
Undetermined (Y27)	–	*	*
Firearm (*U01.4,W32–W34,X72–X74,X93–X95,Y22–Y24,Y35.0)	48,830	14.7	14.6
Unintentional (W32–W34)	549	0.2	0.2
Suicide (X72–X74)	26,328	7.9	7.5
Homicide (*U01.4,X93–X95)	20,958	6.3	6.7
Undetermined (Y22–Y24)	458	0.1	0.1
Legal intervention/war (Y35.0)	537	0.2	0.2
Machinery (W24,W30–W31)[3]	530	0.2	0.2
All transport (*U01.1,V01–V99,X82,Y03,Y32,Y36.1)	49,306	14.9	14.4
Unintentional (V01–V99)	49,000	14.8	14.4
Suicide (X82)	157	0.0	0.0
Homicide (*U01.1,Y03)	113	0.0	0.0
Undetermined (Y32)	36	0.0	0.0
Legal intervention/war (Y36.1)	–	*	*
Motor vehicle traffic (V02–V04[.1,.9],V09.2,V12–V14[.3–.9],V19[.4–.6], V20–V28[.3–.9],V29–V79[.4–.9],V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3],V87[.0–.8],V89.2)[3]	45,404	13.7	13.3
Occupant (V30–V79[.4–.9],V83–V86[.0–.3])[3]	10,025	3.0	3.0
Motorcyclist (V20–V28[.3–.9],V29[.4–.9])[3]	5,762	1.7	1.7
Pedal cyclist (V12–V14[.3–.9],V19[.4–.6])[3]	853	0.3	0.2
Pedestrian (V02–V04[.1,.9],V09.2)[3]	7,984	2.4	2.3
Other (V80[.3–.5],V81.1,V82.1)[3]	12	*	*
Unspecified (V87[.0–.8],V89.2)[3]	20,768	6.3	6.1

See footnotes at end of table.

Table 12. Number of deaths, death rate, and age-adjusted death rate for injury deaths, by mechanism and intent of death: United States, 2021—Con.

[Totals for selected causes of death differ from those shown in other tables that use standard mortality tabulation lists; see Technical Notes in this report. Rates are per 100,000 population; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes. Populations used for computing death rates are postcensal estimates based on the 2010 census estimated as of July 1, 2021; see Technical Notes. Numbers in brackets [ ] apply to the code or range of codes preceding them. An asterisk (*) preceding a cause-of-death code indicates that the code is not included in the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes]

Mechanism and intent of death (based on ICD–10)	Number	Rate	Age-adjusted rate[1]
Pedal cyclist, other (V10–V11,V12–V14[.0–.2],V15–V18,V19[.0–.3,.8,.9])[3]	377	0.1	0.1
Pedestrian, other (V01,V02–V04[.0],V05,V06,V09[.0,.1,.3,.9])[3]	1,000	0.3	0.3
Other land transport (V20–V28[.0–.2],V29–V79[.0–.3],V80[.0–.2,.6–.9], V81–V82[.0,.2–.9],V83–V86[.4–.9],V87.9,V88[.0–.9], V89[.0,.1,.3,.9],X82,Y03,Y32)	1,684	0.5	0.5
Unintentional (V20–V28[.0–.2],V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9],V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9])	1,378	0.4	0.4
Suicide (X82)	157	0.0	0.0
Homicide (Y03)	113	0.0	0.0
Undetermined (Y32)	36	0.0	0.0
Other transport (*U01.1,V90–V99,Y36.1)	841	0.3	0.2
Unintentional (V90–V99)	841	0.3	0.2
Homicide (*U01.1)	–	*	*
Legal intervention/war (Y36.1)	–	*	*
Natural/environmental (W42–W43,W53–W64,W92–W99,X20–X39,X51–X57)[3]	2,812	0.8	0.8
Overexertion (X50)[3]	13	*	*
Poisoning (*U01[.6–.7],X40–X49,X60–X69,X85–X90,Y10–Y19,Y35.2)	111,830	33.7	33.8
Unintentional (X40–X49)	102,001	30.7	31.0
Suicide (X60–X69)	5,568	1.7	1.6
Homicide (*U01[.6–.7],X85–X90)	218	0.1	0.1
Undetermined (Y10–Y19)	4,043	1.2	1.2
Legal intervention/war (Y35.2)	–	*	*
Struck by or against (W20–W22,W50–W52,X79,Y00,Y04,Y29,Y35.3)	1,313	0.4	0.4
Unintentional (W20–W22,W50–W52)	1,024	0.3	0.3
Suicide (X79)	2	*	*
Homicide (Y00,Y04)	287	0.1	0.1
Undetermined (Y29)	–	*	*
Legal intervention/war (Y35.3)	–	*	*
Suffocation (W75–W84,X70,X91,Y20)	20,166	6.1	6.0
Unintentional (W75–W84)	7,182	2.2	2.0
Suicide (X70)	12,431	3.7	3.8
Homicide (X91)	409	0.1	0.1
Undetermined (Y20)	144	0.0	0.0
Other specified, classifiable (*U01[.0,.2,.5],*U03.0,W23,W35–W41,W44,W49,W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4–.8],Y85)	2,546	0.8	0.8
Unintentional (W23,W35–W41,W44,W49,W85–W91,Y85)	1,602	0.5	0.4
Suicide (*U03.0,X75,X81)	697	0.2	0.2
Homicide (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	166	0.1	0.0
Undetermined (Y25,Y31)	70	0.0	0.0
Legal intervention/war (Y35[.1,.5],Y36[.0,.2,.4–.8])	11	*	*
Other specified, not elsewhere classified (*U01.8,*U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	2,047	0.6	0.6
Unintentional (X58,Y86)	1,149	0.3	0.3
Suicide (X83,Y87.0)	112	0.0	0.0
Homicide (*U01.8,*U02,Y08,Y87.1)	464	0.1	0.1
Undetermined (Y33,Y87.2)	196	0.1	0.1
Legal intervention/war (Y35.6,Y89[.0,.1])	126	0.0	0.0
Unspecified (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	8,550	2.6	2.3
Unintentional (X59)	6,392	1.9	1.6
Suicide (*U03.9,X84)	85	0.0	0.0
Homicide (*U01.9,Y09)	1,376	0.4	0.4
Undetermined (Y34,Y89.9)	693	0.2	0.2
Legal intervention/war (Y35.7,Y36.9)	4	*	*

0.0 Quantity more than zero but less than 0.05.
– Quantity zero.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
[1]For method of computation, see Technical Notes.
[2]Codes U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.
[3]Intent of death is unintentional.

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

Table 13. Number of deaths, death rate, and age-adjusted death rate for age 15 and older, by marital status and sex: United States, 2021

[Rates are per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Population estimates used for computing death rates are based on the 2021 1-year American Community Survey adjusted to postcensal July 1, 2021, resident population control totals for the United States; see Technical Notes]

Marital status and sex	Age group (years)								Age-adjusted rate[2]
	15 and older[1]	15–24	25–34	35–44	45–54	55–64	65–74	75 and older	
	Number								
Both sexes	3,434,427	38,307	82,274	124,939	216,037	478,171	724,266	1,770,433	…
Never married	496,695	36,888	63,023	61,570	65,364	103,643	85,858	80,349	…
Ever married	2,908,885	1,335	18,718	61,980	147,734	366,646	629,188	1,683,284	…
Married	1,279,442	1,144	13,495	39,260	86,796	199,282	339,742	599,723	…
Widowed	1,028,227	23	337	1,612	6,878	36,300	113,934	869,143	…
Divorced	601,216	168	4,886	21,108	54,060	131,064	175,512	214,418	…
Not stated	28,847	84	533	1,389	2,939	7,882	9,220	6,800	…
Male	1,821,530	27,911	57,910	81,589	135,774	292,961	418,941	806,444	…
Never married	319,922	27,022	45,960	42,865	44,350	69,714	53,215	36,796	…
Ever married	1,481,065	826	11,593	37,809	89,349	217,236	358,922	765,330	…
Married	860,404	715	8,461	24,164	53,067	122,996	220,176	430,825	…
Widowed	299,938	11	142	682	2,716	13,512	38,698	244,177	…
Divorced	320,723	100	2,990	12,963	33,566	80,728	100,048	90,328	…
Not stated	20,543	63	357	915	2,075	6,011	6,804	4,318	…
Female	1,612,897	10,396	24,364	43,350	80,263	185,210	305,325	963,989	…
Never married	176,773	9,866	17,063	18,705	21,014	33,929	32,643	43,553	…
Ever married	1,427,820	509	7,125	24,171	58,385	149,410	270,266	917,954	…
Married	419,038	429	5,034	15,096	33,729	76,286	119,566	168,898	…
Widowed	728,289	12	195	930	4,162	22,788	75,236	624,966	…
Divorced	280,493	68	1,896	8,145	20,494	50,336	75,464	124,090	…
Not stated	8,304	21	176	474	864	1,871	2,416	2,482	…
					Rate[3]				
Both sexes	1,265.4	88.7	182.5	285.7	531.1	1,116.8	2,144.2	8,006.0	1,337.7
Never married	535.5	90.4	247.2	539.1	1,035.5	2,040.8	3,362.3	7,579.0	1,729.3
Ever married	1,628.2	56.0	95.6	191.8	429.9	971.6	2,015.0	7,995.2	1,240.9
Married	947.7	50.7	75.7	142.1	319.2	713.0	1,583.5	5,598.8	898.6
Widowed	6,934.2	109.9	425.4	605.8	1,003.9	1,794.2	2,781.4	11,350.3	2,036.2
Divorced	2,086.2	159.3	289.8	477.1	834.0	1,688.2	3,093.8	7,987.2	1,643.7
Male	1,365.9	126.3	253.9	370.5	669.3	1,398.2	2,634.1	8,683.4	1,554.0
Never married	645.9	127.9	326.9	673.3	1,268.6	2,515.4	4,161.1	8,501.5	2,060.1
Ever married	1,766.8	85.0	132.5	241.5	532.2	1,194.9	2,454.1	8,643.5	1,418.0
Married	1,261.6	77.6	105.4	177.2	386.7	863.1	1,940.8	6,842.6	1,100.5
Widowed	8,791.0	*	547.1	878.4	1,378.4	2,694.4	4,037.2	14,868.4	2,786.4
Divorced	2,624.7	239.1	430.8	666.7	1,168.9	2,354.1	4,308.1	9,861.9	2,179.6
Female	1,168.4	49.2	109.4	199.7	393.7	847.2	1,708.2	7,515.6	1,145.4
Never married	409.1	50.1	149.2	370.1	746.1	1,470.6	2,560.9	6,942.5	1,387.8
Ever married	1,505.7	36.0	65.8	145.1	332.3	764.0	1,628.2	7,524.7	1,091.2
Married	627.2	32.1	51.4	107.9	250.3	556.9	1,182.6	3,825.2	643.0
Widowed	6,379.3	*	366.1	493.4	852.7	1,497.6	2,397.8	10,389.8	1,795.2
Divorced	1,689.8	106.8	191.1	328.4	567.7	1,161.3	2,252.2	7,016.2	1,282.5

… Category not applicable.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
[1]Excludes figures for age not stated.
[2]Calculated based on age 25 and older. For method of computation, see Technical Notes.
[3]Figures for marital status not stated are included in totals for both sexes, male, and female but are not distributed among specified marital status groups.

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

Table 14. Number of deaths, death rate, and age-adjusted death rate for ages 25–64, by educational attainment and sex: United States, 2021

[Rates are per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Population estimates used for computing death rates are based on the 2021 1-year American Community Survey adjusted to postcensal July 1, 2021, resident population control totals for the United States; see Technical Notes]

Education level and sex	Age group (years)					Age-adjusted rate[2]
	25–64[1]	25–34	35–44	45–54	55–64	
	Number					
Both sexes	901,421	82,274	124,939	216,037	478,171	…
Less than high school diploma or GED	159,086	14,585	22,683	37,973	83,845	…
High school diploma or GED	409,553	40,400	56,396	95,245	217,512	…
Some college or collegiate degree	312,389	26,357	43,763	78,274	163,995	…
Not stated[3]	20,393	932	2,097	4,545	12,819	…
Male	568,234	57,910	81,589	135,774	292,961	…
Less than high school diploma or GED	107,425	10,740	15,866	25,733	55,086	…
High school diploma or GED	267,843	29,522	38,580	62,442	137,299	…
Some college or collegiate degree	178,201	16,975	25,698	44,354	91,174	…
Not stated[3]	14,765	673	1,445	3,245	9,402	…
Female	333,187	24,364	43,350	80,263	185,210	…
Less than high school diploma or GED	51,661	3,845	6,817	12,240	28,759	…
High school diploma or GED	141,710	10,878	17,816	32,803	80,213	…
Some college or collegiate degree	134,188	9,382	18,065	33,920	72,821	…
Not stated[3]	5,628	259	652	1,300	3,417	…
			Rate			
Both sexes[3]	523.2	182.5	285.7	531.1	1,116.8	461.8
Less than high school diploma or GED	921.9	431.1	504.5	827.1	1,752.1	778.2
High school diploma or GED	948.2	366.9	574.6	960.1	1,747.4	817.1
Some college or collegiate degree	279.3	85.9	148.7	299.2	641.1	253.9
Male[3]	660.2	253.9	370.5	669.3	1,398.2	589.9
Less than high school diploma or GED	1,113.7	536.9	619.3	1,020.1	2,151.2	958.6
High school diploma or GED	1,121.1	461.9	682.6	1,145.5	2,146.1	990.5
Some college or collegiate degree	339.2	117.7	186.1	360.2	760.2	309.7
Female[3]	386.4	109.4	199.7	393.7	847.2	335.0
Less than high school diploma or GED	678.8	278.1	352.4	591.7	1,292.7	552.7
High school diploma or GED	734.1	235.4	428.0	734.0	1,325.7	607.7
Some college or collegiate degree	226.2	57.7	115.7	244.9	535.9	204.5

… Category not applicable.
[1]Excludes figures for age not stated.
[2]Calculated based on ages 25–64. For method of computation, see Technical Notes.
[3]Includes deaths with education not stated.

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

Table 15. Number of deaths, death rate, and age-adjusted death rate for injury at work for age 15 and older, by Hispanic origin and race and sex: United States, 2021

[Rates are per 100,000 population in specified group; age-adjusted rates are per 100,000 U.S. standard population; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys, although misclassification is very minor; see Technical Notes. For a discussion of injury at work, see Technical Notes]

Hispanic origin and race and sex	Age group (years)							Age-adjusted rate[2]
	15 and older[1]	15–24	25–34	35–44	45–54	55–64	65 and older	
	Number							
Total[3], both sexes	4,840	371	799	889	1,007	1,075	699	…
Male	4,389	335	725	808	910	990	621	…
Female	451	36	74	81	97	85	78	…
Hispanic[4]	1,041	111	202	250	224	186	68	…
Male	996	104	192	240	215	178	67	…
Female	45	7	10	10	9	8	1	…
Non-Hispanic, single race[5]:								
Black, both sexes	619	45	131	135	129	126	53	…
Male	545	40	117	116	116	107	49	…
Female	74	5	14	19	13	19	4	…
White, both sexes	2,941	189	417	467	604	716	548	…
Male	2,646	169	372	419	538	664	484	…
Female	295	20	45	48	66	52	64	…
	Rate							
Total[3], both sexes	1.8	0.9	1.8	2.0	2.5	2.5	1.3	1.8
Male	3.3	1.5	3.1	3.7	4.5	4.7	2.5	3.3
Female	0.3	0.2	0.3	0.4	0.5	0.4	0.3	0.3
Hispanic[4]	2.2	1.1	2.1	2.8	3.0	3.4	1.3	2.2
Male	4.2	2.0	3.9	5.1	5.6	6.5	3.0	4.2
Female	0.2	*	*	*	*	*	*	0.2
Non-Hispanic, single race[5]:								
Black, both sexes	1.8	0.8	2.0	2.4	2.5	2.5	1.0	1.9
Male	3.4	1.3	3.6	4.3	4.8	4.5	2.3	3.4
Female	0.4	*	*	*	*	*	*	0.4
White, both sexes	1.8	0.8	1.7	1.9	2.5	2.5	1.3	1.7
Male	3.2	1.5	3.0	3.4	4.4	4.6	2.5	3.2
Female	0.3	0.2	0.4	0.4	0.5	0.4	0.3	0.4

… Category not applicable.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
[1]Excludes figures for age not stated.
[2]Calculated based on age 15 and older. For method of computation, see Technical Notes.
[3]Includes race and origin groups not shown separately; see Technical Notes.
[4]Includes people of Hispanic origin of any race; see Technical Notes.
[5]Only one race was reported on the death certificate.

SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

Table 16. Number of deaths, death rate, and age-adjusted death rate for injury at work, by Hispanic origin and race and sex: United States, 1997–2021

[Includes age 15 years and older; excludes figures for age not stated. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys, although misclassification is very minor; see Technical Notes in this report. For a discussion of injury at work, see Technical Notes]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All origins and races[3]									
2021	4,840	4,389	451	1.8	3.3	0.3	1.8	3.3	0.3
2020	4,321	3,921	400	1.6	3.0	0.3	1.6	3.0	0.3
2019	4,743	4,321	422	1.8	3.3	0.3	1.8	3.3	0.3
2018	4,560	4,179	381	1.7	3.2	0.3	1.7	3.2	0.3
2017	4,573	4,143	430	1.7	3.2	0.3	1.7	3.1	0.3
2016	4,621	4,169	452	1.8	3.3	0.3	1.7	3.2	0.3
2015[4]	4,185	3,816	369	1.6	3.0	0.3	1.6	3.0	0.3
2014	4,348	3,916	432	1.7	3.1	0.3	1.7	3.1	0.3
2013	4,268	3,882	386	1.7	3.1	0.3	1.7	3.1	0.3
2012	4,106	3,743	363	1.6	3.0	0.3	1.6	3.0	0.3
2011	4,097	3,736	361	1.6	3.1	0.3	1.6	3.0	0.3
2010	4,157	3,829	328	1.7	3.2	0.3	1.7	3.1	0.3
2009	3,919	3,601	318	1.6	3.0	0.3	1.6	3.0	0.3
2008	4,690	4,317	373	1.9	3.6	0.3	1.9	3.6	0.3
2007	5,025	4,606	419	2.1	3.9	0.3	2.1	3.9	0.3
2006	5,298	4,869	429	2.2	4.2	0.4	2.2	4.2	0.3
2005	5,113	4,670	443	2.2	4.1	0.4	2.2	4.1	0.4
2004	5,157	4,729	428	2.2	4.2	0.4	2.2	4.2	0.4
2003	5,025	4,609	416	2.2	4.1	0.4	2.2	4.1	0.3
2002	5,305	4,859	446	2.3	4.4	0.4	2.4	4.4	0.4
2001[5]	8,303	7,181	1,122	3.7	6.6	1.0	3.7	6.6	1.0
2000	5,430	4,969	461	2.5	4.6	0.4	2.5	4.6	0.4
1999	5,651	5,152	499	2.6	4.9	0.4	2.6	4.9	0.4
1998	5,543	5,036	507	2.6	4.8	0.5	2.6	4.8	0.5
1997	5,666	5,144	522	2.7	5.0	0.5	2.6	5.0	0.5
Hispanic[6]									
2021	1,041	996	45	2.2	4.2	0.2	2.2	4.2	0.2
2020	950	903	47	2.1	3.9	0.2	2.1	4.0	0.2
2019	959	907	52	2.1	4.0	0.2	2.2	4.1	0.2
2018	827	786	41	1.9	3.5	0.2	1.9	3.6	0.2
2017	796	755	41	1.8	3.5	0.2	1.9	3.6	0.2
2016	795	753	42	1.9	3.6	0.2	1.9	3.7	0.2
2015[4]	771	738	33	1.9	3.5	0.2	1.9	3.7	0.2
2014	718	681	37	1.8	3.4	0.2	1.9	3.6	0.2
2013	735	698	37	1.9	3.5	0.2	1.9	3.7	0.2
2012	682	649	33	1.8	3.4	0.2	1.8	3.5	0.2
2011	630	590	40	1.7	3.1	0.2	1.7	3.2	0.2
2010	604	572	32	1.7	3.1	0.2	1.7	3.3	0.2
2009	619	583	36	1.8	3.3	0.2	1.8	3.5	0.2
2008	680	643	37	2.0	3.7	0.2	2.0	3.8	0.2
2007	794	761	33	2.4	4.6	0.2	2.4	4.5	0.2
2006	856	820	36	2.7	5.1	0.2	2.7	5.1	0.2
2005	761	718	43	2.5	4.6	0.3	2.5	4.6	0.3
2004	735	702	33	2.5	4.7	0.2	2.5	4.7	0.2
2003	671	635	36	2.4	4.4	0.3	2.3	4.4	0.2
2002	757	710	47	2.8	5.1	0.4	2.8	5.2	0.4
2001[5]	1,049	916	133	4.0	6.8	1.0	4.1	7.1	1.0
2000	718	684	34	2.9	5.3	0.3	2.8	5.4	0.3
1999	597	566	31	2.5	4.6	0.3	2.5	4.8	0.3
1998	610	584	26	2.7	5.0	0.2	2.7	5.1	0.2
1997	571	531	40	2.6	4.8	0.4	2.7	5.0	0.4

See footnotes at end of table.

Table 16. Number of deaths, death rate, and age-adjusted death rate for injury at work, by Hispanic origin and race and sex: United States, 1997–2021—Con.

[Includes ages 15 years and older; excludes figures for age not stated. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys, although misclassification is very minor; see Technical Notes in this report. For a discussion of injury at work, see Technical Notes]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hispanic, single race[7]									
American Indian and Alaska Native:									
2021	37	31	6	1.9	3.2	*	1.9	3.2	*
2020	31	25	6	1.6	2.6	*	1.6	2.5	*
2019	30	26	4	1.6	2.8	*	1.6	2.8	*
2018	40	36	4	2.1	3.9	*	2.1	3.9	*
Asian:									
2021	140	120	20	0.9	1.5	0.2	0.8	1.5	0.2
2020	118	104	14	0.7	1.4	*	0.7	1.3	*
2019	154	139	15	1.0	1.9	*	0.9	1.8	*
2018	114	103	11	0.7	1.4	*	0.7	1.4	*
Black:									
2021	619	545	74	1.8	3.4	0.4	1.9	3.4	0.4
2020	521	469	52	1.6	3.0	0.3	1.6	3.0	0.3
2019	572	513	59	1.7	3.3	0.3	1.7	3.4	0.3
2018	520	475	45	1.6	3.1	0.3	1.6	3.1	0.3
Native Hawaiian or Other Pacific Islander:									
2021	12	11	1	*	*	*	*	*	*
2020	6	6	–	*	*	*	*	*	*
2019	13	12	1	*	*	*	*	*	*
2018	11	11	–	*	*	*	*	*	*
White:									
2021	2,941	2,646	295	1.8	3.2	0.3	1.7	3.2	0.4
2020	2,655	2,386	269	1.6	2.9	0.3	1.6	2.9	0.3
2019	2,975	2,687	288	1.8	3.3	0.3	1.8	3.2	0.3
2018	3,006	2,728	278	1.8	3.3	0.3	1.8	3.3	0.3

* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
– Quantity zero.
[1]Rates are on an annual basis per 100,000 population in specified group; see Technical Notes.
[2]Age-adjusted rates are per 100,000 U.S. standard population. For method of computation, see Technical Notes.
[3]Includes races and origins not shown separately; see Technical Notes.
[4]Excludes data for Tennessee; see Supplemental Technical Notes from "Deaths: Final Data for 2015," *National Vital Statistics Reports*, vol 66, no 6.
[5]Figures include September 11, 2001, terrorism-related deaths for which death certificates were filed as of October 24, 2002; see Technical Notes from "Deaths: Final Data for 2001," *National Vital Statistics Reports* vol 52, no 3.
[6]Includes people of Hispanic origin of any race. The Hispanic-origin category is consistent with 1997 Office of Management and Budget (OMB) standards; see Technical Notes.
[7]Only one race was reported on the death certificate. Race and Hispanic-origin categories are consistent with 1997 OMB standards; see Technical Notes.

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

Table 17. Number of deaths, death rate, and age-adjusted death rate for major causes of death: United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, 2021

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical Notes in this report. Codes in parentheses after causes of death are categories of the *International Classification of Diseases, 10th Revision* (ICD–10). An asterisk (*) preceding a cause-of-death code indicates that the code is not included in ICD–10; see Technical Notes]

Area	All causes			Septicemia (A40–A41)			Human immunodeficiency virus (HIV) disease (B20–B24)			Malignant neoplasms (C00–C97)		
	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]
United States[2]	3,464,231	1,043.8	879.7	41,281	12.4	10.2	4,977	1.5	1.3	605,213	182.4	146.6
Alabama	68,889	1,366.9	1,134.2	1,183	23.5	18.6	93	1.8	1.7	10,429	206.9	160.2
Alaska	6,208	847.3	931.0	61	8.3	9.4	5	*	*	1,093	149.2	156.0
Arizona	81,442	1,119.3	908.5	511	7.0	5.5	94	1.3	1.3	12,813	176.1	134.7
Arkansas	40,070	1,324.2	1,097.8	596	19.7	15.7	53	1.8	1.6	6,516	215.3	168.2
California	333,249	849.3	760.4	1,833	4.7	4.2	569	1.5	1.3	59,503	151.6	132.4
Colorado	48,281	830.7	799.0	476	8.2	7.7	44	0.8	0.7	8,058	138.6	126.5
Connecticut	34,333	952.2	725.1	574	15.9	12.0	40	1.1	0.8	6,526	181.0	133.5
Delaware	11,296	1,125.8	867.0	122	12.2	9.3	22	2.2	1.7	2,178	217.1	153.2
District of Columbia	5,833	870.5	868.5	83	12.4	12.4	50	7.5	7.6	985	147.0	147.1
Florida	261,369	1,200.0	832.9	2,882	13.2	8.8	629	2.9	2.5	46,937	215.5	141.6
Georgia	112,272	1,039.6	997.6	1,797	16.6	15.5	298	2.8	2.5	18,136	167.9	151.5
Hawaii	12,816	889.0	630.0	138	9.6	7.0	11	*	*	2,562	177.7	125.4
Idaho	18,346	965.1	881.0	121	6.4	5.7	6	*	*	3,130	164.7	140.4
Illinois	125,048	986.8	825.3	1,755	13.9	11.4	131	1.0	1.0	23,609	186.3	150.0
Indiana	78,317	1,150.7	999.3	908	13.3	11.2	55	0.8	0.7	13,983	205.5	169.7
Iowa	34,215	1,071.5	841.8	345	10.8	8.3	10	*	*	6,258	196.0	150.9
Kansas	32,029	1,091.4	915.0	321	10.9	9.2	19	*	*	5,455	185.9	150.8
Kentucky	60,303	1,337.3	1,139.6	923	20.5	16.9	36	0.8	0.7	10,250	227.3	181.1
Louisiana	57,533	1,244.2	1,094.6	1,052	22.8	19.2	125	2.7	2.6	9,246	200.0	163.9
Maine	17,269	1,258.4	889.4	32	2.3	1.6	8	*	*	3,385	246.7	161.3
Maryland	58,117	942.7	805.5	918	14.9	12.4	160	2.6	2.2	10,545	171.0	139.2
Massachusetts	63,115	903.6	721.4	849	12.2	9.6	46	0.7	0.5	12,461	178.4	137.4
Michigan	117,782	1,171.9	943.1	1,262	12.6	9.8	81	0.8	0.7	21,211	211.0	160.1
Minnesota	51,640	904.8	756.5	473	8.3	6.8	29	0.5	0.4	10,178	178.3	143.2
Mississippi	41,085	1,392.7	1,204.5	377	12.8	10.7	80	2.7	2.6	6,617	224.3	181.8
Missouri	73,847	1,197.2	971.9	997	16.2	12.7	63	1.0	0.9	13,153	213.2	164.2
Montana	12,707	1,150.7	909.9	108	9.8	7.5	3	*	*	2,157	195.3	142.2
Nebraska	18,925	963.7	818.6	200	10.2	8.5	13	*	*	3,578	182.2	150.9
Nevada	32,923	1,047.2	937.3	224	7.1	6.3	58	1.8	1.7	5,318	169.1	143.2
New Hampshire	14,198	1,022.2	782.9	123	8.9	6.7	8	*	*	2,831	203.8	145.7
New Jersey	84,032	906.8	731.1	2,011	21.7	17.2	159	1.7	1.4	15,481	167.1	130.6
New Mexico	25,300	1,195.7	995.5	237	11.2	9.3	20	0.9	0.8	3,822	180.6	137.3
New York	181,360	914.3	713.1	2,232	11.3	8.6	397	2.0	1.7	32,601	164.4	125.3
North Carolina	118,093	1,119.2	960.0	1,669	15.8	13.2	183	1.7	1.5	20,229	191.7	153.6
North Dakota	7,266	937.6	794.2	109	14.1	12.2	4	*	*	1,278	164.9	137.8
Ohio	147,635	1,253.3	1,012.8	2,050	17.4	13.6	112	1.0	0.9	25,077	212.9	163.0
Oklahoma	50,945	1,277.9	1,121.1	415	10.4	9.0	67	1.7	1.7	8,368	209.9	175.1
Oregon	44,989	1,059.5	861.0	276	6.5	5.1	41	1.0	0.8	8,596	202.4	155.2
Pennsylvania	155,390	1,198.6	895.0	2,491	19.2	13.9	108	0.8	0.7	27,664	213.4	152.9
Rhode Island	11,243	1,026.2	781.3	85	7.8	5.7	4	*	*	2,115	193.0	142.0
South Carolina	65,422	1,260.4	1,038.1	824	15.9	12.7	126	2.4	2.1	10,593	204.1	155.2
South Dakota	9,185	1,025.8	858.9	106	11.8	9.8	8	*	*	1,739	194.2	154.8
Tennessee	91,130	1,306.5	1,121.3	1,048	15.0	12.5	125	1.8	1.7	14,481	207.6	166.3
Texas	267,651	906.4	942.1	3,562	12.1	12.4	537	1.8	1.8	42,552	144.1	143.3
Utah	22,569	676.1	815.8	214	6.4	7.6	9	*	*	3,492	104.6	121.0
Vermont	6,877	1,065.3	791.2	35	5.4	3.9	2	*	*	1,446	224.0	154.0
Virginia	85,940	994.4	866.5	1,089	12.6	10.5	128	1.5	1.3	15,724	181.9	150.5
Washington	68,689	887.6	796.4	561	7.2	6.3	64	0.8	0.7	13,547	175.1	149.3
West Virginia	29,503	1,654.7	1,229.1	355	19.9	14.0	17	*	*	4,820	270.3	184.7
Wisconsin	60,973	1,034.2	837.0	614	10.4	8.2	25	0.4	0.4	11,336	192.3	147.2
Wyoming	6,582	1,137.2	954.7	54	9.3	7.6	2	*	*	1,151	198.9	156.7
Puerto Rico	33,001	1,011.2	634.7	708	21.7	13.1	143	4.4	3.6	5,207	159.5	97.8
U.S. Virgin Islands	747	705.6	568.8	15	*	*	1	*	*	121	114.3	82.2
Guam	1,276	755.9	1,016.9	46	27.3	38.0	1	*	*	214	126.8	175.4
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	262	507.2	810.6	8	*	*	–	*	*	59	114.2	154.4

See footnotes at end of table.

