

## Deaths: Preliminary Data for 2000

Arialdi M. Minino, M.P.H. and Betty L. Smith, B.S. Ed., Division of Vital Statistics

### Abstract

*Objectives*—This report presents preliminary data on deaths for the year 2000 in the United States. U.S. data on deaths are shown by age, sex, race, and Hispanic origin. Data on life expectancy, leading causes of death, and infant mortality are also presented.

*Methods*—Data in this report are based on a large number of deaths comprising more than 94 percent of the demographic file and 85 percent of the medical file for all deaths in the United States in 2000. The records are weighted to independent control counts of infant deaths, and deaths 1 year and over received in State vital statistics offices for 2000. Unless otherwise indicated, comparisons are made with final data for 1999. For certain causes of death, preliminary data differ from final data because of the truncated nature of the preliminary file. These are, in particular, accidents, homicides, suicides, and respiratory diseases.

*Results*—The age-adjusted death rate in 2000 for the United States decreased slightly from 1999 to a record low in 2000. For causes of death, declines in age-adjusted rates occurred for heart disease, stroke, Chronic liver disease and cirrhosis, diabetes, and cancer. Age-adjusted rates for drug-induced deaths, alcohol-induced deaths, and firearm injuries also decreased during 2000. Declines also occurred for homicides, suicides, unintentional injuries, and Chronic lower respiratory diseases although the extent of the declines cannot be precisely assessed based on the preliminary data. Age-adjusted death rates increased between 1999 following causes: Pneumonitis from solids and liquids, disease, kidney disease, hypertension, Influenza and Septicemia.

The infant mortality rate for the black population lower, while the rate for the white population decreased (slightly) by 2 percent. Life expectancy at birth rose by record high of 76.9 years.

**Keywords:** deaths • vital statistics

### Introduction

This report presents preliminary mortality data based on a substantial proportion of vital records occurring in 2000. This report includes only data on deaths; reports previous to 1999 in the preliminary series included data for births and deaths. Preliminary natality data for 2000 were published separately (1). Trends shown in preliminary reports for 1995–99 deaths, for most measures, were confirmed by final statistics for each year (2–6).

### Sources and methods

#### Data sources

Preliminary data in this series are based on records of deaths that occurred during the year 2000 and were received and processed by the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) as of June 27, 2001. Demographic information was available for an estimated 94 percent of infant deaths (under 1 year of age) and about 95 percent of deaths to persons aged 1 year or older. Medical or cause-of-death information was

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processed separately and was available for an estimated 85 percent of infant deaths and 86 percent of deaths to persons aged 1 year and over.

To produce the preliminary estimates shown in this report, records were weighted using independent control counts of infant deaths and deaths 1 year and over received in the State vital statistics offices during 2000. Two separate sets of weights were applied to the death records—one set for the demographic information and one set for the medical information. This results in slight inconsistencies between comparable demographic data from the mortality demographic and medical tables (see section on “Nature and sources of data” in [Technical notes](#)). Preliminary estimates are subject to sampling variation as well as random variation.

Cause of death is not always available when the preliminary data are sent to NCHS, but is available later for final data processing. As a result, estimates based on preliminary mortality data may differ from statistics from the final mortality data. Such differences may affect certain causes of death where the cause is pending investigation, such as for Assault (homicide), Intentional self-harm (suicide), Accidents (unintentional injuries), and Sudden infant death syndrome (SIDS), or conditions that are highly seasonal, such as Influenza and pneumonia, and Chronic lower respiratory diseases (see section on “Bias estimation” in [Technical notes](#)).

In addition to national and State estimates of total deaths and death rates, this report includes preliminary statistics on life expectancy, infant mortality, and causes of death. Race and Hispanic origin are reported as separate items on the death certificate and are not mutually exclusive. Data are shown for the following race and ethnic groups: white, non-Hispanic white, black, American Indian, Asian or Pacific Islander (API), and Hispanic. Tabulations by race and ethnic group are based on the race and ethnic group reported for the decedent. Death rates for American Indian, API, and to a lesser extent, for Hispanics are known to be too low because of reporting problems (see section on “Race and Hispanic origin” in [Technical notes](#)).

The proportion of records processed by each State is shown in [table I](#) in the [Technical notes](#). Changes in death rates between 1999 and 2000 and differences in death rates across demographic groups for 2000 were tested for statistical significance. Unless otherwise specified, reported differences in death rates are statistically significant. Detailed information on the nature, sources, and qualifications of the preliminary data is given in the [Technical notes](#).

## Results

### Trends in numbers and rates

The **preliminary number of deaths** in the United States for 2000 was 2,404,598, an increase of 13,199 from the 1999 total. The **crude death rate** decreased from 877.0 per 100,000 population in 1999 to 873.6 per 100,000 in 2000. The estimated **age-adjusted death rate**, which accounts for changes in the age distribution of the population, reached a record low of 872.4 per 100,000 U.S. standard population, 1.1 percent lower than the 1999 rate of 881.9 ([table A](#)) (2). Age-adjusted death rates are better indicators than crude death rates for showing changes in the risk of death over time when the age distribution of the population is changing and for

comparing the mortality of subgroups of the population that have different age compositions. All age-adjusted death rates are standardized to the year 2000 population (see section on “Computing rates and percents” in [Technical notes](#)).

The age-adjusted death rate followed a decreasing trend from 1994 to 1998, but increased in 1999 relative to 1998. The 1999 increase was associated with two influenza outbreaks (7, 8). The preliminary age-adjusted death rate for 2000 is 0.4 percent lower than the 1998 final rate despite a major influenza outbreak at the beginning of the year (8).

Relative to 1999, age-adjusted death rates decreased by 1.8 percent for males, and by 0.5 percent for females. For white non-Hispanic males, the age-adjusted death rate decreased 1.4 percent, while mortality for white non-Hispanic females remained virtually unchanged. Reductions in mortality also occurred for other groups as follows: black males, 2.9 percent; black females, 1.2 percent; API males, 3.2 percent; API females, 2.8 percent; Hispanic males, 3.1 percent; and Hispanic females, 3.2 percent. Decreases in mortality for American Indian males and females were not statistically significant. The age-adjusted death rate did not increase for any of the race and Hispanic origin and gender populations reported ([table 1](#)).

The general decrease in mortality between 1999 and 2000 resulted from decreases in the death rate for **age groups** 1–4 years, 55–64 years, 65–74 years, 75–84 years, and 85 years and over. A slight increase of less than 1 percent in the death rate occurred for age group 45–54 years. Other changes were not statistically significant.

The preliminary estimate of **life expectancy** at birth for the total population in 2000 reached a record high of 76.9 years. This represents an increase of 0.2 years relative to 1999 (see [figure 1](#) and [table 6](#)). The gap between male and female life expectancy diminished again in 2000 to 5.4 years. The difference between male and female life expectancy at birth has been steadily decreasing since 1990 ([figure 2](#)). Life expectancy for males increased by 0.2 years, reaching a record 74.1 years. Female life expectancy also rose to 79.5 years, an increase of 0.1 years from 1999, equaling the record high achieved in 1998. Record-high life expectancies were reached for white and black males (74.8 years and 68.3 years, respectively), and for black females (75.0 years). White female levels for 2000 are the same as the record high attained in 1998. Life expectancy did not decrease for any of the race and gender groups reported.

### Causes of death

The list of 15 **leading causes of death** changed between 1999 and 2000. Fourteen of the 15 leading causes of death are on both lists for 1999 and 2000. Aortic aneurysm, which had debuted as the 15th leading cause of death for 1999, dropped from the list in 2000 and, in its place, homicide is the 15th leading cause of death. Making its first appearance among the leading causes of death is Pneumonitis due to solids and liquids, ranked 14th in 2000. This cause of death, concentrated among the elderly, is a pneumonia resulting from aspirating material into the lungs. Pneumonitis due to solids and liquids replaced homicide as the 14th leading cause of death. No changes occurred in the rank order of the leading 13 conditions between 1999 and 2000. In order, the 15 leading causes in 2000 were 1) Diseases of heart (heart disease), 2) Malignant neoplasms

**Table A. Deaths, age-adjusted death rates, and life expectancy at birth, by race and sex; and infant deaths and mortality rates, by race: United States, final 1999 and preliminary 2000**

Measure and sex	All races <sup>1</sup>		White		Black	
	2000	1999	2000	1999	2000	1999
All deaths . . . . .	2,404,598	2,391,399	2,074,157	2,061,348	284,561	285,064
Age-adjusted death rate <sup>2</sup> . . . . .	872.4	881.9	853.2	860.7	1,124.8	1,147.1
Male . . . . .	1,042.7	1,061.8	1,019.3	1,035.8	1,371.3	1,412.5
Female . . . . .	739.8	743.6	723.4	725.7	943.9	955.0
Life expectancy at birth <sup>3</sup> . . . . .	76.9	76.7	77.4	77.3	71.8	71.4
Male . . . . .	74.1	73.9	74.8	74.6	68.3	67.8
Female . . . . .	79.5	79.4	80.0	79.9	75.0	74.7
Infant deaths . . . . .	27,987	27,937	18,216	18,067	8,665	8,822
Infant mortality rate <sup>4</sup> . . . . .	6.9	7.1	5.7	5.8	14.0	14.6

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

<sup>2</sup>Age-adjusted death rates are per 100,000 U.S. standard population, based on the year 2000 standard; see Technical notes.

<sup>3</sup>Life expectancy at birth stated in years.

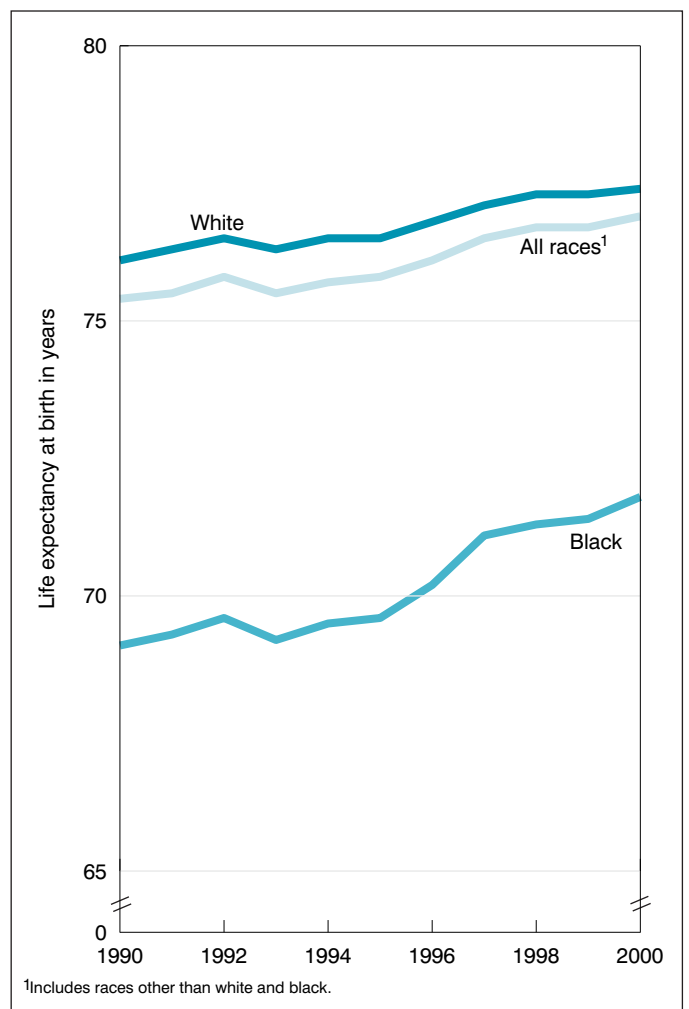
<sup>4</sup>Infant mortality rates are deaths under 1 year per 1,000 live births in specified group.

(cancer), 3) Cerebrovascular diseases (stroke), 4) Chronic lower respiratory diseases, 5) Accidents (unintentional injuries), 6) Diabetes mellitus (diabetes), 7) Influenza and pneumonia, 8) Alzheimer's disease, 9) Nephritis, nephrotic syndrome and nephrosis (kidney disease), 10) Septicemia, 11) suicide, 12) Chronic liver disease and cirrhosis, 13) Essential (primary) hypertension and hypertensive renal disease (hypertension), 14) Pneumonitis due to solids and liquids, and 15) homicide.

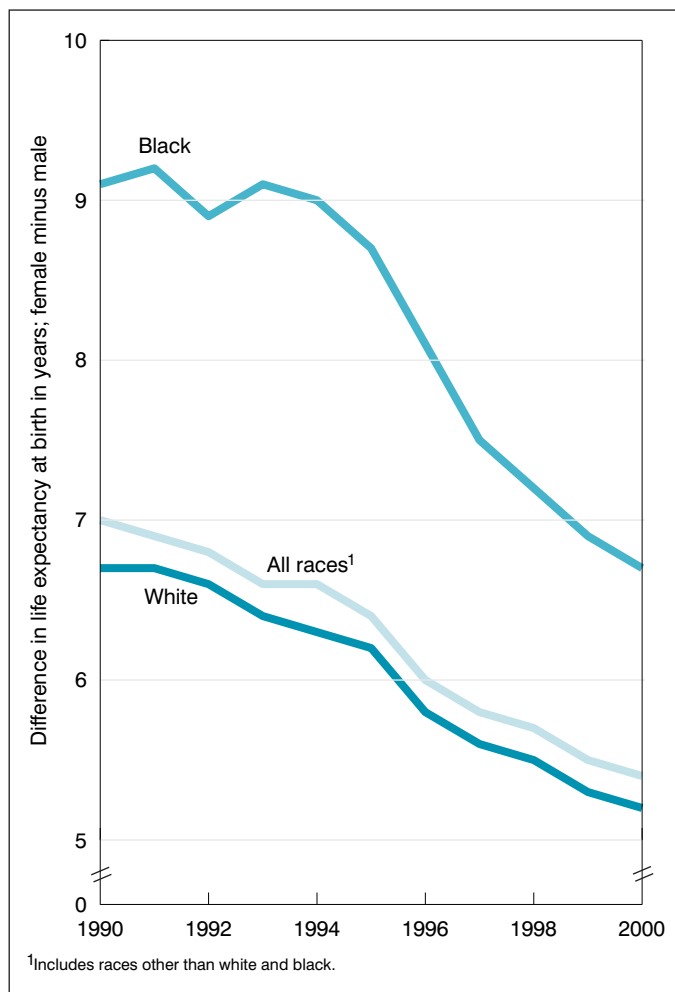
Reductions in mortality occurred for many leading causes of death. From 1999 to 2000 the preliminary age-adjusted death rate for the leading cause of death, **heart disease**, decreased by 3.8 percent. A total of 15,298 fewer deaths from heart disease occurred in 2000 than in 1999. The age-adjusted death rate for **cancer** decreased by 1.1 percent (see [tables B](#) and [2](#)). Deaths from these two diseases combined accounted for more than 1.2 million deaths, or more than one-half of all deaths in 2000. While heart disease mortality has exhibited a downward trend since 1950, cancer mortality has declined only since 1990.

The preliminary age-adjusted death rate decreased for **homicide** by an estimated 6.5 percent, continuing the downward trend since 1991. This decline may be overstated because of bias in the preliminary file (see section on "Bias estimation" in [Technical notes](#)). **Suicide** decreased by 3.7 percent. As with homicide, declines in suicide should be interpreted with caution given the possible bias in the preliminary files for certain causes of death (see section on "Bias estimation" in [Technical notes](#)). The decline in mortality for homicide and suicide continued the downward trend for 1996, 1997, 1998, and 1999 (2–5). **Unintentional injuries** decreased by 5.6 percent continuing the general downward trend since the 1980s. Between 1999 and 2000 the age-adjusted death rate for **stroke** decreased by an estimated 2.6 percent. Decreases also occurred for **Chronic liver disease and cirrhosis** (2.1 percent), **Chronic lower respiratory diseases** (2.0 percent), and **diabetes** (1.2 percent).

Increases occurred for **Pneumonitis due to solids and liquids** (8.9 percent), **Alzheimer's disease** (7.9 percent), **kidney disease** (4.6 percent), **hypertension** (3.2 percent), **Influenza and pneumonia** (3.0 percent), and **Septicemia** (1.8 percent).



**Figure 1. Trends in life expectancy at birth, by race: United States, 1990–2000**



**Figure 2. Difference in life expectancy between males and females, by race: United States, 1990–2000**

The preliminary age-adjusted death rate for Human immunodeficiency virus disease (**HIV disease**) decreased by 3.7 percent from 1999 to 2000 (table 2), continuing its slowing decrease from 1995. The rate decreased 28.8 percent from 1995 to 1996, 47.7 percent from 1996 to 1997, 20.6 percent from 1997 to 1998, and 3.6 percent from 1998 to 1999. In 1995 the rate for HIV disease was not significantly different from 1994. From 1987 until 1994 HIV disease mortality increased an average of 16 percent annually. For the age group 25–44 years, this cause is still the 5th leading cause of death for all races combined.

During 2000 preliminary age-adjusted death rates decreased for **drug-induced deaths** (17.1 percent), **alcohol-induced causes** (5.6 percent), and **firearm injuries** (3.8 percent). The rate for **injuries at work** also decreased (7.7 percent) between the two years (table 2).

Among the major race and Hispanic origin groups for 2000, the lowest mortality was reported for the API and Hispanic populations whose preliminary age-adjusted death rates were 42 percent and 33 percent lower, respectively, than those for the white non-Hispanic population. In contrast, the age-adjusted death rate for the black population was 30 percent higher than that for the white non-Hispanic population (table 1). Mortality for races other than white and black and Hispanic origin may be seriously understated due to under-

reporting of some race groups and Hispanic origin on death certificates and to undercounts of those population groups in the census (9, 10).

The preliminary **infant mortality rate** for 2000 was 6.9 infant deaths per 1,000 live births, compared with the rate of 7.1 in 1999 (see tables A and 4). This change was mostly due to a 4.1 percent decline in the rate for black infants (from 14.6 to 14.0). Although smaller reductions in the rate (ranging from 3.4 to 1.7 percent) were observed for other race and Hispanic-origin groups, none were statistically significant. Because of inconsistencies in reporting some race groups and Hispanic origin on birth and death certificates, infant mortality rates for these groups are likely to be underestimated (9, 10). The linked birth/infant death data set provides a better source of data for infant deaths and mortality rates by race and ethnicity (11).

The leading cause of infant mortality was **Congenital malformations, deformations, and chromosomal abnormalities** (congenital malformations), which accounted for 20.7 percent of all infant deaths. The increase in the infant mortality rate for this cause was not significant (table 5). The rate for **Disorders related to short gestation and low birthweight** (low birthweight), the second leading cause of death for all infants (accounting for 15.4 percent of infant deaths), dropped 4.6 percent from 1999 to 2000. The rate for the third leading cause of infant mortality, **SIDS**, dropped by an estimated 20.9 percent from 1999. Four hundred and ninety-seven (497) fewer infant deaths occurred in 2000 due to SIDS; however, the magnitude of this change may reflect a change in the way SIDS is diagnosed by the medical community as well as bias in the preliminary file. Deaths due to SIDS have been declining since 1988 (3).

By place of residence, **Hawaii** had the lowest mortality, with an age-adjusted death rate of 666.9 deaths per 100,000 U.S. standard population. Mortality was the highest for **Mississippi**, with an age-adjusted death rate of 1,074.8 (table 3).

