

Records 10/1/81

# nchs MONTHLY VITAL STATISTICS REPORT

Provisional Data from the National Center for Health Statistics

Vol. 29, No. 13 • September 17, 1981

1970-81

## Annual Summary of Births, Deaths, Marriages, and Divorces: United States, 1980

A summary of monthly provisional reports shows that there were more births, marriages, divorces, and deaths in the United States in 1980 than in 1979. The rates per 1,000 population for births, marriages, and deaths were also higher in 1980 than in 1979. The divorce rate, however, remained at the same level as the previous year. Although the number of infant deaths was the same in both years, the infant

mortality rate per 1,000 live births was lower in 1980 than in 1979. The population bases used to compute rates for 1979 and 1980 were the same as those used for the monthly series published in Vol. 29, nos. 1-12 and, therefore, are not consistent with estimates based on the 1980 census enumeration (see Technical notes).

Vital Statistics of the United States

Item	Rate per 1,000 population								
	1980 <sup>1</sup>	1979 <sup>1</sup>	1978	1977	1976	1975	1974	1973	1972
Births .....	16.2	15.8	15.3	15.4	14.8	14.8	14.9	14.9	15.6
Deaths .....	8.9	8.7	8.8	8.8	8.9	8.9	9.2	9.4	9.4
Natural increase .....	7.3	7.1	6.5	6.6	5.9	5.9	5.7	5.5	6.2
Marriages .....	10.9	10.7	<sup>2</sup> 10.5	10.1	10.0	10.1	10.5	10.9	11.0
Divorces (est.) .....	5.3	5.3	5.2	5.0	5.0	4.9	4.6	4.4	4.1

<sup>1</sup>Provisional.

<sup>2</sup>Beginning with 1978, data include nonlicensed marriages registered in California; see Technical notes.

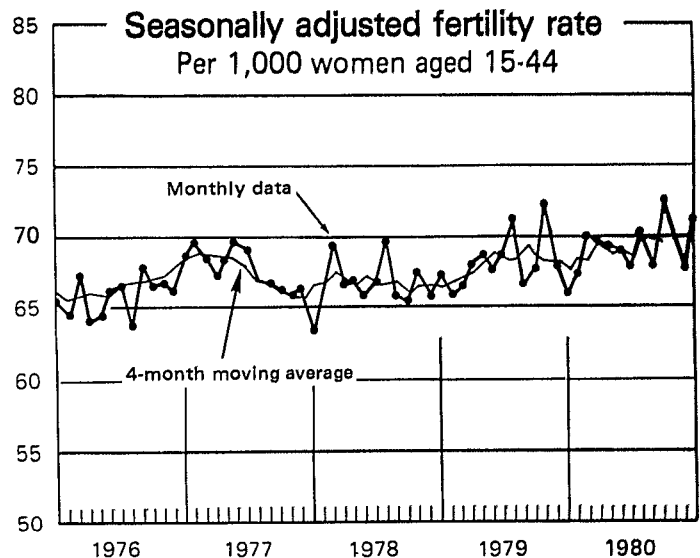
## Births

In 1980 the estimated number of births in the United States was 3,598,000, an increase of nearly 4 percent over the provisional total for 1979. The birth rate was 16.2 live births per 1,000 total population, 3 percent above the provisional rate for 1979. The fertility rate, 69.2 live births per 1,000 women aged 15-44 years, was 2 percent higher than the rate in 1979 (table A). The seasonally adjusted monthly fertility rates in 1980 increased each month except January, August, and November, when the rates decreased (table B).

This marks the fifth consecutive year in which births have increased; the estimated number of births is the largest recorded since 1970. The birth rate is at its highest level since 1971 when it was 17.2, and the fertility rate is at its highest level since 1973 when it was also 69.2.

The increases observed in 1980 in the number of births and the birth rate are the result of the continued growth in the number of women of childbearing age, as well as the increase in the rate of childbearing. The number of women in the childbearing ages (assumed to be 15-44 years) increased 2 percent between 1979 and 1980, with the largest increases observed for women aged 30-34 and 35-39 years and relatively small increases for women under 30 years. The increases in the number of births and in the birth rate would have been greater if there had been larger increases in the number of women under 30 years of age, where childbearing rates are the highest.

According to projections prepared by the U.S. Bureau of the Census, the number of women in the childbearing ages will continue to increase at a rate slightly more than 1 percent annually between 1980 and 1985. Therefore, unless there are offsetting declines in the age-specific birth rates, the annual num-



ber of births will continue to rise. The number of women aged 15-44 years is projected to stabilize in 1986, with an anticipated average annual increase of less than half of 1 percent between 1986 and 1990.

Provisional data by place of occurrence show that the number of births increased in eight geographic divisions, with a slight decrease in only one—New England. The birth rate increased in seven geographic divisions and declined slightly in the New England and West South Central Divisions. The number of births increased in 44 States and declined in Connecticut, Idaho, Louisiana, New Jersey, South Carolina, West Virginia, and the District of Columbia. The birth rate increased in 38 States, was unchanged in 3 States (Indiana, Massachusetts, and Tennessee), and declined in 9 States (Connecticut, Idaho, Louisiana, New Jersey, New Mexico, North Carolina, South Carolina, Texas, and West Virginia) and the District of Columbia.