Table 17. Number of deaths, death rate, and age-adjusted death rate for major causes of death: United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, 2021—Con.

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical Notes in this report. Codes in parentheses after causes of death are categories of the *International Classification of Diseases, 10th Revision* (ICD–10). An asterisk (*) preceding a cause-of-death code indicates that the code is not included in ICD–10; see Technical Notes]

Area	Diabetes mellitus (E10–E14)			Parkinson disease (G20–G21)			Alzheimer disease (G30)			Diseases of heart (I00–I09,I11,I13,I20–I51)		
	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]
United States[2]	103,294	31.1	25.4	38,536	11.6	9.8	119,399	36.0	31.0	695,547	209.6	173.8
Alabama	1,652	32.8	26.3	724	14.4	11.9	2,725	54.1	46.8	15,173	301.1	247.5
Alaska	184	25.1	27.0	44	6.0	7.7	135	18.4	26.4	1,011	138.0	154.7
Arizona	2,559	35.2	27.3	892	12.3	9.5	2,754	37.8	30.5	14,550	200.0	158.3
Arkansas	1,466	48.4	39.3	395	13.1	10.7	1,559	51.5	43.2	8,547	282.5	231.0
California	11,440	29.2	25.5	4,044	10.3	9.5	16,911	43.1	39.5	65,471	166.9	147.8
Colorado	1,204	20.7	19.0	630	10.8	11.1	1,778	30.6	32.6	8,081	139.0	135.1
Connecticut	770	21.4	15.9	436	12.1	9.0	1,049	29.1	21.2	6,731	186.7	136.7
Delaware	334	33.3	23.9	131	13.1	9.7	381	38.0	29.7	2,183	217.6	162.7
District of Columbia	164	24.5	24.4	48	7.2	7.4	66	9.9	10.0	1,288	192.2	192.8
Florida	8,039	36.9	24.8	3,171	14.6	9.2	6,716	30.8	19.6	50,100	230.0	151.3
Georgia	2,943	27.3	25.1	1,093	10.1	10.5	4,378	40.5	44.5	21,931	203.1	195.2
Hawaii	355	24.6	17.7	178	12.3	8.1	562	39.0	23.9	2,651	183.9	126.5
Idaho	541	28.5	24.4	215	11.3	10.5	789	41.5	40.5	3,429	180.4	166.4
Illinois	3,387	26.7	21.8	1,538	12.1	10.2	4,025	31.8	26.6	26,291	207.5	169.8
Indiana	2,539	37.3	31.3	852	12.5	11.1	2,238	32.9	29.7	15,209	223.5	191.2
Iowa	1,025	32.1	25.0	422	13.2	10.3	1,185	37.1	28.2	7,704	241.3	184.9
Kansas	917	31.2	25.6	401	13.7	11.3	805	27.4	22.6	6,315	215.2	176.1
Kentucky	1,765	39.1	32.5	523	11.6	10.2	1,632	36.2	32.7	11,697	259.4	217.5
Louisiana	1,943	42.0	35.7	538	11.6	10.4	2,121	45.9	42.9	12,564	271.7	235.5
Maine	555	40.4	27.0	229	16.7	11.5	539	39.3	27.4	3,357	244.6	168.4
Maryland	1,734	28.1	23.2	641	10.4	9.1	1,129	18.3	16.1	12,138	196.9	165.2
Massachusetts	1,537	22.0	17.3	799	11.4	9.1	1,558	22.3	17.7	11,947	171.0	134.0
Michigan	3,440	34.2	26.7	1,308	13.0	10.4	4,198	41.8	34.4	26,664	265.3	209.6
Minnesota	1,575	27.6	22.6	697	12.2	10.3	2,251	39.4	33.1	8,568	150.1	123.9
Mississippi	1,485	50.3	42.1	374	12.7	11.1	1,694	57.4	52.8	8,837	299.6	255.2
Missouri	1,876	30.4	24.0	803	13.0	10.6	2,517	40.8	33.0	15,713	254.7	202.4
Montana	314	28.4	21.6	135	12.2	9.4	341	30.9	24.7	2,536	229.7	175.2
Nebraska	583	29.7	24.6	258	13.1	11.0	687	35.0	29.6	3,776	192.3	160.8
Nevada	869	27.6	23.5	261	8.3	7.8	804	25.6	26.1	7,352	233.8	208.1
New Hampshire	393	28.3	20.8	171	12.3	9.4	422	30.4	23.5	2,845	204.8	154.1
New Jersey	2,073	22.4	17.6	920	9.9	8.0	2,399	25.9	20.6	18,508	199.7	157.5
New Mexico	817	38.6	31.0	255	12.1	9.4	634	30.0	24.6	4,182	197.6	156.5
New York	4,841	24.4	18.8	1,717	8.7	6.7	3,582	18.1	13.6	42,434	213.9	162.3
North Carolina	3,931	37.3	30.4	1,187	11.2	9.9	4,260	40.4	36.7	21,302	201.9	170.9
North Dakota	228	29.4	25.2	85	11.0	9.1	325	41.9	32.8	1,442	186.1	152.8
Ohio	4,461	37.9	29.5	1,489	12.6	10.1	4,947	42.0	34.2	30,578	259.6	204.7
Oklahoma	1,619	40.6	35.1	449	11.3	10.0	1,580	39.6	36.0	12,158	305.0	264.2
Oregon	1,434	33.8	25.9	621	14.6	12.0	2,047	48.2	41.0	7,823	184.2	148.5
Pennsylvania	4,176	32.2	23.5	1,688	13.0	9.5	4,109	31.7	22.7	32,478	250.5	180.6
Rhode Island	289	26.4	19.5	143	13.1	10.1	445	40.6	29.7	2,359	215.3	158.7
South Carolina	1,753	33.8	26.3	688	13.3	10.7	2,419	46.6	40.9	12,118	233.5	189.1
South Dakota	306	34.2	28.9	99	11.1	9.6	396	44.2	35.6	1,695	189.3	153.0
Tennessee	2,681	38.4	31.4	866	12.4	10.8	2,879	41.3	37.7	18,468	264.8	223.8
Texas	8,136	27.6	27.5	2,890	9.8	11.2	10,437	35.3	41.9	50,584	171.3	180.7
Utah	837	25.1	29.2	325	9.7	12.5	998	29.9	40.7	4,275	128.1	162.4
Vermont	158	24.5	17.9	94	14.6	10.8	337	52.2	38.8	1,585	245.5	175.7
Virginia	2,667	30.9	25.8	1,122	13.0	11.6	2,582	29.9	27.5	16,654	192.7	167.2
Washington	2,237	28.9	24.8	887	11.5	10.7	3,644	47.1	45.5	12,789	165.3	147.7
West Virginia	1,204	67.5	47.6	267	15.0	10.8	851	47.7	35.4	5,549	311.2	223.0
Wisconsin	1,686	28.6	22.6	742	12.6	10.3	2,371	40.2	33.0	12,791	216.9	171.7
Wyoming	172	29.7	23.9	51	8.8	7.5	208	35.9	32.7	1,116	192.8	159.4
Puerto Rico	3,235	99.1	59.4	223	6.8	3.7	2,826	86.6	44.8	5,478	167.9	96.7
U.S. Virgin Islands	35	33.1	25.9	5	*	*	42	39.7	32.8	177	167.2	125.4
Guam	18	*	*	–	*	*	14	*	*	395	234.0	314.9
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	15	*	*	–	*	*	–	*	*	53	102.6	157.9

See footnotes at end of table.

Table 17. Number of deaths, death rate, and age-adjusted death rate for major causes of death: United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, 2021—Con.

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical Notes in this report. Codes in parentheses after causes of death are categories of the *International Classification of Diseases, 10th Revision* (ICD–10). An asterisk (*) preceding a cause-of-death code indicates that the code is not included in ICD–10; see Technical Notes]

Area	Essential hypertension and hypertensive renal disease (I10,I12,I15)			Cerebrovascular diseases (I60–I69)			Influenza and pneumonia (J09–J18)			Chronic lower respiratory diseases (J40–J47)		
	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]
United States[2]	42,816	12.9	10.7	162,890	49.1	41.1	41,917	12.6	10.5	142,342	42.9	34.7
Alabama	769	15.3	12.6	3,361	66.7	54.9	1,034	20.5	16.8	3,282	65.1	50.9
Alaska	66	9.0	9.5	253	34.5	42.3	42	5.7	7.2	237	32.3	35.0
Arizona	1,200	16.5	13.0	3,329	45.8	36.1	932	12.8	10.2	3,518	48.3	36.7
Arkansas	502	16.6	13.6	1,841	60.8	49.9	534	17.6	14.7	2,375	78.5	61.5
California	6,497	16.6	14.7	18,364	46.8	42.1	4,638	11.8	10.5	11,562	29.5	26.1
Colorado	423	7.3	7.0	2,045	35.2	35.5	290	5.0	4.8	2,306	39.7	37.5
Connecticut	328	9.1	6.6	1,444	40.0	29.5	406	11.3	8.3	1,169	32.4	23.8
Delaware	123	12.3	9.1	756	75.3	56.8	118	11.8	8.6	502	50.0	36.1
District of Columbia	83	12.4	13.0	288	43.0	43.6	65	9.7	10.0	110	16.4	16.7
Florida	3,390	15.6	10.2	15,599	71.6	46.5	2,845	13.1	8.8	10,939	50.2	32.0
Georgia	1,480	13.7	13.0	5,233	48.5	47.9	1,273	11.8	11.3	4,709	43.6	41.1
Hawaii	151	10.5	6.9	943	65.4	43.8	210	14.6	9.8	384	26.6	18.1
Idaho	169	8.9	8.4	753	39.6	36.8	161	8.5	7.8	920	48.4	42.5
Illinois	1,390	11.0	8.9	6,766	53.4	44.1	1,681	13.3	11.0	4,931	38.9	31.5
Indiana	887	13.0	11.2	3,425	50.3	43.9	728	10.7	9.2	4,233	62.2	51.6
Iowa	543	17.0	13.0	1,403	43.9	33.8	366	11.5	8.7	1,676	52.5	39.9
Kansas	454	15.5	12.5	1,365	46.5	38.4	396	13.5	11.1	1,506	51.3	41.4
Kentucky	516	11.4	9.6	2,428	53.8	45.8	739	16.4	13.8	3,243	71.9	57.5
Louisiana	455	9.8	8.5	2,755	59.6	52.0	647	14.0	12.2	2,170	46.9	39.4
Maine	167	12.2	8.3	650	47.4	32.5	211	15.4	10.6	895	65.2	42.1
Maryland	733	11.9	10.0	3,413	55.4	47.3	629	10.2	8.7	1,815	29.4	24.5
Massachusetts	741	10.6	8.2	2,278	32.6	25.6	817	11.7	9.1	2,414	34.6	26.9
Michigan	1,234	12.3	9.7	5,781	57.5	46.2	1,321	13.1	10.4	5,218	51.9	39.5
Minnesota	908	15.9	12.8	2,384	41.8	34.5	392	6.9	5.7	2,074	36.3	29.2
Mississippi	709	24.0	20.4	1,982	67.2	57.8	697	23.6	20.0	2,131	72.2	59.2
Missouri	501	8.1	6.5	3,178	51.5	41.0	884	14.3	11.5	3,626	58.8	45.2
Montana	96	8.7	6.7	440	39.8	31.2	105	9.5	7.5	570	51.6	38.4
Nebraska	400	20.4	16.7	851	43.3	36.5	239	12.2	10.1	959	48.8	40.5
Nevada	391	12.4	11.6	1,443	45.9	41.7	459	14.6	12.8	1,426	45.4	40.0
New Hampshire	121	8.7	6.4	548	39.5	30.3	122	8.8	6.5	687	49.5	35.6
New Jersey	961	10.4	8.1	3,760	40.6	32.3	1,156	12.5	9.9	2,472	26.7	21.1
New Mexico	196	9.3	7.3	988	46.7	37.2	297	14.0	11.5	1,014	47.9	36.9
New York	2,900	14.6	11.0	6,685	33.7	25.7	3,757	18.9	14.4	5,911	29.8	22.5
North Carolina	1,271	12.0	10.3	5,677	53.8	46.5	1,537	14.6	12.4	4,741	44.9	36.7
North Dakota	69	8.9	7.1	282	36.4	29.4	125	16.1	13.1	319	41.2	34.2
Ohio	1,526	13.0	10.2	7,244	61.5	49.0	1,673	14.2	11.4	6,437	54.6	41.8
Oklahoma	417	10.5	9.5	1,929	48.4	42.5	561	14.1	12.3	2,858	71.7	60.3
Oregon	742	17.5	13.9	2,325	54.8	45.1	226	5.3	4.4	1,900	44.7	34.4
Pennsylvania	1,353	10.4	7.5	6,775	52.3	37.7	1,844	14.2	10.3	5,552	42.8	30.3
Rhode Island	105	9.6	7.1	422	38.5	28.8	108	9.9	7.4	393	35.9	26.6
South Carolina	711	13.7	11.2	3,070	59.1	48.3	611	11.8	9.4	2,878	55.4	42.5
South Dakota	124	13.8	11.6	392	43.8	35.4	124	13.8	11.4	465	51.9	41.4
Tennessee	1,071	15.4	13.1	3,775	54.1	46.2	1,225	17.6	14.9	4,442	63.7	51.3
Texas	2,718	9.2	9.8	11,944	40.4	43.8	2,938	9.9	10.5	10,026	34.0	35.9
Utah	233	7.0	8.8	853	25.6	32.4	215	6.4	8.1	846	25.3	30.2
Vermont	115	17.8	13.3	280	43.4	31.9	38	5.9	4.5	303	46.9	31.9
Virginia	940	10.9	9.4	4,117	47.6	42.1	963	11.1	9.7	3,194	37.0	31.0
Washington	957	12.4	11.3	3,195	41.3	37.7	496	6.4	5.9	2,644	34.2	29.4
West Virginia	324	18.2	12.9	1,021	57.3	41.2	413	23.2	16.5	1,562	87.6	58.7
Wisconsin	603	10.2	8.0	2,640	44.8	35.9	550	9.3	7.5	2,443	41.4	32.0
Wyoming	53	9.2	7.8	217	37.5	31.5	79	13.6	11.9	355	61.3	48.9
Puerto Rico	679	20.8	11.9	1,323	40.5	22.9	715	21.9	12.6	1,035	31.7	17.6
U.S. Virgin Islands	16	*	*	34	32.1	24.2	7	*	*	12	*	*
Guam	2	*	*	79	46.8	64.6	23	13.6	17.2	15	*	*
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	9	*	*	17	*	*	6	*	*	4	*	*

See footnotes at end of table.

Table 17. Number of deaths, death rate, and age-adjusted death rate for major causes of death: United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, 2021—Con.

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical Notes in this report. Codes in parentheses after causes of death are categories of the *International Classification of Diseases, 10th Revision* (ICD–10). An asterisk (*) preceding a cause-of-death code indicates that the code is not included in ICD–10; see Technical Notes]

Area	Chronic liver disease and cirrhosis (K70,K73–K74)			Nephritis, nephrotic syndrome and nephrosis (N00–N07,N17–N19,N25–N27)			COVID-19 (U07.1)			Accidents (unintentional injuries) (V01–X59,Y85–Y86)		
	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]
United States[2]	56,585	17.0	14.5	54,358	16.4	13.6	416,893	125.6	104.1	224,935	67.8	64.7
Alabama	1,043	20.7	17.0	1,163	23.1	18.5	9,491	188.3	152.8	3,491	69.3	68.9
Alaska	189	25.8	24.4	84	11.5	14.0	763	104.1	109.5	591	80.7	84.5
Arizona	1,773	24.4	21.5	871	12.0	9.4	12,706	174.6	139.5	5,961	81.9	78.6
Arkansas	625	20.7	17.0	793	26.2	21.2	4,739	156.6	127.7	2,046	67.6	65.8
California	7,102	18.1	16.0	4,697	12.0	10.6	44,540	113.5	99.9	20,879	53.2	50.6
Colorado	1,234	21.2	19.1	543	9.3	9.1	5,299	91.2	84.2	4,206	72.4	71.0
Connecticut	550	15.3	12.2	638	17.7	12.9	2,722	75.5	56.7	2,644	73.3	67.4
Delaware	146	14.6	10.9	165	16.4	12.1	1,113	110.9	83.2	817	81.4	80.6
District of Columbia	65	9.7	9.5	51	7.6	7.7	464	69.2	69.8	639	95.4	92.2
Florida	3,911	18.0	13.6	3,445	15.8	10.5	34,557	158.7	111.7	17,780	81.6	74.7
Georgia	1,636	15.1	13.3	2,269	21.0	20.0	15,834	146.6	135.9	6,353	58.8	58.8
Hawaii	177	12.3	9.7	264	18.3	12.4	688	47.7	36.5	656	45.5	39.6
Idaho	351	18.5	16.6	170	8.9	8.1	2,407	126.6	112.3	1,161	61.1	59.9
Illinois	1,776	14.0	11.9	2,648	20.9	17.2	11,298	89.2	73.4	7,664	60.5	56.7
Indiana	1,177	17.3	14.9	1,418	20.8	18.0	8,564	125.8	106.8	5,246	77.1	76.7
Iowa	508	15.9	13.7	419	13.1	10.0	3,098	97.0	75.9	1,745	54.6	48.7
Kansas	518	17.7	16.0	550	18.7	15.4	3,623	123.5	103.1	1,963	66.9	63.6
Kentucky	939	20.8	17.3	1,130	25.1	21.1	7,459	165.4	136.7	4,373	97.0	96.3
Louisiana	667	14.4	12.2	1,109	24.0	20.6	6,329	136.9	116.9	4,489	97.1	98.1
Maine	311	22.7	16.5	250	18.2	12.6	1,331	97.0	66.2	1,286	93.7	86.2
Maryland	682	11.1	9.3	710	11.5	9.7	5,256	85.3	71.2	3,058	49.6	45.6
Massachusetts	930	13.3	10.9	1,221	17.5	13.7	4,866	69.7	54.6	4,624	66.2	60.8
Michigan	1,796	17.9	15.0	1,964	19.5	15.5	13,637	135.7	107.1	6,541	65.1	61.6
Minnesota	885	15.5	13.5	509	8.9	7.4	4,442	77.8	64.1	3,753	65.8	61.4
Mississippi	630	21.4	17.9	734	24.9	21.4	5,082	172.3	146.3	2,423	82.1	81.2
Missouri	958	15.5	13.0	1,542	25.0	19.9	7,760	125.8	100.5	4,814	78.0	75.1
Montana	308	27.9	25.7	179	16.2	12.3	1,576	142.7	108.8	875	79.2	73.8
Nebraska	308	15.7	14.4	207	10.5	8.8	1,594	81.2	69.0	897	45.7	43.2
Nevada	635	20.2	17.1	309	9.8	8.8	5,149	163.8	141.6	2,026	64.4	61.3
New Hampshire	257	18.5	14.0	188	13.5	10.0	1,112	80.1	60.2	946	68.1	63.2
New Jersey	1,060	11.4	9.4	1,644	17.7	14.1	8,423	90.9	71.9	5,077	54.8	51.6
New Mexico	934	44.1	41.1	339	16.0	12.7	3,502	165.5	136.3	2,188	103.4	101.4
New York	1,966	9.9	8.2	2,545	12.8	9.8	21,675	109.3	83.9	10,140	51.1	47.0
North Carolina	1,879	17.8	14.8	2,243	21.3	17.9	13,611	129.0	107.5	8,539	80.9	79.1
North Dakota	147	19.0	17.9	106	13.7	11.4	638	82.3	70.9	469	60.5	56.5
Ohio	2,021	17.2	14.2	2,294	19.5	15.3	18,285	155.2	122.8	9,919	84.2	81.9
Oklahoma	866	21.7	19.4	524	13.1	11.3	7,279	182.6	158.8	3,063	76.8	74.3
Oregon	926	21.8	17.6	400	9.4	7.6	3,681	86.7	69.2	3,151	74.2	67.4
Pennsylvania	1,825	14.1	11.0	3,027	23.3	16.8	18,169	140.1	102.5	10,327	79.7	73.5
Rhode Island	199	18.2	15.1	188	17.2	12.9	979	89.4	66.4	869	79.3	71.4
South Carolina	1,096	21.1	17.3	933	18.0	14.2	9,088	175.1	139.2	4,701	90.6	88.5
South Dakota	330	36.9	37.3	86	9.6	7.5	776	86.7	71.2	596	66.6	62.4
Tennessee	1,417	20.3	17.2	1,237	17.7	14.9	11,911	170.8	142.5	7,076	101.4	100.5
Texas	5,273	17.9	16.8	4,513	15.3	16.0	44,516	150.8	151.4	14,704	49.8	50.7
Utah	356	10.7	11.6	368	11.0	13.9	2,252	67.5	78.2	1,583	47.4	53.2
Vermont	108	16.7	12.4	37	5.7	4.4	261	40.4	29.5	536	83.0	77.8
Virginia	1,183	13.7	11.6	1,638	19.0	16.2	8,990	104.0	88.5	5,358	62.0	59.4
Washington	1,405	18.2	15.7	423	5.5	4.8	5,451	70.4	61.5	5,120	66.2	62.9
West Virginia	417	23.4	17.9	643	36.1	25.8	3,619	203.0	146.8	2,474	138.8	134.7
Wisconsin	913	15.5	12.5	864	14.7	11.6	5,262	89.2	71.1	4,717	80.0	74.1
Wyoming	177	30.6	26.7	66	11.4	9.8	1,026	177.3	143.4	381	65.8	63.0
Puerto Rico	338	10.4	7.0	1,014	31.1	18.5	1,457	44.6	30.5	1,589	48.7	43.7
U.S. Virgin Islands	8	*	*	16	*	*	56	52.9	40.2	33	31.2	32.5
Guam	9	*	*	48	28.4	38.4	116	68.7	86.0	45	26.7	29.9
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	4	*	*	5	*	*	9	*	*	15	*	*

See footnotes at end of table.

Table 17. Number of deaths, death rate, and age-adjusted death rate for major causes of death: United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, 2021—Con.

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Area	Motor vehicle accidents[3]			Intentional self-harm (suicide) (*U03,X60–X84,Y87.0)			Assault (homicide) (*U01–*U02,X85–Y09,Y87.1)			Alcohol-induced causes[4]		
	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]
United States[2]	46,980	14.2	13.8	48,183	14.5	14.1	26,031	7.8	8.2	54,258	16.3	14.4
Alabama	1,058	21.0	21.0	827	16.4	15.8	748	14.8	15.9	639	12.7	11.1
Alaska	97	13.2	13.4	220	30.0	30.8	49	6.7	6.4	315	43.0	41.0
Arizona	1,369	18.8	18.5	1,475	20.3	19.5	562	7.7	8.1	1,891	26.0	24.2
Arkansas	731	24.2	24.0	618	20.4	20.6	335	11.1	11.7	413	13.6	12.1
California	4,986	12.7	12.3	4,148	10.6	10.1	2,495	6.4	6.4	7,290	18.6	16.7
Colorado	754	13.0	12.5	1,384	23.8	22.8	368	6.3	6.3	1,695	29.2	26.5
Connecticut	330	9.2	9.0	401	11.1	10.0	160	4.4	4.8	542	15.0	12.6
Delaware	147	14.7	14.5	137	13.7	13.6	103	10.3	11.3	158	15.7	13.1
District of Columbia	59	8.8	8.3	46	6.9	6.2	223	33.3	30.0	101	15.1	14.8
Florida	3,906	17.9	17.3	3,351	15.4	14.0	1,468	6.7	7.4	3,541	16.3	13.1
Georgia	1,976	18.3	18.0	1,676	15.5	15.3	1,206	11.2	11.4	1,368	12.7	11.3
Hawaii	95	6.6	6.4	202	14.0	13.7	39	2.7	2.7	140	9.7	8.2
Idaho	316	16.6	16.4	387	20.4	20.5	41	2.2	2.2	416	21.9	19.8
Illinois	1,473	11.6	11.3	1,454	11.5	11.1	1,487	11.7	12.3	1,611	12.7	11.4
Indiana	999	14.7	14.6	1,129	16.6	16.4	624	9.2	9.6	1,116	16.4	14.8
Iowa	372	11.7	11.2	549	17.2	17.5	94	2.9	3.2	608	19.0	17.2
Kansas	470	16.0	15.6	560	19.1	19.4	180	6.1	6.4	534	18.2	17.0
Kentucky	820	18.2	17.8	816	18.1	17.9	408	9.0	9.6	689	15.3	13.2
Louisiana	1,028	22.2	22.5	689	14.9	14.8	943	20.4	21.3	514	11.1	9.8
Maine	184	13.4	12.6	277	20.2	19.5	20	1.5	1.7	327	23.8	18.8
Maryland	661	10.7	10.5	620	10.1	9.7	709	11.5	12.2	627	10.2	9.0
Massachusetts	461	6.6	6.1	604	8.6	8.0	160	2.3	2.3	1,005	14.4	12.5
Michigan	1,341	13.3	13.1	1,485	14.8	14.3	822	8.2	8.7	1,745	17.4	15.2
Minnesota	603	10.6	10.2	808	14.2	13.9	232	4.1	4.3	1,162	20.4	18.0
Mississippi	867	29.4	29.1	480	16.3	16.2	656	22.2	23.7	529	17.9	15.5
Missouri	1,061	17.2	16.7	1,177	19.1	18.7	716	11.6	12.4	919	14.9	13.2
Montana	269	24.4	23.9	350	31.7	32.0	46	4.2	4.4	372	33.7	30.6
Nebraska	254	12.9	12.5	288	14.7	15.0	70	3.6	3.6	364	18.5	17.5
Nevada	410	13.0	12.4	691	22.0	21.5	264	8.4	8.5	812	25.8	22.3
New Hampshire	144	10.4	10.2	223	16.1	15.1	15	*	*	271	19.5	15.7
New Jersey	711	7.7	7.5	688	7.4	7.1	409	4.4	4.8	831	9.0	7.8
New Mexico	472	22.3	22.4	533	25.2	25.0	306	14.5	15.3	1,091	51.6	50.0
New York	1,387	7.0	6.6	1,660	8.4	7.9	918	4.6	4.8	1,901	9.6	8.3
North Carolina	1,923	18.2	17.7	1,448	13.7	13.2	991	9.4	9.7	1,638	15.5	13.4
North Dakota	119	15.4	15.2	156	20.1	20.8	24	3.1	3.4	205	26.5	24.8
Ohio	1,508	12.8	12.4	1,766	15.0	14.6	1,020	8.7	9.3	1,771	15.0	12.9
Oklahoma	827	20.7	20.5	877	22.0	22.1	342	8.6	8.9	838	21.0	19.6
Oregon	608	14.3	13.5	889	20.9	19.5	204	4.8	4.9	1,255	29.6	24.4
Pennsylvania	1,378	10.6	10.1	1,885	14.5	13.9	1,101	8.5	9.2	1,469	11.3	9.4
Rhode Island	81	7.4	6.7	117	10.7	10.3	40	3.7	3.6	216	19.7	16.7
South Carolina	1,231	23.7	23.5	802	15.5	15.2	656	12.6	13.4	1,006	19.4	16.5
South Dakota	173	19.3	19.4	203	22.7	23.2	45	5.0	5.3	377	42.1	42.8
Tennessee	1,428	20.5	20.2	1,222	17.5	17.0	810	11.6	12.2	1,323	19.0	16.7
Texas	4,588	15.5	15.4	4,193	14.2	14.2	2,391	8.1	8.2	3,540	12.0	11.4
Utah	355	10.6	11.0	643	19.3	20.1	91	2.7	2.7	431	12.9	13.8
Vermont	72	11.2	11.2	142	22.0	20.3	10	*	*	145	22.5	17.4
Virginia	1,024	11.8	11.3	1,188	13.7	13.2	606	7.0	7.2	1,014	11.7	10.2
Washington	765	9.9	9.6	1,229	15.9	15.3	346	4.5	4.5	1,772	22.9	19.9
West Virginia	300	16.8	15.8	375	21.0	20.6	114	6.4	6.9	318	17.8	14.6
Wisconsin	689	11.7	11.3	905	15.3	15.1	348	5.9	6.4	1,173	19.9	16.7
Wyoming	100	17.3	17.0	190	32.8	32.3	16	*	*	230	39.7	34.3
Puerto Rico	350	10.7	10.2	197	6.0	5.5	604	18.5	20.6	281	8.6	6.0
U.S. Virgin Islands	14	*	*	4	*	*	42	39.7	48.0	14	*	*
Guam	18	*	*	27	16.0	17.2	10	*	*	3	*	*
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	4	*	*	4	*	*	–	*	*	5	*	*

See footnotes at end of table.