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**Table B. Deaths and death rates for 2000 and age-adjusted death rates and percent changes in age-adjusted rates from 1999 to 2000 for the 15 leading causes of death: United States, final 1999 and preliminary 2000**

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population based on year 2000 standard; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to the totals]

Rank <sup>1</sup>	Cause of death (Based on the <i>Tenth Revision</i> , <i>International Classification of Diseases</i> , 1992)	Number	Death rate	Age-adjusted death rate		
				2000	1999	Percent change
...	All causes	2,404,624	873.6	872.4	881.9	-1.1
1	Diseases of heart . . . . . I00-I09,I11,I13,I20-I51	709,894	257.9	257.5	267.8	-3.8
2	Malignant neoplasms . . . . . C00-C97	551,833	200.5	200.5	202.7	-1.1
3	Cerebrovascular diseases . . . . . I60-I69	166,028	60.3	60.2	61.8	-2.6
4	Chronic lower respiratory diseases <sup>2</sup> . . . . . J40-J47	123,550	44.9	44.9	45.8	-2.0
5	Accidents (unintentional injuries) <sup>2</sup> . . . . . V01-X59,Y85-Y86	93,592	34.0	33.9	35.9	-5.6
6	Diabetes mellitus . . . . . E10-E14	68,662	24.9	24.9	25.2	-1.2
7	Influenza and pneumonia <sup>2</sup> . . . . . J10-J18	67,024	24.3	24.3	23.6	3.0
8	Alzheimer's disease . . . . . G30	49,044	17.8	17.8	16.5	7.9
9	Nephritis, nephrotic syndrome and nephrosis . . . . . N00-N07,N17-N19,N25-N27	37,672	13.7	13.7	13.1	4.6
10	Septicemia . . . . . A40-A41	31,613	11.5	11.5	11.3	1.8
11	Intentional self-harm (suicide) <sup>2</sup> . . . . . X60-X84,Y87.0	28,332	10.3	10.3	10.7	-3.7
12	Chronic liver disease and cirrhosis . . . . . K70,K73-K74	26,219	9.5	9.5	9.7	-2.1
13	Essential (primary) hypertension and hypertensive renal disease . . . . . I10,I12	17,964	6.5	6.5	6.3	3.2
14	Pneumonitis due to solids and liquids . . . . . J69	16,659	6.1	6.1	5.6	8.9
15	Assault (homicide) <sup>2</sup> . . . . . X85-Y09,Y87.1	16,137	5.9	5.8	6.2	-6.5
	All other causes . . . . .	400,401	145.5	---	---	---

... Category not applicable.

--- Data not available.

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

<sup>2</sup>Preliminary estimates may differ from final data; see section on Bias estimation in Technical notes.

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## List of detailed tables

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**Table 1. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, final 1999 and preliminary 2000**

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race, and sex	2000		1999	
	Number	Rate	Number	Rate
All races, both sexes				
All ages .....	2,404,598	873.6	2,391,399	877.0
Under 1 year <sup>1</sup> .....	27,987	727.4	27,937	731.4
1-4 years .....	4,964	32.8	5,249	34.7
5-14 years .....	7,386	18.6	7,595	19.2
15-24 years .....	31,259	81.5	30,656	81.2
25-34 years .....	40,409	108.0	41,066	108.3
35-44 years .....	89,652	199.7	89,256	199.2
45-54 years .....	160,014	430.7	152,974	427.3
55-64 years .....	241,029	1,005.4	238,979	1,021.8
65-74 years .....	441,991	2,432.9	452,600	2,484.3
75-84 years .....	701,173	5,694.3	698,590	5,751.3
85 years and over .....	658,295	15,324.4	646,141	15,476.1
Not stated .....	437	...	356	...
Age-adjusted rate <sup>2</sup> .....	...	872.4	...	881.9
All races, male				
All ages .....	1,177,743	874.8	1,175,460	882.0
Under 1 year <sup>1</sup> .....	15,662	797.0	15,646	801.5
1-4 years .....	2,815	36.4	2,975	38.5
5-14 years .....	4,394	21.6	4,492	22.2
15-24 years .....	23,041	117.3	22,414	115.9
25-34 years .....	27,875	149.9	28,276	150.2
35-44 years .....	57,137	256.1	57,118	256.7
45-54 years .....	100,131	551.1	95,659	546.7
55-64 years .....	143,388	1,254.0	142,724	1,280.0
65-74 years .....	3,019,8	3,019.8	254,920	3,109.3
75-84 years .....	340,382	6,858.0	340,970	6,999.8
85 years and over .....	214,851	16,613.8	209,989	16,931.3
Not stated .....	326	...	277	...
Age-adjusted rate <sup>2</sup> .....	...	1,042.7	...	1,061.8
All races, female				
All ages .....	1,226,854	872.3	1,215,939	872.2
Under 1 year <sup>1</sup> .....	12,325	654.7	12,291	658.1
1-4 years .....	2,149	29.0	2,274	30.8
5-14 years .....	2,992	15.5	3,103	16.1
15-24 years .....	8,218	43.9	8,242	44.7
25-34 years .....	12,534	66.6	12,790	66.9
35-44 years .....	32,515	144.0	32,138	142.5
45-54 years .....	59,884	315.5	57,315	313.1
55-64 years .....	97,641	778.7	96,255	786.5
65-74 years .....	194,250	1,949.6	197,680	1,972.9
75-84 years .....	360,792	4,908.6	357,620	4,915.4
85 years and over .....	443,445	14,769.1	436,152	14,861.1
Not stated .....	111	...	79	...
Age-adjusted rate <sup>2</sup> .....	...	739.8	...	743.6

See footnotes at end of table.

**Table 1. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race, and sex	2000		1999	
	Number	Rate	Number	Rate
White, total <sup>3</sup> , both sexes				
All ages .....	2,074,157	916.7	2,061,348	917.7
Under 1 year <sup>1</sup> .....	18,216	600.8	18,067	596.8
1-4 years .....	3,490	29.0	3,690	30.7
5-14 years .....	5,449	17.5	5,493	17.7
15-24 years .....	23,004	75.5	22,352	74.5
25-34 years .....	28,714	96.1	29,400	96.6
35-44 years .....	66,480	180.2	65,607	177.6
45-54 years .....	122,540	391.4	117,011	386.8
55-64 years .....	195,920	950.7	193,582	961.5
65-74 years .....	377,937	2,381.1	387,437	2,427.8
75-84 years .....	628,830	5,662.3	626,489	5,713.2
85 years and over .....	603,256	15,545.2	591,949	15,688.0
Not stated .....	320	...	271	...
Age-adjusted rate <sup>2</sup> .....	...	853.2	...	860.7
White <sup>3</sup> , male				
All ages .....	1,008,313	906.8	1,005,335	911.2
Under 1 year <sup>1</sup> .....	10,208	658.2	10,197	658.1
1-4 years .....	1,998	32.4	2,084	33.9
5-14 years .....	3,268	20.4	3,228	20.3
15-24 years .....	16,869	107.6	16,203	104.9
25-34 years .....	20,143	134.4	20,549	134.5
35-44 years .....	43,307	233.9	42,914	231.5
45-54 years .....	77,756	502.0	73,908	494.2
55-64 years .....	117,315	1,179.8	116,537	1,200.2
65-74 years .....	213,781	2,955.3	220,442	3,043.2
75-84 years .....	306,762	6,826.5	307,450	6,965.1
85 years and over .....	196,653	16,918.7	191,610	17,202.1
Not stated .....	253	...	213	...
Age-adjusted rate <sup>2</sup> .....	...	1,019.3	...	1,035.8
White <sup>3</sup> , female				
All ages .....	1,065,844	926.4	1,056,013	924.1
Under 1 year <sup>1</sup> .....	8,009	540.7	7,870	532.6
1-4 years .....	1,492	25.4	1,606	27.4
5-14 years .....	2,181	14.3	2,265	14.9
15-24 years .....	6,135	41.5	6,149	42.2
25-34 years .....	8,571	57.6	8,851	58.4
35-44 years .....	23,173	126.1	22,693	123.3
45-54 years .....	44,785	283.1	43,103	281.8
55-64 years .....	78,605	737.1	77,045	739.1
65-74 years .....	164,156	1,900.3	166,995	1,916.2
75-84 years .....	322,068	4,871.1	319,039	4,869.7
85 years and over .....	406,603	14,957.9	400,339	15,053.8
Not stated .....	68	...	58	...
Age-adjusted rate <sup>2</sup> .....	...	723.4	...	725.7

See footnotes at end of table.



**Table 1. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race, and sex	2000		1999	
	Number	Rate	Number	Rate
White, non-Hispanic, both sexes				
All ages .....	1,963,254	998.3	1,953,197	996.3
Under 1 year <sup>1</sup> .....	13,579	576.7	13,553	572.7
1-4 years .....	2,652	28.1	2,819	29.7
5-14 years .....	4,411	17.3	4,488	17.5
15-24 years .....	18,277	72.2	17,868	71.4
25-34 years .....	23,218	92.7	23,986	93.4
35-44 years .....	58,237	179.7	57,630	176.6
45-54 years .....	111,939	393.0	106,808	387.0
55-64 years .....	182,828	962.5	180,793	972.1
65-74 years .....	357,880	2,416.2	367,490	2,458.9
75-84 years .....	605,805	5,739.6	604,344	5,783.1
85 years and over .....	584,308	15,841.3	573,327	15,945.8
Not stated .....	120	...	91	...
Age-adjusted rate <sup>2</sup> .....	...	863.4	...	869.4
White, non-Hispanic, male				
All ages .....	946,268	982.5	944,913	984.7
Under 1 year <sup>1</sup> .....	7,679	637.0	7,718	636.5
1-4 years .....	1,545	31.9	1,605	32.9
5-14 years .....	2,670	20.4	2,643	20.1
15-24 years .....	13,083	100.7	12,677	98.7
25-34 years .....	15,969	127.6	16,449	128.4
35-44 years .....	37,568	231.6	37,291	228.2
45-54 years .....	70,767	501.7	67,151	491.6
55-64 years .....	109,302	1,188.6	108,692	1,208.0
65-74 years .....	202,478	2,993.3	209,155	3,077.6
75-84 years .....	295,307	6,924.1	296,528	7,057.5
85 years and over .....	189,816	17,294.4	184,938	17,539.1
Not stated .....	83	...	66	...
Age-adjusted rate <sup>2</sup> .....	...	1,030.2	...	1,045.1
White, non-Hispanic, female				
All ages .....	1,016,986	1,013.6	1,008,284	1,007.4
Under 1 year <sup>1</sup> .....	5,900	513.4	5,835	505.6
1-4 years .....	1,107	24.0	1,214	26.2
5-14 years .....	1,740	14.0	1,845	14.8
15-24 years .....	5,194	42.2	5,191	42.6
25-34 years .....	7,249	57.8	7,537	58.6
35-44 years .....	20,669	127.7	20,339	124.8
45-54 years .....	41,172	286.3	39,657	284.5
55-64 years .....	73,526	750.4	72,101	751.0
65-74 years .....	155,402	1,931.1	158,335	1,942.9
75-84 years .....	310,498	4,936.4	307,816	4,926.2
85 years and over .....	394,492	15,225.8	388,389	15,284.6
Not stated .....	37	...	25	...
Age-adjusted rate <sup>2</sup> .....	...	734.0	...	734.9

See footnotes at end of table.

**Table 1. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race, and sex	2000		1999	
	Number	Rate	Number	Rate
<b>Black, total<sup>3</sup>, both sexes</b>				
All ages .....	284,561	806.0	285,064	817.7
Under 1 year <sup>1</sup> .....	8,665	1,487.4	8,822	1,551.1
1-4 years .....	1,235	55.5	1,311	58.9
5-14 years .....	1,619	25.9	1,789	28.7
15-24 years .....	7,037	120.6	7,066	123.1
25-34 years .....	10,213	195.0	10,115	191.3
35-44 years .....	20,464	358.6	21,041	372.3
45-54 years .....	33,137	802.4	31,759	808.4
55-64 years .....	39,118	1,621.8	39,476	1,683.3
65-74 years .....	55,033	3,241.9	56,122	3,343.6
75-84 years .....	61,161	6,795.0	61,201	6,883.6
85 years and over .....	46,771	14,668.4	46,285	14,787.7
Not stated .....	108	...	77	...
Age-adjusted rate <sup>2</sup> .....	...	1,124.8	...	1,147.1
<b>Black <sup>3</sup>, male</b>				
All ages .....	144,494	861.3	145,703	880.0
Under 1 year <sup>1</sup> .....	4,826	1,627.9	4,897	1,694.0
1-4 years .....	687	60.8	746	66.0
5-14 years .....	955	30.0	1,096	34.6
15-24 years .....	5,306	181.0	5,348	185.6
25-34 years .....	6,722	270.7	6,723	268.4
35-44 years .....	12,185	454.2	12,567	473.6
45-54 years .....	19,806	1,054.6	19,298	1,081.9
55-64 years .....	22,570	2,162.6	22,769	2,244.0
65-74 years .....	29,018	4,058.1	29,594	4,182.8
75-84 years .....	27,856	8,190.2	27,839	8,352.6
85 years and over .....	14,497	15,427.6	14,768	16,047.8
Not stated .....	65	...	58	...
Age-adjusted rate <sup>2</sup> .....	...	1,371.3	...	1,412.5
<b>Black <sup>3</sup>, female</b>				
All ages .....	140,067	756.0	139,361	761.3
Under 1 year <sup>1</sup> .....	3,839	1,341.9	3,925	1,403.3
1-4 years .....	548	50.1	565	51.5
5-14 years .....	663	21.5	693	22.6
15-24 years .....	1,731	59.6	1,718	60.1
25-34 years .....	3,491	126.8	3,392	122.0
35-44 years .....	8,279	273.8	8,474	282.6
45-54 years .....	13,331	592.1	12,461	581.0
55-64 years .....	16,547	1,209.3	16,707	1,255.7
65-74 years .....	26,015	2,647.9	26,528	2,732.1
75-84 years .....	33,306	5,947.8	33,362	6,002.7
85 years and over .....	32,274	14,351.1	31,517	14,262.9
Not stated .....	42	...	19	...
Age-adjusted rate <sup>2</sup> .....	...	943.9	...	955.0

See footnotes at end of table.

**Table 1. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race, and sex	2000		1999	
	Number	Rate	Number	Rate
American Indian, total <sup>3, 4</sup> , both sexes				
All ages .....	11,366	466.6	11,312	471.8
Under 1 year <sup>1</sup> .....	326	737.6	343	806.3
1-4 years .....	91	55.8	82	51.4
5-14 years .....	112	24.0	105	22.4
15-24 years .....	511	116.1	540	125.9
25-34 years .....	595	158.2	645	172.4
35-44 years .....	1,075	297.6	1,027	286.3
45-54 years .....	1,342	504.4	1,328	518.7
55-64 years .....	1,696	1,112.2	1,674	1,130.2
65-74 years .....	2,157	2,332.0	2,164	2,390.9
75-84 years .....	2,072	3,944.7	2,064	4,084.4
85 years and over .....	1,384	6,386.1	1,339	6,569.8
Not stated .....	4	...	1	...
Age-adjusted rate <sup>2</sup> .....	...	697.7	...	716.1
American Indian <sup>3, 4</sup> , male				
All ages .....	6,169	511.5	6,092	513.3
Under 1 year <sup>1</sup> .....	193	867.2	180	839.5
1-4 years .....	48	58.2	48	59.4
5-14 years .....	60	25.4	55	23.1
15-24 years .....	364	164.8	396	183.5
25-34 years .....	411	213.0	418	218.5
35-44 years .....	666	370.1	645	362.1
45-54 years .....	845	656.9	845	683.1
55-64 years .....	962	1,344.5	920	1,321.8
65-74 years .....	1,120	2,693.4	1,148	2,816.8
75-84 years .....	993	4,460.1	987	4,653.0
85 years and over .....	503	7,328.1	449	6,946.2
Not stated .....	4	...	1	...
Age-adjusted rate <sup>2</sup> .....	...	828.2	...	842.0
American Indian <sup>3, 4</sup> , female				
All ages .....	5,197	422.5	5,220	431.2
Under 1 year <sup>1</sup> .....	133	606.1	163	772.5
1-4 years .....	42	52.1	34	43.1
5-14 years .....	52	22.7	50	21.7
15-24 years .....	147	67.0	144	67.5
25-34 years .....	184	100.4	227	124.2
35-44 years .....	409	225.6	382	211.5
45-54 years .....	498	362.4	483	365.0
55-64 years .....	734	906.8	754	960.4
65-74 years .....	1,036	2,034.9	1,016	2,042.0
75-84 years .....	1,079	3,565.5	1,077	3,673.0
85 years and over .....	881	5,949.5	890	6,395.1
Not stated .....	-	...	-	...
Age-adjusted rate <sup>2</sup> .....	...	588.7	...	608.5

See footnotes at end of table.

**Table 1. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race, and sex	2000		1999	
	Number	Rate	Number	Rate
Asian or Pacific Islander, total <sup>3</sup> , both sexes				
All ages .....	34,515	306.2	33,675	311.2
Under 1 year <sup>1</sup> .....	780	413.5	705	388.6
1-4 years .....	149	20.2	166	23.0
5-14 years .....	207	11.8	208	12.2
15-24 years .....	706	43.4	698	43.9
25-34 years .....	887	45.4	906	49.1
35-44 years .....	1,633	84.4	1,581	85.2
45-54 years .....	2,995	206.9	2,876	210.2
55-64 years .....	4,296	536.0	4,247	557.2
65-74 years .....	6,864	1,358.4	6,877	1,401.7
75-84 years .....	9,110	3,567.9	8,836	3,659.7
85 years and over .....	6,884	9,234.6	6,568	9,596.9
Not stated .....	5	...	7	...
Age-adjusted rate <sup>2</sup> .....	...	502.0	...	517.5
Asian or Pacific Islander <sup>3</sup> , male				
All ages .....	18,768	344.6	18,330	352.7
Under 1 year <sup>1</sup> .....	435	456.2	372	403.4
1-4 years .....	82	22.1	97	26.6
5-14 years .....	111	12.3	113	12.9
15-24 years .....	501	61.7	467	58.7
25-34 years .....	599	63.9	586	68.4
35-44 years .....	979	105.3	992	112.4
45-54 years .....	1,725	255.3	1,608	252.2
55-64 years .....	2,540	677.7	2,498	701.6
65-74 years .....	3,822	1,789.5	3,736	1,808.0
75-84 years .....	4,771	4,451.7	4,694	4,581.6
85 years and over .....	3,198	10,647.6	3,162	11,343.5
Not stated .....	4	...	5	...
Age-adjusted rate <sup>2</sup> .....	...	620.1	...	640.6
Asian or Pacific Islander <sup>3</sup> , female				
All ages .....	15,747	270.3	15,345	272.8
Under 1 year <sup>1</sup> .....	345	369.9	333	373.4
1-4 years .....	66	18.1	69	19.4
5-14 years .....	96	11.3	95	11.5
15-24 years .....	204	25.0	231	29.1
25-34 years .....	288	28.4	320	32.4
35-44 years .....	654	65.1	589	60.6
45-54 years .....	1,270	164.5	1,268	173.5
55-64 years .....	1,755	411.3	1,749	430.6
65-74 years .....	3,042	1,042.8	3,141	1,106.1
75-84 years .....	4,339	2,928.6	4,142	2,980.1
85 years and over .....	3,686	8,281.1	3,406	8,396.6
Not stated .....	1	...	2	...
Age-adjusted rate <sup>2</sup> .....	...	412.3	...	424.0

See footnotes at end of table.