Table A. Live births, birth rates, and fertility rates, by month: United States, 1979 and 1980

[Rates on an annual basis. Birth rates per 1,000 population and fertility rates per 1,000 women aged 15-44 years]

Month	Number		Birth rate		Fertility rate	
	1980	1979	1980	1979	1980	1979
Total	3,598,000	3,473,000	16.2	15.8	69.2	68.0
January	278,000	278,000	14.8	15.0	63.6	64.8
February	272,000	253,000	15.5	15.1	66.5	65.2
March	302,000	281,000	16.1	15.1	68.9	65.2
April	284,000	272,000	15.6	15.1	66.9	65.1
May	295,000	285,000	15.7	15.3	67.2	65.8
June	293,000	281,000	16.1	15.6	68.8	67.1
July	313,000	308,000	16.6	16.5	71.1	71.1
August	330,000	325,000	17.5	17.4	74.8	74.8
September	311,000	299,000	17.0	16.5	72.7	71.1
October	325,000	299,000	17.2	16.0	73.6	68.6
November	286,000	301,000	15.7	16.6	66.8	71.4
December	308,000	290,000	16.3	15.5	69.6	66.4

**Table B. Seasonally adjusted birth and fertility rates, by month: United States, 1979 and 1980**

[Rates on an annual basis. Birth rates per 1,000 population and fertility rates per 1,000 women aged 15-44 years]

Month	Birth rate		Fertility rate	
	1980	1979	1980	1979
January	15.3	15.5	65.8	67.0
February	15.8	15.2	67.6	65.9
March	16.3	15.3	70.0	66.3
April	16.3	15.7	69.9	68.0
May	16.3	15.9	69.8	68.4
June	16.2	15.6	69.4	67.5
July	16.1	15.9	68.7	68.5
August	16.5	16.5	70.6	71.1
September	15.9	15.5	67.9	66.5
October	17.0	15.7	72.7	67.6
November	15.8	16.8	67.4	72.3
December	16.6	15.8	70.9	67.7

### Natural increase

As a result of natural increase, the excess of births over deaths, 1,612,000 persons were added to the population during 1980. The rate of natural increase was 7.3 persons per 1,000 population compared with 7.1 for 1979. This increase was due to the increase in the birth rate.

### Deaths

During 1980 an estimated 1,986,000 deaths occurred in the United States. The crude death rate for 1980 (892.6 deaths per 100,000 population) was 3 percent higher than the provisional rate for 1979 (866.2 per 100,000).

Except for November, monthly death rates in 1980 were the same or higher than the corresponding

**Table C. Deaths and death rates, by month: United States, 1979 and 1980**

[Rates on an annual basis per 1,000 population]

Month	Number		Rate	
	1980	1979	1980	1979
Total	1,986,000	1,906,000	8.9	8.7
January	173,000	169,000	9.2	9.1
February	177,000	160,000	10.1	9.5
March	181,000	164,000	9.6	8.8
April	165,000	160,000	9.1	8.9
May	161,000	157,000	8.6	8.4
June	153,000	152,000	8.4	8.4
July	163,000	158,000	8.6	8.5
August	160,000	154,000	8.5	8.3
September	150,000	147,000	8.2	8.1
October	163,000	160,000	8.6	8.5
November	160,000	160,000	8.7	8.8
December	179,000	165,000	9.5	8.8

rates for 1979. Rates for February, March, and December were substantially higher in 1980 than in 1979 (table C). This is attributable to the outbreak of influenza during the early and late parts of 1980 in contrast to the absence of an influenza outbreak for the corresponding periods in 1979.<sup>1,2,3</sup>

The age-adjusted death rate increased by 1 percent between 1979 and 1980. The provisional rate for 1980 was 594.1 deaths per 100,000 population compared with a provisional rate of 587.4 for 1979. Age-adjusted rates control for changes and variations in the age compositions of the population. Therefore, they are usually better indicators than crude death rates in showing changes in the mortality risk over time, between race-sex groups within the population, and among causes of death.

### Expectation of life

The estimated expectation of life at birth in 1980 was 73.6 years for the total population compared with 73.8 years in 1979. The decrease of 0.2 years between 1979 and 1980 was the first decrease in annual life expectancy in the United States since the decrease of 0.3 years between 1967 and 1968. Both declines reflect higher death rates associated with the influenza epidemics in 1968 and 1980. For the race-sex groups, estimated life expectancies at birth in 1980 were as follows: white females, 78.1 years; all other females, 74.0 years; white males, 70.5 years; and all other males 65.3 years. The expectation of life at birth represents the average number of years that a group of infants would be expected to live if throughout life they were to experience the age-specific death rates prevailing during the year of their birth.