Table 17. Number of deaths, death rate, and age-adjusted death rate for major causes of death: United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, 2021—Con.

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical Notes in this report. Codes in parentheses after causes of death are categories of the *International Classification of Diseases, 10th Revision* (ICD–10). An asterisk (*) preceding a cause-of-death code indicates that the code is not included in ICD–10; see Technical Notes]

Area	Drug-induced causes[5]			Injury by firearms[6]		
	Number	Rate	Age-adjusted rate[1]	Number	Rate	Age-adjusted rate[1]
United States[2]	111,219	33.5	33.6	48,830	14.7	14.6
Alabama	1,577	31.3	33.1	1,315	26.1	26.4
Alaska	272	37.1	37.1	182	24.8	25.2
Arizona	2,861	39.3	40.4	1,365	18.8	18.3
Arkansas	684	22.6	23.9	698	23.1	23.3
California	11,398	29.0	27.7	3,576	9.1	9.0
Colorado	1,949	33.5	32.4	1,064	18.3	17.8
Connecticut	1,598	44.3	43.5	248	6.9	6.7
Delaware	526	52.4	55.5	158	15.7	16.6
District of Columbia	463	69.1	65.7	185	27.6	24.4
Florida	8,091	37.1	38.6	3,142	14.4	14.1
Georgia	2,640	24.4	24.7	2,200	20.4	20.3
Hawaii	293	20.3	18.6	71	4.9	4.8
Idaho	376	19.8	20.0	309	16.3	16.3
Illinois	3,843	30.3	29.7	1,995	15.7	16.1
Indiana	2,876	42.3	43.9	1,251	18.4	18.4
Iowa	511	16.0	16.4	364	11.4	11.2
Kansas	703	24.0	25.1	503	17.1	17.3
Kentucky	2,531	56.1	59.1	947	21.0	21.1
Louisiana	2,534	54.8	57.4	1,314	28.4	29.1
Maine	628	45.8	48.1	178	13.0	12.6
Maryland	2,796	45.4	43.7	915	14.8	15.2
Massachusetts	2,695	38.6	38.3	247	3.5	3.4
Michigan	3,151	31.4	32.1	1,544	15.4	15.4
Minnesota	1,498	26.2	26.6	573	10.0	10.0
Mississippi	820	27.8	29.5	962	32.6	33.9
Missouri	2,232	36.2	37.8	1,414	22.9	23.2
Montana	217	19.7	21.0	280	25.4	25.1
Nebraska	234	11.9	12.3	200	10.2	10.3
Nevada	1,011	32.2	31.0	633	20.1	19.8
New Hampshire	455	32.8	33.3	123	8.9	8.3
New Jersey	3,145	33.9	33.3	475	5.1	5.2
New Mexico	1,090	51.5	53.4	578	27.3	27.8
New York	6,037	30.4	29.7	1,078	5.4	5.4
North Carolina	4,131	39.2	40.5	1,839	17.4	17.3
North Dakota	136	17.5	18.8	128	16.5	16.8
Ohio	5,587	47.4	49.7	1,911	16.2	16.5
Oklahoma	1,035	26.0	26.3	836	21.0	21.2
Oregon	1,383	32.6	31.0	670	15.8	14.9
Pennsylvania	5,573	43.0	44.2	1,905	14.7	14.8
Rhode Island	461	42.1	42.2	64	5.8	5.6
South Carolina	2,214	42.7	44.2	1,136	21.9	22.4
South Dakota	108	12.1	12.9	128	14.3	14.3
Tennessee	3,980	57.1	59.0	1,569	22.5	22.8
Texas	5,232	17.7	17.6	4,613	15.6	15.6
Utah	700	21.0	22.4	450	13.5	13.9
Vermont	261	40.4	43.8	83	12.9	11.9
Virginia	2,701	31.3	31.3	1,248	14.4	14.3
Washington	2,467	31.9	30.5	896	11.6	11.2
West Virginia	1,578	88.5	95.1	319	17.9	17.3
Wisconsin	1,816	30.8	32.2	793	13.5	13.5
Wyoming	121	20.9	20.9	155	26.8	26.1
Puerto Rico	689	21.1	22.9	591	18.1	19.9
U.S. Virgin Islands	3	*	*	44	41.6	50.6
Guam	8	*	*	5	*	*
American Samoa	---	---	---	---	---	---
Northern Marianas	2	*	*	1	*	*

See footnotes at end of table.

Table 17. Number of deaths, death rate, and age-adjusted death rate for major causes of death: United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, 2021—Con.

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical Notes in this report. Codes in parentheses after causes of death are categories of the *International Classification of Diseases, 10th Revision* (ICD–10). An asterisk (*) preceding a cause-of-death code indicates that the code is not included in ICD–10; see Technical Notes]

* Estimate does not meet standards of reliability or precision; see Technical Notes.
--- Data not available.
– Quantity zero.
[1]Death rates are affected by the population composition of the area. Age-adjusted death rates should be used for comparisons between areas; for method of computation, see Technical Notes.
[2]Excludes data for Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas.
[3]ICD–10 codes for Motor vehicle accidents are V02–V04, V09.0, V09.2, V12–V14, V19.0–V19.2, V19.4–V19.6, V20–V79, V80.3–V80.5, V81.0–V81.1, V82.0–V82.1, V83–V86, V87.0–V87.8, V88.0–V88.8, V89.0, and V89.2; see Technical Notes.
[4]Causes of death attributable to alcohol-induced mortality include ICD–10 codes E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, R78.0, X45,X65, and Y15; see Technical Notes.
[5]Causes of death attributable to drug-induced mortality include ICD–10 codes D52.1, D59.0, D59.2, D61.1, D64.2, E06.4, E16.0, E23.1, E24.2, E27.3, E66.1, F11.1–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, F19.7–F19.9, G21.1, G24.0, G25.1, G25.4, G25.6, G44.4, G62.0, G72.0, I95.2, J70.2–J70.4, K85.3, L10.5, L27.0–L27.1, M10.2, M32.0, M80.4, M81.4, M83.5, M87.1, R50.2, R78.1–R78.5, X40–X44, X60–X64, X85, and Y10–Y14; see Technical Notes.
[6]Causes of death attributable to injury by firearms include ICD–10 codes *U01.4, W32–W34, X72–X74, X93–X95, Y22–Y24, and Y35.0; see Technical Notes.

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

Table 18. Infant, neonatal, and postneonatal mortality rates, by Hispanic origin and race and sex: United States, 1940, 1950, 1960, 1970, 1980, 1990, 2000–2021

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

Hispanic origin and race and year	Infant mortality rate			Neonatal mortality rate			Postneonatal mortality rate		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All races and origins[1]									
2021	5.44	5.82	5.03	3.48	3.68	3.28	1.95	2.14	1.75
2020	5.42	5.88	4.94	3.56	3.84	3.26	1.86	2.04	1.68
2019	5.58	6.09	5.05	3.68	4.01	3.34	1.90	2.08	1.71
2018	5.66	6.23	5.07	3.77	4.13	3.39	1.89	2.09	1.68
2017	5.79	6.32	5.24	3.84	4.19	3.49	1.95	2.13	1.76
2016	5.87	6.38	5.34	3.87	4.19	3.54	2.00	2.19	1.80
2015	5.90	6.39	5.38	3.93	4.22	3.64	1.96	2.17	1.74
2014	5.82	6.31	5.30	3.94	4.25	3.62	1.88	2.07	1.68
2013	5.96	6.52	5.38	4.04	4.37	3.68	1.93	2.15	1.70
2012	5.98	6.50	5.43	4.01	4.34	3.67	1.97	2.16	1.76
2011	6.07	6.58	5.52	4.06	4.36	3.73	2.01	2.22	1.79
2010	6.15	6.69	5.57	4.05	4.37	3.71	2.10	2.32	1.87
2009	6.39	7.01	5.75	4.18	4.53	3.81	2.22	2.48	1.94
2008	6.61	7.21	5.97	4.29	4.67	3.89	2.32	2.54	2.08
2007	6.75	7.38	6.09	4.42	4.79	4.02	2.34	2.58	2.07
2006	6.69	7.32	6.03	4.45	4.84	4.05	2.24	2.48	1.98
2005	6.87	7.56	6.15	4.54	4.93	4.12	2.34	2.63	2.03
2004	6.79	7.47	6.09	4.52	4.94	4.09	2.27	2.53	2.00
2003	6.85	7.60	6.07	4.62	5.08	4.14	2.23	2.52	1.94
2002	6.97	7.64	6.27	4.66	5.06	4.25	2.31	2.58	2.03
2001	6.85	7.52	6.14	4.54	4.97	4.08	2.31	2.55	2.06
2000	6.91	7.57	6.21	4.63	5.06	4.17	2.28	2.51	2.04
1990	9.22	10.26	8.13	5.85	6.50	5.16	3.38	3.76	2.97
1980	12.60	13.93	11.21	8.48	9.31	7.60	4.13	4.62	3.61
1970	20.01	22.37	17.52	15.08	16.96	13.10	4.93	5.41	4.42
1960	26.04	29.33	22.59	18.73	21.24	16.09	7.31	8.10	6.49
1950	29.21	32.75	25.48	20.50	23.34	17.50	8.71	9.41	7.98
1940	47.02	52.45	41.29	28.75	32.56	24.74	18.27	19.89	16.55
Hispanic[2,3]									
2021	5.03	5.37	4.67	3.43	3.62	3.23	1.60	1.75	1.44
2020	4.89	5.36	4.40	3.38	3.70	3.05	1.51	1.66	1.35
2019	5.20	5.68	4.69	3.59	3.96	3.20	1.61	1.73	1.49
2018	5.06	5.55	4.56	3.54	3.88	3.18	1.52	1.67	1.38
2017	5.35	5.76	4.93	3.73	4.00	3.46	1.62	1.76	1.47
2016	5.24	5.72	4.75	3.63	3.94	3.30	1.62	1.78	1.45
2015	5.20	5.56	4.83	3.73	4.02	3.42	1.47	1.54	1.41
2014	5.22	5.63	4.79	3.67	3.98	3.34	1.55	1.66	1.45
2013	5.27	5.65	4.88	3.73	3.99	3.45	1.54	1.66	1.43
2012	5.30	5.76	4.83	3.71	4.05	3.35	1.60	1.71	1.47
2011	5.25	5.59	4.90	3.67	3.87	3.46	1.58	1.72	1.44
2010	5.47	5.96	4.96	3.73	4.07	3.37	1.74	1.89	1.59
2009	5.43	5.86	4.98	3.63	3.89	3.36	1.80	1.96	1.62
2008	5.66	6.16	5.13	3.81	4.16	3.45	1.84	2.00	1.68
2007	5.71	6.17	5.23	3.82	4.12	3.51	1.89	2.05	1.72
2006	5.52	5.99	5.03	3.79	4.07	3.49	1.73	1.92	1.53
2005	5.81	6.34	5.25	3.92	4.29	3.52	1.89	2.05	1.73
2004	5.62	6.10	5.12	3.84	4.17	3.49	1.78	1.93	1.63
2003	5.79	6.32	5.24	3.95	4.24	3.65	1.84	2.08	1.59
2002	5.64	6.14	5.11	3.80	4.13	3.45	1.84	2.01	1.66
2001	5.49	5.99	4.97	3.65	4.08	3.21	1.84	1.92	1.76
2000	5.64	6.04	5.22	3.74	4.01	3.45	1.90	2.02	1.77

See footnotes at end of table.

Table 18. Infant, neonatal, and postneonatal mortality rates, by Hispanic origin and race and sex: United States, 1940, 1950, 1960, 1970, 1980, 1990, 2000–2021—Con.

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

Hispanic origin and race and year	Infant mortality rate			Neonatal mortality rate			Postneonatal mortality rate		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hispanic, single race[2,4]									
American Indian and Alaska Native:									
2021	7.46	7.87	7.04	3.71	3.67	3.76	3.75	4.20	3.29
2020	7.31	8.13	6.44	3.73	4.35	3.07	3.58	3.77	3.38
2019	8.05	8.55	7.53	4.11	4.00	4.23	3.94	4.55	3.30
2018	7.87	8.31	7.42	4.02	4.59	3.43	3.85	3.71	3.99
Asian:									
2021	2.94	3.20	2.66	2.26	2.36	2.15	0.68	0.84	0.51
2020	2.35	2.53	2.15	1.69	1.79	1.58	0.66	0.74	0.57
2019	2.63	2.89	2.35	1.91	2.10	1.71	0.72	0.79	0.63
2018	2.91	3.06	2.74	2.08	2.19	1.96	0.83	0.87	0.78
Black:									
2021	10.97	12.00	9.91	6.43	6.91	5.94	4.54	5.10	3.97
2020	10.85	11.75	9.92	6.74	7.28	6.18	4.11	4.47	3.75
2019	11.12	12.00	10.20	7.03	7.62	6.43	4.08	4.38	3.77
2018	11.10	12.35	9.81	7.13	7.93	6.31	3.97	4.42	3.50
Native Hawaiian or Other Pacific Islander:									
2021	7.24	9.44	4.94	3.78	4.72	*	3.46	4.72	*
2020	6.96	7.11	6.80	4.26	4.47	*	2.70	*	*
2019	7.27	8.56	5.90	3.79	4.97	*	3.48	*	*
2018	8.34	9.39	7.26	4.75	5.43	*	3.59	*	*
White:									
2021	4.20	4.46	3.92	2.73	2.87	2.58	1.47	1.59	1.34
2020	4.29	4.62	3.94	2.84	3.04	2.63	1.45	1.58	1.31
2019	4.37	4.81	3.90	2.88	3.14	2.61	1.48	1.66	1.29
2018	4.55	4.98	4.09	3.02	3.27	2.76	1.53	1.71	1.34

* Estimate does not meet National Center for Health statistics standards of reliability; see Technical Notes in this report.
[1]Includes race and origin groups not shown separately; see Technical Notes.
[2]Infant deaths are based on race or Hispanic origin of child as stated on the death certificate; live births are based on race or Hispanic origin of mother as stated on the birth certificate; see Technical Notes.
[3]Includes people of Hispanic origin of any race. The Hispanic-origin category is consistent with 1997 Office of Management and Budget (OMB) standards; see Technical Notes.
[4]Only one race was reported on the birth and death certificates; see Technical Notes. Hispanic origin and race categories are consistent with 1997 OMB standards.

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

Table 19. Number of infant deaths and infant mortality rate for 130 selected causes, by Hispanic origin and race: United States, 2021

[Rates are infant deaths (younger than 1 year) per 100,000 live births in specified group. Infant deaths are based on Hispanic origin and race of decedent; live births are based on Hispanic origin and race of mother. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Asterisks (*) preceding cause-of-death codes indicate that they are not part of the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	Number							Rate						
			Non-Hispanic, single race[3]							Non-Hispanic, single race[3]				
	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White
All causes	19,920	4,453	195	628	5,682	69	7,921	543.6	502.6	746.4	293.7	1,097.1	724.0	419.6
Certain infectious and parasitic diseases (A00–B99,U07.1)[4]	537	124	12	14	171	3	188	14.7	14.0	*	*	33.0	*	10.0
Certain intestinal infectious diseases (A00–A08)	13	4	–	1	2	–	5	*	*	*	*	*	*	*
Diarrhea and gastroenteritis of infectious origin (A09)	156	33	4	5	57	1	49	4.3	3.7	*	*	11.0	*	2.6
Tuberculosis (A16–A19)	2	–	–	–	–	–	2	*	*	*	*	*	*	*
Tetanus (A33,A35)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Diphtheria (A36)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Whooping cough (A37)	1	–	–	–	1	–	–	*	*	*	*	*	*	*
Meningococcal infection (A39)	2	–	–	–	–	–	1	*	*	*	*	*	*	*
Septicemia (A40–A41)	113	29	1	5	36	1	36	3.1	3.3	*	*	7.0	*	1.9
Congenital syphilis (A50)	5	3	1	–	1	–	–	*	*	*	*	*	*	*
Gonococcal infection (A54)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Viral diseases (A80–B34,U07.1)[4]	205	49	3	2	58	1	83	5.6	5.5	*	*	11.2	*	4.4
Acute poliomyelitis (A80)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Varicella (chickenpox) (B01)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Measles (B05)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Human immunodeficiency virus (HIV) disease (B20–B24)	1	1	–	–	–	–	–	*	*	*	*	*	*	*
Mumps (B26)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Other and unspecified viral diseases (A81–B00, B02–B04,B06–B19,B25,B27–B34,U07.1)[4]	204	48	3	2	58	1	83	5.6	5.4	*	*	11.2	*	4.4
Candidiasis (B37)	4	2	–	–	–	–	2	*	*	*	*	*	*	*
Malaria (B50–B54)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Pneumocystosis (B59)	1	–	–	–	–	–	1	*	*	*	*	*	*	*
All other and unspecified infectious and parasitic diseases (A20–A32,A38, A42–A49,A51–A53,A55–A79, B35–B36,B38–B49,B55–B58,B60–B99)	35	4	3	1	16	–	9	1.0	*	*	*	*	*	*
Neoplasms (C00–D48)	78	20	–	7	8	1	38	2.1	2.3	*	*	*	*	2.0
Malignant neoplasms (C00–C97)	52	15	–	4	6	1	24	1.4	*	*	*	*	*	1.3
Hodgkin disease and non-Hodgkin lymphomas (C81–C85)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Leukemia (C91–C95)	14	4	–	2	1	1	6	*	*	*	*	*	*	*
Other and unspecified malignant neoplasms (C00–C80,C88,C90,C96–C97)	38	11	–	2	5	–	18	1.0	*	*	*	*	*	*
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00–D48)	26	5	–	3	2	–	14	0.7	*	*	*	*	*	*

See footnotes at end of table.

Table 19. Number of infant deaths and infant mortality rate for 130 selected causes, by Hispanic origin and race: United States, 2021—Con.

[Rates are infant deaths (younger than 1 year) per 100,000 live births in specified group. Infant deaths are based on Hispanic origin and race of decedent; live births are based on Hispanic origin and race of mother. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Asterisks (*) preceding cause-of-death codes indicate that they are not part of the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	Number							Rate						
			Non-Hispanic, single race[3]							Non-Hispanic, single race[3]				
	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	76	21	1	1	20	2	28	2.1	2.4	*	*	3.9	*	1.5
Anemias (D50–D64)	12	3	–	1	2	–	6	*	*	*	*	*	*	*
Hemorrhagic conditions and other diseases of blood and blood-forming organs (D65–D76)	53	16	–	–	16	2	16	1.4	*	*	*	*	*	*
Certain disorders involving the immune mechanism (D80–D89)	11	2	1	–	2	–	6	*	*	*	*	*	*	*
Endocrine, nutritional and metabolic diseases (E00–E88)	171	42	2	15	37	1	71	4.7	4.7	*	*	7.1	*	3.8
Short stature, not elsewhere classified (E34.3)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Nutritional deficiencies (E40–E64)	12	2	–	–	5	–	5	*	*	*	*	*	*	*
Cystic fibrosis (E84)	4	1	–	1	–	–	2	*	*	*	*	*	*	*
Volume depletion, disorders of fluid, electrolyte and acid-base balance (E86–E87)	46	9	1	4	19	–	13	1.3	*	*	*	*	*	*
All other endocrine, nutritional and metabolic diseases (E00–E32,E34.0–E34.2, E34.4–E34.9,E65–E83,E85,E88)	109	30	1	10	13	1	51	3.0	3.4	*	*	*	*	2.7
Diseases of the nervous system (G00–G98)	252	66	1	9	61	–	104	6.9	7.4	*	*	11.8	*	5.5
Meningitis (G00,G03)	55	16	–	3	19	–	13	1.5	*	*	*	*	*	*
Infantile spinal muscular atrophy, type I (Werdnig-Hoffman) (G12.0)	–	–	–	–	–	–	–	*	*	*	*	*	*	*
Infantile cerebral palsy (G80)	2	–	–	–	1	–	1	*	*	*	*	*	*	*
Anoxic brain damage, not elsewhere classified (G93.1)	30	5	1	1	13	–	9	0.8	*	*	*	*	*	*
Other diseases of nervous system (G04,G06–G11, G12.1 –G12.9,G20–G72, G81–G92,G93.0,G93.2–G93.9,G95–G98)	165	45	–	5	28	–	81	4.5	5.1	*	*	5.4	*	4.3
Diseases of the ear and mastoid process (H60–H93)	2	1	–	–	–	–	1	*	*	*	*	*	*	*
Diseases of the circulatory system (I00–I99)	402	92	2	13	120	2	168	11.0	10.4	*	*	23.2	*	8.9
Pulmonary heart disease and diseases of pulmonary circulation (I26–I28)	68	22	–	1	19	1	24	1.9	2.5	*	*	*	*	1.3
Pericarditis, endocarditis and myocarditis (I30,I33,I40)	4	1	–	–	2	–	1	*	*	*	*	*	*	*
Cardiomyopathy (I42)	75	16	1	1	19	1	37	2.0	*	*	*	*	*	2.0
Cardiac arrest (I46)	25	3	–	–	11	–	11	0.7	*	*	*	*	*	*
Cerebrovascular diseases (I60–I69)	97	18	1	4	38	–	34	2.6	*	*	*	7.3	*	1.8
All other diseases of circulatory system (I00–I25, I31,I34–I38,I44–I45,I47–I51,I70–I99)	133	32	–	7	31	–	61	3.6	3.6	*	*	6.0	*	3.2
Diseases of the respiratory system (J00–J98,U04)	343	55	5	9	131	3	119	9.4	6.2	*	*	25.3	*	6.3

See footnotes at end of table.

Table 19. Number of infant deaths and infant mortality rate for 130 selected causes, by Hispanic origin and race: United States, 2021—Con.

[Rates are infant deaths (younger than 1 year) per 100,000 live births in specified group. Infant deaths are based on Hispanic origin and race of decedent; live births are based on Hispanic origin and race of mother. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Asterisks (*) preceding cause-of-death codes indicate that they are not part of the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	Number							Rate						
			Non-Hispanic, single race[3]							Non-Hispanic, single race[3]				
	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White
Acute upper respiratory infections (J00–J06)	7	2	–	–	2	–	3	*	*	*	*	*	*	*
Influenza and pneumonia (J09–J18)	125	23	4	2	48	2	38	3.4	2.6	*	*	9.3	*	2.0
Influenza (J09–J11)	5	1	–	–	2	–	2	*	*	*	*	*	*	*
Pneumonia (J12–J18)	120	22	4	2	46	2	36	3.3	2.5	*	*	8.9	*	1.9
Acute bronchitis and acute bronchiolitis (J20–J21)	27	6	–	–	7	–	10	0.7	*	*	*	*	*	*
Bronchitis, chronic and unspecified (J40–J42)	6	–	–	–	4	–	2	*	*	*	*	*	*	*
Asthma (J45–J46)	3	–	–	–	3	–	–	*	*	*	*	*	*	*
Pneumonitis due to solids and liquids (J69)	5	–	–	–	4	–	1	*	*	*	*	*	*	*
Other and unspecified diseases of respiratory system (J22,J30–J39,J43–J44, J47–J68,J70–J98,U04)	170	24	1	7	63	1	65	4.6	2.7	*	*	12.2	*	3.4
Diseases of the digestive system (K00–K92)	164	46	2	7	38	2	60	4.5	5.2	*	*	7.3	*	3.2
Gastritis, duodenitis, and noninfective enteritis and colitis (K29,K50–K55)	27	3	–	2	3	–	17	0.7	*	*	*	*	*	*
Hernia of abdominal cavity and intestinal obstruction without hernia (K40–K46,K56)	48	16	1	3	10	1	15	1.3	*	*	*	*	*	*
All other and unspecified diseases of digestive system (K00–K28,K30–K38,K57–K92)	89	27	1	2	25	1	28	2.4	3.0	*	*	4.8	*	1.5
Diseases of the genitourinary system (N00–N95)	75	18	1	3	19	–	28	2.0	*	*	*	*	*	1.5
Renal failure and other disorders of kidney (N17–N19,N25,N27)	41	8	–	–	10	–	19	1.1	*	*	*	*	*	*
Other and unspecified diseases of genitourinary system (N00–N15,N20–N23,N26,N28–N95)	34	10	1	3	9	–	9	0.9	*	*	*	*	*	*
Certain conditions originating in the perinatal period (P00–P96)	9,434	2,209	57	386	2,764	27	3,493	257.5	249.3	218.2	180.5	533.7	283.3	185.0
Newborn affected by maternal factors and by complications of pregnancy, labor and delivery (P00–P04)	2,075	484	15	104	587	3	756	56.6	54.6	*	48.6	113.3	*	40.0
Newborn affected by maternal hypertensive disorders (P00.0)	53	14	–	5	16	1	11	1.4	*	*	*	*	*	*
Newborn affected by other maternal conditions which may be unrelated to present pregnancy (P00.1–P00.9)	101	27	–	4	20	–	44	2.8	3.0	*	*	3.9	*	2.3
Newborn affected by maternal complications of pregnancy (P01)	1,113	268	3	60	355	1	371	30.4	30.3	*	28.1	68.5	*	19.7
Newborn affected by incompetent cervix (P01.0)	337	88	–	23	112	–	101	9.2	9.9	*	10.8	21.6	*	5.4
Newborn affected by premature rupture of membranes (P01.1)	569	140	2	27	186	1	181	15.5	15.8	*	12.6	35.9	*	9.6

See footnotes at end of table.