**Table 1. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race, and sex	2000		1999	
	Number	Rate	Number	Rate
Hispanic <sup>5</sup> , both sexes				
All ages .....	106,661	328.6	103,740	331.0
Under 1 year <sup>1</sup> .....	4,572	618.2	4,412	611.5
1-4 years .....	856	30.4	882	32.1
5-14 years .....	1,050	16.9	1,014	16.9
15-24 years .....	4,763	84.5	4,505	82.4
25-34 years .....	5,478	103.7	5,397	103.2
35-44 years .....	8,065	163.3	7,798	164.2
45-54 years .....	10,258	329.9	9,876	338.8
55-64 years .....	12,641	716.1	12,319	733.7
65-74 years .....	19,337	1,676.2	19,201	1,742.8
75-84 years .....	21,885	3,692.9	20,912	3,771.8
85 years and over .....	17,695	8,654.8	17,358	9,175.7
Not stated .....	61	...	66	...
Age-adjusted rate <sup>2</sup> .....	...	582.5	...	601.0
Hispanic <sup>5</sup> , male				
All ages .....	59,757	366.3	57,991	367.9
Under 1 year <sup>1</sup> .....	2,502	663.4	2,411	655.3
1-4 years .....	464	32.3	481	34.3
5-14 years .....	616	19.4	592	19.4
15-24 years .....	3,823	130.7	3,547	124.9
25-34 years .....	4,172	154.1	4,084	151.6
35-44 years .....	5,587	221.5	5,476	226.0
45-54 years .....	6,727	442.0	6,497	456.3
55-64 years .....	7,693	940.5	7,490	962.6
65-74 years .....	10,794	2,118.3	10,783	2,219.4
75-84 years .....	10,893	4,437.6	10,317	4,525.1
85 years and over .....	6,431	9,295.6	6,253	9,842.3
Not stated .....	54	...	60	...
Age-adjusted rate <sup>2</sup> .....	...	713.5	...	736.0
Hispanic <sup>5</sup> , female				
All ages .....	46,905	290.4	45,749	293.7
Under 1 year <sup>1</sup> .....	2,071	571.4	2,001	565.9
1-4 years .....	392	28.5	401	29.8
5-14 years .....	435	14.3	422	14.4
15-24 years .....	939	34.6	958	36.4
25-34 years .....	1,306	50.7	1,313	51.8
35-44 years .....	2,477	102.5	2,322	99.9
45-54 years .....	3,531	222.4	3,379	226.7
55-64 years .....	4,948	522.3	4,829	536.0
65-74 years .....	8,543	1,326.5	8,418	1,366.8
75-84 years .....	10,992	3,166.4	10,595	3,245.6
85 years and over .....	11,264	8,327.0	11,105	8,838.7
Not stated .....	7	...	6	...
Age-adjusted rate <sup>2</sup> .....	...	474.2	...	490.1

... Category not applicable.

- Quantity zero.

<sup>1</sup> Death rates are based on population estimates; they differ from infant mortality rates, which are based on live births and are shown separately for "Under 1 year."

<sup>2</sup> For method of computation, see Technical notes.

<sup>3</sup> Race and Hispanic origin are reported separately on the death certificate. Data for persons of Hispanic origin included in the data for each race group, according to the decedent's reported race; see Technical notes.

<sup>4</sup> Includes deaths among Aleuts and Eskimos.

<sup>5</sup> Includes all persons of Hispanic origin of any race; see Technical notes.

NOTE: Data are subject to sampling and/or random variation. For information on the relative standard errors of the data and further discussion, see Technical notes.

**Table 2. Deaths, death rates, and age-adjusted death rates for 113 selected causes, Injury by firearms, Drug-induced deaths, Alcohol-induced deaths, and Injury at work: United States, final 1999 and preliminary 2000**

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to total or subtotals]

Cause of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	2000			1999		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
All causes .....	2,404,624	873.6	872.4	2,391,399	877.0	881.9
Salmonella infections (A01-A02) .....	26	0.0	0.0	38	0.0	0.0
Shigellosis and amebiasis (A03,A06) .....	11	*	*	10	*	*
Certain other intestinal infections (A04,A07-A09) .....	1,352	0.5	0.5	1,108	0.4	0.4
Tuberculosis (A16-A19) .....	751	0.3	0.3	930	0.3	0.3
Respiratory tuberculosis (A16) .....	595	0.2	0.2	764	0.3	0.3
Other tuberculosis (A17-A19) .....	156	0.1	0.0	166	0.1	0.1
Whooping cough (A37) .....	12	*	*	7	*	*
Scarlet fever and erysipelas (A38,A46) .....	-	*	*	5	*	*
Meningococcal infection (A39) .....	200	0.1	0.0	227	0.1	0.1
Septicemia (A40-A41) .....	31,613	11.5	11.5	30,680	11.3	11.3
Syphilis (A50-A53) .....	41	0.0	0.0	33	0.0	0.0
Acute poliomyelitis (A80) .....	-	*	*	-	*	*
Arthropod-borne viral encephalitis (A83-A84,A85.2) .....	2	*	*	3	*	*
Measles (B05) .....	3	*	*	2	*	*
Viral hepatitis (B15-B19) .....	4,544	1.7	1.6	4,853	1.8	1.8
Human immunodeficiency virus (HIV) disease (B20-B24) .....	14,370	5.2	5.2	14,802	5.4	5.4
Malaria (B50-B54) .....	3	*	*	7	*	*
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) .....	6,266	2.3	2.3	7,279	2.7	2.7
Malignant neoplasms (C00-C97) .....	551,833	200.5	200.5	549,838	201.6	202.7
Malignant neoplasms of lip, oral cavity, and pharynx (C00-C14) .....	7,436	2.7	2.7	7,486	2.7	2.8
Malignant neoplasm of esophagus (C15) .....	12,212	4.4	4.4	11,918	4.4	4.4
Malignant neoplasm of stomach (C16) .....	12,620	4.6	4.6	12,711	4.7	4.7
Malignant neoplasms of colon, rectum and anus (C18-C21) .....	57,344	20.8	20.8	57,155	21.0	21.1
Malignant neoplasms of liver and intrahepatic bile ducts (C22) .....	12,736	4.6	4.6	12,382	4.5	4.6
Malignant neoplasm of pancreas (C25) .....	29,139	10.6	10.6	29,082	10.7	10.7
Malignant neoplasm of larynx (C32) .....	3,785	1.4	1.4	3,815	1.4	1.4
Malignant neoplasm of trachea, bronchus and lung (C33-C34) .....	154,981	56.3	56.3	152,156	55.8	56.0
Malignant melanoma of skin (C43) .....	7,432	2.7	2.7	7,215	2.6	2.7
Malignant neoplasm of breast (C50) .....	42,290	15.4	15.3	41,528	15.2	15.3
Malignant neoplasm of cervix uteri (C53) .....	4,142	1.5	1.5	4,205	1.5	1.6
Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55) .....	6,499	2.4	2.4	6,468	2.4	2.4
Malignant neoplasm of ovary (C56) .....	14,044	5.1	5.1	13,627	5.0	5.0
Malignant neoplasm of prostate (C61) .....	31,225	11.3	11.3	31,729	11.6	11.7
Malignant neoplasms of kidney and renal pelvis (C64-C65) .....	11,751	4.3	4.3	11,116	4.1	4.1
Malignant neoplasm of bladder (C67) .....	11,965	4.3	4.3	11,911	4.4	4.4
Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72) ...	12,574	4.6	4.6	12,765	4.7	4.7
Malignant neoplasms of lymphoid, hematopoietic and related tissue (C81-C96) .....	56,262	20.4	20.4	56,318	20.7	20.7
Hodgkin's disease (C81) .....	1,254	0.5	0.5	1,403	0.5	0.5
Non-Hodgkin's lymphoma (C82-C85) .....	22,548	8.2	8.2	22,802	8.4	8.4
Leukemia (C91-C95) .....	21,298	7.7	7.7	21,014	7.7	7.7
Multiple myeloma and immunoproliferative neoplasms (C88,C90) .....	11,053	4.0	4.0	11,016	4.0	4.1
Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue (C96) .....	108	0.0	0.0	83	0.0	0.0
All other and unspecified malignant neoplasms (C17,C23-C24,C26-C31,C37-C41,C44-C49,C51-C52,C57-C60,C62-C63,C66,C68-C69, C73-C80,C97) .....	63,397	23.0	23.0	66,251	24.3	24.4

See footnotes at end of table.



**Table 2. Deaths, death rates, and age-adjusted death rates for 113 selected causes, Injury by firearms, Drug-induced deaths, Alcohol-induced deaths, and Injury at work: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to total or subtotals]

Cause of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	2000			1999		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) .....	13,657	5.0	5.0	13,227	4.9	4.9
Anemias (D50-D64) .....	4,450	1.6	1.6	4,503	1.7	1.6
Diabetes mellitus (E10-E14) .....	68,662	24.9	24.9	68,399	25.1	25.2
Nutritional deficiencies (E40-E64) .....	4,342	1.6	1.6	4,289	1.6	1.6
Malnutrition (E40-E46) .....	3,922	1.4	1.4	3,985	1.5	1.5
Other nutritional deficiencies (E50-E64) .....	421	0.2	0.1	304	0.1	0.1
Meningitis (G00,G03) .....	770	0.3	0.3	850	0.3	0.3
Parkinson's disease (G20-G21) .....	15,690	5.7	5.7	14,593	5.4	5.4
Alzheimer's disease (G30) .....	49,044	17.8	17.8	44,536	16.3	16.5
Major cardiovascular diseases (I00-I78) .....	934,110	339.3	338.8	950,314	348.5	350.9
Diseases of heart (I00-I09,I11,I13,I20-I51) .....	709,894	257.9	257.5	725,192	265.9	267.8
Acute rheumatic fever and chronic rheumatic heart disease (I00-I09) .....	3,585	1.3	1.3	3,676	1.3	1.4
Hypertensive heart disease (I11) .....	23,330	8.5	8.5	22,702	8.3	8.4
Hypertensive heart and renal disease (I13) .....	2,707	1.0	1.0	3,327	1.2	1.2
Ischemic heart disease (I20-I25) .....	513,758	186.6	186.4	529,659	194.2	195.6
Acute myocardial infarction (I21-I22) .....	192,811	70.0	70.0	199,454	73.1	73.6
Other acute ischemic heart diseases (I24) .....	3,390	1.2	1.2	3,232	1.2	1.2
Other forms of chronic ischemic heart disease (I20,I25) .....	317,558	115.4	115.2	326,973	119.9	120.8
Atherosclerotic cardiovascular disease, so described (I25.0) .....	68,652	24.9	24.9	71,926	26.4	26.5
All other forms of chronic ischemic heart disease (I20, I25.1-I25.9) .....	248,906	90.4	90.3	255,047	93.5	94.2
Other heart diseases (I26-I51) .....	166,515	60.5	60.4	165,828	60.8	61.2
Acute and subacute endocarditis (I33) .....	1,162	0.4	0.4	1,116	0.4	0.4
Diseases of pericardium and acute myocarditis (I30-I31,I40) .....	698	0.3	0.3	890	0.3	0.3
Heart failure (I50) .....	56,863	20.7	20.6	54,913	20.1	20.3
All other forms of heart disease (I26-I28,I34-I38,I42-I49,I51) .....	107,792	39.2	39.1	108,909	39.9	40.2
Essential (primary) hypertension and hypertensive renal disease (I10,I12) .....	17,964	6.5	6.5	16,968	6.2	6.3
Cerebrovascular diseases (I60-I69) .....	166,028	60.3	60.2	167,366	61.4	61.8
Atherosclerosis (I70) .....	14,413	5.2	5.2	14,979	5.5	5.5
Other diseases of circulatory system (I71-I78) .....	25,812	9.4	9.4	25,809	9.5	9.5
Aortic aneurysm and dissection (I71) .....	15,659	5.7	5.7	15,807	5.8	5.8
Other diseases of arteries, arterioles and capillaries (I72-I78) .....	10,153	3.7	3.7	10,002	3.7	3.7
Other disorders of circulatory system (I80-I99) .....	4,564	1.7	1.7	4,025	1.5	1.5
Influenza and pneumonia (J10-J18) .....	67,024	24.3	24.3	63,730	23.4	23.6
Influenza (J10-J11) .....	2,175	0.8	0.8	1,665	0.6	0.6
Pneumonia (J12-J18) .....	64,849	23.6	23.5	62,065	22.8	22.9
Other acute lower respiratory infections (J20-J22) .....	453	0.2	0.1	540	0.2	0.2
Acute bronchitis and bronchiolitis (J20-J21) .....	318	0.1	0.1	388	0.1	0.1
Unspecified acute lower respiratory infection (J22) .....	136	0.0	0.0	152	0.1	0.1
Chronic lower respiratory diseases (J40-J47) .....	123,550	44.9	44.9	124,181	45.5	45.8
Bronchitis, chronic and unspecified (J40-J42) .....	1,188	0.4	0.4	1,172	0.4	0.4
Emphysema (J43) .....	16,936	6.2	6.1	17,787	6.5	6.5
Asthma (J45-J46) .....	4,426	1.6	1.6	4,657	1.7	1.7
Other chronic lower respiratory diseases (J44,J47) .....	100,999	36.7	36.7	100,565	36.9	37.0
Pneumoconioses and chemical effects (J60-J66,J68) .....	1,143	0.4	0.4	1,113	0.4	0.4
Pneumonitis due to solids and liquids (J69) .....	16,659	6.1	6.1	15,268	5.6	5.6
Other diseases of respiratory system (J00-J06,J30-J39,J67,J70-J98) .....	25,608	9.3	9.3	25,031	9.2	9.2
Peptic ulcer (K25-K28) .....	4,507	1.6	1.6	4,604	1.7	1.7
Diseases of appendix (K35-K38) .....	422	0.2	0.1	390	0.1	0.1
Hernia (K40-K46) .....	1,510	0.5	0.5	1,464	0.5	0.5
Chronic liver disease and cirrhosis (K70,K73-K74) .....	26,219	9.5	9.5	26,259	9.6	9.7

See footnotes at end of table.

**Table 2. Deaths, death rates, and age-adjusted death rates for 113 selected causes, Injury by firearms, Drug-induced deaths, Alcohol-induced deaths, and Injury at work: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to total or subtotals]

Cause of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	2000			1999		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
Alcoholic liver disease (K70) .....	11,755	4.3	4.3	11,958	4.4	4.4
Other chronic liver disease and cirrhosis (K73-K74) .....	14,464	5.3	5.3	14,301	5.2	5.3
Cholelithiasis and other disorders of gallbladder (K80-K82) .....	2,769	1.0	1.0	2,830	1.0	1.0
Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) .....	37,672	13.7	13.7	35,525	13.0	13.1
Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01,N04) .....	176	0.1	0.1	182	0.1	0.1
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified (N02-N03,N05-N07,N26) .....	546	0.2	0.2	589	0.2	0.2
Renal failure (N17-N19) .....	36,904	13.4	13.4	34,719	12.7	12.8
Other disorders of kidney (N25,N27) .....	47	0.0	0.0	35	0.0	0.0
Infections of kidney (N10-N12,N13.6,N15.1) .....	781	0.3	0.3	846	0.3	0.3
Hyperplasia of prostate (N40) .....	441	0.2	0.2	430	0.2	0.2
Inflammatory diseases of female pelvic organs (N70-N76) .....	113	0.0	0.0	108	0.0	0.0
Pregnancy, childbirth and the puerperium (O00-O99) .....	370	0.1	0.1	406	0.1	0.2
Pregnancy with abortive outcome (O00-O07) .....	37	0.0	0.0	31	0.0	0.0
Other complications of pregnancy, childbirth and the puerperium (O10-O99) .....	333	0.1	0.1	375	0.1	0.1
Certain conditions originating in the perinatal period (P00-P96) .....	13,831	5.0	4.9	14,259	5.2	5.1
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	10,472	3.8	3.8	10,393	3.8	3.8
Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) .....	42,049	15.3	15.2	26,672	9.8	9.8
All other diseases (Residual) .....	177,980	64.7	64.6	171,683	63.0	63.4
Accidents (unintentional injuries) (V01-X59,Y85-Y86) .....	93,592	34.0	33.9	97,860	35.9	35.9
Transport accidents (V01-V99,Y85) .....	45,103	16.4	16.4	46,423	17.0	17.0
Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5, V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) .....	41,804	15.2	15.2	42,401	15.5	15.5
Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2, V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9) .....	1,513	0.5	0.5	2,118	0.8	0.8
Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85) .....	1,786	0.6	0.6	1,904	0.7	0.7
Nontransport accidents (W00-X59,Y86) .....	48,489	17.6	17.6	51,437	18.9	18.9
Falls (W00-W19) .....	12,604	4.6	4.6	13,162	4.8	4.8
Accidental discharge of firearms (W32-W34) .....	808	0.3	0.3	824	0.3	0.3
Accidental drowning and submersion (W65-W74) .....	3,343	1.2	1.2	3,529	1.3	1.3
Accidental exposure to smoke, fire and flames (X00-X09) .....	3,265	1.2	1.2	3,348	1.2	1.2
Accidental poisoning and exposure to noxious substances (X40-X49) .....	9,893	3.6	3.6	12,186	4.5	4.5
Other and unspecified nontransport accidents and their sequelae (W20-W31,W35-W64,W75-W99,X10-X39,X50-X59,Y86) .....	18,575	6.7	6.7	18,388	6.7	6.8
Intentional self-harm (suicide) (X60-X84,Y87.0) .....	28,332	10.3	10.3	29,199	10.7	10.7
Intentional self-harm (suicide) by discharge of firearms (X72-X74) .....	16,418	6.0	6.0	16,599	6.1	6.1
Intentional self-harm (suicide) by other and unspecified means and their sequelae (X60-X71,X75-X84,Y87.0) .....	11,914	4.3	4.4	12,600	4.6	4.6
Assault (homicide) (X85-Y09,Y87.1) .....	16,137	5.9	5.8	16,889	6.2	6.2
Assault (homicide) by discharge of firearms (X93-X95) .....	10,417	3.8	3.8	10,828	4.0	4.0
Assault (homicide) by other and unspecified means and their sequelae (X85-X92,X96-Y09,Y87.1) .....	5,719	2.1	2.1	6,061	2.2	2.2
Legal intervention (Y35,Y89.0) .....	345	0.1	0.1	398	0.1	0.2

See footnotes at end of table.