Based on the respective annual age-specific death rates, the expectation of life at birth for the total population for 1967-80 was as follows:

1980 (est.)	73.6	1973	71.3
1979 (est.)	73.8	1972	71.1
1978	73.3	1971	71.1
1977	73.2	1970	70.8
1976	72.8	1969	70.5
1975	72.5	1968	70.2
1974	71.9	1967	70.5

### Death rates by age, race, and sex

*Age differentials.*—Between 1979 and 1980, provisional death rates increased for every age group except under 1 year, 5-14 years, and 35-44 years. The largest increase, about 5 percent, was for the age groups 1-4 years and 85 years and over. The largest decrease, 9 percent, was for the age group 5-14 years (table D).

*Race differentials.*—The age-adjusted death rate for the population of all other races increased in 1980

**Table D. Death rates by age: United States, 1979 and 1980**

[Based on a 10-percent sample of deaths. Rates per 100,000 population in specified group]

Age	1980 (est.)	1979 (est.)	Percent difference
All ages <sup>1</sup>	892.6	866.2	3.0
Under 1 year	1,310.7	1,372.5	-4.5
1-4 years	65.7	62.7	4.8
5-14 years	31.5	34.8	-9.5
15-24 years	118.8	118.2	0.5
25-34 years	140.7	139.1	1.2
35-44 years	225.9	227.9	-0.9
45-54 years	590.7	588.5	0.4
55-64 years	1,381.1	1,371.1	0.7
65-74 years	2,968.5	2,921.9	1.6
75-84 years	7,178.4	7,014.0	2.3
85 years and over	14,489.6	13,831.0	4.8

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

more than the rate for the white population, a little over 2 percent compared with a little less than 1 percent. The rate for the population of all other races (790.5 per 100,000 population) was nearly 40 percent higher than the rate for the white population (567.9). Death rates for each 10-year age group under 85 years were higher for the population of all other races than those for the white population.

**Sex differentials.**—Between 1979 and 1980, the age-adjusted death rate for females increased more than the rate for males, nearly 2 percent compared with almost 1 percent. The rate for 1980 for the male population (787.6 per 100,000) was 80 percent higher than the rate for the female population (437.5). For 1980, death rates were higher for males than for females in each age group.

**Major causes of death**

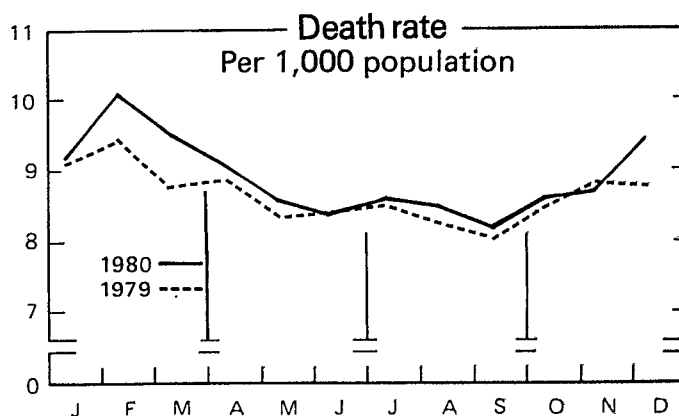
Deaths assigned to the 15 leading causes in 1980 accounted for nearly 90 percent of the total number of estimated deaths (table E). The list of the leading causes for 1980 remained unchanged from the list based on data for 1979. Age-adjusted death rates are shown for 13 of the 15 leading causes. Since deaths from the other two causes (Congenital anomalies and Certain conditions originating in the perinatal period) occur almost entirely at ages under 1 year, age-adjusted rates for these causes are not shown.

The age-adjusted rates were higher for 11 of the 13 leading causes for 1980 than they were for 1979 (table F). These causes were Diseases of heart; Malignant neoplasms including neoplasms of lymphatic and hematopoietic tissues; Chronic obstructive pulmonary diseases and allied conditions; Pneumonia and influenza; Diabetes mellitus; Chronic liver disease and cirrhosis; Atherosclerosis; Suicide; Homicide and legal

**Table E. Death rates for 15 leading causes of death: United States, 1980**

[Based on a 10-percent sample of deaths. Rates per 100,000 population. See table 8 for category numbers of causes of death]

Rank	Cause of death (Ninth Revision International Classification of Diseases, 1975)	Death rate	Percent of total deaths
...	All causes	892.6	100.0
1	Diseases of heart	343.0	38.4
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues	186.3	20.9
3	Cerebrovascular diseases	76.6	8.6
4	Accidents and adverse effects	47.9	5.4
...	Motor vehicle accidents	24.4	2.7
...	All other accidents and adverse effects	23.5	2.6
5	Chronic obstructive pulmonary diseases and allied conditions	25.1	2.8
6	Pneumonia and influenza	23.7	2.7
7	Diabetes mellitus	15.4	1.7
8	Chronic liver disease and cirrhosis	14.1	1.6
9	Atherosclerosis	13.4	1.5
10	Suicide	12.7	1.4
11	Homicide and legal intervention	11.3	1.3
12	Certain conditions originating in the perinatal period	10.1	1.1
13	Nephritis, nephrotic syndrome, and nephrosis	7.8	0.9
14	Congenital anomalies	6.2	0.7
15	Septicemia	4.1	0.5
...	All other causes	94.9	10.6



intervention; Nephritis, nephrotic syndrome, and nephrosis; and Septicemia. The age-adjusted rates were lower in 1980 than they were in 1979 for Cerebrovascular diseases and for Accidents and adverse effects.