Table 19. Number of infant deaths and infant mortality rate for 130 selected causes, by Hispanic origin and race: United States, 2021—Con.

[Rates are infant deaths (younger than 1 year) per 100,000 live births in specified group. Infant deaths are based on Hispanic origin and race of decedent; live births are based on Hispanic origin and race of mother. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Asterisks (*) preceding cause-of-death codes indicate that they are not part of the *International Classification of Diseases, 10th Revision* (ICD–10); see Technical Notes in this report]

Cause of death (based on ICD–10)	Number							Rate						
			Non-Hispanic, single race[3]							Non-Hispanic, single race[3]				
	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White
Newborn affected by multiple pregnancy (P01.5)	79	10	–	4	23	–	36	2.2	*	*	*	4.4	*	1.9
Newborn affected by other maternal complications of pregnancy (P01.2–P01.4,P01.6–P01.9)	128	30	1	6	34	–	53	3.5	3.4	*	*	6.6	*	2.8
Newborn affected by complications of placenta, cord and membranes (P02)	672	138	9	32	175	–	267	18.3	15.6	*	15.0	33.8	*	14.1
Newborn affected by complications involving placenta (P02.0–P02.3)	410	73	7	17	107	–	180	11.2	8.2	*	*	20.7	*	9.5
Newborn affected by complications involving cord (P02.4–P02.6)	45	7	1	–	11	–	23	1.2	*	*	*	*	*	1.2
Newborn affected by chorioamnionitis (P02.7)	215	56	1	15	57	–	64	5.9	6.3	*	*	11.0	*	3.4
Newborn affected by other and unspecified abnormalities of membranes (P02.8–P02.9)	2	2	–	–	–	–	–	*	*	*	*	*	*	*
Newborn affected by other complications of labor and delivery (P03)	86	21	1	3	15	1	40	2.3	2.4	*	*	*	*	2.1
Newborn affected by noxious influences transmitted via placenta or breast milk (P04)	50	16	2	–	6	–	23	1.4	*	*	*	*	*	1.2
Disorders related to length of gestation and fetal malnutrition (P05–P08)	3,035	689	13	126	1,052	7	987	82.8	77.8	*	58.9	203.1	*	52.3
Slow fetal growth and fetal malnutrition (P05)	88	15	–	9	28	–	33	2.4	*	*	*	5.4	*	1.7
Disorders related to short gestation and low birth weight, not elsewhere classified (P07)	2,946	674	13	116	1,024	7	954	80.4	76.1	*	54.3	197.7	*	50.5
Extremely low birth weight or extreme immaturity (P07.0,P07.2)	2,262	536	10	95	795	6	698	61.7	60.5	*	44.4	153.5	*	37.0
Other low birth weight or preterm (P07.1,P07.3)	684	138	3	21	229	1	256	18.7	15.6	*	9.8	44.2	*	13.6
Disorders related to long gestation and high birth weight (P08)	1	–	–	1	–	–	–	*	*	*	*	*	*	*
Birth trauma (P10–P15)	11	3	–	–	3	–	4	*	*	*	*	*	*	*
Intrauterine hypoxia and birth asphyxia (P20–P21)	358	80	1	11	88	–	158	9.8	9.0	*	*	17.0	*	8.4
Intrauterine hypoxia (P20)	189	47	–	8	48	–	76	5.2	5.3	*	*	9.3	*	4.0
Birth asphyxia (P21)	169	33	1	3	40	–	82	4.6	3.7	*	*	7.7	*	4.3
Respiratory distress of newborn (P22)	414	112	1	12	117	1	152	11.3	12.6	*	*	22.6	*	8.1
Other respiratory conditions originating in the perinatal period (P23–P28)	707	150	7	14	187	3	316	19.3	16.9	*	*	36.1	*	16.7
Congenital pneumonia (P23)	41	11	1	1	12	–	15	1.1	*	*	*	*	*	*
Neonatal aspiration syndromes (P24)	42	12	–	–	7	–	21	1.1	*	*	*	*	*	1.1
Interstitial emphysema and related conditions originating in the perinatal period (P25)	62	15	–	1	14	2	28	1.7	*	*	*	*	*	1.5

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Table 19. Number of infant deaths and infant mortality rate for 130 selected causes, by Hispanic origin and race: United States, 2021—Con.

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Cause of death (based on ICD–10)	Number							Rate						
			Non-Hispanic, single race[3]							Non-Hispanic, single race[3]				
	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White
Pulmonary hemorrhage originating in the perinatal period (P26)	144	27	2	6	38	1	59	3.9	3.0	*	*	7.3	*	3.1
Chronic respiratory disease originating in the perinatal period (P27)	126	16	–	2	47	–	60	3.4	*	*	*	9.1	*	3.2
Atelectasis (P28.0–P28.1)	241	61	4	4	58	–	106	6.6	6.9	*	*	11.2	*	5.6
All other respiratory conditions originating in the perinatal period (P28.2–P28.9)	51	8	–	–	11	–	27	1.4	*	*	*	*	*	1.4
Infections specific to the perinatal period (P35–P39)	716	170	6	38	206	2	262	19.5	19.2	*	17.8	39.8	*	13.9
Bacterial sepsis of newborn (P36)	557	138	6	31	158	2	197	15.2	15.6	*	14.5	30.5	*	10.4
Omphalitis of newborn with or without mild hemorrhage (P38)	2	–	–	–	–	–	2	*	*	*	*	*	*	*
All other infections specific to the perinatal period (P35,P37,P39)	157	32	–	7	48	–	63	4.3	3.6	*	*	9.3	*	3.3
Hemorrhagic and hematological disorders of newborn (P50–P61)	449	107	2	19	112	3	176	12.3	12.1	*	*	21.6	*	9.3
Neonatal hemorrhage (P50–P52,P54)	342	78	1	14	87	1	138	9.3	8.8	*	*	16.8	*	7.3
Hemorrhagic disease of newborn (P53)	1	–	–	–	–	–	1	*	*	*	*	*	*	*
Hemolytic disease of newborn due to isoimmunization and other perinatal jaundice (P55–P59)	9	3	–	–	1	–	4	*	*	*	*	*	*	*
Hematological disorders (P60–P61)	97	26	1	5	24	2	33	2.6	2.9	*	*	4.6	*	1.7
Syndrome of infant of a diabetic mother and neonatal diabetes mellitus (P70.0–P70.2)	10	3	–	–	2	–	4	*	*	*	*	*	*	*
Necrotizing enterocolitis of newborn (P77)	313	84	5	9	98	–	101	8.5	9.5	*	*	18.9	*	5.4
Hydrops fetalis not due to hemolytic disease (P83.2)	175	48	1	5	19	1	95	4.8	5.4	*	*	*	*	5.0
Other perinatal conditions (P29,P70.3–P70.9, P71–P76,P78–P81,P83.0–P83.1,P83.3–P83.9,P90–P96)	1,171	279	6	48	293	7	482	32.0	31.5	*	22.4	56.6	*	25.5
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	3,963	1,035	38	113	727	8	1,884	108.2	116.8	145.5	52.8	140.4	*	99.8
Anencephaly and similar malformations (Q00)	230	69	2	10	31	–	112	6.3	7.8	*	*	6.0	*	5.9
Congenital hydrocephalus (Q03)	69	23	1	1	13	2	27	1.9	2.6	*	*	*	*	1.4
Spina bifida (Q05)	17	5	–	–	3	–	9	*	*	*	*	*	*	*
Other congenital malformations of nervous system (Q01–Q02,Q04,Q06–Q07)	253	81	2	6	36	–	123	6.9	9.1	*	*	7.0	*	6.5
Congenital malformations of heart (Q20–Q24)	834	181	11	20	161	3	424	22.8	20.4	*	9.4	31.1	*	22.5
Other congenital malformations of circulatory system (Q25–Q28)	153	36	2	6	26	–	69	4.2	4.1	*	*	5.0	*	3.7

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Cause of death (based on ICD–10)	Number							Rate						
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Congenital malformations of respiratory system (Q30–Q34)	298	87	2	5	52	1	136	8.1	9.8	*	*	10.0	*	7.2
Congenital malformations of digestive system (Q35–Q45)	52	12	1	1	6	–	29	1.4	*	*	*	*	*	1.5
Congenital malformations of genitourinary system (Q50–Q64)	369	113	3	9	71	1	160	10.1	12.8	*	*	13.7	*	8.5
Congenital malformations and deformations of musculoskeletal system, limbs and integument (Q65–Q85)	441	100	1	16	92	–	215	12.0	11.3	*	*	17.8	*	11.4
Down syndrome (Q90)	48	16	1	–	11	–	19	1.3	*	*	*	*	*	*
Edward syndrome (Q91.0–Q91.3)	431	135	3	16	81	1	179	11.8	15.2	*	*	15.6	*	9.5
Patau syndrome (Q91.4–Q91.7)	241	55	1	4	52	–	120	6.6	6.2	*	*	10.0	*	6.4
Other congenital malformations and deformations (Q10–Q18,Q86–Q89)	438	97	7	17	69	–	227	12.0	10.9	*	*	13.3	*	12.0
Other chromosomal abnormalities, not elsewhere classified (Q92–Q99)	89	25	1	2	23	–	35	2.4	2.8	*	*	4.4	*	1.9
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	2,714	467	53	35	994	13	1,017	74.1	52.7	202.9	16.4	191.9	*	53.9
Sudden infant death syndrome (R95)	1,459	224	32	16	520	9	580	39.8	25.3	122.5	*	100.4	*	30.7
Other symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R53,R55–R94,R96–R99)	1,255	243	21	19	474	4	437	34.2	27.4	80.4	*	91.5	*	23.2
All other diseases (residual)	26	5	–	–	7	–	13	0.7	*	*	*	*	*	*
External causes of mortality (*U01,V01–Y84)	1,683	252	21	16	585	7	709	45.9	28.4	80.4	*	113.0	*	37.6
Accidents (unintentional injuries) (V01–X59)	1,306	201	18	15	447	7	553	35.6	22.7	*	*	86.3	*	29.3
Transport accidents (V01–V99)	108	27	1	1	44	–	35	2.9	3.0	*	*	8.5	*	1.9
Motor vehicle accidents (V02–V04,V09.0, V09.2,V12–V14,V19.0–V19.2,V19.4–V19.6, V20–V79,V80.3–V80.5,V81.0–V81.1,V82.0–V82.1, V83–V86,V87.0–V87.8,V88.0–V88.8, V89.0,V89.2)	107	27	1	1	44	–	34	2.9	3.0	*	*	8.5	*	1.8
Other and unspecified transport accidents (V01,V05–V06,V09.1,V09.3–V09.9,V10–V11, V15–V18,V19.3,V19.8–V19.9,V80.0–V80.2, V80.6–V80.9,V81.2–V81.9,V82.2–V82.9, V87.9,V88.9,V89.1,V89.3,V89.9,V90–V99)	1	–	–	–	–	–	1	*	*	*	*	*	*	*
Falls (W00–W19)	8	3	–	–	1	–	4	*	*	*	*	*	*	*

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Cause of death (based on ICD–10)	Number							Rate						
			Non-Hispanic, single race[3]							Non-Hispanic, single race[3]				
	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	Total[1]	Hispanic[2]	American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White
Accidental discharge of firearms (W32–W34)	3	2	–	–	–	–	1	*	*	*	*	*	*	*
Accidental drowning and submersion (W65–W74)	38	2	–	3	11	–	20	1.0	*	*	*	*	*	1.1
Accidental suffocation and strangulation in bed (W75)	971	135	16	9	338	6	415	26.5	15.2	*	*	65.3	*	22.0
Other accidental suffocation and strangulation (W76–W77,W81–W84)	66	9	–	1	21	1	30	1.8	*	*	*	4.1	*	1.6
Accidental inhalation and ingestion of food or other objects causing obstruction of respiratory tract (W78–W80)	35	12	1	–	7	–	12	1.0	*	*	*	*	*	*
Accidents caused by exposure to smoke, fire and flames (X00–X09)	15	1	–	–	9	–	5	*	*	*	*	*	*	*
Accidental poisoning and exposure to noxious substances (X40–X49)	27	6	–	–	9	–	12	0.7	*	*	*	*	*	*
Other and unspecified accidents (W20–W31, W35–W64,W85–W99,X10–X39,X50–X59)	35	4	–	1	7	–	19	1.0	*	*	*	*	*	*
Assault (homicide) (*U01,X85–Y09)	267	38	1	–	102	–	105	7.3	4.3	*	*	19.7	*	5.6
Assault (homicide) by hanging, strangulation and suffocation (X91)	10	1	–	–	4	–	4	*	*	*	*	*	*	*
Assault (homicide) by discharge of firearms (*U01.4,X93–X95)	15	1	–	–	9	–	4	*	*	*	*	*	*	*
Neglect, abandonment and other maltreatment syndromes (Y06–Y07)	53	9	1	–	18	–	18	1.4	*	*	*	*	*	*
Assault (homicide) by other and unspecified means (*U01.0–*U01.3,*U01.5–*U01.9, X85–X90,X92,X96–X99,Y00–Y05,Y08–Y09)	189	27	–	–	71	–	79	5.2	3.0	*	*	13.7	*	4.2
Complications of medical and surgical care (Y40–Y84)	12	4	–	1	3	–	4	*	*	*	*	*	*	*
Other external causes (Y10–Y36)	98	9	2	–	33	–	47	2.7	*	*	*	6.4	*	2.5

* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
– Quantity zero.
[1]Includes race and Hispanic-origin groups not shown separately; see Technical Notes.
[2]Includes people of Hispanic origin of any race; see Technical Notes.
[3]Only one race was reported on the death certificate; see Technical Notes.
[4]Beginning with data year 2020, COVID-19 (ICD–10 code U07.1) was newly added as a cause of death.

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

Table 20. Number of infant deaths and infant mortality rate, by Hispanic origin and race for the United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, and by sex for the United States, 2021

[Rates are infant (younger than 1 year) deaths per 1,000 live births in specified group. Infant deaths are based on Hispanic origin and race of decedent; live births are based on Hispanic origin and race of mother; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards; see Technical Notes]

					Non-Hispanic, single race[3]									
	Total[1]		Hispanic[2]		American Indian and Alaska Native		Asian		Black		Native Hawaiian or Other Pacific Islander		White	
Area and sex	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
United States[4]	19,920	5.44	4,453	5.03	195	7.46	628	2.94	5,682	10.97	69	7.24	7,921	4.20
Male	10,909	5.82	2,421	5.37	105	7.87	352	3.20	3,153	12.00	46	9.44	4,317	4.46
Female	9,011	5.03	2,032	4.67	90	7.04	276	2.66	2,529	9.91	23	4.94	3,604	3.92
Alabama	444	7.65	30	5.31	1	*	5	*	191	11.57	–	*	195	5.77
Alaska	70	7.47	4	*	29	16.76	3	*	–	*	2	*	25	5.32
Arizona	429	5.51	204	6.09	16	*	6	*	53	12.04	2	*	118	3.75
Arkansas	313	8.70	27	6.64	–	*	7	*	94	14.11	1	*	173	7.57
California	1,704	4.05	911	4.65	4	*	140	2.51	180	8.46	11	*	348	3.00
Colorado	315	5.00	114	6.21	2	*	8	*	29	9.71	3	*	137	3.77
Connecticut	167	4.68	55	5.80	–	*	5	*	42	9.64	–	*	60	3.14
Delaware	53	5.06	6	*	–	*	1	*	32	11.80	–	*	11	*
District of Columbia	57	6.58	5	*	–	*	1	*	41	11.42	–	*	4	*
Florida	1,268	5.86	329	4.74	–	*	23	3.54	511	11.18	–	*	370	4.06
Georgia	770	6.21	81	4.16	–	*	16	*	396	9.45	–	*	255	4.75
Hawaii	72	4.61	13	*	–	*	13	*	1	*	7	*	9	*
Idaho	117	5.22	26	6.69	1	*	2	*	6	*	–	*	80	4.70
Illinois	743	5.62	164	5.75	–	*	21	2.52	247	11.89	–	*	291	4.07
Indiana	537	6.72	72	8.16	–	*	3	*	127	12.71	–	*	308	5.42
Iowa	148	4.02	14	*	–	*	3	*	33	12.86	3	*	87	3.09
Kansas	193	5.56	33	5.39	–	*	2	*	30	12.95	–	*	118	4.91
Kentucky	325	6.22	18	*	–	*	1	*	62	12.10	2	*	228	5.55
Louisiana	416	7.24	22	4.18	3	*	2	*	240	11.45	–	*	144	4.95
Maine	62	5.16	2	*	2	*	2	*	2	*	–	*	49	4.61
Maryland	415	6.08	68	5.17	–	*	11	*	198	9.68	–	*	108	3.83
Massachusetts	228	3.30	56	3.85	–	*	13	*	54	8.09	–	*	94	2.36
Michigan	656	6.25	58	8.20	2	*	24	5.93	262	14.33	–	*	277	3.84
Minnesota	309	4.80	27	4.92	15	*	15	*	74	9.58	1	*	155	3.56
Mississippi	327	9.30	10	*	3	*	2	*	186	12.72	–	*	120	6.73
Missouri	394	5.67	15	*	–	*	2	*	115	12.18	5	*	232	4.58
Montana	55	4.90	5	*	4	*	1	*	1	*	–	*	39	4.29
Nebraska	133	5.40	20	4.50	5	*	1	*	17	*	1	*	84	5.01
Nevada	190	5.64	70	5.45	2	*	6	*	51	11.44	2	*	49	4.15
New Hampshire	53	4.20	3	*	–	*	1	*	2	*	–	*	47	4.33
New Jersey	355	3.50	120	4.26	–	*	15	*	106	8.27	–	*	108	2.28
New Mexico	102	4.77	59	4.78	8	*	1	*	4	*	–	*	24	4.17
New York	868	4.12	172	3.51	3	*	59	2.88	244	8.43	–	*	311	2.92
North Carolina	814	6.76	105	5.09	12	*	23	4.91	323	11.95	–	*	328	5.19
North Dakota	28	2.77	3	*	1	*	2	*	4	*	–	*	16	*
Ohio	913	7.03	63	7.66	–	*	19	*	311	14.99	3	*	481	5.19
Oklahoma	336	6.94	64	7.87	35	7.67	7	*	45	11.76	1	*	149	5.62
Oregon	154	3.76	41	4.92	2	*	–	*	6	*	1	*	88	3.30
Pennsylvania	719	5.42	98	5.71	–	*	24	4.01	193	11.52	–	*	353	4.00
Rhode Island	46	4.40	11	*	–	*	1	*	10	*	–	*	21	3.58

See footnotes at end of table.

Table 20. Number of infant deaths and infant mortality rate, by Hispanic origin and race for the United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, and by sex for the United States, 2021–Con.

[Rates are infant (younger than 1 year) deaths per 1,000 live births in specified group. Infant deaths are based on Hispanic origin and race of decedent; live births are based on Hispanic origin and race of mother; see Technical Notes in this report. Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards; see Technical Notes]

					Non-Hispanic, single race[3]									
	Total[1]		Hispanic[2]		American Indian and Alaska Native		Asian		Black		Native Hawaiian or Other Pacific Islander		White	
Area and sex	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
South Carolina	421	7.36	38	5.95	–	*	1	*	218	13.62	–	*	154	4.84
South Dakota	69	6.07	3	*	25	16.39	–	*	7	*	–	*	31	3.82
Tennessee	505	6.18	60	6.35	–	*	6	*	160	10.52	1	*	255	4.78
Texas	1,985	5.31	879	4.96	1	*	55	2.83	455	9.81	1	*	566	4.58
Utah	218	4.67	54	6.46	4	*	4	*	6	*	9	*	133	3.94
Vermont	16	*	1	*	–	*	–	*	1	*	–	*	13	*
Virginia	566	5.91	98	6.51	–	*	23	3.31	194	10.12	1	*	205	3.94
Washington	360	4.29	71	4.37	10	*	32	3.63	26	7.03	12	*	170	3.68
West Virginia	121	7.04	2	*	–	*	–	*	9	*	–	*	104	6.65
Wisconsin	329	5.33	42	6.07	5	*	16	*	83	13.92	–	*	173	3.93
Wyoming	32	5.13	7	*	–	*	–	*	–	*	–	*	23	4.71
Puerto Rico	132	6.84	131	6.96	–	*	–	*	–	*	–	*	1	*
U.S. Virgin Islands	5	*	2	*	–	*	–	*	3	*	–	*	–	*
Guam	41	15.63	–	*	–	*	3	*	1	*	31	18.21	–	*
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	7	*	–	*	–	*	2	*	–	*	4	*	–	*

* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
– Quantity zero.
--- Data not available.
[1]Includes race and origin groups not shown separately; see Technical Notes.
[2]Includes people of Hispanic origin of any race; see Technical Notes.
[3]Only one race was reported on the death certificate; see Technical Notes.
[4]Excludes data for Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas.

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

Table 21. Number of maternal deaths and maternal mortality rate for selected causes, by Hispanic origin and race: United States, 2021

[Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for specified categories other than Black non-Hispanic, single race and White non-Hispanic, single race should be interpreted with caution because of inconsistencies between reporting these items on death certificates and on censuses and surveys; see Technical Notes in this report]

Cause of death (based on *International Classification of Diseases, 10th Revision*)	Total[1]	Hispanic[2]	Non-Hispanic, single race[3]				
			American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White
			Number				
Maternal causes (A34,000–095,098–099)	1,205	248	31	36	362	6	503
Direct obstetric causes (A34, 000–095)	448	75	13	20	147	3	185
Pregnancy with abortive outcome (000–007)	48	11	1	2	18	–	15
Ectopic pregnancy (000)	36	7	1	1	14	–	12
Spontaneous abortion (003)	8	3	–	1	2	–	2
Medical abortion (004)	2	1	–	–	1	–	–
Other abortion (005)	2	–	–	–	1	–	1
Other and unspecified pregnancy with abortive outcome (001–002,006–007)	–	–	–	–	–	–	–
Other direct obstetric causes (A34,010–092)	399	63	12	18	129	3	170
Eclampsia and pre–eclampsia (011,013–016)	44	4	3	1	20	–	16
Hemorrhage of pregnancy and childbirth and placenta previa (020,044–046,067,072)	29	1	–	3	9	1	15
Complications predominantly related to the puerperium (A34,085–092)	79	8	2	4	26	1	36
Obstetrical tetanus (A34)	–	–	–	–	–	–	–
Obstetric embolism (088)	44	5	1	2	10	1	24
Other complications predominantly related to the puerperium (085–087,089–092)	35	3	1	2	16	–	12
All other direct obstetric causes (010,012, 021–043,047–066,068–071,073–075)	247	50	7	10	74	1	103
Obstetric death of unspecified cause (095)	1	1	–	–	–	–	–
Indirect obstetric causes (098–099)	757	173	18	16	215	3	318
Death from any obstetric cause occurring more than 42 days but less than 1 year after delivery (096)[4]	461	104	11	16	144	–	178

See footnotes at end of table.

Table 21. Number of maternal deaths and maternal mortality rate for selected causes, by Hispanic origin and race: United States, 2021—Con.

[Hispanic-origin and race categories are consistent with 1997 Office of Management and Budget standards. Data for specified categories other than Black non-Hispanic, single race and White non-Hispanic, single race should be interpreted with caution because of inconsistencies between reporting these items on death certificates and on censuses and surveys; see Technical Notes in this report]

Cause of death (based on *International Classification of Diseases, 10th Revision*)	Total[1]	Hispanic[2]	Non-Hispanic, single race[3]				
			American Indian and Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White
	Rate per 100,000 live births						
Maternal causes (A34,000–095,098–099)	32.9	28.0	118.7	16.8	69.9	*	26.6
Direct obstetric causes (A34, 000–095)	12.2	8.5	*	9.4	28.4	*	9.8
Pregnancy with abortive outcome (000–007)	1.3	*	*	*	*	*	*
Ectopic pregnancy (000)	1.0	*	*	*	*	*	*
Spontaneous abortion (003)	*	*	*	*	*	*	*
Medical abortion (004)	*	*	*	*	*	*	*
Other abortion (005)	*	*	*	*	*	*	*
Other and unspecified pregnancy with abortive outcome (001–002,006–007)	*	*	*	*	*	*	*
Other direct obstetric causes (A34,010–092)	10.9	7.1	*	*	24.9	*	9.0
Eclampsia and pre–eclampsia (011,013–016)	1.2	*	*	*	3.9	*	*
Hemorrhage of pregnancy and childbirth and placenta previa (020,044–046,067,072)	0.8	*	*	*	*	*	*
Complications predominantly related to the puerperium (A34,085–092)	2.2	*	*	*	5.0	*	1.9
Obstetrical tetanus (A34)	*	*	*	*	*	*	*
Obstetric embolism (088)	1.2	*	*	*	*	*	1.3
Other complications predominantly related to the puerperium (085–087,089–092)	1.0	*	*	*	*	*	*
All other direct obstetric causes (010,012, 021–043,047–066,068–071,073–075)	6.7	5.6	*	*	14.3	*	5.5
Obstetric death of unspecified cause (095)	*	*	*	*	*	*	*
Indirect obstetric causes (098–099)	20.7	19.5	*	*	41.5	*	16.8
Death from any obstetric cause occurring more than 42 days but less than 1 year after delivery (O96)[4]	12.6	11.7	*	*	27.8	*	9.4

– Quantity zero.
* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes.
[1]Includes deaths with origin not stated, origin not classifiable, and two or more races reported; see Technical Notes.
[2]Includes people of Hispanic origin of any race; see Technical Notes.
[3]Only one race was reported on the death certificate; see Technical Notes.
[4]Late maternal death.