**Table 2. Deaths, death rates, and age-adjusted death rates for 113 selected causes, Injury by firearms, Drug-induced deaths, Alcohol-induced deaths, and Injury at work: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to total or subtotals]

Cause of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	2000			1999		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
Events of undetermined intent (Y10-Y34,Y87.2,Y89.9) .....	3,422	1.2	1.2	3,917	1.4	1.4
Discharge of firearms, undetermined intent (Y22-Y24) .....	214	0.1	0.1	324	0.1	0.1
Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9) .....	3,208	1.2	1.1	3,593	1.3	1.3
Operations of war and their sequelae (Y36,Y89.1) .....	17	*	*	23	0.0	0.0
Complications of medical and surgical care (Y40-Y84,Y88) .....	2,886	1.0	1.0	2,823	1.0	1.0
<b>Injury by firearms<sup>1</sup> (W32-W34,X72-X74,X93-X95,Y22-Y24,Y35.0) .....</b>	<b>28,117</b>	<b>10.2</b>	<b>10.2</b>	<b>28,874</b>	<b>10.6</b>	<b>10.6</b>
<b>Drug-induced deaths<sup>1</sup></b> <b>(F11.0-F11.5,F11.7-F11.9,F12.0-F12.5,F12.7-F12.9,F13.0-F13.5,F13.7-F13.9,F14.0-F14.5,</b> <b>F14.7-F14.9,F15.0-F15.5,F15.7-F15.9,F16.0-F16.5,F16.7-F16.9,F17.0,F17.3-F17.5,</b> <b>F17.7-F17.9,F18.0-F18.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9,X40-X44,X60-X64,X85,</b> <b>Y10-Y14) .....</b>	<b>15,852</b>	<b>5.8</b>	<b>5.8</b>	<b>19,102</b>	<b>7.0</b>	<b>7.0</b>
<b>Alcohol-induced deaths<sup>1</sup> (F10,G31.2,G62.1,I42.6,K29.2,K70,R78.0,X45,X65,Y15) .....</b>	<b>18,539</b>	<b>6.7</b>	<b>6.7</b>	<b>19,171</b>	<b>7.0</b>	<b>7.1</b>
<b>Injury at work<sup>2</sup> .....</b>	<b>5,291</b>	<b>2.4</b>	<b>2.4</b>	<b>5,651</b>	<b>2.6</b>	<b>2.6</b>

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

- Quantity zero.

<sup>1</sup> Included in selected categories.

<sup>2</sup> Injury at work described in Technical notes.

NOTE: Data are subject to sampling and/or random variation. For information on the relative standard errors of the data and further discussion, see Technical notes.

**Table 3. Deaths, death rates, and age-adjusted death rates: United States, and each State and territory, final 1999 and preliminary 2000**

[By place of residence. Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population based on the year 2000 standard; see Technical notes. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Area	2000			1999		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
United States <sup>1</sup>	2,404,598	873.6	872.4	2,391,399	877.0	881.9
Alabama	45,075	1,027.3	1,013.6	44,806	1,025.3	1,021.1
Alaska	2,911	467.9	863.0	2,708	437.1	834.4
Arizona	40,524	830.0	844.5	40,050	838.2	850.1
Arkansas	28,231	1,095.7	1,002.1	27,925	1,094.5	1,005.4
California	229,535	682.5	765.7	229,380	692.0	791.0
Colorado	27,335	660.8	789.7	27,114	668.5	801.2
Connecticut	30,237	917.0	799.6	29,446	897.2	792.3
Delaware	6,862	900.2	918.4	6,666	884.6	904.6
District of Columbia	5,957	1,149.2	1,036.2	6,076	1,170.7	1,082.7
Florida	164,401	1,072.3	828.9	163,224	1,080.1	833.9
Georgia	63,980	805.5	1,004.2	62,028	796.4	983.9
Hawaii	8,292	703.2	666.9	8,270	697.6	680.3
Idaho	9,564	751.1	811.7	9,579	765.3	825.2
Illinois	106,712	875.7	877.5	108,436	894.1	903.1
Indiana	55,848	934.5	942.8	55,303	930.6	941.4
Iowa	28,082	976.0	802.9	28,411	990.1	815.3
Kansas	24,720	927.3	852.0	24,472	922.1	850.5
Kentucky	39,532	991.9	1,005.2	39,321	992.7	1,012.8
Louisiana	41,150	940.6	1,020.4	41,238	943.2	1,040.7
Maine	12,377	983.4	888.4	12,261	978.5	896.3
Maryland	43,779	838.9	912.1	43,089	833.2	911.2
Massachusetts	56,475	910.3	815.3	55,840	904.3	816.7
Michigan	86,967	876.8	892.8	87,232	884.4	906.9
Minnesota	37,752	782.0	767.2	38,537	807.0	792.2
Mississippi	28,671	1,028.7	1,074.8	28,185	1,018.0	1,064.9
Missouri	54,880	997.4	928.3	55,931	1,022.8	954.1
Montana	8,104	912.7	843.8	8,128	920.7	861.2
Nebraska	14,988	897.3	798.1	15,579	935.1	838.7
Nevada	15,263	811.7	951.5	15,082	833.6	967.1
New Hampshire	9,703	798.0	837.6	9,537	794.0	835.2
New Jersey	75,681	922.4	863.6	73,981	908.5	857.8
New Mexico	13,488	771.7	839.9	13,676	786.0	875.7
New York	158,137	865.2	808.3	159,927	878.9	836.0
North Carolina	71,995	929.3	964.5	69,600	909.7	943.6
North Dakota	5,860	931.2	766.9	6,103	963.1	802.6
Ohio <sup>2</sup>	*	*	*	108,517	964.0	933.6
Oklahoma	35,265	1,043.3	991.7	34,700	1,033.3	985.0
Oregon	29,562	884.8	834.5	29,422	887.2	839.2
Pennsylvania	130,814	1,091.5	903.6	130,283	1,086.2	907.5
Rhode Island	10,030	1,006.9	827.2	9,708	979.8	812.8
South Carolina	36,948	941.5	993.4	36,053	927.8	996.0
South Dakota	7,024	952.7	813.5	6,953	948.4	820.2
Tennessee	55,318	999.7	1,021.2	53,765	980.5	1,001.9
Texas	148,554	728.6	887.8	146,858	732.7	892.2
Utah	12,370	571.5	786.7	12,058	566.1	787.1
Vermont	5,142	860.1	856.5	4,993	840.9	843.9
Virginia	56,161	805.7	897.9	55,320	804.9	905.9
Washington	43,976	756.8	807.2	43,865	762.0	816.1
West Virginia	21,078	1,169.5	1,010.7	21,049	1,164.9	1,013.3
Wisconsin	46,519	878.5	827.6	46,672	888.9	838.1
Wyoming	3,918	814.7	860.1	4,042	842.8	909.0
Puerto Rico <sup>3</sup>	56,738	1,449.0	1,762.2	57,934	1,489.4	1,833.9
Virgin Islands <sup>3</sup>	644	532.6	733.5	659	550.9	805.2
Guam <sup>3</sup>	648	419.1	723.5	693	456.0	832.9
American Samoa <sup>3</sup>	---	---	---	246	385.7	832.8
Northern Marianas <sup>3</sup>	---	---	---	162	234.0	1,016.9

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

--- Data not available.

<sup>1</sup> Excludes data for U.S. territories.

<sup>2</sup> Due to data processing problems, Ohio data for 12 months ending December 2000 are not shown separately but are included in U.S. totals; see Technical notes.

<sup>3</sup> Age-adjusted death rates for U.S. territories are calculated using different age groups in the weighting procedure; see Technical notes.

NOTE: Data are subject to sampling and/or random variation. For information on the relative standard errors of the data and further discussion, see Technical notes.

**Table 4. Infant deaths and infant mortality rates, by age and race and Hispanic origin: United States, final 1999 and preliminary 2000**

[Data are based on a continuous file of records received from the States. Rates per 1,000 live births. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals. Rates for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on birth and death certificates; see Technical notes]

Age and race/Hispanic origin	2000		1999	
	Number	Rate	Number	Rate
All races <sup>1</sup>				
Under 1 year .....	27,987	6.9	27,937	7.1
Under 28 days .....	18,737	4.6	18,728	4.7
28 days-11 months .....	9,250	2.3	9,209	2.3
White, total <sup>2</sup>				
Under 1 year .....	18,216	5.7	18,067	5.8
Under 28 days .....	12,263	3.8	12,164	3.9
28 days-11 months .....	5,954	1.9	5,903	1.9
White, non-Hispanic				
Under 1 year .....	13,579	5.7	13,553	5.8
Under 28 days .....	9,127	3.8	9,054	3.9
28 days-11 months .....	4,452	1.9	4,499	1.9
Black, total <sup>2</sup>				
Under 1 year .....	8,665	14.0	8,822	14.6
Under 28 days .....	5,750	9.3	5,920	9.8
28 days-11 months .....	2,915	4.7	2,902	4.8
Hispanic <sup>3</sup>				
Under 1 year .....	4,572	5.6	4,412	5.8
Under 28 days .....	3,034	3.7	2,986	3.9
28 days-11 months .....	1,538	1.9	1,426	1.9

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

<sup>2</sup> Race and Hispanic origin are reported separately on both the birth and death certificates. Data for persons of Hispanic origin are included in the data for each race group, according to the decedent's reported race; see Technical notes.

<sup>3</sup> Includes all persons of Hispanic origin of any race; see Technical notes.

NOTE: Data are subject to sampling and/or random variation. For information on the relative standard errors of the data and further discussion, see Technical notes.

**Table 5. Infant deaths and infant mortality rates for 130 selected causes: United States, final 1999 and preliminary 2000**

[Data are based on a continuous file of records received from the States. Rates per 100,000 live births. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals or subtotals]

Cause of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	2000		1999	
	Number	Rate	Number	Rate
All causes .....	27,983	688.4	27,937	705.6
Certain infectious and parasitic diseases (A00-B99) .....	528	13.0	562	14.2
Certain intestinal infectious diseases (A00-A08) .....	8	*	21	0.5
Diarrhea and gastroenteritis of infectious origin (A09) .....	1	*	-	*
Tuberculosis (A16-A19) .....	1	*	2	*
Tetanus (A33,A35) .....	-	*	-	*
Diphtheria (A36) .....	-	*	-	*
Whooping cough (A37) .....	12	*	7	*
Meningococcal infection (A39) .....	20	0.5	32	0.8
Septicemia (A40-A41) .....	289	7.1	283	7.1
Congenital syphilis (A50) .....	1	*	2	*
Gonococcal infection (A54) .....	-	*	-	*
Viral diseases (A80-B34) .....	108	2.7	134	3.4
Acute poliomyelitis (A80) .....	-	*	-	*
Varicella (chickenpox) (B01) .....	1	*	3	*
Measles (B05) .....	1	*	1	*
Human immunodeficiency virus (HIV) disease (B20-B24) .....	8	*	14	*
Mumps (B26) .....	-	*	-	*
Other and unspecified viral diseases (A81-B00,B02-B04,B06-B19,B25,B27-B34) .....	98	2.4	116	2.9
Candidiasis (B37) .....	32	0.8	27	0.7
Malaria (B50-B54) .....	-	*	1	*
Pneumocystosis (B59) .....	3	*	4	*
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) .....	53	1.3	49	1.2
Neoplasms (C00-D48) .....	156	3.8	126	3.2
Malignant neoplasms (C00-C97) .....	98	2.4	68	1.7
Hodgkin's disease and non-Hodgkin's lymphomas (C81-C85) .....	1	*	2	*
Leukemia (C91-C95) .....	46	1.1	27	0.7
Other and unspecified malignant neoplasms (C00-C80,C88,C90,C96-C97) .....	51	1.3	39	1.0
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) .....	58	1.4	58	1.5
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89) .....	71	1.7	94	2.4
Anemias (D50-D64) .....	11	*	12	*
Hemorrhagic conditions and other diseases of blood and blood-forming organs (D65-D76) .....	41	1.0	64	1.6
Certain disorders involving the immune mechanism (D80-D89) .....	18	*	18	*
Endocrine, nutritional and metabolic diseases (E00-E88) .....	268	6.6	261	6.6
Short stature, not elsewhere classified (E34.3) .....	23	0.6	24	0.6
Nutritional deficiencies (E40-E64) .....	11	*	9	*
Cystic fibrosis (E84) .....	4	*	12	*
Volume depletion, disorders of fluid, electrolyte and acid-base balance (E86-E87) .....	81	2.0	73	1.8
All other endocrine, nutritional and metabolic diseases (E00-E32,E34.0-E34.2,E34.4-E34.9,E65-E83,E85,E88) .....	149	3.7	143	3.6
Diseases of the nervous system (G00-G98) .....	393	9.7	441	11.1
Meningitis (G00,G03) .....	96	2.4	116	2.9
Infantile spinal muscular atrophy, type I (Werdnig-Hoffman) (G12.0) .....	36	0.9	42	1.1
Infantile cerebral palsy (G80) .....	6	*	13	*
Anoxic brain damage, not elsewhere classified (G93.1) .....	38	0.9	39	1.0
Other diseases of nervous system (G04,G06-G11,G12.1-G12.9,G20-G72,G81-G92,G93.0,G93.2-G93.9,G95-G98) .....	218	5.4	231	5.8
Diseases of the ear and mastoid process (H60-H93) .....	4	*	4	*
Diseases of the circulatory system (I00-I99) .....	632	15.5	667	16.8
Pulmonary heart disease and diseases of pulmonary circulation (I26-I28) .....	182	4.5	218	5.5

See footnotes at end of table.



**Table 5. Infant deaths and infant mortality rates for 130 selected causes: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Rates per 100,000 live births. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals or subtotals]

Cause of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	2000		1999	
	Number	Rate	Number	Rate
Pericarditis, endocarditis and myocarditis (I30,I33,I40) .....	13	*	20	0.5
Cardiomyopathy (I42) .....	96	2.4	132	3.3
Cardiac arrest (I46) .....	31	0.8	27	0.7
Cerebrovascular diseases (I60-I69) .....	125	3.1	103	2.6
All other diseases of circulatory system (I00-I25,I31,I34-I38,I44-I45,I47-I51,I70-I99) .....	185	4.6	167	4.2
Diseases of the respiratory system (J00-J98) .....	613	15.1	687	17.4
Acute upper respiratory infections (J00-J06) .....	6	*	10	*
Influenza and pneumonia (J10-J18) .....	261	6.4	320	8.1
Influenza (J10-J11) .....	10	*	13	*
Pneumonia (J12-J18) .....	252	6.2	307	7.8
Acute bronchitis and acute bronchiolitis (J20-J21) .....	51	1.3	62	1.6
Bronchitis, chronic and unspecified (J40-J42) .....	14	*	20	0.5
Asthma (J45-J46) .....	8	*	5	*
Pneumonitis due to solids and liquids (J69) .....	7	*	16	*
Other and unspecified diseases of respiratory system (J22,J30-J39,J43-J44,J47-J68,J70-J98) .....	265	6.5	254	6.4
Diseases of the digestive system (K00-K92) .....	503	12.4	500	12.6
Gastritis, duodenitis, and noninfective enteritis and colitis (K29,K50-K55) .....	244	6.0	242	6.1
Hernia of abdominal cavity and intestinal obstruction without hernia (K40-K46,K56) .....	80	2.0	66	1.7
All other and unspecified diseases of digestive system (K00-K28,K30-K38,K57-K92) .....	179	4.4	192	4.8
Diseases of the genitourinary system (N00-N98) .....	199	4.9	192	4.8
Renal failure and other disorders of kidney (N17-N19,N25,N27) .....	152	3.7	163	4.1
Other and unspecified diseases of genitourinary system (N00-N15,N20-N23,N26,N28-N98) .....	47	1.2	29	0.7
Certain conditions originating in the perinatal period (P00-P96) .....	13,602	334.6	14,084	355.7
Newborn affected by maternal factors and by complications of pregnancy, labor and delivery (P00-P04) .....	2,688	66.1	2,738	69.2
Newborn affected by maternal hypertensive disorders (P00.0) .....	58	1.4	71	1.8
Newborn affected by other maternal conditions which may be unrelated to present pregnancy (P00.1-P00.9) .....	70	1.7	68	1.7
Newborn affected by maternal complications of pregnancy (P01) .....	1,372	33.8	1,399	35.3
Newborn affected by incompetent cervix (P01.0) .....	402	9.9	384	9.7
Newborn affected by premature rupture of membranes (P01.1) .....	588	14.5	647	16.3
Newborn affected by multiple pregnancy (P01.5) .....	215	5.3	225	5.7
Newborn affected by other maternal complications of pregnancy (P01.2-P01.4,P01.6-P01.9) .....	167	4.1	143	3.6
Newborn affected by complications of placenta, cord and membranes (P02) .....	1,028	25.3	1,025	25.9
Newborn affected by complications involving placenta (P02.0-P02.3) .....	550	13.5	530	13.4
Newborn affected by complications involving cord (P02.4-P02.6) .....	56	1.4	64	1.6
Newborn affected by chorioamnionitis (P02.7) .....	420	10.3	430	10.9
Newborn affected by other and unspecified abnormalities of membranes (P02.8-P02.9) .....	2	*	1	*
Newborn affected by other complications of labor and delivery (P03) .....	131	3.2	145	3.7
Newborn affected by noxious influences transmitted via placenta or breast milk (P04) .....	29	0.7	30	0.8
Disorders related to length of gestation and fetal malnutrition (P05-P08) .....	4,369	107.5	4,454	112.5
Slow fetal growth and fetal malnutrition (P05) .....	67	1.6	62	1.6
Disorders related to short gestation and low birth weight, not elsewhere classified (P07) .....	4,299	105.8	4,392	110.9
Extremely low birth weight or extreme immaturity (P07.0,P07.2) .....	3,221	79.2	3,324	84.0
Other low birth weight or preterm (P07.1,P07.3) .....	1,078	26.5	1,068	27.0
Disorders related to long gestation and high birth weight (P08) .....	2	*	-	*
Birth trauma (P10-P15) .....	32	0.8	20	0.5
Intrauterine hypoxia and birth asphyxia (P20-P21) .....	642	15.8	613	15.5
Intrauterine hypoxia (P20) .....	117	2.9	114	2.9
Birth asphyxia (P21) .....	524	12.9	499	12.6
Respiratory distress of newborn (P22) .....	1,018	25.0	1,110	28.0
Other respiratory conditions originating in the perinatal period (P23-P28) .....	1,485	36.5	1,718	43.4

See footnotes at end of table.