**Diseases of heart.**—An estimated 763,060 deaths from Diseases of heart (the leading cause of death in the United States) occurred in 1980, accounting for 38 percent of all deaths. The age-adjusted death rate for 1980 (205.3 deaths per 100,000 population) was 1 percent higher than the rate for 1979 (203.0). For Diseases of heart, death rates for all age groups 65

Table F. Age-adjusted death rates for 15 leading causes of death, 1979 and 1980: United States

[Based on a 10-percent sample of deaths. Rates per 100,000 population. For method of computation, see Technical notes]

Rank <sup>1</sup>	Cause of death (Ninth Revision International Classification of Diseases, 1975)	1980 (est.)	1979 (est.)
...	All causes .....	594.1	587.4
1	Diseases of heart .....	205.3	203.0
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues .....	134.2	133.4
3	Cerebrovascular diseases .....	41.5	42.5
4	Accidents and adverse effects .....	43.4	43.6
...	Motor vehicle accidents .....	23.7	23.9
...	All other accidents and adverse effects .....	19.6	19.7
5	Chronic obstructive pulmonary diseases and allied conditions .....	16.2	14.8
6	Pneumonia and influenza .....	12.6	11.1
7	Diabetes mellitus .....	10.1	9.9
8	Chronic liver disease and cirrhosis .....	12.6	12.3
9	Atherosclerosis .....	5.8	5.6
10	Suicide .....	12.2	12.0
11	Homicide and legal intervention .....	11.4	10.6
12	Certain conditions originating in the perinatal period .....	(2)	(2)
13	Nephritis, nephrotic syndrome, and nephrosis .....	4.7	4.5
14	Congenital anomalies .....	(2)	(2)
15	Septicemia .....	2.6	2.5

<sup>1</sup>Based on numbers of deaths for 1980; see Technical notes.  
<sup>2</sup>Since deaths from these causes occur primarily among infants, rates adjusted to the total population of the United States in 1940 are not shown. See table H.

years and over increased between 1979 and 1980, while death rates for the age groups 35-64 years decreased.

**Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues.**—In 1980 there were an estimated 414,320 deaths (21 percent of all deaths) from Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues, the second leading cause of death. The age-adjusted rate (134.2 deaths per 100,000 population) was slightly higher than the rate for 1979 (133.4). Death rates for Malignant neoplasms increased between 1979 and 1980 for the age groups 55-84 years and decreased for the age groups 25-54 years and 85 years and over.

**Cerebrovascular diseases.**—An estimated 170,420 persons died from Cerebrovascular diseases in 1980. This third leading cause of death accounted for about 9 percent of all deaths. The age-adjusted death rate decreased 2 percent between 1979 and 1980, from 42.5 per 100,000 to 41.5, the lowest rate ever recorded for this cause in the United States. A decrease occurred in all age groups 35 years and over.

**Accidents and adverse effects.**—An estimated 106,550 deaths were attributed to Accidents and adverse effects in 1980, including 54,200 deaths from

Motor vehicle accidents and 52,350 from All other accidents and adverse effects. The age-adjusted rate for Accidents and adverse effects and for its two component causes—Motor vehicle accidents and All other accidents and adverse effects—each decreased less than 1 percent between 1979 and 1980.

**Chronic obstructive pulmonary diseases and allied conditions.**—In 1980 there were an estimated 55,810 deaths from Chronic obstructive pulmonary diseases and allied conditions. The age-adjusted death rate for this cause increased 9 percent between 1979 and 1980, from 14.8 to 16.2 deaths per 100,000 population. Death rates for the age groups 45 years and over increased for this cause.

**Pneumonia and influenza.**—An estimated 52,720 deaths in 1980 were attributed to Pneumonia and influenza. The age-adjusted death rate for this cause increased about 14 percent, from 11.1 per 100,000 population in 1979 to 12.6 in 1980, reflecting the presence of influenza epidemics in 1980 and the absence of one in the previous year. For Pneumonia and influenza, death rates increased for the age groups 35 years and over.

**Diabetes mellitus.**—In 1980 an estimated 34,230 persons died from Diabetes mellitus. The age-adjusted death rate increased 2 percent between 1979 and 1980, from 9.9 to 10.1 deaths per 100,000 population.

**Chronic liver disease and cirrhosis.**—Chronic liver disease and cirrhosis accounted for 31,330 deaths in 1980. The age-adjusted rate for this cause increased 2 percent, from 12.3 deaths per 100,000 population in 1979 to 12.6 in 1980.

**Atherosclerosis.**—An estimated 29,830 persons died from Atherosclerosis in 1980. The age-adjusted death rate (5.8 deaths per 100,000 population) was close to 4 percent higher than the rate for 1979 (5.6).

**Suicide.**—An estimated 28,290 persons in the United States committed suicide in 1980. The age-adjusted death rate was nearly 2 percent higher for 1980 (12.2 deaths per 100,000 population) than for 1979 (12.0).