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

Table 22. Number of deaths, death rate, and age-adjusted death rate for dementia-related causes, by Hispanic origin and race and sex: United States, 1999–2021

[Excludes deaths of nonresidents of the United States]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All origins and races[3]									
2021	279,704	92,303	187,401	84.3	56.2	111.9	72.4	59.7	80.2
2020	303,984	99,157	204,827	92.3	61.1	122.5	73.3	60.5	81.1
2019	271,872	90,482	181,390	82.8	56.0	108.9	66.6	56.6	72.6
2018	266,957	87,759	179,198	81.6	54.5	107.9	66.6	56.4	72.5
2017	261,914	85,129	176,785	80.4	53.1	106.9	66.7	56.4	72.7
2016	249,605	80,680	168,925	77.2	50.7	103.0	64.9	55.1	70.5
2015	245,926	79,113	166,813	76.5	50.0	102.2	65.2	55.4	70.7
2014	239,753	76,911	162,842	75.2	49.0	100.6	64.9	55.5	70.2
2013	234,242	74,656	159,586	74.1	48.0	99.4	64.8	55.4	69.8
2012	223,404	71,158	152,246	71.2	46.1	95.5	63.3	54.7	68.0
2011	212,876	67,053	145,823	68.3	43.7	92.1	61.8	53.1	66.3
2010	196,371	61,961	134,410	63.6	40.8	85.6	58.8	51.1	62.8
2009	177,523	55,553	121,970	57.9	36.8	78.2	54.2	46.8	57.9
2008	178,960	54,893	124,067	58.9	36.7	80.2	55.9	47.5	60.1
2007	156,042	47,537	108,505	51.8	32.1	70.8	49.8	42.4	53.5
2006	151,432	45,937	105,495	50.8	31.3	69.5	49.5	42.2	52.9
2005	129,573	38,024	91,549	43.8	26.2	60.9	43.4	36.1	46.9
2004	114,271	33,467	80,804	39.0	23.3	54.2	39.1	32.7	42.3
2003	110,569	32,246	78,323	38.1	22.6	53.0	38.4	32.1	41.4
2002	102,105	29,891	72,214	35.5	21.2	49.3	36.1	30.6	38.6
2001	92,514	27,315	65,199	32.5	19.5	44.9	33.1	28.5	35.2
2000	83,694	24,568	59,126	29.7	17.8	41.2	30.5	26.1	32.4
1999	74,386	22,380	52,006	26.7	16.4	36.6	27.5	24.2	28.9
Hispanic[4]									
2021	17,876	5,815	12,061	28.5	18.3	39.0	53.8	44.2	59.6
2020	18,534	6,151	12,383	30.2	19.9	40.7	54.3	46.1	59.3
2019	15,412	5,243	10,169	25.4	17.2	33.9	47.3	41.2	50.9
2018	14,937	5,181	9,756	24.9	17.1	32.9	47.4	42.1	50.3
2017	13,820	4,634	9,186	23.4	15.6	31.5	46.0	39.7	49.8
2016	12,687	4,278	8,409	22.1	14.7	29.6	44.8	38.9	48.3
2015	12,104	4,111	7,993	21.4	14.4	28.6	45.2	39.5	48.5
2014	11,583	3,987	7,596	20.9	14.2	27.8	46.3	41.2	49.3
2013	10,767	3,588	7,179	19.9	13.1	27.0	46.2	39.8	49.7
2012	9,943	3,411	6,532	18.8	12.7	25.0	45.7	40.6	48.4
2011	8,793	2,995	5,798	16.9	11.3	22.6	43.1	38.2	45.9
2010	7,744	2,717	5,027	15.3	10.6	20.2	41.7	38.2	43.5
2009	6,535	2,203	4,332	13.2	8.8	17.9	36.7	32.2	39.2
2008	6,378	2,127	4,251	13.3	8.7	18.1	38.2	32.8	40.9
2007	5,198	1,774	3,424	11.3	7.5	15.1	33.0	29.7	34.7
2006	5,076	1,757	3,319	11.4	7.7	15.2	33.9	30.6	35.4
2005	3,876	1,356	2,520	9.0	6.2	12.0	27.6	25.5	28.5
2004	3,244	1,059	2,185	7.8	5.0	10.8	24.5	21.2	26.2
2003	3,001	1,032	1,969	7.5	5.0	10.1	23.8	21.8	24.7
2002	2,461	840	1,621	6.4	4.2	8.6	20.7	19.0	21.5
2001	2,184	736	1,448	5.9	3.9	8.0	19.1	17.0	20.1
2000	1,867	671	1,196	5.3	3.7	7.0	17.2	16.0	17.6
1999	1,677	563	1,114	4.9	3.2	6.8	16.4	14.8	17.2
Non-Hispanic, single race[5]									
American Indian and Alaska Native:									
2021	874	264	610	35.6	21.8	49.1	43	30.0	51.6
2020	864	278	586	35.5	23.3	47.4	43.0	32.6	49.9
2019	733	254	479	30.1	21.2	38.7	39.2	32.3	43.3
2018	764	270	494	31.6	22.7	40.2	42.7	36.2	46.5
Asian:									
2021	6,793	2,189	4,604	34.5	23.2	45.0	35.9	29.1	40.2
2020	7,120	2,288	4,832	36.8	24.7	47.8	36.8	30.0	41.1
2019	5,931	1,932	3,999	31.4	21.4	40.4	32.6	27.0	35.9
2018	5,529	1,799	3,730	29.5	20.2	38.0	32.3	26.8	35.6

See footnotes at end of table.

Table 22. Number of deaths, death rate, and age-adjusted death rate for dementia-related causes, by Hispanic origin and race and sex: United States, 1999–2021—Con.

[Excludes deaths of nonresidents of the United States]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hispanic, single race[5]—Con.									
Black:									
2021	23,685	7,506	16,179	56.6	37.3	74.4	71.8	62.7	75.9
2020	25,815	8,213	17,602	62.3	41.5	81.4	74.7	66.4	78.2
2019	21,629	7,067	14,562	52.6	35.9	67.8	64.5	59.6	66.3
2018	21,037	6,743	14,294	51.4	34.5	67.0	64.8	59.1	67.0
Native Hawaiian or Other Pacific Islander:									
2021	170	61	109	27.1	19.3	35.2	39.9	32.0	45.3
2020	171	71	100	27.9	23.0	32.9	40.3	37.4	42.1
2019	147	64	83	24.7	21.3	28.0	38.1	36.9	38.7
2018	126	50	76	21.5	16.9	26.1	35.5	31.2	38.3
White:									
2021	229,199	76,082	153,117	116.4	77.9	154.5	77.4	63.5	86.3
2020	250,280	81,744	168,536	127.2	84.2	169.0	77.8	63.7	86.8
2019	226,969	75,549	151,420	115.0	77.6	151.4	71.2	59.9	78.1
2018	223,473	73,273	150,200	113.1	75.2	150.0	70.9	59.4	77.8

[1]Rates are on an annual basis per 100,000 population in specified group; see Technical Notes in this report.
[2]Age-adjusted rates are per 100,000 U.S. standard population. For method of computation, see Technical Notes.
[3]Includes origins and races not shown separately; see Technical Notes.
[4]Includes people of Hispanic origin of any race. The Hispanic-origin category is consistent with 1997 Office of Management and Budget (OMB) standards; see Technical Notes.
[5]Only one race was reported on the death certificate. Hispanic-origin and race categories are consistent with 1997 OMB standards; see Technical Notes.

NOTE: Causes of death attributable to dementia-related mortality include *International Classification of Diseases, 10th Revision* codes F01 (Vascular dementia), F03 (Unspecified dementia), G30 (Alzheimer disease), and G31 (Other degenerative diseases of nervous system, not elsewhere classified).

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

Table 23. Number of deaths, death rate, and age-adjusted death rate for drug-induced causes, by Hispanic origin and race and sex: United States, 1999–2021

[Excludes deaths of nonresidents of the United States]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All origins and races[3]									
2021	111,219	77,309	33,910	33.5	47.0	20.2	33.6	46.8	20.4
2020	96,096	66,607	29,489	29.2	41.1	17.6	29.5	41.1	17.9
2019	74,511	50,393	24,118	22.7	31.2	14.5	22.8	31.1	14.5
2018	71,147	47,338	23,809	21.7	29.4	14.3	21.8	29.3	14.3
2017	73,990	48,967	25,023	22.7	30.5	15.1	22.8	30.5	15.2
2016	67,265	43,931	23,334	20.8	27.6	14.2	20.8	27.6	14.2
2015	55,403	34,815	20,588	17.2	22.0	12.6	17.2	21.9	12.5
2014	49,714	30,510	19,204	15.6	19.4	11.9	15.5	19.3	11.7
2013	46,471	28,381	18,090	14.7	18.2	11.3	14.6	18.0	11.1
2012	43,819	26,594	17,225	14.0	17.2	10.8	13.8	17.0	10.7
2011	43,544	26,444	17,100	14.0	17.3	10.8	13.9	17.0	10.7
2010	40,393	24,376	16,017	13.1	16.1	10.2	12.9	15.9	10.0
2009	39,147	24,015	15,132	12.8	15.9	9.7	12.6	15.7	9.5
2008	38,649	23,928	14,721	12.7	16.0	9.5	12.6	15.8	9.4
2007	38,371	23,883	14,488	12.7	16.1	9.5	12.6	16.0	9.3
2006	38,396	24,507	13,889	12.9	16.7	9.2	12.8	16.6	9.1
2005	33,541	21,208	12,333	11.3	14.6	8.2	11.3	14.5	8.1
2004	30,711	19,362	11,349	10.5	13.5	7.6	10.5	13.4	7.6
2003	28,723	18,426	10,297	9.9	12.9	7.0	9.9	12.9	7.0
2002	26,040	16,734	9,306	9.1	11.8	6.4	9.1	11.8	6.3
2001	21,705	14,253	7,452	7.6	10.2	5.1	7.6	10.1	5.1
2000	19,720	13,137	6,583	7.0	9.5	4.6	7.0	9.5	4.6
1999	19,128	12,885	6,243	6.9	9.4	4.4	6.8	9.4	4.4
Hispanic[4]									
2021	13,436	10,513	2,923	21.4	33.1	9.5	21.9	33.5	9.7
2020	11,059	8,725	2,334	18.0	28.2	7.7	18.4	28.5	7.9
2019	7,837	6,106	1,731	12.9	20.0	5.8	13.4	20.5	6.0
2018	6,663	5,087	1,576	11.1	16.8	5.3	11.6	17.5	5.6
2017	6,322	4,797	1,525	10.7	16.1	5.2	11.2	16.8	5.5
2016	5,540	4,130	1,410	9.6	14.2	5.0	10.1	14.8	5.3
2015	4,387	3,175	1,212	7.8	11.1	4.3	8.2	11.7	4.7
2014	3,790	2,687	1,103	6.8	9.6	4.0	7.3	10.3	4.4
2013	3,616	2,546	1,070	6.7	9.3	4.0	7.3	10.0	4.4
2012	3,272	2,283	989	6.2	8.5	3.8	6.8	9.3	4.2
2011	3,152	2,175	977	6.1	8.2	3.8	6.6	8.9	4.3
2010	2,788	1,944	844	5.5	7.6	3.4	6.1	8.4	3.8
2009	2,811	2,013	798	5.7	8.0	3.3	6.4	8.9	3.7
2008	2,761	2,033	728	5.8	8.4	3.1	6.4	9.3	3.5
2007	2,723	2,045	678	5.9	8.7	3.0	6.6	9.7	3.4
2006	2,871	2,135	736	6.4	9.4	3.4	7.3	10.6	3.9
2005	2,596	1,969	627	6.0	9.0	3.0	6.9	10.2	3.5
2004	2,257	1,671	586	5.4	7.9	2.9	6.3	9.1	3.4
2003	2,358	1,800	558	5.9	8.8	2.9	6.7	10.1	3.3
2002	2,137	1,647	490	5.5	8.3	2.6	6.3	9.5	3.0
2001	1,731	1,335	396	4.7	7.0	2.2	5.3	8.0	2.5
2000	1,700	1,348	352	4.8	7.4	2.1	5.4	8.3	2.4
1999	1,965	1,605	360	5.8	9.2	2.2	6.4	10.3	2.5
Non-Hispanic, single race[5]									
American Indian and Alaska Native:									
2021	1,448	876	572	59.1	72.4	46.1	60.4	73.8	47.0
2020	1,076	642	434	44.2	53.7	35.1	45.1	54.2	36.4
2019	785	465	320	32.2	38.8	25.9	33.0	40.0	26.2
2018	680	407	273	28.1	34.2	22.2	29.2	35.5	23.1
Asian:									
2021	1,017	757	260	5.2	8.0	2.5	4.9	7.6	2.4
2020	990	753	237	5.1	8.1	2.3	4.9	7.7	2.2
2019	713	530	183	3.8	5.9	1.8	3.5	5.5	1.7
2018	634	441	193	3.4	4.9	2.0	3.1	4.6	1.8

See footnotes at end of table.

Table 23. Number of deaths, death rate, and age-adjusted death rate for drug-induced causes, by Hispanic origin and race and sex: United States, 1999–2021—Con.

[Excludes deaths of nonresidents of the United States]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hispanic, single race[5]—Con.									
Black:									
2021	19,944	14,457	5,487	47.6	71.8	25.2	45.8	69.8	24.4
2020	15,936	11,560	4,376	38.5	58.4	20.2	37.3	57.3	19.7
2019	11,115	7,968	3,147	27.0	40.5	14.7	26.1	39.9	14.2
2018	9,632	6,883	2,749	23.5	35.2	12.9	22.7	34.6	12.3
Native Hawaiian or Other Pacific Islander:									
2021	137	106	31	21.9	33.5	10.0	21.6	32.7	10.2
2020	91	70	21	14.8	22.6	6.9	14.6	22.1	6.9
2019	66	48	18	11.1	16.0	*	10.8	15.4	6.1
2018	76	56	20	13.0	19.0	6.9	13.1	19.0	7.1
White:									
2021	73,225	49,176	24,049	37.2	50.3	24.3	38.2	51.2	24.9
2020	65,270	43,689	21,581	33.2	45.0	21.6	34.5	46.3	22.5
2019	52,796	34,490	18,306	26.8	35.4	18.3	27.4	36.1	18.7
2018	52,322	33,679	18,643	26.5	34.6	18.6	27.2	35.3	19.0

* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes in this report.
[1]Rates are on an annual basis per 100,000 population in specified group; see Technical Notes.
[2]Age-adjusted rates are per 100,000 U.S. standard population. For method of computation, see Technical Notes.
[3]Includes origins and races not shown separately; see Technical Notes.
[4]Includes people of Hispanic origin of any race. The Hispanic-origin category is consistent with 1997 Office of Management and Budget (OMB) standards; see Technical Notes.
[5]Only one race was reported on the death certificate. Hispanic-origin and race categories are consistent with 1997 OMB standards; see Technical Notes.

NOTE: Causes of death attributable to drug-induced mortality include *International Classification of Diseases, 10th Revision* codes D52.1, D59.0, D59.2, D61.1, D64.2, E06.4, E16.0, E23.1, E24.2, E27.3, E66.1, 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, F19.7–F19.9, G21.1, G24.0, G25.1, G25.4, G25.6, G44.4, G62.0, G72.0, I95.2, J70.2–J70.4, K85.3, L10.5, L27.0–L27.1, M10.2, M32.0, M80.4, M81.4, M83.5, M87.1, R50.2, R78.1–R78.5, X40–X44, X60–X64, X85, and Y10–Y14.

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

Table 24. Number of deaths, death rate, and age-adjusted death rate for alcohol-induced causes, by Hispanic origin and race and sex: United States, 1999–2021

[Excludes deaths of nonresidents of the United States]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All origins and races[3]									
2021	54,258	38,700	15,558	16.3	23.5	9.3	14.4	20.9	8.3
2020	49,061	35,002	14,059	14.9	21.6	8.4	13.1	19.2	7.5
2019	39,043	27,921	11,122	11.9	17.3	6.7	10.4	15.2	5.9
2018	37,329	26,820	10,509	11.4	16.6	6.3	9.9	14.7	5.6
2017	35,823	25,911	9,912	11.0	16.2	6.0	9.6	14.3	5.3
2016	34,865	25,221	9,644	10.8	15.9	5.9	9.5	14.1	5.2
2015	33,171	23,996	9,175	10.3	15.2	5.6	9.1	13.6	5.0
2014	30,722	22,389	8,333	9.6	14.3	5.1	8.5	12.9	4.6
2013	29,001	21,361	7,640	9.2	13.7	4.8	8.2	12.5	4.3
2012	27,762	20,418	7,344	8.8	13.2	4.6	8.0	12.1	4.2
2011	26,654	19,492	7,162	8.6	12.7	4.5	7.7	11.7	4.1
2010	25,692	19,038	6,654	8.3	12.5	4.2	7.6	11.7	3.9
2009	24,518	18,088	6,430	8.0	12.0	4.1	7.4	11.3	3.8
2008	24,189	18,152	6,037	8.0	12.1	3.9	7.4	11.5	3.6
2007	23,199	17,428	5,771	7.7	11.8	3.8	7.2	11.3	3.5
2006	22,073	16,472	5,601	7.4	11.2	3.7	7.0	10.9	3.4
2005	21,634	16,238	5,396	7.3	11.2	3.6	7.0	11.0	3.4
2004	21,081	15,906	5,175	7.2	11.1	3.5	7.0	11.0	3.3
2003	20,687	15,630	5,057	7.1	11.0	3.4	7.0	11.0	3.3
2002	20,218	15,272	4,946	7.0	10.8	3.4	6.9	11.0	3.3
2001	20,114	15,149	4,965	7.1	10.8	3.4	7.0	11.2	3.3
2000	19,643	14,993	4,650	7.0	10.9	3.2	7.0	11.4	3.2
1999	19,469	14,894	4,575	7.0	10.9	3.2	7.1	11.5	3.2
Hispanic[4]									
2021	7,533	6,148	1,385	12.0	19.4	4.5	13.6	22.4	4.9
2020	6,737	5,448	1,289	11.0	17.6	4.2	12.6	20.9	4.7
2019	5,458	4,442	1,016	9.0	14.5	3.4	10.6	17.8	3.8
2018	4,969	4,109	860	8.3	13.6	2.9	9.9	17.1	3.3
2017	4,817	3,934	883	8.2	13.2	3.0	9.9	16.9	3.5
2016	4,711	3,814	897	8.2	13.1	3.2	10.1	17.2	3.7
2015	4,474	3,643	831	7.9	12.7	3.0	9.9	16.9	3.5
2014	4,127	3,393	734	7.5	12.1	2.7	9.5	16.4	3.3
2013	3,698	3,034	664	6.8	11.0	2.5	9.0	15.3	3.1
2012	3,513	2,903	610	6.6	10.8	2.3	8.8	15.2	3.0
2011	3,445	2,842	603	6.6	10.7	2.4	9.0	15.6	3.0
2010	3,326	2,759	567	6.6	10.8	2.3	9.1	16.0	3.0
2009	3,139	2,618	521	6.4	10.4	2.1	8.9	15.6	2.9
2008	3,021	2,522	499	6.3	10.4	2.1	8.9	15.5	2.8
2007	2,977	2,539	438	6.4	10.8	1.9	9.4	16.8	2.7
2006	2,804	2,341	463	6.3	10.3	2.1	9.2	16.2	3.0
2005	2,658	2,265	393	6.2	10.3	1.9	9.1	16.5	2.6
2004	2,406	2,056	350	5.8	9.7	1.7	8.6	15.4	2.5
2003	2,422	2,048	374	6.0	10.0	1.9	9.2	16.4	2.8
2002	2,408	2,065	343	6.2	10.4	1.8	9.7	17.4	2.7
2001	2,381	2,026	355	6.4	10.6	2.0	10.1	18.2	2.9
2000	2,323	2,024	299	6.6	11.1	1.7	10.5	19.4	2.6
1999	2,184	1,864	320	6.4	10.7	1.9	10.3	18.6	3.0
Non-Hispanic, single race[5]									
American Indian and Alaska Native:									
2021	2,221	1,377	844	90.6	113.8	68.0	91.7	116.0	68.7
2020	1,776	1,042	734	73.0	87.2	59.3	74.0	88.8	60.3
2019	1,315	785	530	54.0	65.5	42.9	54.0	65.7	43.3
2018	1,312	793	519	54.3	66.7	42.3	54.5	68.2	42.1
Asian:									
2021	638	504	134	3.2	5.3	1.3	2.9	5.0	1.2
2020	617	507	110	3.2	5.5	1.1	2.9	5.3	1.0
2019	467	368	99	2.5	4.1	1.0	2.3	3.9	0.9
2018	456	356	100	2.4	4.0	1.0	2.2	3.8	0.9

See footnotes at end of table.

Table 24. Number of deaths, death rate, and age-adjusted death rate for alcohol-induced causes, by Hispanic origin and race and sex: United States, 1999–2021—Con.

[Excludes deaths of nonresidents of the United States]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hispanic, single race[5]—Con.									
Black:									
2021	5,023	3,477	1,546	12.0	17.3	7.1	11.2	16.6	6.7
2020	4,329	3,047	1,282	10.4	15.4	5.9	9.7	15.0	5.5
2019	3,391	2,409	982	8.2	12.2	4.6	7.6	11.9	4.2
2018	3,143	2,234	909	7.7	11.4	4.3	7.1	11.2	3.9
Native Hawaiian or Other Pacific Islander:									
2021	40	33	7	6.4	10.4	*	6.4	10.8	*
2020	25	17	8	4.1	*	*	4.5	*	*
2019	26	20	6	4.4	6.7	*	4.3	7.0	*
2018	34	23	11	5.8	7.8	*	5.9	8.4	*
White:									
2021	38,117	26,671	11,446	19.4	27.3	11.5	15.6	21.8	9.5
2020	35,033	24,568	10,465	17.8	25.3	10.5	14.3	20.2	8.7
2019	27,951	19,588	8,363	14.2	20.1	8.4	11.2	15.8	6.8
2018	26,987	19,001	7,986	13.7	19.5	8.0	10.7	15.3	6.5

* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes in this report.
[1]Rates are on an annual basis per 100,000 population in specified group; see Technical Notes.
[2]Age-adjusted rates are per 100,000 U.S. standard population. For method of computation, see Technical Notes.
[3]Includes origins and races not shown separately; see Technical Notes.
[4]Includes people of Hispanic origin of any race. The Hispanic-origin category is consistent with 1997 Office of Management and Budget (OMB) standards; see Technical Notes.
[5]Only one race was reported on the death certificate. Hispanic-origin and race categories are consistent with 1997 OMB standards; see Technical Notes.

NOTE: Causes of death attributable to alcohol-induced mortality include *International Classification of Diseases, 10th Revision* codes E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, R78.0, X45, X65, and Y15.

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

Table 25. Number of deaths, death rate, and age-adjusted death rate for injury by firearms, by Hispanic origin and race and sex: United States, 1999–2021

[Excludes deaths of nonresidents of the United States]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All origins and races[3]									
2021	48,830	41,866	6,964	14.7	25.5	4.2	14.6	25.3	4.2
2020	45,222	38,981	6,241	13.7	24.0	3.7	13.6	23.8	3.8
2019	39,707	34,041	5,666	12.1	21.1	3.4	11.9	20.7	3.4
2018	39,740	33,955	5,785	12.1	21.1	3.5	11.9	20.7	3.4
2017	39,773	34,062	5,711	12.2	21.2	3.5	12.0	20.9	3.4
2016	38,658	32,994	5,664	12.0	20.7	3.5	11.8	20.5	3.4
2015	36,252	31,032	5,220	11.3	19.6	3.2	11.1	19.4	3.2
2014	33,594	28,715	4,879	10.5	18.3	3.0	10.3	18.0	3.0
2013	33,636	28,794	4,842	10.6	18.5	3.0	10.4	18.3	3.0
2012	33,563	28,838	4,725	10.7	18.7	3.0	10.5	18.5	3.0
2011	32,351	27,738	4,613	10.4	18.1	2.9	10.2	18.0	2.9
2010	31,672	27,356	4,316	10.3	18.0	2.7	10.1	17.9	2.7
2009	31,347	26,921	4,426	10.2	17.9	2.8	10.1	17.8	2.8
2008	31,593	27,336	4,257	10.4	18.3	2.8	10.3	18.3	2.7
2007	31,224	27,047	4,177	10.4	18.3	2.7	10.3	18.3	2.7
2006	30,896	26,712	4,184	10.4	18.2	2.8	10.3	18.2	2.7
2005	30,694	26,657	4,037	10.4	18.4	2.7	10.3	18.5	2.7
2004	29,569	25,498	4,071	10.1	17.7	2.7	10.0	17.9	2.7
2003	30,136	26,124	4,012	10.4	18.3	2.7	10.3	18.5	2.7
2002	30,242	26,098	4,144	10.5	18.5	2.8	10.5	18.7	2.8
2001	29,573	25,480	4,093	10.4	18.2	2.8	10.3	18.5	2.8
2000	28,663	24,582	4,081	10.2	17.8	2.8	10.2	18.1	2.8
1999	28,874	24,700	4,174	10.3	18.1	2.9	10.3	18.4	2.9
Hispanic[4]									
2021	5,741	5,014	727	9.2	15.8	2.4	8.9	15.3	2.3
2020	5,003	4,395	608	8.2	14.2	2.0	7.9	13.8	1.9
2019	4,058	3,503	555	6.7	11.5	1.8	6.6	11.2	1.9
2018	4,018	3,521	497	6.7	11.6	1.7	6.6	11.6	1.7
2017	3,884	3,369	515	6.6	11.3	1.8	6.5	11.1	1.8
2016	3,771	3,316	455	6.6	11.4	1.6	6.4	11.2	1.6
2015	3,332	2,912	420	5.9	10.2	1.5	5.8	10.1	1.5
2014	3,010	2,630	380	5.4	9.4	1.4	5.4	9.4	1.4
2013	2,951	2,595	356	5.5	9.4	1.3	5.4	9.4	1.3
2012	3,061	2,724	337	5.8	10.1	1.3	5.7	10.1	1.3
2011	2,947	2,608	339	5.7	9.9	1.3	5.6	9.8	1.3
2010	3,008	2,694	314	6.0	10.5	1.3	5.9	10.5	1.3
2009	3,202	2,867	335	6.5	11.4	1.4	6.4	11.4	1.4
2008	3,256	2,912	344	6.8	12.0	1.5	6.6	11.7	1.5
2007	3,492	3,155	337	7.6	13.4	1.5	7.2	12.9	1.5
2006	3,464	3,142	322	7.8	13.8	1.5	7.3	12.8	1.4
2005	3,469	3,144	325	8.1	14.3	1.5	7.6	13.4	1.5
2004	3,278	2,973	305	7.9	14.0	1.5	7.5	13.2	1.5
2003	3,319	2,998	321	8.3	14.6	1.6	7.8	13.7	1.6
2002	3,143	2,834	309	8.1	14.3	1.6	7.7	13.6	1.6
2001	3,087	2,774	313	8.3	14.5	1.7	7.8	13.7	1.7
2000	2,891	2,582	309	8.2	14.2	1.8	7.8	13.6	1.8
1999	2,878	2,549	329	8.5	14.6	2.0	8.2	14.2	2.0
Non-Hispanic, single race[5]									
American Indian and Alaska Native:									
2021	466	390	76	19.0	32.2	6.1	19.1	32.1	6.3
2020	449	381	68	18.5	31.9	5.5	18.1	31.2	5.3
2019	336	272	64	13.8	22.7	5.2	13.8	22.5	5.3
2018	361	298	63	14.9	25.0	5.1	15	24.8	5.4
Asian:									
2021	576	469	107	2.9	5.0	1.0	2.9	4.8	1.0
2020	516	435	81	2.7	4.7	0.8	2.6	4.5	0.8
2019	513	424	89	2.7	4.7	0.9	2.5	4.4	0.8
2018	492	396	96	2.6	4.4	1.0	2.5	4.2	1.0

See footnotes at end of table.

Table 25. Number of deaths, death rate, and age-adjusted death rate for injury by firearms, by Hispanic origin and race and sex: United States, 1999–2021—Con.

[Excludes deaths of nonresidents of the United States]

Hispanic origin and race and year	Number			Crude death rate[1]			Age-adjusted death rate[2]		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Non-Hispanic, single race[5]—Con.									
Black:									
2021	15,290	13,349	1,941	36.5	66.3	8.9	36.0	64.0	9.0
2020	13,974	12,416	1,558	33.7	62.7	7.2	33.1	59.9	7.3
2019	10,288	9,198	1,090	25.0	46.8	5.1	24.5	44.8	5.1
2018	9,713	8,567	1,146	23.7	43.8	5.4	23.2	42.0	5.4
Native Hawaiian or Other Pacific Islander:									
2021	68	63	5	10.9	19.9	*	10.4	18.9	*
2020	58	52	6	9.5	16.8	*	9.1	15.7	*
2019	54	45	9	9.1	15.0	*	8.6	14.0	*
2018	54	48	6	9.2	16.3	*	8.8	15.6	*
White:									
2021	26,054	22,068	3,986	13.2	22.6	4.0	12.3	21.0	3.9
2020	24,664	20,838	3,826	12.5	21.5	3.8	11.6	19.9	3.7
2019	23,964	20,173	3,791	12.1	20.7	3.8	11.1	19.0	3.6
2018	24,643	20,745	3,898	12.5	21.3	3.9	11.4	19.5	3.7

* Estimate does not meet National Center for Health Statistics standards of reliability; see Technical Notes in this report.
[1]Rates are on an annual basis per 100,000 population in specified group; see Technical Notes.
[2]Age-adjusted rates are per 100,000 U.S. standard population. For method of computation, see Technical Notes.
[3]Includes origins and races not shown separately; see Technical Notes.
[4]Includes people of Hispanic origin of any race. The Hispanic-origin category is consistent with 1997 Office of Management and Budget (OMB) standards; see Technical Notes.
[5]Only one race was reported on the death certificate. Hispanic-origin and race categories are consistent with 1997 OMB standards; see Technical Notes.

NOTE: Causes of death attributable to injury by firearms include *International Classification of Diseases, 10th Revision* codes *U01.4, W32–W34, X72–X74, X93–X95, Y22–Y24, and Y35.0.

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

Technical Notes

Nature and sources of data

Data in this report are based on information from all death certificates filed in the 50 states and the District of Columbia (D.C.) and are processed by the National Center for Health Statistics (NCHS). Death certificates are completed by funeral directors, attending physicians, medical examiners, coroners, or other people legally authorized to certify deaths. Data for 2021 are based on records of deaths that occurred during 2021 and were received as of July 27, 2022. Data for earlier years can be obtained from the Centers for Disease Control and Prevention's (CDC) WONDER database (14).