**Table 5. Infant deaths and infant mortality rates for 130 selected causes: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Rates per 100,000 live births. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals or subtotals]

Cause of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	2000		1999	
	Number	Rate	Number	Rate
Congenital pneumonia (P23) .....	87	2.1	82	2.1
Neonatal aspiration syndromes (P24) .....	58	1.4	84	2.1
Interstitial emphysema and related conditions originating in the perinatal period (P25) .....	235	5.8	230	5.8
Pulmonary hemorrhage originating in the perinatal period (P26) .....	269	6.6	269	6.8
Chronic respiratory disease originating in the perinatal period (P27) .....	304	7.5	336	8.5
Atelectasis (P28.0-P28.1) .....	465	11.4	647	16.3
All other respiratory conditions originating in the perinatal period (P28.2-P28.9) .....	66	1.6	70	1.8
Infections specific to the perinatal period (P35-P39) .....	876	21.6	871	22.0
Bacterial sepsis of newborn (P36) .....	723	17.8	691	17.5
Omphalitis of newborn with or without mild hemorrhage (P38) .....	1	*	-	*
All other infections specific to the perinatal period (P35,P37,P39) .....	152	3.7	180	4.5
Hemorrhagic and hematological disorders of newborn (P50-P61) .....	694	17.1	619	15.6
Neonatal hemorrhage (P50-P52,P54) .....	574	14.1	506	12.8
Hemorrhagic disease of newborn (P53) .....	-	*	1	*
Hemolytic disease of newborn due to isoimmunization and other perinatal jaundice (P55-P59) .....	20	0.5	16	*
Hematological disorders (P60-P61) .....	101	2.5	96	2.4
Syndrome of infant of a diabetic mother and neonatal diabetes mellitus (P70.0-P70.2) .....	8	*	8	*
Necrotizing enterocolitis of newborn (P77) .....	366	9.0	404	10.2
Hydrops fetalis not due to hemolytic disease (P83.2) .....	159	3.9	189	4.8
Other perinatal conditions (P29,P70.3-P70.9,P71-P76,P78-P81,P83.0-P83.1,P83.3-P83.9,P90-P96) .....	1,265	31.1	1,340	33.8
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	5,779	142.2	5,473	138.2
Anencephaly and similar malformations (Q00) .....	328	8.1	311	7.9
Congenital hydrocephalus (Q03) .....	97	2.4	93	2.3
Spina bifida (Q05) .....	28	0.7	22	0.6
Other congenital malformations of nervous system (Q01-Q02,Q04,Q06-Q07) .....	314	7.7	264	6.7
Congenital malformations of heart (Q20-Q24) .....	1,660	40.8	1,598	40.4
Other congenital malformations of circulatory system (Q25-Q28) .....	187	4.6	220	5.6
Congenital malformations of respiratory system (Q30-Q34) .....	681	16.8	564	14.2
Congenital malformations of digestive system (Q35-Q45) .....	82	2.0	93	2.3
Congenital malformations of genitourinary system (Q50-Q64) .....	326	8.0	366	9.2
Congenital malformations and deformations of musculoskeletal system, limbs and integument (Q65-Q85) .....	437	10.8	486	12.3
Down's syndrome (Q90) .....	88	2.2	94	2.4
Edward's syndrome (Q91.0-Q91.3) .....	523	12.9	439	11.1
Patau's syndrome (Q91.4-Q91.7) .....	301	7.4	250	6.3
Other congenital malformations and deformations (Q10-Q18,Q86-Q89) .....	568	14.0	507	12.8
Other chromosomal abnormalities, not elsewhere classified (Q92-Q99) .....	159	3.9	166	4.2
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) .....	3,997	98.3	3,538	89.4
Sudden infant death syndrome (R95) .....	2,151	52.9	2,648	66.9
Other symptoms, signs and abnormal clinical and laboratory findings,not elsewhere classified (R00-R53,R55-R94,R96-R99) .....	1,846	45.4	890	22.5
All other diseases (Residual) .....	32	0.8	23	0.6
External causes of mortality (V01-Y84) .....	1,205	29.6	1,285	32.5
Accidents (unintentional injuries)(V01-X59) .....	826	20.3	845	21.3
Transport accidents (V01-V99) .....	171	4.2	189	4.8
Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) .....	167	4.1	184	4.6
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) .....	4	*	5	*

See footnotes at end of table.

**Table 5. Infant deaths and infant mortality rates for 130 selected causes: United States, final 1999 and preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Rates per 100,000 live births. Figures for 2000 are based on weighted data rounded to the nearest individual, so categories may not add to totals or subtotals]

Cause of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	2000		1999	
	Number	Rate	Number	Rate
Falls (W00-W19) .....	7	*	12	*
Accidental discharge of firearms (W32-W34) .....	-	*	-	*
Accidental drowning and submersion (W65-W74) .....	77	1.9	68	1.7
Accidental suffocation and strangulation in bed (W75) .....	235	5.8	255	6.4
Other accidental suffocation and strangulation (W76-W77,W81-W84) .....	167	4.1	154	3.9
Accidental inhalation and ingestion of food or other objects causing obstruction of respiratory tract (W78-W80) .....	66	1.6	63	1.6
Accidents caused by exposure to smoke, fire and flames (X00-X09) .....	36	0.9	41	1.0
Accidental poisoning and exposure to noxious substances (X40-X49) .....	10	*	12	*
Other and unspecified accidents (W20-W31,W35-W64,W85-W99,X10-X39,X50-X59) .....	57	1.4	51	1.3
Assault (homicide) (X85-Y09) .....	304	7.5	331	8.4
Assault (homicide) by hanging, strangulation and suffocation (X91) .....	21	0.5	34	0.9
Assault (homicide) by discharge of firearms (X93-X95) .....	13	*	8	*
Neglect, abandonment and other maltreatment syndromes (Y06-Y07) .....	105	2.6	125	3.2
Assault (homicide) by other and unspecified means (X85-X90,X92,X96-X99,Y00-Y05,Y08-Y09) .....	165	4.1	164	4.1
Complications of medical and surgical care (Y40-Y84) .....	24	0.6	54	1.4
Other external causes (X60-X84,Y10-Y36) .....	51	1.3	55	1.4

\* Figure does not meet standards of reliability or precision; see Technical notes.  
 - Quantity zero.

NOTE: Data are subject to sampling and/or random variation. For information on the relative standard errors of the data and further discussion, see Technical notes.

**Table 6. Expectation of life by age, race, and sex: United States, final 1999 and preliminary 2000**

[Data are based on a continuous file of records received from the States]

Age (Years) and race	Both sexes		Male		Female	
	2000	1999	2000	1999	2000	1999
All races <sup>1</sup>						
0 .....	76.9	76.7	74.1	73.9	79.5	79.4
1 .....	76.4	76.3	73.7	73.5	79.0	78.9
5 .....	72.5	72.4	69.8	69.6	75.1	75.0
10 .....	67.6	67.4	64.9	64.7	70.1	70.1
15 .....	62.6	62.5	60.0	59.8	65.2	65.1
20 .....	57.8	57.7	55.2	55.0	60.3	60.2
25 .....	53.1	53.0	50.6	50.4	55.4	55.4
30 .....	48.4	48.2	45.9	45.7	50.6	50.5
35 .....	43.6	43.5	41.3	41.1	45.8	45.7
40 .....	39.0	38.8	36.7	36.5	41.0	41.0
45 .....	34.4	34.3	32.2	32.0	36.3	36.3
50 .....	30.0	29.8	27.9	27.7	31.8	31.7
55 .....	25.7	25.5	23.8	23.5	27.3	27.3
60 .....	21.6	21.5	19.9	19.6	23.1	23.1
65 .....	17.9	17.7	16.3	16.1	19.2	19.1
70 .....	14.4	14.3	13.0	12.8	15.5	15.4
75 .....	11.3	11.2	10.2	10.0	12.1	12.1
80 .....	8.6	8.5	7.6	7.5	9.1	9.1
85 .....	6.3	6.3	5.6	5.5	6.7	6.6
90 .....	4.7	4.6	4.2	4.1	4.8	4.8
95 .....	3.5	3.4	3.1	3.0	3.5	3.5
100 .....	2.6	2.6	2.4	2.4	2.7	2.7
White						
0 .....	77.4	77.3	74.8	74.6	80.0	79.9
1 .....	76.9	76.8	74.3	74.1	79.4	79.3
5 .....	73.0	72.9	70.3	70.2	75.4	75.4
10 .....	68.0	67.9	65.4	65.3	70.5	70.5
15 .....	63.1	63.0	60.5	60.3	65.5	65.5
20 .....	58.3	58.2	55.7	55.6	60.7	60.7
25 .....	53.5	53.4	51.1	50.9	55.8	55.8
30 .....	48.7	48.6	46.4	46.2	50.9	50.9
35 .....	44.0	43.9	41.7	41.5	46.1	46.1
40 .....	39.3	39.2	37.1	36.9	41.3	41.3
45 .....	34.7	34.6	32.5	32.4	36.6	36.6
50 .....	30.2	30.1	28.2	28.0	32.0	32.0
55 .....	25.8	25.7	24.0	23.8	27.5	27.5
60 .....	21.7	21.6	20.0	19.8	23.2	23.2
65 .....	17.9	17.8	16.3	16.1	19.2	19.2
70 .....	14.4	14.4	13.0	12.9	15.5	15.5
75 .....	11.3	11.2	10.1	10.0	12.1	12.1
80 .....	8.5	8.5	7.6	7.5	9.1	9.1
85 .....	6.3	6.2	5.5	5.5	6.6	6.6
90 .....	4.5	4.5	4.0	4.0	4.7	4.7
95 .....	3.3	3.2	3.0	2.9	3.3	3.3
100 .....	2.4	2.3	2.2	2.2	2.4	2.4
Black						
0 .....	71.8	71.4	68.3	67.8	75.0	74.7
1 .....	71.8	71.5	68.3	67.9	75.0	74.7
5 .....	68.0	67.6	64.5	64.1	71.1	70.9
10 .....	63.0	62.7	59.6	59.2	66.2	66.0
15 .....	58.1	57.8	54.7	54.3	61.2	61.0
20 .....	53.4	53.1	50.0	49.6	56.4	56.2
25 .....	48.8	48.5	45.6	45.2	51.6	51.4
30 .....	44.2	43.9	41.1	40.7	46.8	46.6
35 .....	39.6	39.3	36.7	36.3	42.2	41.9
40 .....	35.2	34.8	32.3	31.9	37.6	37.4
45 .....	30.9	30.6	28.2	27.8	33.2	33.0
50 .....	26.8	26.6	24.3	24.0	29.0	28.7
55 .....	23.1	22.8	20.8	20.4	24.9	24.7
60 .....	19.5	19.3	17.5	17.2	21.0	20.9
65 .....	16.2	16.0	14.6	14.3	17.5	17.3
70 .....	13.2	13.0	11.8	11.6	14.1	14.0
75 .....	10.5	10.4	9.4	9.2	11.2	11.1
80 .....	8.2	8.2	7.4	7.3	8.7	8.6
85 .....	6.3	6.2	5.8	5.6	6.5	6.5
90 .....	4.8	4.8	4.5	4.4	4.9	4.8
95 .....	3.7	3.6	3.6	3.5	3.6	3.6
100 .....	2.8	2.8	2.9	2.8	2.7	2.7

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

NOTE: Data are subject to sampling and/or random variation.

**Table 7. Deaths and death rates for the 10 leading causes of death in specified age groups: United States, preliminary 2000**

[Data are based on a continuous file of records received from the States. Rates per 100,000 population in specified group. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Rank <sup>1</sup>	Cause of death and age (Based on the Tenth Revision, International Classification of Diseases, 1992)	Number	Rate
All ages <sup>2</sup>			
...	All causes .....	2,404,624	873.6
1	Diseases of heart (I00-I09,I11,I13,I20-I51) .....	709,894	257.9
2	Malignant neoplasms (C00-C97) .....	551,833	200.5
3	Cerebrovascular diseases (I60-I69) .....	166,028	60.3
4	Chronic lower respiratory diseases (J40-J47) .....	123,550	44.9
5	Accidents (unintentional injuries) (V01-X59,Y85-Y86) .....	93,592	34.0
...	Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5, V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) .....	41,804	15.2
...	All other 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,W00-X59,Y85,Y86) .....	51,788	18.8
6	Diabetes mellitus (E10-E14) .....	68,662	24.9
7	Influenza and pneumonia (J10-J18) .....	67,024	24.3
8	Alzheimer's disease (G30) .....	49,044	17.8
9	Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27) .....	37,672	13.7
10	Septicemia (A40-A41) .....	31,613	11.5
...	All other causes (Residual) .....	505,712	183.7
1-4 years			
...	All causes .....	4,942	32.6
1	Accidents (unintentional injuries) (V01-X59,Y85-Y86) .....	1,780	11.7
...	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) .....	630	4.2
...	All other 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,W00-X59,Y85,Y86) .....	1,150	7.6
2	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	471	3.1
3	Malignant neoplasms (C00-C97) .....	393	2.6
4	Assault (homicide) (X85-Y09,Y87.1) .....	318	2.1
5	Diseases of heart (I00-I09,I11,I13,I20-I51) .....	169	1.1
6	Influenza and pneumonia (J10-J18) .....	96	0.6
7	Septicemia (A40-A41) .....	91	0.6
8	Certain conditions originating in the perinatal period (P00-P96) .....	84	0.6
9	In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) .....	56	0.4
10	Cerebrovascular diseases (I60-I69) .....	45	0.3
...	All other causes (Residual) .....	1,439	9.5
5-14 years			
...	All causes .....	7,340	18.5
1	Accidents (unintentional injuries) (V01-X59,Y85-Y86) .....	2,878	7.3
...	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) .....	1,716	4.3
...	All other 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,W00-X59,Y85,Y86) .....	1,163	2.9
2	Malignant neoplasms (C00-C97) .....	1,017	2.6
3	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	387	1.0
4	Assault (homicide) (X85-Y09,Y87.1) .....	364	0.9
5	Intentional self-harm (suicide) (X60-X84,Y87.0) .....	297	0.7
6	Diseases of heart (I00-I09,I11,I13,I20-I51) .....	236	0.6
7	Chronic lower respiratory diseases (J40-J47) .....	130	0.3
8	In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) .....	106	0.3
9	Influenza and pneumonia (J10-J18) .....	83	0.2
10	Cerebrovascular diseases (I60-I69) .....	78	0.2
...	All other causes (Residual) .....	1,764	4.4
15-24 years			
...	All causes .....	30,959	80.7
1	Accidents (unintentional injuries) (V01-X59,Y85-Y86) .....	13,616	35.5
...	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) .....	10,357	27.0
...	All other 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,W00-X59,Y85,Y86) .....	3,259	8.5
2	Assault (homicide) (X85-Y09,Y87.1) .....	4,796	12.5
3	Intentional self-harm (suicide) (X60-X84,Y87.0) .....	3,877	10.1
4	Malignant neoplasms (C00-C97) .....	1,668	4.3
5	Diseases of heart (I00-I09,I11,I13,I20-I51) .....	931	2.4
6	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	425	1.1
7	Cerebrovascular diseases (I60-I69) .....	193	0.5
8	Influenza and pneumonia (J10-J18) .....	188	0.5
9	Chronic lower respiratory diseases (J40-J47) .....	180	0.5
10	Human immunodeficiency virus (HIV) disease (B20-B24) .....	178	0.5
...	All other causes (Residual) .....	4,907	12.8

See footnotes at end of table.

**Table 7. Deaths and death rates for the 10 leading causes of death in specified age groups: United States, preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Rates per 100,000 population in specified group. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Rank <sup>1</sup>	Cause of death and age (Based on the Tenth Revision, International Classification of Diseases, 1992)	Number	Rate
25-44 years			
...	All causes .....	128,779	156.4
1	Accidents (unintentional injuries) (V01-X59, Y85-Y86) .....	24,817	30.1
...	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) .....	13,261	16.1
...	All other 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, W00-X59, Y85, Y86) .....	11,556	14.0
2	Malignant neoplasms (C00-C97) .....	20,200	24.5
3	Diseases of heart (I00-I09, I11, I13, I20-I51) .....	15,267	18.5
4	Intentional self-harm (suicide) (X60-X84, Y87.0) .....	10,884	13.2
5	Human immunodeficiency virus (HIV) disease (B20-B24) .....	8,302	10.1
6	Assault (homicide) (X85-Y09, Y87.1) .....	7,156	8.7
7	Chronic liver disease and cirrhosis (K70, K73-K74) .....	3,644	4.4
8	Cerebrovascular diseases (I60-I69) .....	3,122	3.8
9	Diabetes mellitus (E10-E14) .....	2,416	2.9
10	Influenza and pneumonia (J10-J18) .....	1,437	1.7
...	All other causes (Residual) .....	31,534	38.3
45-64 years			
...	All causes .....	399,008	652.8
1	Malignant neoplasms (C00-C97) .....	136,363	223.1
2	Diseases of heart (I00-I09, I11, I13, I20-I51) .....	97,334	159.2
3	Accidents (unintentional injuries) (V01-X59, Y85-Y86) .....	18,252	29.9
...	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) .....	8,483	13.9
...	All other 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, W00-X59, Y85, Y86) .....	9,769	16.0
4	Cerebrovascular diseases (I60-I69) .....	15,735	25.7
5	Chronic lower respiratory diseases (J40-J47) .....	14,086	23.0
6	Diabetes mellitus (E10-E14) .....	13,958	22.8
7	Chronic liver disease and cirrhosis (K70, K73-K74) .....	12,206	20.0
8	Intentional self-harm (suicide) (X60-X84, Y87.0) .....	8,052	13.2
9	Human immunodeficiency virus (HIV) disease (B20-B24) .....	5,336	8.7
10	Nephritis, nephrotic syndrome and nephrosis (N00-N07, N17-N19, N25-N27) .....	4,821	7.9
...	All other causes (Residual) .....	72,865	119.2
65 years and over			
...	All causes .....	1,805,187	5,190.8
1	Diseases of heart (I00-I09, I11, I13, I20-I51) .....	595,440	1,712.2
2	Malignant neoplasms (C00-C97) .....	392,082	1,127.4
3	Cerebrovascular diseases (I60-I69) .....	146,725	421.9
4	Chronic lower respiratory diseases (J40-J47) .....	107,888	310.2
5	Influenza and pneumonia (J10-J18) .....	60,261	173.3
6	Diabetes mellitus (E10-E14) .....	52,102	149.8
7	Alzheimer's disease (G30) .....	48,492	139.4
8	Nephritis, nephrotic syndrome and nephrosis (N00-N07, N17-N19, N25-N27) .....	31,588	90.8
9	Accidents (unintentional injuries) (V01-X59, Y85-Y86) .....	31,332	90.1
...	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) .....	7,165	20.6
...	All other 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, W00-X59, Y85, Y86) .....	24,167	69.5
10	Septicemia (A40-A41) .....	25,143	72.3
...	All other causes (Residual) .....	314,134	903.3

... Category not applicable.

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

<sup>2</sup> Includes deaths under 1 year of age.

NOTE: Data are subject to sampling and/or random variation. For information on the relative standard errors of the data and further discussion, see Technical notes.