**Homicide and legal intervention.**—There were an estimated 25,090 deaths from Homicide and legal intervention in 1980. The age-adjusted death rate of 11.4 deaths per 100,000 population for 1980 was the highest ever recorded in the United States and 8 percent higher than the rate of 10.6 for 1979. Death rates for Homicide and legal intervention increased for most age groups between 1979 and 1980, with the age groups under 1 year and 45-54 years showing the largest increases.

**Certain conditions originating in the perinatal period.**—An estimated 22,570 deaths were attributed to Certain conditions originating in the perinatal period. Since nearly all of the deaths from this cause occurred among infants under 1 year of age, mortal-

ity change for this cause was measured by the infant mortality rate per 100,000 live births. On this basis, the rate for 1980 (623.4 infant deaths per 100,000 live births) was close to 5 percent below the rate for 1979 (653.6).

*Nephritis, nephrotic syndrome, and nephrosis.*—In 1980 there were an estimated 17,390 deaths from Nephritis, nephrotic syndrome, and nephrosis. The age-adjusted death rate of 4.7 deaths per 100,000 population for 1980 was about 4 percent higher than the provisional rate of 4.5 for 1979. Between 1979 and 1980, death rates for this cause increased for the age groups 35 years and over.

Table G. Infant mortality rates by age: United States, 1950, 1960, 1965, and 1970-80

[For 1979 and 1980, based on a 10-percent sample of deaths; for all other years, based on final data. Rates per 1,000 live births]

Year	Under 1 year	Under 28 days	28 days to 11 months
1980 (est.)	12.5	8.4	4.1
1979 (est.)	13.0	8.7	4.2
1978	13.8	9.5	4.3
1977	14.1	9.9	4.2
1976	15.2	10.9	4.3
1975	16.1	11.6	4.5
1974	16.7	12.3	4.4
1973	17.7	13.0	4.8
1972 <sup>1</sup>	18.5	13.6	4.8
1971	19.1	14.2	4.9
1970	20.0	15.1	4.9
1965	24.7	17.7	7.0
1960	26.0	18.7	7.3
1950	29.2	20.5	8.7

<sup>1</sup>Based on a 50-percent sample of deaths.

*Congenital anomalies.*—In 1980 an estimated 13,730 deaths were assigned to Congenital anomalies. Since two-thirds of these deaths (9,150) were to infants under 1 year of age, the number of infant deaths per 100,000 live births was used to measure the change in the risk of dying from this cause. This infant mortality rate for Congenital anomalies decreased from 257.7 infant deaths per 100,000 live births in 1979 to 254.3 in 1980, a reduction of 1 percent.

*Septicemia.*—There were an estimated 9,230 deaths from Septicemia in 1980. The age-adjusted death rate for 1980 (2.6 deaths per 100,000 population) was 4 percent higher than the rate for 1979 (2.5). Between 1979 and 1980, death rates for this cause increased for most age groups.

### Maternal and infant mortality

In 1980 the deaths of an estimated 250 women were assigned to Complications of pregnancy, childbirth, and the puerperium compared with an estimated 270 deaths in the previous year. The maternal mortality rate was 6.9 deaths per 100,000 live births in 1980. Maternal mortality rates for 1950 and each of the last 21 years are as follows:

1980 (est.)	.69	1969	22.2
1979 (est.)	.78	1968	24.5
1978	.96	1967	28.0
1977	11.2	1966	29.1
1976	12.3	1965	31.6
1975	12.8	1964	33.3
1974	14.6	1963	35.8
1973	15.2	1962	35.2
1972	18.8	1961	36.9
1971	18.8	1960	37.1
1970	21.5	1950	83.3

Table H. Infant mortality rates for 10 selected causes of death, 1970 and 1976-80; and comparability ratios, 1976: United States

[For 1979 and 1980, based on a 10-percent sample of deaths; for all other years, based on final data. Rates per 100,000 live births]

Cause of death (Ninth Revision International Classification of Diseases, 1975)	Year						Comparability ratio
	1980 (est.)	1979 (est.)	1978	1977	1976	1970	
All causes	1,251.4	1,296.7	1,378.4	1,412.1	1,523.6	2,001.1	1.0000
Certain gastrointestinal diseases	8.1	10.7	23.0	20.8	24.2	24.1	0.4678
Pneumonia and influenza	28.1	33.1	46.0	50.6	61.9	168.9	0.7471
Congenital anomalies	254.3	257.7	252.1	253.1	263.4	301.7	1.0071
Disorders relating to short gestation and unspecified low birthweight	107.8	100.5	110.3	111.6	125.5	234.6	0.9630
Birth trauma	25.3	31.7	57.4	53.9	57.2	64.2	0.7154
Intrauterine hypoxia and birth asphyxia	42.2	48.4	88.7	98.3	113.6	252.9	0.3270
Respiratory distress syndrome	139.8	155.8	99.7	107.8	119.7	119.5	( <sup>1</sup> )
Other conditions originating in the perinatal period	308.2	317.3	2403.3	2438.3	2485.4	2605.5	0.8492
Sudden infant death syndrome	146.8	142.8	148.9	142.8	137.5	---	( <sup>1</sup> )
All other causes	190.4	199.0	3397.6	3385.5	3392.2	3349.1	0.5455

<sup>1</sup>Comparability ratio has not been computed for this cause; see Technical notes.