The U.S. Standard Certificate of Death, which the states use as a model, was revised in 2003 (7). Before 2003, the standard certificate of death had not been revised since 1989 (15). Beginning in 2018, all 50 states and D.C. used the 2003 revision of the U.S. Standard Certificate of Death for the entire year. During 2003–2017, both the 1989 and the 2003 standard certificates were used. For this transitional period, race and Hispanic ethnicity of decedents was reported using the 1977 Office of Management and Budget (OMB) guidelines (1989 certificate), which allowed the reporting of only one race and provided four choices, and the 1997 OMB guidelines (2003 certificate), which allowed the reporting of more than one race and provided five categories (7,8).

Data for Commonwealth of the Northern Mariana Islands (Northern Marianas), Guam, Puerto Rico, and U.S. Virgin Islands are included in tables showing data by state but are not included in U.S. totals. Data for American Samoa for the 2021 data year were not available at the time of file closing and, consequently, are not included in this report. In 2021, Guam, Northern Marianas, Puerto Rico, and U.S. Virgin Islands collected and reported death data using the 2003 revision of the U.S. Standard Certificate of Death. Mortality statistics are based on information submitted by the jurisdictions and coded by NCHS through the Vital Statistics Cooperative Program. For the 2021 data year, all states, D.C, New York City, Northern Marianas, and Puerto Rico submitted mortality medical data and demographic data in electronic data files to NCHS. Guam and U.S. Virgin Islands submitted copies of death certificates, from which NCHS entered and coded all medical data and demographic data.

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

Mortality statistics for Northern Marianas, Puerto Rico, and U.S. Virgin Islands exclude deaths of nonresidents for each area. For Guam, however, mortality statistics exclude deaths that occurred to nonresidents of Guam or the United States (50 states and D.C.).

Cause-of-death classification

The mortality statistics presented in this report were compiled in accordance with World Health Organization (WHO) regulations, which specify that member countries classify and code causes of death in accordance with the current revision of the *International Classification of Diseases* (ICD). ICD provides the basic guidance used in virtually all countries to code and classify causes of death. Effective with deaths occurring in 1999, the United States began using the 10th revision of this classification (ICD–10) (34). For earlier years, causes of death were classified according to the revisions then in use: 1979–1998, Ninth Revision; 1968–1978, Eighth Revision, adapted for use in the United States; 1958–1967, Seventh Revision; and 1949–1957, Sixth Revision.

Changes in classification of causes of death due to these revisions may result in discontinuities in cause-of-death trends. Consequently, cause-of-death comparisons among revisions require consideration of comparability ratios and, where available, estimates of their standard errors (SEs). Comparability ratios between the Ninth and Tenth revisions, Eighth and Ninth revisions, Seventh and Eighth revisions, and Sixth and Seventh revisions may be found in other NCHS reports and independent tabulations (35–40).

ICD not only details disease classification but also provides definitions, tabulation lists, the format of the death certificate, and the rules for coding cause of death. Cause-of-death data presented in this publication were coded by procedures outlined in annual issues of the NCHS Instruction Manual (41,42). ICD includes rules for selecting the underlying cause of death and regulations on the use of ICD.

Before data year 1968, mortality medical data were based on manual coding of an underlying cause of death for each certificate, in accordance with WHO rules. Effective with data year 1968, NCHS converted to computerized coding of the underlying cause and manual coding of all causes (multiple causes) on the death certificate. In this system, called Automated Classification of Medical Entities (ACME) (43), multiple-cause codes are inputted into computer software that uses WHO rules to select the underlying cause. All cause-of-death data in this report are coded using ACME.

The ACME system is used to select the underlying cause of death for all death certificates in the United States. In addition, NCHS developed two computer systems as inputs to ACME. Beginning with 1990 data, the Mortality Medical Indexing, Classification, and Retrieval system (MICAR) (44) was introduced to automate the coding of multiple causes of death. In addition, MICAR provides more detailed information on the conditions reported on death certificates than is available through ICD code structure. Beginning with data year 1993, SuperMICAR (45), an enhancement of the MICAR system, was introduced, allowing for literal entry of the multiple cause-of-death text as reported by the certifier. This information is then automatically processed by the MICAR and ACME computer systems. Records that cannot be automatically processed by MICAR are manually multiple-cause coded and then further processed through ACME to determine the underlying cause of death. In 2021, SuperMICAR was used to process all of the country's death records.

In this report, tabulations of cause-of-death statistics are based solely on the underlying cause of death. The underlying cause is defined by WHO as "the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury" (4). The underlying cause is selected from the conditions entered by the medical certifier in the cause-of-death section of the death certificate. When more than one cause or condition is entered by the medical certifier, the underlying cause is determined by the sequence of conditions on the certificate, provisions of ICD, and associated selection rules and modifications. Generally, more medical information is reported on death certificates than is directly reflected in the underlying cause of death. This is captured in NCHS multiple cause-of-death statistics (18,46,47).

Tabulation lists and cause-of-death ranking

Tabulation lists for ICD–10 are published in NCHS Instruction Manual, Part 9, "ICD–10 Cause-of-Death Lists for Tabulating Mortality Statistics" (updated October 2020 to include WHO updates to ICD–10 for data year 2020) (48). Two tabulation lists are used to rank leading causes of death (48): a) "List of 113 Selected Causes of Death, Enterocolitis due to *Clostridium difficile,* and COVID-19" (the title of which was modified in 2009 to include Enterocolitis due to *Clostridium difficile* and modified again in 2020 to include COVID-19), which is used for deaths of all ages; and b) "List of 130 Selected Causes of Infant Death," which is used for infants. Not all causes in the 113 list of causes are rankable. Group titles of Major cardiovascular diseases (ICD–10 codes I00–I78) and Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99) are not ranked. In addition, category titles that begin with the words "other" and "all other" are not ranked to determine the leading causes of death. When one of the titles that represents a subtotal is ranked, for example, Tuberculosis (A16–A19), its component parts are not ranked, as in this case, Respiratory tuberculosis (A16) and Other tuberculosis (A17–A19). For the list of 130 causes of infant death, the same ranking procedures are used with two exceptions: 1) COVID-19 is included in the category Other and unspecified viral diseases but is not a separate rankable cause, and 2) the category of Major cardiovascular diseases is not on the list. More detail regarding ranking procedures can be found in "Deaths: Leading Causes for 2021" (2).

Leading cause-of-death trends discussed in this report are based on cause-of-death data according to ICD–10 for 1999–2021 and ICD–9 for the most comparable cause-of-death titles for 1979–1998.

Although, in some cases, categories from the "List of 113 Selected Causes of Death" are identical to those in the earlier "List of 72 Selected Causes of Death" used with ICD–9, caution must be used because many of these categories are not comparable even though the cause-of-death titles may be the same. Tables showing ICD–9 categories that are comparable with ICD–10 titles in the "List of 113 Selected Causes of Death" may be found in the reports "Comparability of Cause of Death Between ICD–9 and ICD–10: Preliminary Estimates" (37) and "Deaths: Final Data for 1999" (49).

Trend data for 1979–1998 that are classified by ICD–9 but sorted into the "List of 113 Selected Causes of Death" developed for ICD–10 are available from the NCHS website: https://www.cdc.gov/nchs/data/statab/hist001r.pdf.

Revision of ICD and resulting changes in classification and rules for selecting the underlying cause of death have important implications for the analysis of mortality trends by cause of death. For some causes of death, the discontinuity in trend can be substantial (36–39). Consequently, considerable caution should be used in analyzing cause-of-death trends for periods of time that extend across more than one revision of ICD.

Codes added or deleted in 2021

No codes were added or deleted from the list of valid underlying cause-of-death codes in 2021. Information on codes added or deleted in previous years is available from: https://www.cdc.gov/nchs/data/dvs/Part9InstructionManual2020-508.pdf (48).

Codes for terrorism

Beginning with data for 2001, NCHS introduced categories *U01–*U03 for classifying and coding deaths due to acts of terrorism. The asterisks before the category codes indicate that they are not part of ICD–10. Deaths classified to the terrorism categories are included in the 113 causes-of-death list in the categories for Assault (homicide) and Intentional self-harm (suicide), and in the 130 causes-of-death list for infants in the category for Assault (homicide). Additional information on these new categories is available from: https://archive.cdc.gov/#/details?url=https://www.cdc.gov/nchs/icd/terrorism_code.htm. No deaths were assigned to terrorism codes in 2021. Only deaths to residents of the United States are included in this report.

In any given year, deaths resulting from acts of terrorism may not be identified as such if: a) information identifying an incident as an act of terrorism is not available to the certifier at the time of certification; b) the certificate is not updated with the information if it later becomes available; or c) official results of the investigation declaring the incident to be an act of terrorism have not yet been made public.

COVID-19

COVID-19 (ICD–10 code U07.1) became an official new cause of death in 2020 after the first death from COVID-19 was reported in the United States. COVID-19 was added as a rankable cause of death to the 113 cause list. For infants (younger than 1 year), COVID-19 was added to the 130 infant cause list category Other and unspecified viral diseases but is not considered as a separate rankable cause. In report tables showing 113 selected causes, COVID-19 was added to the bottom of the table.

Deaths assigned to COVID-19 may not reflect all deaths directly or indirectly due to COVID-19 because some deaths due to COVID-19 may not have been diagnosed, especially early in the pandemic, and some deaths may have been assigned to another, co-existing condition. Estimates of excess deaths—the difference between the observed number of deaths and the

expected number of deaths—can provide information about the effect of the COVID-19 pandemic on mortality. Excess deaths include deaths directly or indirectly attributable to COVID-19. Estimates of excess deaths based on provisional data are available from: https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm (50). Provisional data are incomplete and may underestimate counts relative to final data, but they provide an early indication of shifts in mortality trends and can guide public health policies and interventions aimed at reducing mortality (51).

COVID-19 data in this report do not include deaths where COVID-19 may have been reported as a contributing cause but was not considered to be the underlying cause of death. For additional coding detail and guidelines, see: https://www.cdc.gov/nchs/covid19/coding-and-reporting.htm. Data are not adjusted for potential issues with diagnosis, testing, or reporting. Data in this report are final data and may differ from provisional data published previously (available from: https://www.cdc.gov/nchs/nvss/vsrr/covid19/index.htm).

Enterocolitis due to *Clostridium difficile*

The number of deaths from Enterocolitis due to *Clostridium difficile* (*C. difficile*) (ICD–10 code A04.7) was 4,105 in 2021. Deaths from this cause increased dramatically from 793 deaths in 1999 to a high of 8,085 deaths in 2011 (14). Because of the increasing importance of this cause of death (22,23), beginning with data year 2006, *C. difficile* was added to the list of rankable causes.

Quality of reporting and processing cause of death

The quality of mortality data is largely dependent on proper and thorough completion of death certificates by certifiers. Accuracy and completeness of information entered on death certificates can vary by state from year to year.

One index of the quality of reporting causes of death is the proportion of death certificates coded to Chapter XVIII—Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (ICD–10 codes R00–R99). Although which deaths occur for which underlying causes are impossible to determine, the proportion coded to R00–R99 indicates the consideration given to the cause-of-death statement by the medical certifier. This proportion also may be used as a rough measure of the specificity of medical diagnoses made by the certifier in various areas. The percentage of all reported deaths in the United States assigned to Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified, decreased from 1.01% in 2020 to 1.00% in 2021.

Rules for coding a cause or causes of death may sometimes require modification when evidence suggests it will improve the quality of cause-of-death data. Before 1999, such modifications were made only when a new ICD revision was implemented. A process for updating ICD was introduced with ICD–10 that allows for midrevision changes. These changes, however, may affect comparability of data between years for selected causes of death.

Detail on coding and classification rule changes can be found in NCHS Instruction Manual, Part 2, available from: https://www.cdc.gov/nchs/nvss/instruction_manuals.htm (41–43). Although coding rule changes can impact the number of deaths assigned to a given code, other factors, such as increased use of a term by certifiers, can also influence changes from year to year. Trend data for causes of death affected by coding rule changes should be interpreted with caution.

Rare causes of death

Selected causes of death considered to be of public health concern are supposed to be routinely confirmed by states according to agreed-upon procedures between state vital statistics programs and NCHS. These causes, termed "infrequent and rare causes of death," are listed in the NCHS Instruction Manual, Parts 2a, 11, and 20 (41,52,53). In 2021, some states did not confirm some or all deaths from rare causes.

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); 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.

Hispanic origin and race

The 2003 revision of the U.S. Standard Certificate of Death allows the reporting of more than one race (multiple races) (7). This change was implemented 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 OMB (8). This revision replaced standards that were issued in 1977 (10). The new standards mandate the collection of more than one race, where applicable, for federal data (8) and require the collection of information on a minimum set of five races (more than the minimum number of race categories are reported on death certificates) (7). Multiple race includes any combination of White, Black or African American, American Indian and Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander. If two or more specific subgroups are reported on a death certificate and both subgroups fall under the same larger category, such as Korean and Chinese, those subgroups count as a single race (in this case, Asian) rather than as multiple races.

The number of states reporting multiple race increased, from 7 states in 2003 to all 50 states and D.C. by 2018 (Table I). In 2021, more than one race was reported for 0.6% of decedents of non-Hispanic origin and for 0.9% of decedents of Hispanic origin (Table II). Although still uncommon, multiple races were reported more often for younger decedents than for older decedents (3.4% of decedents younger than age 25 compared with 0.9% of decedents ages 25–64 and 0.4% of decedents age 65 and older).

During 2003–2017, both the 1989 and the 2003 standard death certificates were used. For this transitional period, states using the 1989 death certificate reported the race and Hispanic ethnicity of decedents based on the OMB 1977 guidelines, which allowed the reporting of only one race and provided four choices: White, Black, American Indian and Alaskan Native, and Asian or Pacific Islander. Under these standards, data for Asian or Pacific Islander people were collected as a single group; that is, data for Asian people were not reported separately from Pacific Islander people (10,15). States using the 2003 death certificate reported the race and Hispanic ethnicity of decedents based on the OMB 1997 guidelines, which allowed the reporting of more than one race and provided five categories (7,8). These guidelines provide for the reporting of Asian people separately from Native Hawaiian or Other Pacific Islander people (8).

Jurisdictions adopted the 2003 standard certificate at different times throughout the period 2003–2017. To provide consistent mortality statistics by Hispanic origin and race during this period, multiple-race data for states that had adopted the 2003 standard certificate were bridged back to the 1977 OMB standard single-race categories.

Beginning in 2018, all states collected data on race according to the 1997 OMB guidelines, so the use of the bridged-race process was no longer necessary. In 2018, the new race categories became the official categories for reporting race. For comparative purposes, data by both single and bridged race were tabulated through data year 2020 (31). Beginning with the 2021 data year, bridged-race estimates are no longer produced, and bridged-race data for earlier years are no longer presented in this report.

Hispanic origin and race are two distinct attributes and are reported separately on the death certificate. As a result, data shown by Hispanic origin and race are based on a combination of the two attributes for the non-Hispanic population. Data shown for the Hispanic population include people of any race.

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

Area	Year[1] state began reporting multiple race	Year state began using 2003 standard certificate	Area	Year[1] state began reporting multiple race	Year state began using 2003 standard certificate
Alabama	2016	2016	Montana	2003	2003
Alaska	2014	2014	Nebraska	2005	2005
Arizona	2010	2010	Nevada	2008	2008
Arkansas	2008	2008	New Hampshire	[9]2004	[10]2004
California	2003	2003	New Jersey	2004	2004
Colorado	2015	2015	New Mexico	2006	2006
Connecticut	2005	2005	New York	2003	2003
Delaware	2007	2007	North Carolina	2014	2014
District of Columbia	[2]2005	[3]2005	North Dakota	2008	2008
Florida	2005	2005	Ohio	2007	2007
Georgia	2008	2008	Oklahoma	2004	2004
Hawaii	2003	2014	Oregon	2006	2006
Idaho	2003	2003	Pennsylvania	2012	2012
Illinois	2008	2008	Rhode Island	2006	2006
Indiana	2008	2008	South Carolina	2005	2005
Iowa	2011	2011	South Dakota	2004	2004
Kansas	2005	2005	Tennessee	2012	2012
Kentucky	[4]2010	[5]2010	Texas	2006	2006
Louisiana	[4]2012	[5]2012	Utah	2005	2005
Maine	2003	[6]2010	Vermont	[4]2008	[5]2008
Maryland	2015	2015	Virginia	[11]2014	[12]2014
Massachusetts	[7]2014	[8]2014	Washington	2004	2004
Michigan	2004	2004	West Virginia	[7]2017	[8]2017
Minnesota	2004	[3]2011	Wisconsin	2003	[5]2013
Mississippi	2012	2012	Wyoming	2004	2004
Missouri	2010	2010			

[1]Indicates year in which National Center for Health Statistics first received multiple-race data from each state, although the state may have begun collecting such data at an earlier date.
[2]Began reporting multiple race in March.
[3]Began implementing revised certificate in March.
[4]Began reporting multiple race in July.
[5]Began implementing revised certificate in July.
[6]Began implementing revised certificate in June.
[7]Began implementing revised certificate in September.
[8]Began reporting multiple race in September.
[9]Began reporting multiple race in mid-April.
[10]Began implementing revised certificate in mid-April.
[11]Began reporting multiple race in November.
[12]Began implementing revised certificate in November.

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

Quality of race and Hispanic-origin data—Death rates for Hispanic, American Indian and Alaska Native non-Hispanic, Asian non-Hispanic, and Native Hawaiian or Other Pacific Islander non-Hispanic populations are affected by inconsistencies in reporting Hispanic origin or race on the death certificate compared with censuses, surveys, and birth certificates. Studies have shown underreporting on death certificates of non-Hispanic and Hispanic decedents, as well as undercounts of these groups in censuses (16,54–56).

A number of studies have been conducted on the reliability of Hispanic origin and race reported on the death certificate by comparing it with Hispanic origin and race reported on another data collection instrument, such as a census or survey (16,54–56). Inconsistencies may arise because of differences in who provides race and ethnicity information on the compared records. Race and Hispanic-origin information on the death certificate is reported by a funeral director as provided by an informant or, in the absence of an informant, on the basis of observation. In contrast, Hispanic origin and race in the census or the U.S. Census Bureau's American Community Survey (ACS) is obtained while the person is alive; in these cases, race and ethnicity is self-reported or reported by another member of the household familiar with the person and, consequently, may be considered more valid. A high level of agreement between the death certificate and the census or survey report is essential to assure unbiased death rates by race and ethnicity.

Using the National Longitudinal Mortality Study, Arias et al. examined the reliability of Hispanic origin and race reported on more than 559,000 death certificates compared with that reported on a total of 38 Current Population Surveys (CPSs) conducted by the U.S. Census Bureau for 1979–2011 (16,54). Agreement between the two sources was found to be excellent for the White non-Hispanic and Black non-Hispanic populations, both exhibiting CPS-to-death certificate ratios of 1.00. On the

Table II. Deaths, by Hispanic origin and race: United States, 2021

[Data exclude deaths with origin not stated or not classifiable. Records with race not stated or not classifiable are imputed; see Technical Notes in this report]

Hispanic origin and race	Deaths	Percent of non-Hispanic deaths[1]	Hispanic origin and race	Deaths	Percent of Hispanic deaths[1]
Non-Hispanic	3,140,516	100.0	Hispanic	315,664	100.0
One race	3,123,200	99.4	One race	312,795	99.1
American Indian and Alaska Native (AIAN)	26,972	0.9	AIAN	1,878	0.6
Asian	92,432	2.9	Asian	961	0.3
Black	449,764	14.3	Black	5,232	1.7
Native Hawaiian or Other Pacific Islander (NHOPI)	5,223	0.2	NHOPI	372	0.1
White	2,548,809	81.2	White	304,352	96.4
Two or more races	17,316	0.6	Two or more races	2,869	0.9
Two races	16,292	0.5	Two races	2,664	0.8
AIAN and Asian	251	0.0	AIAN and Asian	27	0.0
AIAN and NHOPI	38	0.0	AIAN and NHOPI	5	0.0
AIAN and White	6,127	0.2	AIAN and White	1,102	0.3
Asian and NHOPI	1,223	0.0	Asian and NHOPI	40	0.0
Asian and White	3,233	0.1	Asian and White	621	0.2
Black and AIAN	1,038	0.0	Black and AIAN	56	0.0
Black and Asian	436	0.0	Black and Asian	26	0.0
Black and NHOPI	138	0.0	Black and NHOPI	8	0.0
Black and White	2,870	0.1	Black and White	632	0.2
NHOPI and White	938	0.0	NHOPI and White	147	0.0
Three races	1,013	0.0	Three races	199	0.1
AIAN, Asian, and NHOPI	3	0.0	AIAN, Asian, and NHOPI	1	0.0
AIAN, Asian, and White	44	0.0	AIAN, Asian, and White	25	0.0
AIAN, NHOPI, and White	13	0.0	AIAN, NHOPI, and White	4	0.0
Asian, NHOPI, and White	644	0.0	Asian, NHOPI, and White	98	0.0
Black, AIAN, and Asian	10	0.0	Black, AIAN, and Asian	4	0.0
Black, AIAN, and NHOPI	4	0.0	Black, AIAN, and NHOPI	–	–
Black, AIAN, and White	203	0.0	Black, AIAN, and White	50	0.0
Black, Asian, and NHOPI	9	0.0	Black, Asian, and NHOPI	1	0.0
Black, Asian, and White	69	0.0	Black, Asian, and White	13	0.0
Black, NHOPI, and White	14	0.0	Black, NHOPI, and White	3	0.0
Four races	10	0.0	Four races	5	0.0
AIAN, Asian, NHOPI, and White	3	0.0	AIAN, Asian, NHOPI, and White	4	0.0
Black, AIAN, Asian, and NHOPI	–	–	Black, AIAN, Asian, and NHOPI	–	–
Black, AIAN, Asian, and White	6	0.0	Black, AIAN, Asian, and White	1	0.0
Black, AIAN, NHOPI, and White	–	–	Black, AIAN, NHOPI, and White	–	–
Black, Asian, NHOPI, and White	1	0.0	Black, Asian, NHOPI, and White	–	–
Five races	1	0.0	Five races	1	0.0
Black, AIAN, Asian, NHOPI, and White	1	0.0	Black, AIAN, Asian, NHOPI, and White	1	0.0

0.0 Quantity more than zero but less than 0.05.
– Quantity zero.
[1]Percentages may not add to 100 due to rounding.

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

other hand, substantial differences were found for other race and ethnicity groups. The ratio of CPS-to-death certificates was found to be 1.33 for the American Indian and Alaska Native non-Hispanic population and 1.03 for the Asian or Other Pacific Islander non-Hispanic population, indicating net underreporting on death certificates of 33% for American Indian and Alaska Native non-Hispanic and 3% for Asian or Other Pacific Islander non-Hispanic. Using the new race standard, Asian and Pacific Islander are separate categories. The ratio of deaths for CPS-to-death certificates for Hispanic people was found to be 1.03, indicating a net underreporting on death certificates for the Hispanic population of 3%. The net effect of misclassification is an underestimation of deaths and death rates for some race–ethnicity populations.

A new study on race and Hispanic-origin misclassification for the American Indian and Alaska Native non-Hispanic population found similar results as the earlier study, with a misclassification rate of 1.34. The study was based on an extract of the 2010 Census Edited File–Census Unedited File Match File containing records for people classified as American Indian and Alaska Native alone or in combination with another race in the 2010 decennial census linked to the National Death Index to identify decedents for April 1, 2010, to December 31, 2011 (57).

In addition, undercoverage of minority groups in the census and resultant population estimates introduces biases into death rates by Hispanic origin and race (16,54–56,58,59). Unlike the 1990 census, coverage error in the 2000 census was found to be statistically significant only for the White non-Hispanic population (overcounted by about 1.13%) and Black non-Hispanic population (undercounted by about 1.84%) (58). Overall, the 2010 census coverage error was minor, with a net overcount of 0.01%. The net undercounts were statistically different from zero for the following populations: Black non-Hispanic (2.07%), White non-Hispanic (–0.84%), Hispanic (1.54%), and on-reservation American Indian (4.88%) populations. The net undercounts were not statistically different from zero for the Asian non-Hispanic (0.08%), Native Hawaiian or Pacific Islander (1.34%), and off-reservation American Indian (–1.95%) populations (60).

Data year 1997 was the first year in which mortality data by Hispanic origin were available for the entire United States.

Mortality data presented by specified Hispanic subgroup for the United States include Central American, Cuban, Dominican, Mexican, Puerto Rican, South American, and Other Hispanic populations. Data by specified Hispanic populations are affected by whether a state submits literal text to NCHS, making it possible to identify decedents as being Central American, Cuban, Dominican, Mexican, Puerto Rican, or South American.

Numbers of deaths and death rates discussed in this report are not adjusted for misclassification of ethnicity and race. These data are consistent with data in the general mortality file as reported by the jurisdictions. However, to illustrate the effect of ethnicity and race misclassification, Table III presents classification ratios by Hispanic origin and race, age, and sex and Table IV presents age-adjusted rates by Hispanic origin and race and sex, both unadjusted and adjusted for ethnicity–race misclassification. Classification ratios and age-adjusted death rates adjusted for misclassification of Hispanic origin and race for the Native Hawaiian or Other Pacific Islander population were not produced because the data needed to evaluate ethnicity and race misclassification on death certificates for this population are not currently available.

Hispanic origin not stated or not classifiable and race not stated or not classifiable—In 2021, death records with Hispanic origin not stated or not classifiable were not imputed and accounted for 0.2% of all records. Records with race not stated or not classifiable (1.4% of all records) were imputed to one of the five single-race categories by assigning the record a single-race value based on the last single-race record processed.

Infant and maternal mortality rates—Infant and maternal deaths in this report are tabulated by the Hispanic origin and race of the decedent. Live births, the denominators of infant and maternal mortality rates, are tabulated by Hispanic origin and race of mother.

In 2021, multiple race was reported on the revised birth certificates of all 50 states, D.C., Guam, Northern Marianas, Puerto Rico, and U.S. Virgin Islands using the 2003 revision of the U.S. Standard Certificate of Birth (61).

Infant mortality rates (IMRs) by Hispanic origin and race are based on numbers of resident infant deaths by Hispanic origin and race and numbers of resident live births by Hispanic origin and race of mother for the United States. In computing IMRs, deaths and live births of unknown or not classifiable origin are not distributed among the specified Hispanic and non-Hispanic groups. In the United States in 2021, the percentage of infant deaths of unknown origin was 1.1%, and the percentage of live births to mothers of unknown origin was 1.0% (61).

Small numbers of infant deaths for specific Hispanic-origin groups result in IMRs subject to relatively large random variation (see "Random variation").

IMRs calculated from the general mortality file for specified Hispanic origin and race contain errors because of reporting problems that affect the classification of Hispanic origin and race on the birth and death certificates for the same infant. IMRs by specified Hispanic origin and race are more accurate when based on the linked file of infant deaths and live births (32). The linked file computes IMRs using the Hispanic origin and race of the mother from the birth certificate in both the numerator and denominator of the rate. In addition, the mother's Hispanic origin and race from the birth certificate are considered to be more accurately reported than the infant's Hispanic origin and race from the death certificate. On the birth certificate, Hispanic origin and race are generally reported by the mother at the time of delivery, whereas on the death certificate, the infant's Hispanic origin and race are reported by an informant, usually the mother but sometimes the funeral director.

Estimates of reporting errors have been made by comparing rates based on the linked files with those in which the infant's Hispanic origin and race are based on information from the death certificate (32,55).