**Table 8. Infant deaths and infant mortality rates for the 10 leading causes of infant death, by race and Hispanic origin: United States, preliminary 2000**

[Data are based on a continuous file of records received from the States. Rates per 100,000 live births. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals. Rates for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on birth and death certificates; see Technical notes]

Rank <sup>1</sup>	Cause of death and race (Based on the Tenth Revision, International Classification of Diseases, 1992)	Number	Rate
All races <sup>2</sup>			
...	All causes .....	27,983	688.4
1	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	5,779	142.2
2	Disorders related to short gestation and low birth weight, not elsewhere classified (P07) .....	4,299	105.8
3	Sudden infant death syndrome (R95) .....	2,151	52.9
4	Newborn affected by maternal complications of pregnancy (P01) .....	1,372	33.8
5	Newborn affected by complications of placenta, cord and membranes (P02) .....	1,028	25.3
6	Respiratory distress of newborn (P22) .....	1,018	25.0
7	Accidents (unintentional injuries)(V01-X59) .....	826	20.3
8	Bacterial sepsis of newborn (P36) .....	723	17.8
9	Intrauterine hypoxia and birth asphyxia (P20-P21) .....	642	15.8
10	Diseases of the circulatory system (I00-I99) .....	632	15.5
...	All other causes (Residual) .....	9,513	234.0
White, total <sup>3</sup>			
...	All causes .....	18,340	572.6
1	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	4,458	139.2
2	Disorders related to short gestation and low birth weight, not elsewhere classified (P07) .....	2,396	74.8
3	Sudden infant death syndrome (R95) .....	1,374	42.9
4	Newborn affected by maternal complications of pregnancy (P01) .....	851	26.6
5	Newborn affected by complications of placenta, cord and membranes (P02) .....	706	22.0
6	Respiratory distress of newborn (P22) .....	642	20.0
7	Accidents (unintentional injuries)(V01-X59) .....	537	16.8
8	Bacterial sepsis of newborn (P36) .....	450	14.0
9	Intrauterine hypoxia and birth asphyxia (P20-P21) .....	443	13.8
10	Diseases of the circulatory system (I00-I99) .....	442	13.8
...	All other causes (Residual) .....	6,041	188.6
White, non-Hispanic			
...	All causes .....	13,647	575.6
1	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	3,281	138.4
2	Disorders related to short gestation and low birth weight, not elsewhere classified (P07) .....	1,700	71.7
3	Sudden infant death syndrome (R95) .....	1,154	48.7
4	Newborn affected by maternal complications of pregnancy (P01) .....	672	28.3
5	Newborn affected by complications of placenta, cord and membranes (P02) .....	558	23.5
6	Respiratory distress of newborn (P22) .....	462	19.5
7	Accidents (unintentional injuries)(V01-X59) .....	432	18.2
8	Intrauterine hypoxia and birth asphyxia (P20-P21) .....	344	14.5
9	Diseases of the circulatory system (I00-I99) .....	329	13.9
10	Bacterial sepsis of newborn (P36) .....	323	13.6
...	All other causes (Residual) .....	4,392	185.3
Black, total <sup>3</sup>			
...	All causes .....	8,529	1,375.7
1	Disorders related to short gestation and low birth weight, not elsewhere classified (P07) .....	1,763	284.4
2	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	1,065	171.8
3	Sudden infant death syndrome (R95) .....	700	112.9
4	Newborn affected by maternal complications of pregnancy (P01) .....	477	76.9
5	Respiratory distress of newborn (P22) .....	348	56.1
6	Newborn affected by complications of placenta, cord and membranes (P02) .....	291	46.9
7	Bacterial sepsis of newborn (P36) .....	253	40.8
8	Accidents (unintentional injuries)(V01-X59) .....	252	40.6
9	Intrauterine hypoxia and birth asphyxia (P20-P21) .....	165	26.6
10	Diseases of the circulatory system (I00-I99) .....	160	25.8
...	All other causes (Residual) .....	3,055	492.8

See footnotes at end of table.

**Table 8. Infant deaths and infant mortality rates for the 10 leading causes of infant death, by race and Hispanic origin: United States, preliminary 2000 - Con.**

[Data are based on a continuous file of records received from the States. Rates per 100,000 live births. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals. Rates for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on birth and death certificates; see Technical notes]

Rank <sup>1</sup>	Cause of death and race (Based on the Tenth Revision, International Classification of Diseases, 1992)	Number	Rate
	Hispanic <sup>4</sup>		
...	All causes .....	4,601	564.0
1	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) .....	1,170	143.4
2	Disorders related to short gestation and low birth weight, not elsewhere classified (P07) .....	634	77.7
3	Sudden infant death syndrome (R95) .....	234	28.7
4	Newborn affected by maternal complications of pregnancy (P01) .....	175	21.5
4	Respiratory distress of newborn (P22) .....	175	21.5
6	Newborn affected by complications of placenta, cord and membranes (P02) .....	138	16.9
7	Bacterial sepsis of newborn (P36) .....	127	15.6
8	Diseases of the circulatory system (I00-I99) .....	112	13.7
9	Accidents (unintentional injuries)(V01-X59) .....	111	13.6
10	Neonatal hemorrhage (P50-P52,P54) .....	106	13.0
...	All other causes (Residual) .....	1,619	198.5

... Category not applicable.

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

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

<sup>3</sup> Race and Hispanic origin are reported separately on both the birth and death certificate. Data for persons of Hispanic origin are included in the data for each race group, according to the decedent's reported race; see Technical notes.

<sup>4</sup> Includes all persons of Hispanic origin of any race; see Technical notes.

NOTE: Data are subject to sampling and/or random variation. For information on the relative standard errors of the data and further discussion, see Technical notes.

## Technical notes

### Nature and sources of data

Preliminary mortality data for 2000 are based on a substantial proportion of death records for that year. The data for 2000 are based on a continuous receipt and processing of statistical records through June 27, 2001, by the Centers for Disease Control and Prevention's National Center for Health Statistics. NCHS received the data from the States' vital registration systems through the Vital Statistics Cooperative Program. In this report U.S. totals include only events occurring within the 50 States and the District of Columbia. Data for Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Marianas that are included in tables showing data by State are not included in U.S. totals.

For year 2000 individual records of infant deaths (deaths under 1 year of age) and deaths of persons 1 year and over are weighted (when necessary) to independent counts of deaths occurring in each State. These State-specific counts serve as control totals and are the basis for the record weights in the preliminary file. If the number of records in the preliminary file is greater than the count received from the State, the State-specific number of records in the preliminary file is used instead and the weight is set at 1.0.

For this report two separate files are processed: the medical file or cause-of-death file, and the demographic file. The medical file contains records that include demographic and medical information that is used to generate tables showing cause of death. The demographic file includes the records from the medical file as well as additional records containing demographic information only and is used to generate tables showing mortality by demographic characteristics only. A State-specific weight is computed for each file by dividing the State control total by the number of records in the preliminary sample. Because there are two separate files, with two separate sets of weights, slight inconsistencies may occur between the demographic and medical tables. [Table I](#) shows the percent completeness of the preliminary file by place of occurrence. The percent completeness is obtained by dividing the number of records in the preliminary file by the control total and multiplying by 100. Although data by place of occurrence are used to compute the weights, all data in this report are tabulated by place of residence.

For selected variables in the mortality files, unknown or not-stated values are imputed. The percent not stated was less than 1 percent for all variables discussed in this report. Detailed information on reporting completeness and imputation procedures may be found in *Technical Appendix, Vital Statistics of the United States: Mortality, 1995* (12).

### Cause-of-death classification

Mortality statistics are compiled in accordance with the World Health Organization (WHO) regulations that specify that member nations classify and code causes of death in accordance with the current revision of the *International Statistical Classification of Diseases, and Related Health Problems*. The International Classification of Diseases (ICD) provides the basic guidance used in virtually all countries to code and classify causes of death. It provides not only disease, injury, and poisoning categories but also the rules used to

select the single underlying cause of death for tabulation from the several diagnoses that may be reported on a single death certificate, as well as definitions, tabulation lists, the format of the death certificate, and regulations on the use of the classification. Effective with deaths occurring in 1999, the United States began use of the Tenth Revision of this classification, (ICD-10) (13). During the period 1979-98 causes were coded and classified according to the Ninth Revision (ICD-9) (14). The change from ICD-9 to ICD-10 resulted in discontinuities for selected cause-of-death trends. These discontinuities are measured using comparability ratios from a comparability study described in the [Technical notes](#) of the preliminary report for 1999 (15) under the section "Comparability between ICD-9 and ICD-10 for mortality."

Causes of death for data presented in this report were coded by procedures described in annual issues of part 2a of the *NCHS Instruction Manual* (16).

### Bias estimation

Causes of death in this report are subject to nonsampling bias because of the nature of the preliminary file. Inasmuch as the preliminary file is processed before a full year of data is available, it is subject to the seasonality of certain causes of death that may not be equally distributed throughout the year. It is known, for example, that external causes such as accidents occur disproportionately during the summer months, and that fatal respiratory conditions are more prevalent during the winter months. Accordingly, the truncated nature of the preliminary file may systematically overemphasize or underemphasize causes with pronounced seasonality.

Further, for some deaths, especially those subject to medico-legal investigation such as unintentional injuries, homicides, and suicides, the final cause may not be available at the time the preliminary file is processed. In those cases, the causes of death may be reported in the preliminary file as unknown and coded to the category Other ill-defined and unspecified causes of mortality (ICD-10 code R99), a subcategory of Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (ICD-10 codes R00-R99). In the final data some of the deaths of unknown cause in the preliminary file will be reassigned to specific causes if further, more specific cause-of-death information is provided.

A quantitative assessment of the degree of these biases can be made by comparing final data and preliminary data for the same year. Such a comparison for the leading causes of death for the total U.S. population during 1996, 1997, and 1998, coded and classified under ICD-9, indicates that preliminary estimates for influenza and pneumonia are sometimes underestimated and sometimes overestimated in the preliminary file (see [table II](#)). Thus, for 1996 the preliminary data underestimated the number of deaths for pneumonia and influenza by 1.4 percent, but in contrast during the two succeeding years, when there were major influenza outbreaks, the preliminary data overestimated the number of deaths for these causes by over 2 and 3 percent, respectively. Similar bias occurred in chronic obstructive lung disease with overestimates up to 2 percent for all three years. In contrast, suicide deaths may be underrepresented as much as 5 percent, homicide by up to 6 percent, and unintentional injuries by 1-5 percent. The comparisons upon which these estimates of nonsampling bias are made are shown in [tables II](#) and [III](#).

**Table I. Total count of records and percent completeness of preliminary files of infant deaths and deaths 1 year and over: United States, each State and territory, preliminary 2000**

[By place of occurrence]

Area	Infant deaths (under 1 year)			Deaths 1 year and over		
	Count of records	Percent completeness		Count of records	Percent completeness	
		Demographic file	Medical file		Demographic file	Medical file
United States <sup>1</sup> .....	28,045	94.2	84.6	2,380,675	94.9	86.0
Alabama .....	597	100.0	99.7	43,808	100.0	100.0
Alaska .....	64	100.0	96.9	2,772	99.2	95.3
Arizona .....	571	100.0	100.0	40,949	100.0	100.0
Arkansas .....	295	100.0	100.0	27,410	99.9	99.9
California .....	2,895	78.8	78.1	227,680	78.4	77.4
Colorado .....	431	98.8	98.8	27,285	100.0	99.9
Connecticut .....	270	90.7	90.7	30,055	95.6	95.6
Delaware .....	123	97.6	97.6	6,658	99.8	99.8
District of Columbia .....	194	89.2	86.1	6,961	100.0	99.4
Florida .....	1,458	100.0	99.7	164,131	100.0	100.0
Georgia .....	1,121	100.0	100.0	63,415	100.0	100.0
Hawaii .....	138	100.0	86.2	8,375	100.0	90.2
Idaho .....	122	99.2	99.2	9,237	100.0	100.0
Illinois .....	1,486	100.0	93.2	102,432	99.8	94.1
Indiana .....	633	99.7	99.7	55,672	97.9	97.8
Iowa .....	224	99.6	99.6	27,521	99.9	99.9
Kansas .....	239	99.2	99.2	23,886	100.0	100.0
Kentucky .....	340	86.2	78.5	38,679	94.5	86.8
Louisiana .....	638	100.0	98.0	40,941	100.0	99.6
Maine .....	63	98.4	92.1	12,242	98.7	94.2
Maryland .....	452	100.0	99.8	43,193	100.0	100.0
Massachusetts .....	385	99.2	53.0	56,888	97.5	69.0
Michigan .....	1,118	100.0	99.9	84,689	100.0	100.0
Minnesota .....	373	98.4	86.1	37,462	99.7	88.8
Mississippi .....	421	100.0	100.0	27,489	100.0	99.9
Missouri .....	670	100.0	78.8	55,745	100.0	88.4
Montana .....	61	95.1	95.1	7,985	100.0	99.8
Nebraska .....	189	100.0	59.8	14,994	100.0	58.1
Nevada .....	190	100.0	100.0	15,605	100.0	100.0
New Hampshire .....	74	100.0	87.8	9,559	100.0	84.0
New Jersey .....	704	87.9	42.5	73,050	81.2	51.1
New Mexico .....	193	84.5	77.2	13,148	100.0	88.9
New York .....	1,668	100.0	68.5	155,813	99.9	77.8
New York excluding New York City ...	828	100.0	97.2	95,810	99.9	98.8
New York City .....	840	100.0	40.2	60,003	100.0	44.3
North Carolina .....	1,052	100.0	97.9	71,545	100.0	99.9
North Dakota .....	70	98.6	98.6	6,212	100.0	100.0
Ohio .....	1,265	58.6	28.1	107,301	63.3	32.7
Oklahoma .....	392	100.0	100.0	33,914	97.2	97.2
Oregon .....	270	100.0	100.0	29,306	100.0	100.0
Pennsylvania .....	1,104	94.5	68.5	130,716	96.9	73.3
Rhode Island .....	89	100.0	100.0	10,053	99.8	99.8
South Carolina .....	452	70.4	70.4	35,711	79.8	79.8
South Dakota .....	65	100.0	100.0	7,167	100.0	100.0
Tennessee .....	820	100.0	100.0	57,744	100.0	100.0
Texas .....	2,050	97.5	93.3	148,494	99.5	97.1
Utah .....	281	100.0	99.6	12,411	100.0	100.0
Vermont .....	39	100.0	100.0	5,084	100.0	99.6
Virginia .....	646	100.0	97.8	55,178	99.7	97.5
Washington .....	422	100.0	78.2	43,508	100.0	77.4
West Virginia .....	158	100.0	77.8	20,911	100.0	86.6
Wisconsin .....	450	100.0	43.1	45,963	100.0	46.2
Wyoming .....	20	100.0	100.0	3,728	100.0	100.0
Puerto Rico .....	633	83.1	18.3	27,928	89.5	21.2
Virgin Islands .....	18	66.7	38.9	610	99.8	63.3
Guam .....	23	82.6	82.6	644	73.9	73.9
American Samoa .....	---	---	---	---	---	---
Northern Marianas .....	---	---	---	---	---	---

--- Data not available.

<sup>1</sup> Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas.NOTE: Percent completeness =  $\frac{\text{Number of records in preliminary file} \times 100}{\text{Count of records}}$

**Table II. Ratios of preliminary to final reported numbers of deaths from 72 selected causes, Human immunodeficiency virus infection, and Alzheimer's disease: United States, 1996-98**

Cause of death (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i> )	Preliminary number of deaths 1996	Final number of deaths 1996	Ratio of preliminary to final deaths 1996	Preliminary number of deaths 1997	Final number of deaths 1997	Ratio of preliminary to final deaths 1997	Preliminary number of deaths 1998	Final number of deaths 1998	Ratio of preliminary to final deaths 1998
All causes . . . . .	2,322,421	2,314,690	1.0033	2,314,729	2,314,245	1.0002	2,338,075	2,337,256	1.0004
Shigellosis and amebiasis . . . . . 004,006	7	9	0.7778	6	6	1.0000	10	8	1.2500
Certain other intestinal infections . . . . . 007-009	842	824	1.0218	1,012	1,023	0.9892	1,092	1,059	1.0312
Tuberculosis . . . . . 010-018	1,194	1,202	0.9933	1,165	1,166	0.9991	1,110	1,112	0.9982
Tuberculosis of respiratory system . . . . . 010-012	902	912	0.9890	872	875	0.9966	816	815	1.0012
Other tuberculosis . . . . . 013-018	291	290	1.0034	293	291	1.0069	295	297	0.9933
Whooping cough . . . . . 033	5	4	1.2500	6	6	1.0000	7	5	1.4000
Streptococcal sore throat, scarlatina, and erysipelas . . . . . 034-035	14	13	1.0769	5	8	0.6250	7	8	0.8750
Meningococcal infection . . . . . 036	285	290	0.9828	327	309	1.0583	244	234	1.0427
Septicemia . . . . . 038	21,395	21,423	0.9987	22,604	22,396	1.0093	23,643	23,731	0.9963
Acute poliomyelitis . . . . . 045	1	-	-	1	-	-	3	-	-
Measles . . . . . 055	-	1	0.0000	3	2	1.5000	3	-	-
Viral hepatitis . . . . . 070	3,811	3,780	1.0082	3,908	4,057	0.9633	4,729	4,796	0.9860
Syphilis . . . . . 090-097	65	73	0.8904	60	62	0.9677	44	45	0.9778
All other infectious and parasitic diseases . . . . . 001-003,005,020-032,037,039-041,042-044,071-088,098-139	39,695	38,172	1.0399	23,441	23,336	1.0045	19,988	20,254	0.9869
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues . . . . . 140-208	544,278	539,533	1.0088	537,390	539,577	0.9959	538,947	541,532	0.9952
Malignant neoplasms of lip, oral cavity, and pharynx . . . . . 140-149	7,803	7,854	0.9935	7,823	7,894	0.9910	7,902	7,965	0.9921
Malignant neoplasms of digestive organs and peritoneum . . . . . 150-159	127,726	126,495	1.0097	126,109	127,054	0.9926	127,685	128,683	0.9922
Malignant neoplasms of respiratory and intrathoracic organs . . . . . 160-165	158,606	157,271	1.0085	158,234	158,465	0.9985	159,207	159,736	0.9967
Malignant neoplasm of breast . . . . . 174-175	44,062	43,448	1.0141	42,181	42,297	0.9973	41,862	42,086	0.9947
Malignant neoplasms of genital organs . . . . . 179-187	60,441	60,080	1.0060	58,539	59,010	0.9920	58,097	58,367	0.9954
Malignant neoplasms of urinary organs . . . . . 188-189	23,152	23,004	1.0064	23,271	23,395	0.9947	23,722	23,768	0.9981
Malignant neoplasms of all other and unspecified sites . . . . . 170-173,190-199	67,151	66,451	1.0105	65,616	65,627	0.9998	65,305	65,389	0.9987
Leukemia . . . . . 204-208	20,506	20,340	1.0082	20,197	20,313	0.9943	20,160	20,324	0.9919
Other malignant neoplasms of lymphatic and hematopoietic tissues . . . . . 200-203	34,831	34,590	1.0070	35,421	35,522	0.9972	35,007	35,214	0.9941
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature . . . . . 210-239	7,798	7,647	1.0197	7,784	7,659	1.0163	7,909	7,933	0.9970
Diabetes mellitus . . . . . 250	61,559	61,767	0.9966	62,332	62,636	0.9951	64,574	64,751	0.9973
Nutritional deficiencies . . . . . 260-269	3,710	3,706	1.0011	3,946	3,928	1.0046	4,088	4,077	1.0027
Anemias . . . . . 280-285	4,376	4,332	1.0102	4,477	4,471	1.0013	4,509	4,544	0.9923
Meningitis . . . . . 320-322	769	758	1.0145	797	781	1.0205	767	768	0.9987
Major cardiovascular diseases . . . . . 390-448	951,302	950,164	1.0012	942,680	944,148	0.9984	939,610	940,565	0.9990
Diseases of heart . . . . . -398,402,404-429	733,834	733,361	1.0006	725,790	726,974	0.9984	724,269	724,859	0.9992
Rheumatic fever and rheumatic heart disease . . . . . 390-398	5,043	5,006	1.0074	4,922	5,014	0.9817	4,833	4,792	1.0086
Hypertensive heart disease . . . . . 402	25,907	26,188	0.9893	26,088	26,607	0.9805	27,304	27,715	0.9852
Hypertensive heart and renal disease . . . . . 404	2,475	2,501	0.9896	2,403	2,424	0.9913	2,396	2,412	0.9934
Ischemic heart disease . . . . . 410-414	476,818	476,124	1.0015	465,651	466,101	0.9990	460,390	459,841	1.0012
Acute myocardial infarction . . . . . 410	214,260	213,532	1.0034	205,933	206,212	0.9986	203,835	203,551	1.0014
Other acute and subacute forms of ischemic heart disease . . . . . 411	2,819	2,889	0.9758	3,031	3,046	0.9951	2,824	2,907	0.9714
Angina pectoris . . . . . 413	830	829	1.0012	726	735	0.9878	657	650	1.0108
Old myocardial infarction and other forms of chronic ischemic heart disease . . . . . 412,414	258,909	258,874	1.0001	255,961	256,108	0.9994	253,074	252,733	1.0013

See footnotes at end of table.