<sup>2</sup>Includes deaths from Respiratory distress syndrome; see Technical notes.

<sup>3</sup>Includes deaths from Sudden infant death syndrome; see Technical notes.

In 1980 an estimated 45,000 infants died in the United States. The resulting infant mortality rate of 12.5 deaths per 1,000 births was the lowest annual rate ever recorded in the United States. The 1980 rate decreased nearly 4 percent from the rate of 13.0 for 1979. Both the neonatal (under 28 days) and the postneonatal (28 days to 11 months) mortality rates decreased between 1979 and 1980 (tables G, H, and J).

## Marriages

According to provisional reports, there were 2,413,000 marriages in 1980. This represents a 2-percent increase over the 1979 provisional marriage total, a 12-percent increase over 1970, a 58-percent increase over 1960, and a new national record. Except for 1974 and 1975, the annual marriage total has risen every year since 1958.

The provisional marriage rate for 1980 was 10.9 per 1,000 population, a 2-percent increase over the

provisional rate for 1979. The marriage rate peaked at 11.0 in 1972, declined for 3 years (1973-75), stabilized through 1977, and increased for 3 years (1978-80).

As in previous years, the seasonal peak occurred in June, with a secondary peak in August. Almost twice as many marriages were performed in June as in January, the lowest month (tables K, L, and M).

The number and rate of marriages varied considerably among States. The largest number of marriages occurred in California, about 9 percent of the national total, and the next largest number occurred in Texas, 8 percent. Altogether, the six States with more than 100,000 marriages (California, Texas, New York, Nevada, Illinois, and Florida) accounted for more than one-third of the marriages in the United States. Between 1979 and 1980, marriages increased in about three-fourths of the States, while the mar-

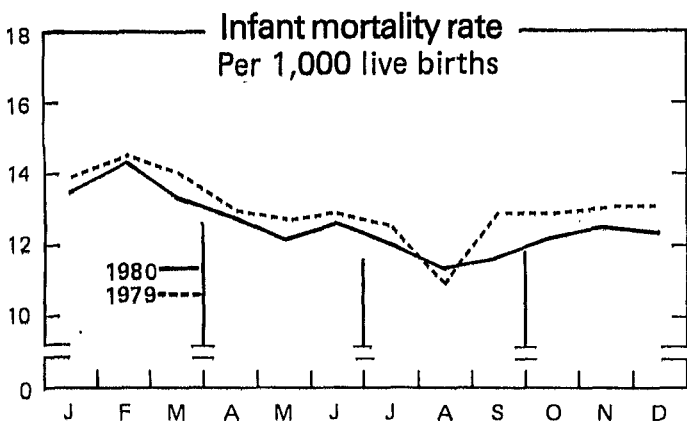


Table J. Deaths under 1 year and infant mortality rates, by month: United States, 1979 and 1980

[Rates on an annual basis per 1,000 live births. Monthly rates adjusted for changing number of births]

Month	Number		Rate	
	1980	1979	1980	1979
Total	45,000	45,000	12.5	13.0
January	3,800	3,900	13.5	14.0
February	3,900	3,700	14.4	14.6
March	4,000	4,000	13.4	14.1
April	3,700	3,600	12.8	13.2
May	3,600	3,600	12.2	12.7
June	3,700	3,600	12.6	12.9
July	3,800	3,800	12.1	12.5
August	3,700	3,500	11.4	11.0
September	3,600	3,800	11.7	12.9
October	3,900	3,800	12.2	12.9
November	3,600	3,900	12.5	13.1
December	3,800	3,900	12.4	13.2

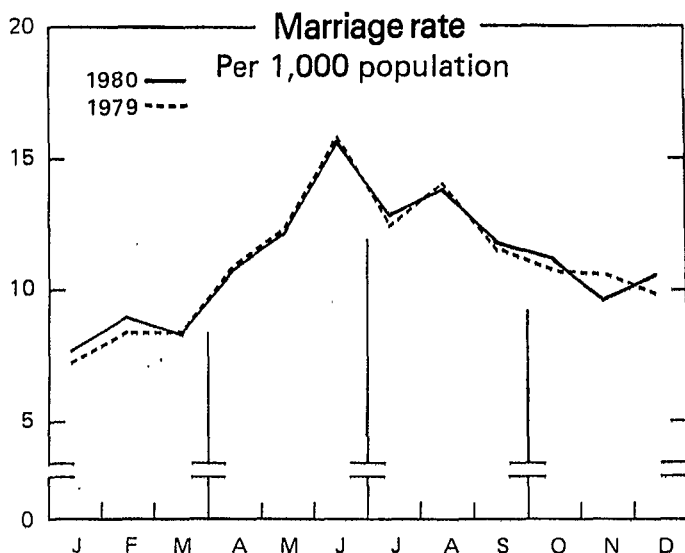


Table K. Marriages and marriage rates, by month: United States, 1979 and 1980

[Rates on an annual basis per 1,000 population. Data include nonlicensed marriages registered in California; see Technical notes]