Life tables

The life table provides a comprehensive measure of the effect of mortality on life expectancy. It is composed of sets of values showing the mortality experience of a hypothetical

Table III. Classification ratio and standard error, by Hispanic origin and race, age, and sex

[Standard errors are shown in parentheses below each classification ratio]

Age (years)	Hispanic[1]			Non-Hispanic[1]											
				American Indian and Alaska Native			Asian[2]			Black			White		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	1.0329	1.0362	1.0294	1.3354	1.3488	1.3197	1.0331	1.0480	1.0171	1.0047	1.0041	1.0053	0.9995	0.9993	0.9997
	(0.005)	(0.007)	(0.007)	(0.007)	(0.010)	(0.011)	(0.009)	(0.013)	(0.012)	(0.002)	(0.002)	(0.002)	(0.000)	(0.001)	(0.000)
0	*1.7054	*1.0000	*2.1519	0.9630	*0.9444	*1.0000	---	---	---	*1.0000	*1.0000	*1.0000	*1.0000	*1.0000	*1.0000
	(0.896)	(0.000)	(1.821)	(0.132)	(0.181)	(0.161)	…	…	…	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
1–14	0.9905	0.9659	*1.0299	1.1243	1.1546	1.0833	*0.8655	*0.8426	*1.0000	1.0266	0.9379	*1.1751	0.9918	1.0755	0.8770
	(0.125)	(0.181)	(0.143)	(0.051)	(0.069)	(0.074)	(0.131)	(0.154)	(0.000)	(0.058)	(0.065)	(0.123)	(0.037)	(0.049)	(0.056)
15–24	0.9668	0.9325	1.0604	1.1462	1.1201	1.2190	1.2285	*1.4276	*0.9721	1.0248	1.0215	1.0343	0.9976	1.0019	0.9869
	(0.046)	(0.055)	(0.079)	(0.029)	(0.033)	(0.056)	(0.294)	(0.508)	(0.254)	(0.020)	(0.019)	(0.055)	(0.010)	(0.011)	(0.020)
25–34	1.0354	1.0401	1.0232	1.1375	1.1557	1.1033	1.1527	1.0967	*1.2648	0.9855	0.9770	1.0008	1.0021	1.0034	0.9994
	(0.041)	(0.043)	(0.094)	(0.025)	(0.032)	(0.040)	(0.106)	(0.102)	(0.248)	(0.009)	(0.011)	(0.015)	(0.006)	(0.007)	(0.013)
35–44	1.0434	1.0645	1.0066	1.1799	1.1815	1.1772	1.0338	1.0459	1.0125	1.0062	1.0073	1.0048	0.9980	0.9997	0.9951
	(0.025)	(0.035)	(0.028)	(0.022)	(0.027)	(0.036)	(0.066)	(0.090)	(0.092)	(0.007)	(0.010)	(0.012)	(0.003)	(0.004)	(0.005)
45–54	1.0584	1.0372	1.0953	1.3915	1.3913	1.3916	1.0699	1.1123	1.0113	1.0002	1.0019	0.9982	0.9969	0.9965	0.9976
	(0.018)	(0.021)	(0.033)	(0.021)	(0.027)	(0.033)	(0.040)	(0.054)	(0.059)	(0.004)	(0.007)	(0.005)	(0.002)	(0.002)	(0.003)
55–64	1.0571	1.0517	1.0659	1.4281	1.4547	1.3917	1.0274	1.0694	0.9784	1.0003	0.9965	1.0046	0.9994	0.9992	0.9997
	(0.013)	(0.017)	(0.022)	(0.019)	(0.026)	(0.029)	(0.028)	(0.044)	(0.035)	(0.004)	(0.006)	(0.005)	(0.001)	(0.002)	(0.002)
65–74	1.0295	1.0485	1.0072	1.3654	1.4244	1.2980	1.0845	1.0841	1.0850	1.0062	1.0055	1.0070	0.9967	0.9967	0.9966
	(0.010)	(0.014)	(0.015)	(0.017)	(0.025)	(0.023)	(0.022)	(0.030)	(0.033)	(0.003)	(0.005)	(0.005)	(0.001)	(0.001)	(0.001)
75–84	1.0192	1.0188	1.0196	1.3099	1.3367	1.2852	1.0305	1.0328	1.0281	1.0057	1.0057	1.0058	1.0004	1.0003	1.0004
	(0.009)	(0.013)	(0.013)	(0.017)	(0.025)	(0.022)	(0.014)	(0.022)	(0.017)	(0.003)	(0.005)	(0.004)	(0.001)	(0.001)	(0.001)
85–94	1.0208	1.0313	1.0137	1.3845	1.3807	1.3870	0.9962	0.9983	0.9944	1.0110	1.0155	1.0086	1.0008	1.0007	1.0009
	(0.011)	(0.018)	(0.014)	(0.024)	(0.038)	(0.032)	(0.015)	(0.020)	(0.021)	(0.004)	(0.007)	(0.005)	(0.001)	(0.001)	(0.001)
95 and older	1.0732	1.0509	1.0842	1.3951	1.3043	1.4240	0.9755	1.0238	0.9405	0.9980	1.0070	0.9954	1.0005	0.9995	1.0008
	(0.025)	(0.034)	(0.033)	(0.052)	(0.098)	(0.062)	(0.039)	(0.045)	(0.057)	(0.010)	(0.029)	(0.010)	(0.001)	(0.003)	(0.001)

* Ratio does not meet National Center for Health Statistics standards of reliability; either the unweighted number of Current Population Survey deaths, the unweighted number of death certificate deaths, or both are based on fewer than 20 deaths.
--- Data not available.
… Category not applicable.
[1]Classification ratios for the Hispanic and non-Hispanic race groups (Asian, Black, and White) are based on the National Longitudinal Mortality Study data (see: https://www.cdc.gov/nchs/data/series/sr_02/sr02_172.pdf). Classification ratios for the American Indian and Alaska Native non-Hispanic population are based on the Census AIAN Extract–Mortality Linked Data (see: https://www.cdc.gov/nchs/data/nvsr/nvsr70/NVSR70-12.pdf).
[2]Classification ratios for the Asian non-Hispanic race group were estimated based on combined data for the Asian and Pacific Islander non-Hispanic groups due to data availability. However, the ratios reflect misclassification predominantly among the Asian component, which makes up more than 95% of the combined group.

SOURCES: 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 (see: https://www.cdc.gov/nchs/data/series/sr_02/sr02_172.pdf), and Mortality profile of the non-Hispanic American Indian or Alaska Native population, 2019. *National Vital Statistics Report*s, vol 70 no 12. National Center for Health Statistics. 2021. DOI: https://dx.doi.org/10.15620/cdc:110370.

Table IV. Age-adjusted death rate, unadjusted and adjusted for race–ethnicity misclassification, by Hispanic origin and race and sex: United States, 2021

[Hispanic origin and race categories are consistent with 1997 Office of Management and Budget standards]

Hispanic origin and race and sex	Age-adjusted rate[1]	
	Unadjusted[2]	Adjusted[3]
Hispanic, total[4]	724.7	747.8
Male	884.9	915.6
Female	582.7	599.8
Non-Hispanic, single race[5]:		
American Indian and Alaska Native	1,109.2	1,468.2
Male	1,282.7	1,717.5
Female	946.6	1,236.6
Asian	461.7	476.4
Male	554.9	578.1
Female	386.3	391.1
Black	1,118.0	1,123.4
Male	1,374.0	1,380.2
Female	917.2	921.9
White	893.9	893.4
Male	1,055.6	1,055.3
Female	751.4	750.6

[1]Rates per 100,000 U.S. standard population. For method of computation, see Technical Notes in this report.
[2]Data are not adjusted for race and Hispanic misclassification on death certificates; see Technical Notes. Rates are consistent with rates in other tables shown in this report.
[3]Data are adjusted for race and Hispanic-origin misclassification on death certificates; see Technical Notes. Rates may differ from rates in other tables shown in this report.
[4]Includes people of Hispanic origin of any race; see Technical Notes.
[5]Only one race was reported on the death certificate; see Technical Notes.

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

group of infants born at the same time and subject throughout their lifetime to the age-specific death rates of a particular time period, usually a given year. Before data year 1997, U.S. life tables were abridged and constructed by reference to a standard table (62). In addition, the age range for these life tables was limited to 5-year age groups ending with age group 85 and older. Beginning with final data reported for 1997, complete life tables were constructed by single years of age extending to age 100 (63), using a methodology similar to that of the 1989–1991 decennial life tables (64). The methodology was again revised for data years 2000–2007 using a methodology similar to that of the 1999–2001 decennial life tables (65).

Research into the methodology used for the 1999–2001 decennial life tables, which was applied to the 2000–2007 annual life tables, revealed that it is not necessary to model (or "smooth") the probabilities of death beginning at age 66. The observed blended vital statistics and Medicare data for ages 66–85 are robust enough and do not require additional smoothing. Beginning with final data reported for 2008 (66), the life table methodology was refined by changing the smoothing technique used to estimate the life table functions at the oldest ages. Beginning with the 2008 data year, the methodology used to produce the life tables does not model the probabilities of death beginning at age 66, but rather at ages above 85 or so. See "United States Life Tables, 2008" for a detailed description of the new methodology (67). Life table data shown in this report for data years 2001–2021 are based on the new methodology.

Because life table values presented in this report for 2001–2009 were re-estimated using the new methodology and revised 2001–2009 intercensal population estimates based on the 2010 decennial census, the values may differ from those previously published in annual final mortality and life table reports. Historically, NCHS has produced annual life tables by race, including the White and Black populations, regardless of Hispanic origin, but did not produce life tables for other racial or ethnic groups. Beginning with data year 2006 (originally published elsewhere) (19), NCHS began producing life tables for the Hispanic, Black non-Hispanic, and White non-Hispanic populations, after conducting research into the quality of ethnicity and race reporting on death certificates and developing methodologies to correct for misclassification of these populations on death certificates (16,54). Beginning with data year 2019, life tables for the American Indian and Alaska Native non-Hispanic and Asian non-Hispanic populations were added to the annual life tables series. A new data source was used to evaluate the quality of ethnicity and race reporting and generate adjustment factors for the American Indian and Alaska Native population (57). Life tables for the Asian non-Hispanic population were produced using the same methodology as that used for the American Indian and Alaska Native non-Hispanic population following the transition to the 1997 OMB standard for the collection of race and ethnicity data, which disaggregated the Asian and Native Hawaiian and Other Pacific Islander populations (8). These methods that adjust for misclassification are applied to the production of the life tables, but not to the death rates shown throughout this report.

Race-specific life tables for 2018 through 2021 presented in this report are based on the new OMB standard and show estimates for single-race groups. These estimates may not be comparable to those of previous years that are based on bridged-race groups. Estimates for bridged-race categories were discontinued in data year 2021. The category, "Hispanic" is consistent with previous reports, and trend data for the Hispanic population are not affected by the race category changes.

Although the life table methodology used produces complete life tables (by single years of age), the life table data shown in this report are summarized in 5-year age groupings.

Causes of death contributing to changes in life expectancy

A life table partitioning technique was used to estimate causes of death contributing to changes in life expectancy in this report. The method partitions changes into component additive parts and identifies the causes of death having the greatest influence, positive or negative, on changes in life expectancy (68–70).

Injury mortality by mechanism and intent

Injury mortality data are presented using the external cause-of-injury mortality matrix for ICD–10 (Table 14). In this framework, cause-of-injury deaths are organized principally by mechanism (such as firearm or poisoning), and secondarily by

manner or intent of death (such as unintentional, suicide, or homicide).

The number of deaths for selected causes in this framework may differ from those shown in tables that use the standard mortality tabulation lists. Following WHO conventions, standard mortality tabulations (Table 9) present external causes of death (ICD–10 codes *U01–*U03 and V01–Y89); in contrast, the matrix (Table 14) excludes deaths classified as Complications of medical and surgical care (Y40–Y84 and Y88). For additional information on injury data presented in this framework, see "Deaths: Injuries, 2002," available from: https://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_10.pdf (71). Data for later years are available through CDC WONDER (https://wonder.cdc.gov) or through CDC WISQARS (https://www.cdc.gov/injury/wisqars/index.html). Implementation of changes to ICD–10 may affect the matrix, requiring modification of codes in selected categories. No changes were made to the matrix in 2021. For more information on the latest ICD–10 external cause-of-injury codes included in the matrix, see https://www.cdc.gov/nchs/injury/injury_tools.htm.

Marital status

Mortality data by marital status are generally of high quality. A study of death certificate data using the 1986 National Mortality Followback Survey showed a high level of consistency in reporting marital status (59).

Although Table 13 shows age-specific death rates by marital status for age group 15–24, these rates are not included in the computation of the age-adjusted rate because of their high variability, particularly for the widowed population. Furthermore, age groups 75–84 and 85 and older are combined because of high variability in death rates among those age 85 and older, particularly for the never-married population.

Educational attainment

Table 14 presents mortality data by educational attainment for ages 25–64. Data are not shown for ages younger than 25 years because people younger than age 25 may not have completed their education. Data for those age 65 and older are not shown because reporting quality is poorer at older ages (72). Age-adjusted death rates by educational attainment were computed based on the age-specific rates and the standard population for those ages 25–64. Data were about 98% complete on a state-of-occurrence basis.

Injury at work

Deaths, crude death rates, and age-adjusted death rates for injury at work (Tables 15 and 16) include those age 15 and older. Information on deaths attributed to injuries at work is derived from a separate item on the death certificate that asks the medical certifier whether the death resulted from an injury sustained at work.

Infant mortality

IMRs are the most commonly used index for measuring the risk of dying during the first year of life. The rates presented in this report are calculated by dividing the number of infant deaths in a calendar year by the number of live births registered for the same period and are presented as rates per 1,000 or per 100,000 live births. For final birth figures used in the denominator for IMRs, see the report "Births: Final Data for 2021" (61). In contrast to IMRs based on live births, infant death rates are based on the estimated population younger than age 1 year. Infant death rates that appear in tabulations of age-specific death rates in this report are calculated by dividing the number of infant deaths by the July 1, 2021, population estimate of people younger than age 1. These rates are presented per 100,000 population in this age group. Because of differences in the denominators, infant death rates may differ from IMRs.

There are two sources of infant mortality data: a) the general mortality file, and b) the linked file of live births and infant deaths. Data from the linked file differ from the infant mortality data presented in this report because the linked file includes only those events in which both the birth and the death occur in the United States, and late-filed births. Processing of the linked file allows for further exclusion of infant records due to duplicates and records with additional information that raise questions about an infant's age. Although the differences are usually very small, IMRs based on the linked file tend to be somewhat smaller than those based on data from the general mortality file as presented in this report. The linked file is the preferred source for infant mortality by race because it uses the mother's self-reported race from the child's birth certificate (32), which is more reliable than the infant's race listed on the death certificate, and because the numerator and denominator are referring to the same person's race.

Maternal mortality

Maternal mortality rates are computed based on the number of live births. The maternal mortality rate indicates the likelihood of a pregnant woman dying of maternal causes. The rates are calculated by dividing the number of maternal deaths in a calendar year by the number of live births registered for the same period and are presented as rates per 100,000 live births. Because the population of pregnant women who are at risk of a maternal death is unknown, the number of live births is used as the denominator.

Maternal deaths are defined by WHO as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes" (4). Included in these deaths are ICD–10 codes A34, O00–O95, and O98–O99.

The 2003 revision of the U.S. Standard Certificate of Death introduced a pregnancy-related checkbox question to help identify pregnancy-related deaths. Adopting a pregnancy status question consistent with the standard death certificate increased the identification of maternal deaths. Because maternal mortality

was not comparable between states using a pregnancy checkbox and those not using a checkbox, NCHS suspended publishing maternal mortality data after the 2007 data year until all states adopted use of the revised certificate (33).

Beginning in 2018, all 50 states and D.C. used the revised certificate for the entire year including its pregnancy checkbox (in the first part of the 2021 data year, California used a different checkbox from that on the U.S. Standard Certificate of Death that indicates if pregnant within the last year but does not indicate detail on whether pregnant at the time of death, pregnant 42 days before death, or pregnant 2 days to 1 year before death, but California transitioned to use of the standard checkbox later in the year.) (33). Because maternal mortality data among states became comparable, NCHS resumed publication of maternal mortality statistics in 2018.

NCHS adopted a method (called the 2018 method) for coding maternal deaths, which was developed to improve the quality of maternal mortality data after studies concluded that implementation of the checkbox had resulted in overreporting of maternal deaths, particularly among older women (31). The 2018 method restricts use of a pregnancy checkbox for identifying maternal deaths to a more limited age group than before. In addition, if the checkbox is the only indication of pregnancy on the death certificate and no other pregnancy information is provided in the cause-of-death section, the 2018 method restricts assignment of maternal codes solely to the underlying cause of death.

Between 2018 and 2020, the 2018 method was implemented manually, but was incorporated into the automated system beginning with the 2021 data year. The transition to automated processing changed the order in which information from the pregnancy checkbox and cause-of-death fields on the death certificate are used to assign ICD–10 underlying cause-of-death codes. As a result, some deaths that would have previously been assigned mostly to O26.8, Other specified pregnancy-related conditions as the underlying cause-of-death code were instead assigned to O98, Maternal infectious and parasitic diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium; or O99, Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium.

Population bases for computing rates

Populations used for computing death rates and life tables shown in this report represent the population residing in the United States, enumerated as of April 1 for census years before 2020 and estimated as of July 1 for all other years. The populations used for computing death rates for 2021 in Tables B, 1, 2, 6, 8, and 10–12, 15–17, and 22–25 are estimated as of July 1, 2021, based on the Blended Base produced by the U.S. Census Bureau in lieu of the April 1, 2020, decennial population count. The Blended Base consists of the blend of Vintage 2020 postcensal population estimates, 2020 Demographic Analysis Estimates, and 2020 Census PL 94–171 Redistricting File (see https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2020-2021/methods-statement-v2021.pdf). Detailed populations from the 2020 census were not available when this report was prepared. The U.S. Census Bureau provided all population estimates used in this report. When the 2010–2020 intercensal population estimates based on the 2010 and 2020 decennial censuses become available, population-based rates for years 2011–2020 will be recalculated and presented in an upcoming report. Meanwhile, considerable caution should be used in interpreting the rates and trends for the nation and states.

Population estimates used to compute death rates for the United States for 2021 are shown for 5-year age groups by Hispanic origin and race in Table V (17).

Population estimates used to compute death rates by Hispanic subgroup, marital status, and educational attainment are shown in Tables VI, VII, and VIII, respectively. These population estimates were prepared by the U.S. Census Bureau using the 2021, 1-year ACS (73).

Populations used for computing death rates by state shown in Table IX are estimated as of July 1, 2021, using the Blended Base (17).

Populations used to compute rates for Puerto Rico, Guam, and Northern Marianas are based on population estimates provided by the U.S. Census Bureau's International Database (74). Population estimates for each state and territory are not subject to sampling variation because the sources used in demographic analysis are complete counts.

Computing rates

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

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

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

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

Beginning with the 1999 data year, NCHS adopted a new population standard for use in age-adjusting death rates. Based on the projected year 2000 population of the United States, the new standard replaced the 1940 standard population that had been used for over 50 years. The new population standard affects levels of mortality and, to some extent, trends and group comparisons. Of particular note are the effects on race mortality comparisons. For detailed discussion, see: "Age Standardization of Death Rates: Implementation of the Year 2000 Standard" (75). Beginning with 2003 data, the traditional standard million population along with corresponding standard weights to

Table V. Estimated population by 5-year age groups, according to Hispanic origin and race, by sex: United States, 2021

[Population estimates for 2021 are estimated as of July 1, 2021; see Technical Notes in this report]

Hispanic origin and race and sex	All ages	Younger than 1 year	Age group (years) 1–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39
Total[1]	331,893,745	3,564,493	15,262,845	20,291,548	21,447,784	21,564,666	21,523,997	22,392,477	23,102,628	22,299,318
Male	164,384,742	1,821,502	7,802,850	10,376,158	10,988,223	11,022,976	10,973,238	11,379,058	11,674,304	11,263,833
Female	167,509,003	1,742,991	7,459,995	9,915,390	10,459,561	10,541,690	10,550,759	11,013,419	11,428,324	11,035,485
Hispanic[2]	62,647,044	942,614	3,959,083	5,185,787	5,569,449	5,340,312	4,961,857	4,859,186	4,726,080	4,611,331
Male	31,716,199	481,447	2,016,260	2,642,433	2,847,476	2,726,879	2,533,492	2,486,955	2,465,179	2,419,059
Female	30,930,845	461,167	1,942,823	2,543,354	2,721,973	2,613,433	2,428,365	2,372,231	2,260,901	2,192,272
Non-Hispanic, single race[3]:										
American Indian and Alaska Native	2,451,916	26,985	115,714	164,050	179,510	180,438	180,587	189,540	187,134	164,377
Male	1,209,987	13,796	58,937	83,759	91,201	91,728	91,378	96,165	94,805	82,244
Female	1,241,929	13,189	56,777	80,291	88,309	88,710	89,209	93,375	92,329	82,133
Asian	19,685,901	191,399	865,628	1,154,526	1,108,209	1,132,448	1,216,438	1,459,021	1,691,504	1,681,466
Male	9,455,217	98,582	446,797	594,225	567,508	568,851	611,024	726,044	822,645	808,096
Female	10,230,684	92,817	418,831	560,301	540,701	563,597	605,414	732,977	868,859	873,370
Black	41,858,536	503,199	2,128,055	2,779,886	2,962,193	2,923,919	3,022,547	3,273,378	3,277,352	2,865,664
Male	20,121,104	255,978	1,078,365	1,407,555	1,506,253	1,481,523	1,526,119	1,645,986	1,617,641	1,389,062
Female	21,737,432	247,221	1,049,690	1,372,331	1,455,940	1,442,396	1,496,428	1,627,392	1,659,711	1,476,602
Native Hawaiian or Other Pacific Islander	626,246	8,149	35,302	44,822	43,692	43,233	42,695	47,340	53,736	51,887
Male	316,725	4,194	18,215	22,917	22,274	22,039	22,094	24,129	27,753	26,687
Female	309,521	3,955	17,087	21,905	21,418	21,194	20,601	23,211	25,983	25,200
White	196,833,431	1,702,061	7,371,843	9,965,432	10,625,178	11,123,944	11,389,650	11,944,992	12,670,433	12,524,995
Male	97,704,907	870,576	3,781,503	5,115,657	5,463,483	5,715,753	5,830,218	6,090,035	6,406,605	6,348,826
Female	99,128,524	831,485	3,590,340	4,849,775	5,161,695	5,408,191	5,559,432	5,854,957	6,263,828	6,176,169

Hispanic origin and race and sex	Age group (years) 40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85 and older
Total[1]	21,104,536	19,781,510	20,906,926	21,567,314	21,235,750	18,394,320	15,271,802	9,904,769	6,301,306	5,975,756
Male	10,593,780	9,875,757	10,436,202	10,630,059	10,333,259	8,748,213	7,120,873	4,472,410	2,696,104	2,175,943
Female	10,510,756	9,905,753	10,470,724	10,937,255	10,902,491	9,646,107	8,150,929	5,432,359	3,605,202	3,799,813
Hispanic[2]	4,383,702	3,972,503	3,554,967	3,073,516	2,457,465	1,833,658	1,322,864	842,395	544,605	505,670
Male	2,270,467	2,021,875	1,811,480	1,544,349	1,206,928	866,657	604,248	363,622	223,340	184,053
Female	2,113,235	1,950,628	1,743,487	1,529,167	1,250,537	967,001	718,616	478,773	321,265	321,617
Non-Hispanic, single race[3]:										
American Indian and Alaska Native	150,748	138,819	144,179	153,725	147,924	119,419	91,281	55,113	34,013	28,360
Male	74,848	68,541	70,824	74,206	69,671	54,987	42,384	24,956	14,763	10,794
Female	75,900	70,278	73,355	79,519	78,253	64,432	48,897	30,157	19,250	17,566
Asian	1,518,227	1,452,902	1,307,643	1,166,411	1,044,314	908,409	727,661	459,450	302,392	297,853
Male	713,348	685,251	615,480	545,566	478,514	405,888	319,381	202,881	131,896	113,240
Female	804,879	767,651	692,163	620,845	565,800	502,521	408,280	256,569	170,496	184,613
Black	2,708,428	2,496,707	2,573,957	2,617,529	2,448,425	1,948,560	1,451,478	857,502	537,603	482,154
Male	1,292,454	1,180,757	1,217,518	1,225,274	1,127,301	860,401	614,962	344,967	200,559	148,429
Female	1,415,974	1,315,950	1,356,439	1,392,255	1,321,124	1,088,159	836,516	512,535	337,044	333,725
Native Hawaiian or Other Pacific Islander	45,275	38,456	36,812	35,595	31,573	24,712	18,656	11,501	6,757	6,053
Male	23,210	19,722	18,469	17,557	15,690	11,818	8,984	5,457	3,063	2,453
Female	22,065	18,734	18,343	18,038	15,883	12,894	9,672	6,044	3,694	3,600
White	11,954,920	11,401,146	13,032,111	14,284,432	14,887,848	13,387,491	11,531,015	7,598,776	4,826,654	4,610,510
Male	6,057,449	5,767,014	6,580,394	7,111,700	7,331,430	6,467,594	5,471,224	3,494,520	2,101,103	1,699,823
Female	5,897,471	5,634,132	6,451,717	7,172,732	7,556,418	6,919,897	6,059,791	4,104,256	2,725,551	2,910,687

[1]Includes origin not stated, origin not classifiable, and two or more races reported; see Technical Notes.
[2]Includes people of Hispanic origin of any race; see Technical Notes.
[3]Only one race was reported; see Technical Notes.

SOURCE: National Center for Health Statistics, estimates as of July 1, 2021, U.S. resident population by age, sex, race, and Hispanic origin prepared by U.S. Census Bureau, 2022.