**Table II. Ratios of preliminary to final reported numbers of deaths from 72 selected causes, Human immunodeficiency virus infection, and Alzheimer's disease: United States, 1996-98—Con.**

Cause of death (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i> )	Preliminary number of deaths 1996	Final number of deaths 1996	Ratio of preliminary to final deaths 1996	Preliminary number of deaths 1997	Final number of deaths 1997	Ratio of preliminary to final deaths 1997	Preliminary number of deaths 1998	Final number of deaths 1998	Ratio of preliminary to final deaths 1998
Other diseases of endocardium . . . . .	424	17,252	1.0041	17,683	17,661	1.0012	18,526	18,522	1.0002
All other forms of heart disease . . . . .	415,423,425-429	206,339	0.9999	209,043	209,167	0.9994	210,820	211,579	0.9964
Hypertension with or without renal disease . . . . .	401,403	12,947	1.0002	13,344	13,534	0.9860	14,216	14,308	0.9936
Cerebrovascular diseases . . . . .	430-438	160,431	1.0031	159,877	159,791	1.0005	158,060	158,448	0.9976
Intracerebral and other intracranial hemorrhage . . . . .	431-432	23,522	0.9978	25,675	25,858	0.9929	26,010	26,230	0.9916
Cerebral thrombosis and unspecified occlusion of cerebral arteries . . . . .	434.0,434.9	13,124	1.0078	12,040	12,045	0.9996	11,024	10,958	1.0060
Cerebral embolism . . . . .	434.1	675	1.0045	608	617	0.9854	566	570	0.9930
All other and late effects of cerebrovascular diseases . . . . .	430,433,435-438	123,110	1.0035	121,553	121,271	1.0023	120,461	120,690	0.9981
Atherosclerosis . . . . .	440	16,803	1.0038	15,844	16,057	0.9867	15,424	15,279	1.0095
Other diseases of arteries, arterioles, and capillaries . . . . .	441-448	27,287	1.0041	27,824	27,792	1.0012	27,641	27,671	0.9989
Acute bronchitis and bronchiolitis . . . . .	466	460	0.9465	481	465	1.0344	446	452	0.9867
Pneumonia and influenza . . . . .	480-487	82,579	0.9863	88,383	86,449	1.0224	94,828	91,871	1.0322
Pneumonia . . . . .	480-486	81,972	0.9878	87,526	85,729	1.0210	92,718	90,147	1.0285
Influenza . . . . .	487	607	0.8148	857	720	1.1903	2,109	1,724	1.2233
Chronic obstructive pulmonary diseases and allied conditions . . . . .	490-496	106,146	1.0011	110,637	109,029	1.0147	114,381	112,584	1.0160
Bronchitis, chronic and unspecified . . . . .	490-491	3,166	1.0048	3,061	3,055	1.0020	3,120	3,032	1.0290
Emphysema . . . . .	492	17,367	1.0047	17,827	17,518	1.0176	17,918	17,555	1.0207
Asthma . . . . .	493	5,641	0.9954	5,338	5,434	0.9823	5,344	5,438	0.9827
Other chronic obstructive pulmonary diseases and allied conditions . . . . .	494-496	79,971	1.0006	84,411	83,022	1.0167	87,999	86,559	1.0166
Ulcer of stomach and duodenum . . . . .	531-533	5,091	0.9973	5,114	5,115	0.9998	4,665	4,695	0.9936
Appendicitis . . . . .	540-543	425	1.0024	421	395	1.0658	444	439	1.0114
Hernia of abdominal cavity and intestinal obstruction without mention of hernia . . . . .	550-553,560	6,500	1.0037	6,475	6,498	0.9965	66,920	6,635	10.0859
Chronic liver disease and cirrhosis . . . . .	571	25,135	1.0035	24,765	25,175	0.9837	24,936	25,192	0.9898
Cholelithiasis and other disorders of gallbladder . . . . .	574-575	2,809	0.9975	2,721	2,757	0.9869	2,746	2,822	0.9731
Nephritis, nephrotic syndrome, and nephrosis . . . . .	580-589	24,392	1.0036	25,570	25,331	1.0094	26,295	26,182	1.0043
Acute glomerulonephritis and nephrotic syndrome . . . . .	580-581	319	0.9938	307	324	0.9475	316	325	0.9723
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified . . . . .	582-583,587	1,625	0.9921	1,635	1,652	0.9897	1,706	1,715	0.9948
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause . . . . .	584-586,588-589	22,449	1.0047	23,628	23,355	1.0117	24,274	24,142	1.0055
Infections of kidney . . . . .	590	890	0.9933	811	831	0.9759	810	828	0.9783
Hyperplasia of prostate . . . . .	600	462	1.0109	413	420	0.9833	412	410	1.0049
Complications of pregnancy, childbirth, and the puerperium . . . . .	630-676	276	0.9388	291	327	0.8899	247	281	0.8790
Pregnancy with abortive outcome . . . . .	630-638	39	1.0000	39	41	0.9512	30	32	0.9375
Other complications of pregnancy, childbirth, and the puerperium . . . . .	640-676	237	0.9294	252	286	0.8811	217	249	0.8715
Congenital anomalies . . . . .	740-759	11,926	1.0076	11,733	11,912	0.9850	11,910	11,934	0.9980
Certain conditions originating in the perinatal period . . . . .	760-779	12,809	0.9801	12,764	13,092	0.9749	13,323	13,428	0.9922
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .	767-769	2,022	1.0146	1,983	1,990	0.9965	2,039	1,997	1.0210
Other conditions originating in the perinatal period . . . . .	760-766,770-779	10,787	0.9739	10,781	11,102	0.9711	11,284	11,431	0.9871
Symptoms, signs, and ill-defined conditions . . . . .	780-799	30,371	1.1596	33,569	25,752	1.3035	35,491	25,992	1.3655
All other diseases . . . . .	Residual	222,386	0.9948	234,690	235,435	0.9968	246,099	247,644	0.9938
Accidents and adverse effects . . . . .	E800-E949	93,874	0.9887	92,191	95,644	0.9639	93,207	97,835	0.9527
Motor vehicle accidents . . . . .	E810-E825	43,449	0.9954	42,420	43,458	0.9761	41,826	43,501	0.9615
All other accidents and adverse effects . . . . .	807,E826-E949	50,425	0.9830	49,772	52,186	0.9537	51,382	54,334	0.9457

See footnotes at end of table.



**Table II. Ratios of preliminary to final reported numbers of deaths from 72 selected causes, Human immunodeficiency virus infection, and Alzheimer's disease: United States, 1996-98—Con.**

Cause of death (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i> )		Preliminary number of deaths 1996	Final number of deaths 1996	Ratio of preliminary to final deaths 1996	Preliminary number of deaths 1997	Final number of deaths 1997	Ratio of preliminary to final deaths 1997	Preliminary number of deaths 1998	Final number of deaths 1998	Ratio of preliminary to final deaths 1998
Suicide . . . . .	E950-E959	30,862	30,903	0.9987	29,725	30,535	0.9735	29,264	30,575	0.9571
Homicide and legal intervention . . . . .	E960-E978	20,738	20,971	0.9889	18,774	19,846	0.9460	17,350	18,272	0.9495
All other external causes . . . . .	E980-E999	3,185	3,476	0.9163	3,255	3,666	0.8879	3,315	3,763	0.8809
Human immunodeficiency virus infection <sup>1</sup> . . . . .	042-044	32,655	31,130	1.0490	16,685	16,516	1.0102	13,210	13,426	0.9839
Alzheimer's disease <sup>2</sup> . . . . .	331.0	21,166	21,397	0.9892	22,527	22,475	1.0023	22,824	22,725	1.0044

- Quantity zero.

<sup>1</sup>Included in "All other infectious and parasitic diseases" shown above.

<sup>2</sup>Included in "All other diseases (Residual)" category shown above.

SOURCE: Preliminary and final data from the National Vital Statistics System, National Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville, Maryland 20782.

## Tabulation lists and cause-of-death ranking

Tabulation lists for ICD-10 were developed to maximize continuity with ICD-9 lists to facilitate trend analysis, and to separately identify causes of death of public health importance. The lists are published in the NCHS Instruction Manual, Part 9, ICD-10 Cause-of-Death Lists for Tabulating Mortality Statistics, Effective 1999 (17). For this report two tabulation lists are used, namely, the List of 113 Selected Causes of Death used for deaths of all ages, and List of 130 Selected Causes of Infant Death used for infants. These lists are also used to rank leading causes of death for the two population groups. For the List of 113 Selected Causes of Death, the group titles Major cardiovascular diseases (ICD-10 codes I00-I78) and Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (ICD-10 codes R00-R99) are not ranked. In addition, category titles that begin with the words "Other" and "All other" are not ranked to determine the leading causes of death. When one of the titles that represents a subtotal is ranked (for example, Tuberculosis (ICD-10 codes A16-A19)), its component parts are not ranked (in this case, Respiratory tuberculosis (ICD-10 code A16) and Other tuberculosis (ICD-10 codes A17-A19)). For the List of 130 Selected Causes of Infant Death, the same ranking procedures are used, except that the category Major cardiovascular diseases is not in the list.

## Race and Hispanic origin

Race and Hispanic origin are reported separately on the death certificate. In this report, unless otherwise specified, deaths of Hispanic origin are included in the totals for each race group—white, black, American Indian, and API—according to the decedent's race as reported on the death certificate. Data shown for Hispanic persons include all persons of Hispanic origin of any race. Mortality data on the Hispanic-origin population are based on deaths in all States. Death rates for Hispanic, American Indian, and API persons should be interpreted with caution because of inconsistencies in reporting race on the death certificate as compared with race on censuses, surveys, and birth certificates. Studies have shown underreporting on death certificates of American Indians, API, and Hispanic decedents; and undercounts of these groups in the censuses (9, 10).

## Infant mortality

Infant mortality rates are the most commonly used index for measuring the risk of dying during the first year of life. The rates presented in this report are calculated by dividing the number of infant deaths that occurred in a 12-month period by the preliminary number of live births for the same period and are presented as rates per 1,000 or per 100,000 live births. For preliminary birth figures used in the denominator for infant mortality rates, see *Births: Preliminary Data for 2000* (1). In contrast to infant mortality rates based on live births, infant death rates are based on the estimated population under 1 year of age (table 1). Infant death rates that appear in tabulations of age-specific death rates in this report are calculated by dividing the number of infant deaths in the 12-month period by the estimated population of persons under 1 year of age on July 1, 2000, and are presented as rates per 100,000 population in this age group. Because of differences in the denominators, infant death rates may

differ from infant mortality rates. The linked birth/infant death data set (linked file) is a better source of data for infant deaths and mortality rates by race and ethnicity (11).

## Injury at work

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. The item is on the death certificate of all States. Number of deaths, crude death rates, and age-adjusted death rates for injury at work are shown in table 2. Deaths, crude death rates, and age-adjusted death rates for injury at work are shown for ages 15 years and over. Age-adjusted death rates for injury at work were computed using age-specific death rates and the U.S. standard population based on year 2000 standard for ages 15 years and over. See section on "Computing rates and percents."

## Life tables

The life table provides a comprehensive measure of the effect of mortality on life expectancy. It is composed of sets of values showing the mortality experience of a hypothetical group of infants born at the same time and subject throughout their lifetime to the age-specific death rates of a particular time period, usually a given year. Beginning with final data reported for 1997, the life table methodology was changed from previous annual reports. Previously, U.S. life tables were abridged and constructed by reference to a standard table (18). In addition, the age range for these life tables was limited to 5-year age groups ending with the age group 85 years and over.

Beginning with 1997 mortality data, a revised life table methodology was used to construct complete life tables by single years of age that extend to age 100 (19) using a methodology similar to that of the decennial life tables (20). The advantages of the new methodology over the previous methodology are its comparability with decennial life table methodology, greater accuracy, and greater age detail. A comparison of the two methods shows small differences in resulting values for life expectancy (19). Although the new method produces complete life tables, that is, life tables by single years of age, life table data shown in this report are summarized in 5-year age groupings. Life expectancy by age is shown in table 6. To calculate the probability of dying at each age, the revised methodology uses vital statistics death rates for ages under 85 years and mortality data from the Medicare program for ages over 85 years. Medicare data were used to model the probability of dying at ages 85 and over because the data are shown to be significantly more reliable than vital statistics data at the oldest ages (21).

## Computing rates and percents

Except for infant mortality rates, rates are on an annual basis per 1,000 or per 100,000 estimated population residing in the specified area as of July 1, 1999, and July 1, 2000, and are based on populations furnished by the U.S. Bureau of the Census (22, 23). Infant mortality rates are per 1,000 or per 100,000 live births. Rates by State are computed on the basis of populations on July 1, 1999, and July 1, 2000, (24, 25).

Age-adjusted rates are used to compare relative mortality risks among groups and over time. However, they should be viewed as

**Table III. Ratios of preliminary to final reported numbers of infant deaths from 61 selected causes and Human immunodeficiency virus infection: United States, 1996–98**

Cause of death (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i> )	Preliminary number of deaths 1996	Final number of deaths 1996	Ratio of preliminary to final 1996	Preliminary number of deaths 1997	Final number of deaths 1997	Ratio of preliminary to final 1997	Preliminary number of deaths 1998	Final number of deaths 1998	Ratio of preliminary to final 1998
All causes . . . . .	28,245	28,478	0.9918	27,692	28,045	0.9874	28,488	28,371	1.0041
Certain intestinal infections . . . . . 008–009	223	207	1.0773	195	200	0.9750	235	229	1.0262
Whooping cough . . . . . 033	5	4	1.2500	6	6	1.0000	6	4	1.5000
Meningococcal infection . . . . . 036	39	39	1.0000	52	46	1.1304	31	23	1.3478
Septicemia . . . . . 038	193	199	0.9698	186	196	0.9490	201	216	0.9306
Viral diseases . . . . . 045–079	88	91	0.9670	98	111	0.8829	96	98	0.9796
Congenital syphilis . . . . . 090	6	6	1.0000	6	4	1.5000	2	2	1.0000
Remainder of infectious and parasitic diseases. . . . . 001,007,010–032,034–035,037,039–041, 042–044,080–088,091–139	164	162	1.0123	141	158	0.8924	172	176	0.9773
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues. . . . . 140–208	90	87	1.0345	81	91	0.8901	86	78	1.1026
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature. . . . . 210–239	55	60	0.9167	67	63	1.0635	56	60	0.9333
Diseases of thymus gland . . . . . 254	–	2		2	3		1	1	
Cystic fibrosis . . . . . 277.0	5	8	0.6250	10	10	1.0000	12	12	1.0000
Diseases of blood and blood-forming organs . . . . . 280–289	80	79	1.0127	84	81	1.0370	88	94	0.9362
Meningitis. . . . . 320–322	112	103	1.0874	109	97	1.1237	105	107	0.9813
Other diseases of nervous system and sense organs. . . . . 323–389	358	371	0.9650	337	334	1.0090	348	340	1.0235
Acute upper respiratory infections . . . . . 460–465	14	18	0.7778	14	12	1.1667	6	9	0.6667
Bronchitis and bronchiolitis. . . . . 466,490–491	88	92	0.9565	95	106	0.8962	65	71	0.9155
Pneumonia and influenza . . . . . 480–487	485	496	0.9778	397	421	0.9430	400	441	0.9070
Pneumonia. . . . . 480–486	469	481	0.9751	383	409	0.9364	391	435	0.8989
Influenza . . . . . 487	16	15	1.0667	14	12	1.1667	9	6	1.5000
Remainder of diseases of respiratory system. . . . . 470–478,492–519	259	263	0.9848	244	274	0.8905	283	297	0.9529
Hernia of abdominal cavity and intestinal obstruction without mention of hernia . . . . . 550–553,560	67	69	0.9710	76	77	0.9870	67	69	0.9710
Gastritis, duodenitis, and noninfective enteritis and colitis. . . . . 535,555–558	82	82	1.0000	77	76	1.0132	70	76	0.9211
Remainder of diseases of digestive system. . . . . 520–534,536–543,562–579	192	202	0.9505	187	187	1.0000	175	185	0.9459
Congenital anomalies. . . . . 740–759	6,463	6,381	1.0129	6,063	6,178	0.9814	6,266	6,212	1.0087
Anencephalus and similar anomalies . . . . . 740	362	352	1.0284	334	344	0.9709	285	296	0.9628
Spina bifida . . . . . 741	66	63	1.0476	37	48	0.7708	41	41	1.0000
Congenital hydrocephalus. . . . . 742.3	141	156	0.9038	130	146	0.8904	117	122	0.9590
Other congenital anomalies of central nervous system and eye. . . . . 742.0–742.2,742.4–742.9,743	294	300	0.9800	275	290	0.9483	308	301	1.0233
Congenital anomalies of heart . . . . . 745–746	1,942	1,921	1.0109	1,731	1,760	0.9835	1,820	1,769	1.0288
Other congenital anomalies of circulatory system . . . . . 747	357	350	1.0200	327	332	0.9849	309	315	0.9810
Congenital anomalies of respiratory system . . . . . 748	960	951	1.0095	995	973	1.0226	962	950	1.0126
Congenital anomalies of digestive system . . . . . 749–751	85	83	1.0241	92	94	0.9787	101	104	0.9712
Congenital anomalies of genitourinary system. . . . . 752–753	348	341	1.0205	290	302	0.9603	372	364	1.0220
Congenital anomalies of musculoskeletal system . . . . . 754–756	477	464	1.0280	412	424	0.9717	449	447	1.0045
Down's syndrome. . . . . 758.0	107	106	1.0094	98	102	0.9608	122	121	1.0083
Other chromosomal anomalies . . . . . 758.1–758.9	760	749	1.0147	810	805	1.0062	832	822	1.0122
All other and unspecified congenital anomalies . . . . . 744,757,759	564	556	1.0144	531	558	0.9516	547	560	0.9768

See footnotes at end of table.