Month	Number		Rate	
	1980	1979	1980	1979
Total	2,413,000	2,359,000	10.9	10.7
January	140,000	131,000	7.5	7.1
February	155,000	135,000	8.8	8.1
March	153,000	150,000	8.1	8.1
April	190,000	189,000	10.5	10.5
May	224,000	221,000	11.9	11.9
June	278,000	277,000	15.3	15.4
July	235,000	227,000	12.5	12.2
August	255,000	254,000	13.5	13.6
September	212,000	204,000	11.6	11.3
October	206,000	199,000	10.9	10.6
November	172,000	187,000	9.4	10.3
December	194,000	181,000	10.3	9.6

**Table L. Marriage rates, seasonally adjusted and unadjusted, by month: United States, 1979 and 1980**

[Rates on an annual basis per 1,000 women aged 15-44 years. Data include nonlicensed marriages registered in California; see Technical notes]

Month	Rate unadjusted for seasonal variation		Rate adjusted for seasonal variation	
	1980	1979	1980	1979
	January . . . . .	32.0	30.6	48.6
February . . . . .	37.8	34.9	49.6	44.3
March . . . . .	34.9	34.9	45.7	42.5
April . . . . .	44.8	45.4	46.6	50.7
May . . . . .	51.0	51.2	47.9	47.2
June . . . . .	65.3	66.2	46.6	46.4
July . . . . .	53.3	52.5	44.5	47.6
August . . . . .	57.7	58.5	46.5	46.3
September . . . . .	49.7	48.6	46.5	45.6
October . . . . .	46.5	45.7	47.7	46.4
November . . . . .	40.0	44.4	43.2	47.5
December . . . . .	43.8	41.4	44.9	42.3

**Table M. Marriages, divorces, and rates: United States, 1958-80**

[Rates per 1,000 population. Data refer only to events occurring in the United States. Alaska included beginning with 1959 and Hawaii with 1960]

Year	Marriages		Divorces	
	Number	Rate <sup>1</sup>	Number	Rate <sup>1</sup>
1980 <sup>2</sup> . . . . .	2,413,000	10.9	1,182,000	5.3
1979 <sup>2</sup> . . . . .	2,359,000	10.7	1,170,000	5.3
1978 <sup>3</sup> . . . . .	2,282,272	10.5	1,130,000	5.2
1977 . . . . .	2,178,367	10.1	1,091,000	5.0
1976 . . . . .	2,154,807	10.0	1,083,000	5.0
1975 . . . . .	2,152,662	10.1	1,036,000	4.9
1974 . . . . .	2,229,667	10.5	977,000	4.6
1973 . . . . .	2,284,108	10.9	915,000	4.4
1972 . . . . .	2,282,154	11.0	845,000	4.1
1971 . . . . .	2,190,481	10.6	773,000	3.7
1970 . . . . .	2,158,802	10.6	708,000	3.5
1969 . . . . .	2,145,000	10.6	639,000	3.2
1968 . . . . .	2,069,000	10.4	584,000	2.9
1967 . . . . .	1,927,000	9.7	523,000	2.6
1966 . . . . .	1,857,000	9.5	499,000	2.5
1965 . . . . .	1,800,000	9.3	479,000	2.5
1964 . . . . .	1,725,000	9.0	450,000	2.4
1963 . . . . .	1,654,000	8.8	428,000	2.3
1962 . . . . .	1,577,000	8.5	413,000	2.2
1961 . . . . .	1,548,000	8.5	414,000	2.3
1960 . . . . .	1,523,000	8.5	393,000	2.2
1959 . . . . .	1,494,000	8.5	395,000	2.2
1958 . . . . .	1,451,000	8.4	368,000	2.1

<sup>1</sup>Rates are based on population enumerated as of April 1 for 1960 and 1970 and estimated as of July 1 for all other years.

<sup>2</sup>Provisional.

<sup>3</sup>Beginning with 1978, marriage data include nonlicensed marriages registered in California; see Technical notes.

riage rate rose in about half of them. Marriage rates for most States ranged between the rate of 7.5 per 1,000 population for New Jersey and the rate of 15.8 for Oklahoma. Two States had exceptionally high rates, South Carolina, with a rate of 18.2 and Nevada, with a rate of 156.8. Traditionally, a large number of marriages to nonresident couples are performed in these two States.

## Divorces

There were an estimated 1,182,000 divorces reported for 1980, a record high. This represents an increase of 1 percent over the 1979 provisional total, 67 percent over the 1970 final total, and is 3 times the total recorded in 1960.

The divorce rate, in contrast, leveled off in 1980 at 5.3 per 1,000 population, the same as the 1979 provisional divorce rate. The rate rose steeply between 1966 and 1976, doubling from 2.5 to 5.0 per 1,000 population. Between 1976 and 1979, however, the rate rose only from 5.0 to 5.3 (table M).

There is pronounced geographic variation in the incidence of divorce. Divorce rates are generally low in States in the northeastern part of the country and generally high in the western States. For example, the States with rates of 3.5 per 1,000 population or lower were Massachusetts, New Jersey, New York, Pennsylvania, and North Dakota. States with rates above 7.5 per 1,000 population were Alaska, Arizona, Arkansas, Florida, Nevada, New Mexico, Oklahoma, and Wyoming.