Table VI. Estimated population and standard error for specified Hispanic-origin populations, by 10-year age group and sex: United States, 2021

[Population estimates for Central American, Cuban, Dominican, Mexican, Puerto Rican, South American, and Other and unknown Hispanic populations are based on the 2021 1-year American Community Survey adjusted to postcensal July 1, 2021, resident population control totals; see Technical Notes in this report. Population estimates by specified Hispanic origin in this table may not add to population estimates for total Hispanic in Table V; see Technical Notes. Standard errors are shown in parentheses below each population estimate]

Hispanic origin and sex	Age group (years)											
	All ages	Younger than 1 year	1–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75–84	85 and older
Central American	6,306,930	110,840	444,325	1,060,835	1,026,510	1,046,495	1,039,275	737,555	491,830	243,060	80,145	26,060
	(31,191)	(4,739)	(9,028)	(12,905)	(12,395)	(13,011)	(13,467)	(9,782)	(7,945)	(5,173)	(3,158)	(1,585)
Male	3,230,040	59,970	231,330	537,645	529,435	543,340	567,410	386,010	237,800	102,375	28,125	6,600
	(22,899)	(3,787)	(6,254)	(9,079)	(9,055)	(9,289)	(10,918)	(7,254)	(5,581)	(3,633)	(1,810)	(865)
Female	3,076,890	50,870	212,995	523,190	497,075	503,155	471,865	351,545	254,030	140,685	52,020	19,460
	(21,178)	(2,848)	(6,510)	(9,171)	(8,465)	(9,111)	(7,884)	(6,562)	(5,655)	(3,682)	(2,589)	(1,328)
Cuban	2,400,145	24,725	112,110	258,115	266,590	342,015	312,695	346,900	330,640	205,900	133,135	67,320
	(18,855)	(2,088)	(4,753)	(6,865)	(6,318)	(7,067)	(7,078)	(7,038)	(6,461)	(5,097)	(4,086)	(2,740)
Male	1,216,655	11,980	56,150	132,305	137,115	179,715	162,575	184,000	173,890	98,070	56,715	24,140
	(13,561)	(1,379)	(3,441)	(4,683)	(4,663)	(5,019)	(5,338)	(5,362)	(4,791)	(3,464)	(2,473)	(1,730)
Female	1,183,490	12,745	55,960	125,810	129,475	162,300	150,120	162,900	156,750	107,830	76,420	43,180
	(13,100)	(1,568)	(3,279)	(5,020)	(4,263)	(4,975)	(4,649)	(4,560)	(4,334)	(3,739)	(3,253)	(2,125)
Dominican	2,393,705	38,875	164,375	382,080	371,860	394,995	334,605	277,445	223,890	136,930	53,810	14,840
	(19,760)	(2,572)	(5,375)	(8,713)	(7,553)	(8,190)	(7,568)	(6,186)	(5,287)	(4,604)	(2,880)	(1,393)
Male	1,127,715	18,715	83,705	192,575	192,985	190,675	155,230	120,300	93,440	55,915	19,320	4,855
	(14,023)	(1,633)	(4,024)	(6,024)	(5,872)	(5,832)	(5,522)	(4,493)	(3,302)	(2,794)	(1,771)	(704)
Female	1,265,990	20,160	80,670	189,505	178,875	204,320	179,375	157,145	130,450	81,015	34,490	9,985
	(13,922)	(1,987)	(3,564)	(6,295)	(4,750)	(5,751)	(5,175)	(4,251)	(4,129)	(3,659)	(2,271)	(1,202)
Mexican	37,235,885	548,770	2,383,680	6,816,680	6,585,510	5,701,495	5,266,395	4,378,430	2,984,055	1,657,190	689,405	224,275
	(61,986)	(8,927)	(14,482)	(27,118)	(22,434)	(24,003)	(27,367)	(20,515)	(17,909)	(12,442)	(8,363)	(4,769)
Male	19,000,500	278,270	1,216,735	3,487,515	3,369,610	2,953,565	2,745,905	2,251,660	1,522,715	791,050	296,395	87,080
	(44,653)	(6,549)	(9,319)	(18,817)	(16,462)	(17,743)	(21,110)	(14,419)	(12,823)	(8,351)	(5,367)	(2,771)
Female	18,235,385	270,500	1,166,945	3,329,165	3,215,900	2,747,930	2,520,490	2,126,770	1,461,340	866,140	393,010	137,195
	(42,994)	(6,066)	(11,086)	(19,526)	(15,241)	(16,166)	(17,416)	(14,593)	(12,503)	(9,223)	(6,413)	(3,881)
Puerto Rican	5,798,305	80,070	353,285	963,620	873,320	870,990	801,570	682,630	573,910	370,065	167,995	60,850
	(29,576)	(3,359)	(7,390)	(13,303)	(10,284)	(11,270)	(11,503)	(10,369)	(9,126)	(7,054)	(4,299)	(2,785)
Male	2,889,335	39,760	181,300	501,010	446,980	445,360	401,850	335,855	276,450	171,065	68,570	21,135
	(21,765)	(2,293)	(5,475)	(10,243)	(7,453)	(8,313)	(8,618)	(7,512)	(6,708)	(4,883)	(2,696)	(1,450)
Female	2,908,970	40,310	171,985	462,610	426,340	425,630	399,720	346,775	297,460	199,000	99,425	39,715
	(20,026)	(2,454)	(4,963)	(8,488)	(7,086)	(7,610)	(7,620)	(7,147)	(6,187)	(5,090)	(3,348)	(2,378)
South American	4,348,010	46,355	215,490	570,235	573,310	635,650	717,795	633,370	498,250	279,170	129,985	48,400
	(26,018)	(2,732)	(6,273)	(10,409)	(9,464)	(10,120)	(10,742)	(9,235)	(8,473)	(6,109)	(3,721)	(2,478)
Male	2,103,085	25,675	113,425	284,700	285,865	310,315	357,030	301,650	233,660	119,770	53,610	17,385
	(18,150)	(2,146)	(4,564)	(7,016)	(6,542)	(7,092)	(8,285)	(6,067)	(5,745)	(3,927)	(2,357)	(1,488)
Female	2,244,925	20,680	102,065	285,535	287,445	325,335	360,765	331,720	264,590	159,400	76,375	31,015
	(18,641)	(1,690)	(4,303)	(7,689)	(6,838)	(7,220)	(6,836)	(6,963)	(6,228)	(4,679)	(2,879)	(1,981)
Other and unknown Hispanic	4,046,070	66,555	262,535	697,705	631,845	553,020	530,545	443,990	402,490	276,190	131,645	49,550
	(23,959)	(3,304)	(6,575)	(10,286)	(9,765)	(9,122)	(8,991)	(7,182)	(7,307)	(5,546)	(3,798)	(2,132)
Male	2,063,460	33,560	137,915	360,905	331,170	293,565	292,645	225,715	190,260	125,860	54,925	16,940
	(17,364)	(2,300)	(5,036)	(7,634)	(6,533)	(6,754)	(6,602)	(5,357)	(5,463)	(3,928)	(2,281)	(1,238)
Female	1,982,610	32,995	124,620	336,800	300,675	259,455	237,900	218,275	212,230	150,330	76,720	32,610
	(16,509)	(2,371)	(4,228)	(6,893)	(7,257)	(6,132)	(6,104)	(4,784)	(4,853)	(3,916)	(3,036)	(1,736)

SOURCE: Population estimates are based on unpublished tabulations prepared by the U.S. Census Bureau, 2021 1-year American Community Survey.

Table VII. Estimated population and standard errors for age 15 and older, by marital status, 10-year age group, and sex: United States, 2021

[Population estimates are based on the 2021 1-year American Community Survey Public Use Microdata Sample adjusted to postcensal July 1, 2021, resident population control totals; see Technical Notes in this report. Standard errors are shown in parentheses below each population estimate]

Marital status and sex	Age group (years)							
	15 and older	15–24	25–34	35–44	45–54	55–64	65–74	75 and older
All races	271,400,165	43,206,725	45,079,130	43,733,570	40,673,710	42,815,030	33,778,195	22,113,805
	(145,750)	(42,980)	(58,077)	(69,757)	(54,727)	(61,259)	(51,082)	(42,422)
Never married	92,745,015	40,822,640	25,497,105	11,420,495	6,312,500	5,078,600	2,553,515	1,060,160
	(77,999)	(38,531)	(38,524)	(37,043)	(28,185)	(23,940)	(16,719)	(9,789)
Ever married	178,655,150	2,384,085	19,582,025	32,313,075	34,361,210	37,736,430	31,224,680	21,053,645
	(123,123)	(19,043)	(43,461)	(59,109)	(46,911)	(56,387)	(48,269)	(41,277)
Married	135,007,955	2,257,675	17,816,595	27,622,480	27,194,420	27,949,715	21,455,420	10,711,650
	(102,519)	(18,565)	(40,327)	(52,846)	(38,176)	(45,488)	(38,493)	(27,171)
Widowed	14,828,305	20,930	79,220	266,115	685,160	2,023,150	4,096,270	7,657,460
	(37,924)	(1,828)	(3,876)	(6,707)	(9,661)	(14,074)	(19,030)	(26,858)
Divorced	28,818,890	105,480	1,686,210	4,424,480	6,481,630	7,763,565	5,672,990	2,684,535
	(56,664)	(3,829)	(15,734)	(25,615)	(25,493)	(30,205)	(22,047)	(15,625)
All races, male	133,358,200	22,096,180	22,807,825	22,024,015	20,286,005	20,952,445	15,904,510	9,287,220
	(100,009)	(30,156)	(39,939)	(45,385)	(40,078)	(43,544)	(35,527)	(25,942)
Never married	49,530,120	21,124,265	14,060,290	6,366,450	3,495,925	2,771,500	1,278,870	432,820
	(55,186)	(27,501)	(26,315)	(25,514)	(21,898)	(16,586)	(12,385)	(6,137)
Ever married	83,828,080	971,915	8,747,535	15,657,565	16,790,080	18,180,945	14,625,640	8,854,400
	(83,405)	(12,371)	(30,044)	(37,535)	(33,567)	(40,262)	(33,299)	(25,206)
Married	68,196,910	921,120	8,027,505	13,635,665	13,721,340	14,250,270	11,344,790	6,296,220
	(72,053)	(12,091)	(28,452)	(32,772)	(27,637)	(33,999)	(28,494)	(20,746)
Widowed	3,411,895	8,965	25,955	77,640	197,045	501,490	958,545	1,642,255
	(18,407)	(1,112)	(2,222)	(3,624)	(5,030)	(7,220)	(10,022)	(11,902)
Divorced	12,219,275	41,830	694,075	1,944,260	2,871,695	3,429,185	2,322,305	915,925
	(37,761)	(2,368)	(9,392)	(17,937)	(18,374)	(20,321)	(14,017)	(7,958)
All races, female	138,041,965	21,110,545	22,271,305	21,709,555	20,387,705	21,862,585	17,873,685	12,826,585
	(106,024)	(30,626)	(42,164)	(52,973)	(37,267)	(43,087)	(36,705)	(33,565)
Never married	43,214,895	19,698,375	11,436,815	5,054,045	2,816,575	2,307,100	1,274,645	627,340
	(55,121)	(26,988)	(28,136)	(26,855)	(17,744)	(17,264)	(11,232)	(7,626)
Ever married	94,827,070	1,412,170	10,834,490	16,655,510	17,571,130	19,555,485	16,599,040	12,199,245
	(90,569)	(14,478)	(31,404)	(45,661)	(32,771)	(39,478)	(34,944)	(32,687)
Married	66,811,045	1,336,555	9,789,090	13,986,815	13,473,080	13,699,445	10,110,630	4,415,430
	(72,928)	(14,087)	(28,579)	(41,457)	(26,337)	(30,219)	(25,880)	(17,547)
Widowed	11,416,410	11,965	53,265	188,475	488,115	1,521,660	3,137,725	6,015,205
	(33,157)	(1,450)	(3,177)	(5,643)	(8,248)	(12,081)	(16,177)	(24,077)
Divorced	16,599,615	63,650	992,135	2,480,220	3,609,935	4,334,380	3,350,685	1,768,610
	(42,248)	(3,009)	(12,623)	(18,287)	(17,672)	(22,347)	(17,018)	(13,447)

SOURCE: Population estimates are based on unpublished tabulations prepared by the U.S. Census Bureau, American Community Survey 2021, 1-Year.

six decimal places were replaced by the projected year 2000 population age distribution (Table X). The effect of the change is negligible and does not significantly affect comparability with age-adjusted rates calculated using the previous method. All age-adjusted rates shown in this report are based on the 2000 U.S. standard population.

Age-adjusted rates for Puerto Rico, Guam, U.S. Virgin Islands, and Northern Marianas were computed by applying the age-specific death rates to the U.S. standard population. The 2000 standard population used for computing age-adjusted rates for the territories is shown in Table X.

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

Random variation

The mortality data presented in this report are not subject to sampling error. Mortality data, even based on complete counts, may be affected by random variation; that is, the number of deaths that actually occurred may be considered as one of a large series of possible results that could have arisen under the same circumstances (76,77). When the number of deaths is small, perhaps fewer than 100, random variation tends to be relatively large. Therefore, considerable caution must be observed in interpreting statistics based on small numbers of deaths.

Measuring random variability—To quantify the random variation associated with mortality statistics, an assumption must be made regarding the appropriate underlying distribution. Deaths, as infrequent events, can be viewed as deriving from a Poisson probability distribution. The Poisson distribution is simple conceptually and computationally, and provides reasonable, conservative variance estimates for mortality

Table VIII. Estimated population and standard error for ages 25–64, by educational attainment and sex: United States, 2021

[Population estimates are based on the 2021 1-year American Community Survey adjusted to postcensal July 1, 2021, resident population control totals; see Technical Notes in this report. Standard errors are shown in parentheses below each population estimate]

Education level and sex	Age group (years)				
	25–64	25–34	35–44	45–54	55–64
Both sexes	172,301,425	45,079,125	43,733,550	40,673,720	42,815,030
	(139,809)	(72,346)	(76,695)	(65,238)	(64,611)
Less than high school diploma or GED	17,256,565	3,383,245	4,496,545	4,591,350	4,785,425
	(47,521)	(22,305)	(27,016)	(23,026)	(22,376)
High school diploma or GED	43,194,700	11,011,790	9,814,670	9,920,185	12,448,055
	(68,396)	(34,756)	(36,227)	(32,067)	(33,606)
Some college or collegiate degree	111,850,160	30,684,090	29,422,335	26,162,185	25,581,550
	(112,296)	(59,401)	(61,966)	(51,938)	(50,443)
Male	86,070,285	22,807,835	22,024,005	20,286,005	20,952,440
	(98,404)	(51,688)	(53,063)	(45,247)	(46,355)
Less than high school diploma or GED	9,645,705	2,000,440	2,561,975	2,522,615	2,560,675
	(36,299)	(16,799)	(21,331)	(17,421)	(16,642)
High school diploma or GED	23,891,635	6,391,000	5,652,065	5,450,950	6,397,620
	(49,559)	(26,889)	(24,991)	(22,034)	(24,962)
Some college or collegiate degree	52,532,945	14,416,395	13,809,965	12,312,440	11,994,145
	(76,874)	(40,822)	(41,667)	(35,473)	(35,338)
Female	86,231,140	22,271,290	21,709,545	20,387,715	21,862,590
	(99,314)	(50,619)	(55,375)	(46,997)	(45,008)
Less than high school diploma or GED	7,610,860	1,382,805	1,934,570	2,068,735	2,224,750
	(30,669)	(14,674)	(16,579)	(15,057)	(14,957)
High school diploma or GED	19,303,065	4,620,790	4,162,605	4,469,235	6,050,435
	(47,137)	(22,022)	(26,227)	(23,298)	(22,500)
Some college or collegiate degree	59,317,215	16,267,695	15,612,370	13,849,745	13,587,405
	(81,858)	(43,151)	(45,866)	(37,937)	(35,997)

SOURCE: Population estimates are based on unpublished tabulations prepared by the U.S. Census Bureau, American Community Survey, 2021 1-Year.

statistics when the probability of dying is relatively low (76). Using the properties of the Poisson distribution, the SE associated with the number of deaths (D) is

$$\mathrm{SE}(D) = \sqrt{\mathrm{var}(D)} = \sqrt{D} \quad [1]$$

where var(D) denotes the variance of D.

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

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

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

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

For crude and age-specific death rates,

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

Thus,

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

SE of the age-adjusted death rate (R') is

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

where:

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

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

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

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

$$\mathrm{SE}(IMR) = IMR \bullet \sqrt{\frac{\mathrm{var}(D)}{\mathrm{E}(D)^2} + \frac{\mathrm{var}(B)}{\mathrm{E}(B)^2}} = IMR \bullet \sqrt{\frac{1}{D} + \frac{1}{B}} \quad [5]$$

Table IX. Estimated population for the United States, each state, Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas, 2021

[Populations are postcensal estimates based on 2020 census, estimated as of July 1, 2021]

Area	Total	Area	Total
United States	331,893,745	New Jersey	9,267,130
Alabama	5,039,877	New Mexico	2,115,877
Alaska	732,673	New York	19,835,913
Arizona	7,276,316	North Carolina	10,551,162
Arkansas	3,025,891	North Dakota	774,948
California	39,237,836	Ohio	11,780,017
Colorado	5,812,069	Oklahoma	3,986,639
Connecticut	3,605,597	Oregon	4,246,155
Delaware	1,003,384	Pennsylvania	12,964,056
District of Columbia	670,050	Rhode Island	1,095,610
Florida	21,781,128	South Carolina	5,190,705
Georgia	10,799,566	South Dakota	895,376
Hawaii	1,441,553	Tennessee	6,975,218
Idaho	1,900,923	Texas	29,527,941
Illinois	12,671,469	Utah	3,337,975
Indiana	6,805,985	Vermont	645,570
Iowa	3,193,079	Virginia	8,642,274
Kansas	2,934,582	Washington	7,738,692
Kentucky	4,509,394	West Virginia	1,782,959
Louisiana	4,624,047	Wisconsin	5,895,908
Maine	1,372,247	Wyoming	578,803
Maryland	6,165,129	Puerto Rico	3,263,584
Massachusetts	6,984,723	U.S. Virgin Islands	105,870
Michigan	10,050,811	Guam	168,801
Minnesota	5,707,390	American Samoa	46,366
Mississippi	2,949,965	Northern Marianas	51,659
Missouri	6,168,187		
Montana	1,104,271		
Nebraska	1,963,692		
Nevada	3,143,991		
New Hampshire	1,388,992		

SOURCES: U.S. Census Bureau. 2021 population estimates (available from: https://www2.census.gov/programs-surveys/popest/datasets/2020-2021/state/asrh/sc-est2021-alldata6.csv) and International data base, 2021 (available from: https://www.census.gov/data-tools/demo/idb/#/dashboard?COUNTRY_=&COUNTRY_YEAR=2021&COUNTRY_YR_ANIM=2024).

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

RSE for IMR is

$$RSE(IMR) = 100\frac{SE(IMR)}{IMR} = 100\sqrt{\frac{1}{D}+\frac{1}{B}} \qquad [6]$$

For maternal mortality rates, Formulas 5 and 6 may be used, substituting the maternal mortality rate for IMR.

Formulas 1–6 may be used for all tables presented in this report except for death rates and age-adjusted death rates shown in Tables 3, 13, and 14, which are calculated using population figures that are subject to sampling error, and for rates adjusted for misclassification in Table IV.

SE associated with the age-specific death rates adjusted for Hispanic origin and race misclassification ($\acute{R}_i$) on death certificates assumes the population denominator (P_i) is a constant and is

$$SE(\acute{R}_i) = \sqrt{[(CR_i^2 SE(D_i)^2)+(D_i^2 SE(CR_i)^2)]/P_i^2} \qquad [7]$$

Table X. U.S. standard population

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

SOURCE: 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.

SE of the age-adjusted death rate adjusted for Hispanic origin and race misclassification ($\acute{R}'$) is

$$SE(\acute{R}') = \sqrt{\sum_i \left(\frac{P_{si}}{P_s}\right)^2 SE(\acute{R}_i)^2} \quad [8]$$

Again, this is a major issue. Classification quality has been evaluated for both race and a combination of Hispanic origin and race. So, there are ratios for "White" regardless of Hispanic origin and for "White non-Hispanic" where:

- $\acute{R}_i$ is the age-specific rate adjusted for Hispanic origin and race misclassification on death certificates for the ith age group.
- P_i is the age-specific population for the ith age group.
- D_i is the age-specific number of deaths for the ith age group.
- CR_i is the age-specific classification ratio for the ith age group (see Table III).
- P_{si} is the age-specific standard population for the ith age group from the U.S. standard age distribution (Table X).
- P_s is the total U.S. standard population (all ages combined).

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

Tables 3, 13, and 14—Rates for Central American, Cuban, Dominican, Mexican, Puerto Rican, South American, and Other Hispanic populations in Table 3, by marital status in Table 13, and by educational attainment in Table 14 are based on population estimates derived from 1-year ACS Public Use Microdata Sample for 2021 and adjusted to resident population control totals (73). As a result, the rates are subject to sampling variability in the denominator as well as random variability in the numerator.

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

$$SE(R) = R \bullet \sqrt{\frac{1}{D} + \left(\frac{SE(P)}{P}\right)^2} \quad [9]$$

For age-adjusted death rates (R')

$$SE(R') = \sqrt{\sum_i \left\{\left(\frac{P_{si}}{P_s}\right)^2 \bullet R_i^2 \left[\frac{1}{D_i}\left(\frac{SE(P_i)}{P_i}\right)^2\right]\right\}} \quad [10]$$

where $SE(P)$ in Formulas 9 and 10 represents the SEs of ACS population estimates. SEs of ACS population estimates used in this report are presented in Table VI by Central American, Cuban, Dominican, Mexican, Puerto Rican, South American, and Other Hispanic populations; in Table VII by marital status; and in Table VIII by educational attainment.

In Tables 3, 13, and 14, sampling variability in the population denominator had a substantial impact on the overall variability in the death rate. Therefore, the number of deaths in the numerator was not used as the sole suppression factor. RSEs for rates shown in Tables 3, 13, and 14 are derived from Formulas 9 and 10 by dividing the result of Formula 9 by the crude and age-specific rate, and the result of Formula 10 by the age-adjusted rate, and then multiplying by 100. Rates are replaced by asterisks if the calculated RSE is 23% or more.

Confidence intervals and statistical tests based on 100 deaths or more—When the number of deaths is large, a normal approximation may be used in calculating confidence intervals and statistical tests. How large, in terms of number of deaths, is to some extent subjective. In general, for crude and age-specific death rates and for infant and maternal mortality rates, the normal approximation performs well when the number of deaths is 100 or more. For age-adjusted rates, the criterion for use of the normal approximation is somewhat more complicated (77,78). Formula 11 is used to calculate 95% confidence limits for the death rate when the normal approximation is appropriate:

$$L(R) = R - 1.96\ (SE(R)) \quad [11]$$

and

$$U(R) = R + 1.96\ (SE(R))$$

where $L(R)$ and $U(R)$ are the lower and upper limits of the confidence interval, respectively. The resulting 95% confidence interval can be interpreted to mean that the chances are 95 in 100 that the "true" death rate falls between $L(R)$ and $U(R)$. For example, suppose that the crude death rate for Malignant neoplasms is 186.0 per 100,000 population based on 565,469 deaths. Lower and upper 95% confidence limits using Formula 11 are calculated as

$$L(186.0) = 186.0 - 1.96\ (0.25) = 185.5$$

and

$$U(186.0) = 186.0 + 1.96\ (0.25) = 186.5$$

Thus, the chances are 95 in 100 that the true death rate for Malignant neoplasms is between 185.5 and 186.5. Formula 11 can also be used to calculate 95% confidence intervals for the number of deaths, age-adjusted death rates, IMRs, and other mortality statistics when the normal approximation is appropriate by replacing R with D, R', IMR, or others.

When testing the difference between two rates, R_1 and R_2 (each based on 100 or more deaths), the normal approximation may be used to calculate a test statistic, z, such that

$$z = \frac{R_1 - R_2}{\sqrt{SE(R_1)^2 + SE(R_2)^2}} \quad [12]$$

If $|z| \geq 1.96$, then the difference between the rates is statistically significant at the 0.05 level. If $|z| < 1.96$, then the difference is not statistically significant. Formula 12 can also be used to perform tests for other mortality statistics when the normal approximation is appropriate (when both statistics being compared meet the normal criteria) by replacing R_1 and R_2 with D_1 and D_2, R'_1 and R'_2, or others. For example, suppose that the male age-adjusted death rate for Malignant neoplasms of trachea, bronchus and lung (lung cancer) is 65.1 per 100,000 U.S. standard population in the previous data year (R_1) and 63.6 per 100,000 U.S. standard population in the current data year (R_2). SE for each of these figures, SE(R_1) and SE(R_2), is calculated using Formula 4. A test using Formula 12 can determine if the decrease in the age-adjusted rate is statistically significant:

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

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

Confidence intervals and statistical tests based on fewer than 100 deaths—When the number of deaths is not large (fewer than 100), the Poisson distribution cannot be approximated by the normal distribution. The normal distribution is symmetrical, with a range from $-\infty$ to $+\infty$. As a result, confidence intervals based on the normal distribution also have this range. The number of deaths or the death rate, however, cannot be less than zero. When the number of deaths is very small, approximating confidence intervals for deaths and death rates using the normal distribution will sometimes produce lower confidence limits that are negative. The Poisson distribution, in contrast, is an asymmetric distribution with zero as a lower bound—confidence limits based on this distribution will never be less than zero. A simple method based on the more general family of gamma distributions, of which the Poisson is a member, can be used to approximate confidence intervals for deaths and death rates when the number of deaths is small (75,77). For more information regarding how the gamma method is derived, see "Derivation of gamma method" at the end of this section.

Calculations using the gamma method can be made using commonly available spreadsheet programs or statistical software (such as Excel or SAS) that include an inverse gamma function. In Excel, the function "gammainv (probability, alpha, beta)" returns values associated with the inverse gamma function for a given probability between zero and one. For 95% confidence limits, the probability associated with the lower limit is 0.05/2 = 0.025, and with the upper limit, 1 – (0.05/2) = 0.975. Alpha and beta are parameters associated with the gamma distribution. For the number of deaths and crude and age-specific death rates, alpha = D (the number of deaths) and beta = 1. In Excel, the following formulas can be used to calculate lower and upper 95% confidence limits for the number of deaths and crude and age-specific death rates:

$$L(D) = \text{GAMMAINV}(0.025, D, 1)$$

and

$$U(D) = \text{GAMMAINV}(0.975, D + 1, 1)$$

Confidence limits for the death rate are then calculated by dividing L(D) and U(D) by the population (P) at risk of dying (see Formula 19).

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

$$L(D) = L \bullet D \text{ and } U(D) = U \bullet D \quad [13]$$

and

$$L(R) = L \bullet R \text{ and } U(R) = U \bullet R \quad [14]$$

where L and U in both formulas are the lower and upper confidence limit factors that correspond to the appropriate number of deaths, D, in Table XI. For example, suppose that the death rate for American Indian and Alaska Native non-Hispanic females ages 1–4 is 39.5 per 100,000 and based on 50 deaths. Applying Formula 14, values for L and U from Table XI for 50 deaths are multiplied by the death rate, 39.5, such that

$$L(R) = L(39.5) = 0.742219 \bullet 39.5 = 29.3$$

and

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

These confidence limits indicate that the chances are 95 in 100 that the actual death rate for American Indian and Alaska Native non-Hispanic females ages 1–4 is between 29.3 and 52.1 per 100,000.

Although the calculations are similar, confidence intervals based on small numbers for age-adjusted death rates, infant and maternal mortality rates, and rates that are subject to sampling variability in the denominator are somewhat more complicated (77).

Refer to the last published version of the Mortality Technical Appendix for more details: https://www.cdc.gov/nchs/data/statab/techap95.pdf (78).

When comparing the difference between two rates (R_1 and R_2), where one or both of the rates are based on fewer than 100 deaths, a comparison of 95% confidence intervals may be used as a statistical test. If the 95% confidence intervals do not overlap, then the difference can be said to be statistically significant at the 0.05 level. A simple rule of thumb is: If $R_1 > R_2$, then test if L(R_1) > U(R_2), or if $R_2 > R_1$, then test if L(R_2) > U(R_1). Positive tests denote statistical significance at the 0.05 level. For example, suppose that American Indian and Alaska Native non-Hispanic females ages 1–4 have a death rate (R_1) of 39.5 based on 50 deaths, and Asian non-Hispanic females ages 1–4 have a death rate (R_2) of 20.1 per 100,000 based on 86 deaths. The 95% confidence limits for R_1 and R_2 calculated using Formula 14 would be

$$L(R_1) = L(39.5) = 0.742219 \bullet 39.5 = 29.3$$

and

$$U(R_1) = U(39.5) = 1.318375 \bullet 39.5 = 52.1$$

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

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

SOURCE: Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the year 2000 standard. *National Vital Statistics Report*s; vol 47 no 3. Hyattsville, MD: National Center for Health Statistics. 1998.

$$L(R_2) = L(20.1) = 0.799871 \bullet 20.1 = 16.1$$

and

$$U(R_2) = U(20.1) = 1.234992 \bullet 20.1 = 24.8$$

Because $R_1 > R_2$ and $L(R_1) > U(R_2)$, it can be concluded that the difference between the death rates for American Indian and Alaska Native females ages 1–4 and Asian females of the same age is statistically significant at the 0.05 level. That is, accounting for random variability, Asian females ages 1–4 have a death rate significantly lower than that for American Indian and Alaska Native females of the same age.

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

Users of the method of comparing confidence intervals should be aware that this method is a conservative test for statistical significance—the difference between two rates may, in fact, be statistically significant even though confidence intervals for the two rates overlap (79). Caution should be observed when interpreting a nonsignificant difference between two rates, especially when the lower and upper limits being compared overlap only slightly.

Derivation of gamma method—For a random variable X that follows a gamma distribution $\Gamma(y,z)$, where y and z are the parameters that determine the shape of the distribution (78), $E(X) = yz$ and $Var(X) = yz^2$. For the number of deaths, D, $E(D) = D$ and $Var(D) = D$. It follows that $y = D$ and $z = 1$, and thus,

$$D \sim \Gamma(D,1) \qquad [15]$$

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

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

$$R \sim \Gamma(D,P^{-1}) \qquad [16]$$

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

$$R/P^{-1} = D \sim \Gamma(D,1) \qquad [17]$$

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

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

$$L(D) = \Gamma^{-1}_{(D,1)}(\alpha / 2) \text{ and } U(D) = \Gamma^{-1}_{(D+1,1)}(1 - \alpha /2) \qquad [18]$$

where Γ^{-1} represents the inverse of the gamma distribution and $D + 1$ in the formula for $U(D)$ reflects a continuity correction, which is necessary because D is a discrete random variable, and the gamma distribution is a continuous distribution. For a 95% confidence interval, $\alpha = 0.05$. For the death rate, it can be shown that

$$L(R) = L(D)/P \text{ and } U(R) = U(D)/P \qquad [19]$$

For more detail regarding the derivation of the gamma method and its application to age-adjusted death rates and other mortality statistics, see References (14,76,80).

Availability of mortality data

Mortality data are available in publications, unpublished tables, and electronic products as described on the NCHS mortality website: https://www.cdc.gov/nchs/nvss/deaths.htm. More detailed analysis than this report provides can be obtained from the mortality public-use data set issued each data year. Since 1968, the data set has been available through NCHS in ASCII format and can now be downloaded: https://www.cdc.gov/nchs/data_access/Vitalstatsonline.htm. Additional resources available from NCHS include *Vital Statistics of the United States, Mortality; Vital and Health Statistics*, Series 20 reports; and *National Vital Statistics Report*s.

Definition of terms

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

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

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

Infant deaths—Deaths of infants younger than age 1 year.

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

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

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

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Contents

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