**Table III. Ratios of preliminary to final reported numbers of infant deaths from 61 selected causes and Human immunodeficiency virus infection: United States, 1996–98—Con.**

Cause of death (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i> )	Preliminary number of deaths 1996	Final number of deaths 1996	Ratio of preliminary to final 1996	Preliminary number of deaths 1997	Final number of deaths 1997	Ratio of preliminary to final 1997	Preliminary number of deaths 1998	Final number of deaths 1998	Ratio of preliminary to final 1998
Certain conditions originating in the perinatal period . . . . . 760–779	12,623	12,955	0.9744	12565	12935	0.9714	13,133	13,294	0.9879
Newborn affected by maternal conditions which may be unrelated to present pregnancy . . . . . 760	145	161	0.9006	157	164	0.9573	150	158	0.9494
Newborn affected by maternal complications of pregnancy . . . . . 761	1,212	1,249	0.9704	1242	1244	0.9984	1,328	1,343	0.9888
Newborn affected by complications of placenta, cord, and membranes . . . . . 762	892	949	0.9399	927	960	0.9656	932	961	0.9698
Newborn affected by other complications of labor and delivery . . . . . 763	80	82	0.9756	66	76	0.8684	84	91	0.9231
Slow fetal growth and fetal malnutrition . . . . . 764	47	45	1.0444	41	39	1.0513	34	38	0.8947
Disorders relating to short gestation and unspecified low birthweight . . . . . 765	3,706	3,902	0.9498	3727	3925	0.9496	4,011	4,101	0.9781
Disorders relating to long gestation and high birthweight . . . . . 766	–	–	–	–	–	–	1	1	1.0000
Birth trauma . . . . . 767	172	166	1.0361	201	185	1.0865	191	194	0.9845
Intrauterine hypoxia and birth asphyxia . . . . . 768	429	428	1.0023	456	452	1.0088	459	461	0.9957
Fetal distress in liveborn infant . . . . . 768.2–768.4	116	111	1.0450	125	123	1.0163	122	122	1.0000
Birth asphyxia . . . . . 768.5–768.9	313	317	0.9874	330	329	1.0030	337	339	0.9941
Respiratory distress syndrome . . . . . 769	1,368	1,362	1.0044	1262	1301	0.9700	1,328	1,295	1.0255
Other respiratory conditions of newborn . . . . . 770	1,832	1,817	1.0083	1694	1734	0.9769	1,744	1,702	1.0247
Infections specific to the perinatal period . . . . . 771	747	756	0.9881	756	777	0.9730	815	815	1.0000
Neonatal hemorrhage . . . . . 772	283	301	0.9402	354	339	1.0442	341	334	1.0210
Hemolytic disease of newborn, due to isoimmunization, and other perinatal jaundice . . . . . 773–774	21	23	0.9130	19	14	1.3571	31	34	0.9118
Syndrome of “infant of a diabetic mother” and neonatal diabetes mellitus . . . . . 775.0–775.1	9	10	0.9000	10	11	0.9091	9	11	0.8182
Hemorrhagic disease of newborn . . . . . 776.0	1	2	0.5000	1	1	1.0000	4	4	1.0000
All other and ill-defined conditions originating in the perinatal period . . . . . 775.2–775.9,776.1–779	1,678	1,702	0.9859	1653	1713	0.9650	1,670	1,751	0.9537
Symptoms, signs, and ill-defined conditions . . . . . 780–799	4,022	3,883	1.0358	4046	3773	1.0724	4,038	3,658	1.1039
Sudden infant death syndrome . . . . . 798.0	2,906	3,050	0.9528	2705	2991	0.9044	2,529	2,822	0.8962
Symptoms, signs, and all other ill-defined conditions . . . . . 780–797,798.1–799	1,115	833	1.3385	1341	782	1.7148	1,508	836	1.8038
Accidents and adverse effects . . . . . E800–E949	772	804	0.9602	753	765	0.9843	726	754	0.9629
Inhalation and ingestion of food or other object causing obstruction of respiratory tract suffocation . . . . . E911–E912	75	73	1.0274	78	76	1.0263	69	64	1.0781
Accidental mechanical suffocation . . . . . E913	259	285	0.9088	275	303	0.9076	282	312	0.9038
Other accidental causes and adverse effects . . . . . E800–E910,E914–E949	439	466	0.9421	401	386	1.0389	374	378	0.9894
Homicide . . . . . E960–E969	299	332	0.9006	305	317	0.9621	299	322	0.9286
Child battering and other maltreatment . . . . . E967	102	112	0.9107	96	98	0.9796	106	114	0.9298
Other homicide . . . . . E960–E966,E968–E969	197	220	0.8955	209	219	0.9543	193	208	0.9279
All other causes . . . . . Residual	1,462	1,492	0.9799	1495	1524	0.9810	1,522	1,543	0.9864
Human immunodeficiency virus infection <sup>1</sup> . . . . . (042–044)	40	40	1.0000	19	19	1.0000	15	14	1.0714

– Quantity zero.

<sup>1</sup>Included in “Remainder of infectious and parasitic diseases” shown above.

SOURCE: Preliminary and final data from the National Vital Statistics System, National Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville, Maryland 20782.

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 to the U.S. standard population (relative age distribution of year 2000 projected population of the United States) using the following age groups:

Age	Number	Weights ( <i>w</i> )
All ages	1,000,000	1.000000
Under 1 year	13,818	0.013818
1–4 years	55,317	0.055317
5–14 years	145,565	0.145565
15–24 years	138,646	0.138646
25–34 years	135,573	0.135573
35–44 years	162,613	0.162613
45–54 years	134,834	0.134834
55–64 years	87,247	0.087247
65–74 years	66,037	0.066037
75–84 years	44,842	0.044842
85 years and over	15,508	0.015508

Age-adjusted death rates for Puerto Rico, the Virgin Islands, Guam, American Samoa, and Northern Marianas were computed using the following age groups:

Age	Number	Weights ( <i>w</i> )
All ages	1,000,000	1.000000
Under 1 year	13,818	0.013818
1–4 years	55,317	0.055317
5–14 years	145,565	0.145565
15–24 years	138,646	0.138646
25–34 years	135,573	0.135573
35–44 years	162,613	0.162613
45–54 years	134,834	0.134834
55–64 years	87,247	0.087247
65–74 years	66,037	0.066037
75 years and over	60,350	0.060350

Effective with 1999 data, the standard population was changed from 1940 to the year 2000 population in accordance with new statistical policy promulgated by the Secretary of Health and Human Services in August 1998 (26). The new population standard affects levels of mortality and to some extent trends and group comparisons. Of particular note are the effects on race comparison of mortality. For detailed discussion see *Age Standardization of Death Rates: Implementation of the Year 2000 Standard* (26).

Death rates for the Hispanic population are based only on events to persons reported as Hispanic. Rates for white non-Hispanic persons are based on the sum of all events to white decedents reported as non-Hispanic and white decedents with origin not stated. Hispanic origin is not imputed if it is not reported. For calculating death rates, deaths with age not stated are not distributed. The number of deaths with age not stated was 437 or less than 0.02 percent of all deaths.

An asterisk (\*) indicates that the figure does not meet standards of reliability or precision. In this report three sets of criteria determine whether a figure meets these standards:

- The number of records provided by each State yields a proportion of the total of records that is large enough to provide reliable estimates. For example, a criterion of at least 75 percent of a State's records (demographic file) for the 12-month period is used as a basis for providing State-specific estimates (see table I).
- Reporting for any particular variable is at least 80 percent complete. In this report no data were suppressed based on this criterion.

- A rate or percent is based on at least 20 deaths. Rates based on fewer than 20 deaths have a relative standard error (RSE) of about 23 percent or more and, therefore, are considered highly variable. For age-adjusted death rates, this criterion is applied to the sum of the age-specific deaths. However, some death rates (based on data files that are less than 100 percent complete and based on 20–31 births or deaths) may have RSEs of 23 percent or more but are still shown instead of asterisks. As a result, caution should be exercised in analyzing rates based on 20–31 events. Additional information on random variation in numbers of events, rates, ratios, and percents may be found in the following section on “Reliability of estimates.”

In table 3 figures for Ohio are not shown because that State did not meet the minimum requirements for separate publication of State data; see table I.

### Reliability of estimates

Because the preliminary estimates of deaths in this report are based on files that may not be complete, they are subject to sampling variability. This notion is reflected in the fact that record weights are used to adjust record counts to independent control totals. The lack of completeness of the vital statistics files is due to delays in receiving and processing the death records. Although the proportion of records making up the preliminary file does not constitute a veritable random sample, for the sake of convenience we treat the variability associated with this error (sampling variability) as if it were from a random sample.

In addition, mortality files are subject to biases. Records that were delayed and were not included in this report are assumed to have the same characteristics as the records that were included in this report. However, this assumption may be violated in the relatively small number of records where cause of death is pending investigation at the time the preliminary statistical file is closed for processing (for example, homicides, suicides, unintentional injuries, and SIDS—see discussion in section on “Bias estimation”) or where the causes of death were rejected by the automated coding systems for manual processing. Seasonal bias may occur because file completeness is greater during the earlier part than during the later part of the 12-month period when the data are processed and tabulated.

Even where the number of vital events in this report is 100 percent complete and not subject to sampling variability, it might be affected by random variation. Thus, when the number of events is small and the probability of such an event is small, considerable caution must be observed in interpreting the data. Such infrequent events may be assumed to follow a Poisson probability distribution. The first column of table IV shows the estimated RSEs of a file that is nearly 100 percent complete.

Data in a file that is less than 100 percent complete are affected by sampling variation as well as by random variation. The estimated RSEs in columns 2–6 of table IV for various levels of file completeness are measures of the sampling errors and the random errors of the estimates. They do not include error due to bias.

The estimated RSEs in table IV were computed using this formula:

$$1. RSE = 100 \sqrt{\frac{1}{\bar{X}} + \frac{(1-f)(N-\bar{X})}{fX(N-1/f)}}$$

**Table IV. Relative standard errors for preliminary number of deaths by percent of file completeness**

[Relative standard errors are expressed as a percent of the estimate]

Estimated number of deaths	Percent of file completeness					
	100	95	90	80	70	60
	Relative standard error (percent)					
1..	100.0	102.6	105.4	111.8	119.5	129.1
5..	44.7	45.9	47.1	50.0	53.5	57.7
10..	31.6	32.4	33.3	35.4	37.8	40.8
20..	22.4	22.9	23.6	25.0	26.7	28.9
30..	18.3	18.7	19.2	20.4	21.8	23.6
40..	15.8	16.2	16.7	17.7	18.9	20.4
50..	14.1	14.5	14.9	15.8	16.9	18.3
60..	12.9	13.2	13.6	14.4	15.4	16.7
70..	12.0	12.3	12.6	13.4	14.3	15.4
80..	11.2	11.5	11.8	12.5	13.4	14.4
90..	10.5	10.8	11.1	11.8	12.6	13.6
100..	10.0	10.3	10.5	11.2	12.0	12.9
200..	7.1	7.3	7.5	7.9	8.5	9.1
300..	5.8	5.9	6.1	6.5	6.9	7.5
400..	5.0	5.1	5.3	5.6	6.0	6.5
500..	4.5	4.6	4.7	5.0	5.3	5.8
600..	4.1	4.2	4.3	4.6	4.9	5.3
700..	3.8	3.9	4.0	4.2	4.5	4.9
800..	3.5	3.6	3.7	4.0	4.2	4.6
900..	3.3	3.4	3.5	3.7	4.0	4.3
1,000..	3.2	3.2	3.3	3.5	3.8	4.1
2,000..	2.2	2.3	2.4	2.5	2.7	2.9
5,000..	1.4	1.5	1.5	1.6	1.7	1.8
10,000..	1.0	1.0	1.1	1.1	1.2	1.3
20,000..	0.7	0.7	0.7	0.8	0.8	0.9
50,000..	0.4	0.5	0.5	0.5	0.5	0.6
100,000..	0.3	0.3	0.3	0.4	0.4	0.4
200,000..	0.2	0.2	0.2	0.2	0.3	0.3
500,000..	0.1	0.1	0.1	0.2	0.2	0.2
1,000,000..	0.1	0.1	0.1	0.1	0.1	0.1
2,000,000..	0.1	0.1	0.1	0.1	0.1	0.1
4,000,000..	0.1	0.1	0.1	0.1	0.1	0.1

where

*f* = the sampling fraction or the percent of file completeness/100 from table I. For mortality data based on deaths under 1 year of age, use the *f* for "infant deaths" for either the demographic or medical file as appropriate. For mortality data based on all ages combined or any age group that is 1 year and over, use the *f* for "deaths 1 year of age and over" for either the demographic or medical files as appropriate.

*X* = the estimated number of infant deaths or deaths.

*N* = the total count of infant deaths or deaths for the United States or any State. (Note: The RSEs shown in table IV are based on *N* = 4,000,000. If *N* is smaller, the RSEs may be slightly smaller than those shown.)

RSEs may be used to compute 95-percent confidence intervals for the number of events (*X*), for a rate (*R*), or for a percent (*P*) and to compute statistical tests concerning the equality of two rates (*R*<sub>1</sub> and *R*<sub>2</sub>) or two percents (*P*<sub>1</sub> and *P*<sub>2</sub>).

For the number of deaths, the 95-percent confidence interval may be computed as follows:

$$2. \text{ Lower limit: } X_1 - \left( 1.96 \cdot X_1 \cdot \frac{RSE(X_1)}{100} \right)$$

$$3. \text{ Upper limit: } X_1 + \left( 1.96 \cdot X_1 \cdot \frac{RSE(X_1)}{100} \right)$$

As a hypothetical example, assume the number of deaths, *X*<sub>1</sub>, is 70 from a file with 80 percent completeness. Then

$$\text{Lower limit: } 70 - \left( 1.96 \cdot 70 \cdot \frac{13.4}{100} \right) = 51.6$$

$$\text{Upper limit: } 70 + \left( 1.96 \cdot 70 \cdot \frac{13.4}{100} \right) = 88.4$$

This means that the chances are 95 times out of 100 that the confidence interval (51.6–88.4) will cover the "true" number of deaths.

For rates based on population estimates in the denominator, the 95-percent confidence interval may be computed as follows:

$$4. \text{ Lower limit: } R_1 - \left( 1.96 \cdot R_1 \cdot \frac{RSE(R_1)}{100} \right)$$

$$5. \text{ Upper limit: } R_1 + \left( 1.96 \cdot R_1 \cdot \frac{RSE(R_1)}{100} \right)$$

As a hypothetical example, assume the death rate, *R*<sub>1</sub>, is 20.0, which is based on 70 deaths from a file with 80 percent completeness. Then



$$\text{Lower limit: } 20.0 - \left( 1.96 \cdot 20.0 \cdot \frac{13.4}{100} \right) = 14.7$$

$$\text{Upper limit: } 20.0 + \left( 1.96 \cdot 20.0 \cdot \frac{13.4}{100} \right) = 25.3$$

This means that the chances are 95 times out of 100 that the confidence interval (14.7–25.3) will cover the “true” rate.

For age-adjusted death rates,  $R'$ , the 95-percent confidence interval may be computed as follows:

$$6. \text{ Lower limit: } R' - \left( 1.96 \cdot R' \cdot \frac{RSE(R')}{100} \right)$$

$$7. \text{ Upper limit: } R' + \left( 1.96 \cdot R' \cdot \frac{RSE(R')}{100} \right)$$

where

$$8. RSE(R') = 100 \cdot \frac{\sqrt{\sum_i \left\{ w_i^2 R_i^2 \left[ \frac{1}{X_i} + \frac{(1-f_i)(N_i - X_i)}{f_i X_i (N_i - \bar{f}_i)} \right] \right\}}}{R'}$$

where

$i$  = each age group where  $i = 1$  for infant deaths,  $i = 2$  for 1–4 years,  $i = 3$  for 5–14 years, . . . and  $i = 11$  for 85 years and over.

$R_i$  = age-specific rate for the  $i$ th age group.

$w_i$  =  $i$ th age-specific U.S. standard population such that  $\sum w_i = 1.000000$  (see “Computing rates and percents”).

$X_i$  = the estimated number of deaths for the  $i$ th age group.

$N_i$  = the total count of deaths from table I for each  $i$ th age group (for infant deaths, use the count of records as shown; for all age groups 1–4 through 85 years and over, use the count of records as shown for deaths 1 year and over).

$f_i$  = percent of file completeness/100 from table I (for infant deaths, use the percent completeness for the demographic or medical file as appropriate for deaths under age 1 year; for all age groups 1–4 through 85 years and over, use the percent completeness for the demographic or medical file as appropriate for deaths 1 year and over).

For testing the equality of two rates,  $R_1$  and  $R_2$ , the following z-test may be used to define a significance test statistic:

$$9. z = \frac{R_1 - R_2}{\sqrt{R_1^2 \left( \frac{RSE(R_1)}{100} \right)^2 + R_2^2 \left( \frac{RSE(R_2)}{100} \right)^2}}$$

The two-tailed 0.95 critical value for a z statistic is 1.96. Therefore, if  $|z| \geq 1.96$ , the difference is significant at the 0.05 level. If  $|z| < 1.96$ , then the difference would be considered not statistically significant at the 0.05 level.

As a hypothetical example, assume  $R_1$  is the same as the above example for the current 12-month period and that  $R_2$ , 15.0, is based

on 50 deaths occurring in the prior 12-month period (which implies that the file is approximately 100 percent complete for  $R_2$ ). The z-test may be determined as follows:

$$z = \frac{20.0 - 15.0}{\sqrt{(20.0)^2 \left( \frac{13.4}{100} \right)^2 + (15.0)^2 \left( \frac{14.1}{100} \right)^2}} = 1.46$$

Because  $|z| < 1.96$ , there is not a statistically significant difference between the two rates at the 0.05 level of significance.

For rates or percents based on denominators having random variation only or random and sampling variation, the RSE must take into account the variation in both the numerator and denominator. For example, for a rate,  $R_3$ , based on the number of live births in the denominator, the RSE is computed as follows:

$$10. RSE(R_3) = 100 \sqrt{\left( \frac{RSE(D)}{100} \right)^2 + \left( \frac{RSE(B)}{100} \right)^2}$$

where

$RSE(D)$  = the RSE of the number of deaths,  $D$

$RSE(B)$  = the RSE of the number of births,  $B$

The 95-percent confidence interval of  $R_3$  may be computed as follows:

$$11. \text{ Lower limit: } R_3 - \left( 1.96 \cdot R_3 \cdot \frac{RSE(R_3)}{100} \right)$$

$$12. \text{ Upper limit: } R_3 + \left( 1.96 \cdot R_3 \cdot \frac{RSE(R_3)}{100} \right)$$

As a hypothetical example, assume the infant mortality rate,  $R_3$ , is 15.0, which is based on 30 infant deaths ( $D$ ) from a file with 70 percent completeness and 2,000 live births ( $B$ ) from a file with 80 percent completeness. Then

$$RSE(R_3) = 100 \sqrt{\left( \frac{21.8}{100} \right)^2 + \left( \frac{2.5}{100} \right)^2} = 21.9$$

$$\text{Lower limit: } 15.0 - \left( 1.96 \cdot 15.0 \cdot \frac{21.9}{100} \right) = 8.6$$

$$\text{Upper limit: } 15.0 + \left( 1.96 \cdot 15.0 \cdot \frac{21.9}{100} \right) = 21.4$$

This means that the chances are 95 times out of 100 that the confidence interval (8.6–21.4) will cover the “true” rate. The same formulas are applicable to a percent ( $P_1$ ) that has variation in both the numerator and denominator. To compare the equality of two infant mortality rates or two percents that have variation in both the numerator and denominator, the above-mentioned z-test may be used.



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**National Center for Health Statistics**

Director, Edward J. Sondik, Ph.D.  
Deputy Director, Jack R. Anderson

**Division of Vital Statistics**

Director, Mary Anne Freedman

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**DEPARTMENT OF  
HEALTH & HUMAN SERVICES**

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National Center for Health Statistics  
6525 Belcrest Road  
Hyattsville, Maryland 20782-2003

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