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## References

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<sup>1</sup>Center for Disease Control: *Morbidity and Mortality Weekly Report*, Vol. 29, No. 14, DHEW Pub. No. (CDC) 80-8017. Atlanta, Ga., Apr. 1980.

<sup>2</sup>*Ibid.*, Vol. 30, No. 1, DHHS Pub. No. (CDC) 81-8017. Jan. 1981.

<sup>3</sup>*Ibid.*, Vol. 28, No. 54, Annual Summary 1979. DHHS Pub. No. (CDC) 80-8241. Sept. 1980.

<sup>4</sup>National Center for Health Statistics: Advance report, final marriage statistics. *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement (1). DHHS Pub. No. (PHS) 80-1120. Public Health Service. Washington. U.S. Government Printing Office, Sept. 12, 1980.

<sup>5</sup>National Center for Health Statistics: *Eighth Revision International Classification of Diseases, Adapted for Use in the*

*United States*. PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office, 1967.

<sup>6</sup>World Health Organization: *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*, based on the recommendations of the Ninth Revision Conference, 1975. Geneva. World Health Organization, 1977.

<sup>7</sup>National Center for Health Statistics: Estimates of selected comparability ratios based on dual coding of 1976 death certificates by the Eighth and Ninth Revisions of the International Classification of Diseases, by A. J. Klebba and J. H. Scott. *Monthly Vital Statistics Report*. Vol. 28, No. 11, Supplement. DHEW Pub. No. (PHS) 80-1120. Public Health Service. Washington. U.S. Government Printing Office, Feb. 29, 1980.

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Table 1. Live births, marriages, and rates: Each reporting area, 1979 and 1980

[By place of occurrence. Rates per 1,000 population in specified area]

Area	Live births				Marriages <sup>1</sup>			
	Number		Rate		Number		Rate	
	1980	1979	1980	1979	1980	1979	1980	1979
New England . . . . .	157,318	158,279	12.8	12.9	110,875	101,024	9.0	8.2
Maine . . . . .	16,095	15,755	14.6	14.4	14,351	11,944	13.1	10.9
New Hampshire . . . . .	13,647	12,830	15.2	14.5	9,292	9,175	10.4	10.3
Vermont . . . . .	7,640	7,396	15.3	15.0	5,187	5,228	10.4	10.6
Massachusetts . . . . .	73,355	73,104	12.7	12.7	49,058	42,652	8.5	7.4
Rhode Island . . . . .	12,512	12,235	13.6	13.2	7,120	7,350	7.8	7.9
Connecticut . . . . .	34,069	36,959	10.9	11.9	25,887	24,675	8.2	7.9
Middle Atlantic . . . . .	484,663	481,466	13.2	13.1	291,649	285,611	8.0	7.8
New York . . . . .	232,491	231,787	13.2	13.1	141,299	141,350	8.0	8.0
New Jersey . . . . .	91,047	91,896	12.4	12.5	54,956	54,844	7.5	7.5
Pennsylvania . . . . .	161,025	157,783	13.7	13.5	95,394	89,417	8.1	7.6
East North Central . . . . .	661,318	647,726	16.0	15.7	398,600	396,806	9.6	9.6
Ohio . . . . .	169,359	164,111	15.8	15.3	99,522	102,539	9.3	9.6
Indiana . . . . .	87,906	87,452	16.2	16.2	57,852	59,813	10.7	11.0
Illinois . . . . .	186,576	181,218	16.7	16.1	110,667	108,443	9.9	9.7
Michigan . . . . .	143,007	142,127	15.5	15.4	89,606	86,660	9.7	9.4
Wisconsin . . . . .	74,470	72,818	15.6	15.4	40,953	39,551	8.6	8.4
West North Central . . . . .	289,039	279,112	16.8	16.3	175,055	170,339	10.2	10.0
Minnesota . . . . .	68,233	64,939	16.6	16.0	37,825	36,298	9.2	8.9
Iowa . . . . .	48,050	47,083	16.5	16.2	27,527	27,731	9.5	9.6
Missouri . . . . .	79,623	78,505	16.3	16.1	55,518	52,336	11.3	10.8
North Dakota . . . . .	12,939	12,769	19.7	19.4	6,139	5,977	9.3	9.1
South Dakota . . . . .	13,013	12,623	18.8	18.3	8,929	9,098	12.9	13.2
Nebraska . . . . .	27,851	26,093	17.6	16.6	14,189	14,032	9.0	8.9
Kansas . . . . .	39,330	37,100	16.5	15.7	24,928	24,867	10.4	10.5
South Atlantic . . . . .	547,459	528,204	15.4	15.1	413,471	400,272	11.8	11.4
Delaware . . . . .	9,544	9,123	16.5	15.7	4,423	4,418	7.6	7.6
Maryland . . . . .	52,284	50,043	12.6	12.1	45,967	45,803	11.1	11.1
District of Columbia . . . . .	17,835	20,334	28.0	31.0	5,182	4,974	8.1	7.6
Virginia . . . . .	75,042	73,812	14.3	14.2	60,193	58,739	11.5	11.3
West Virginia . . . . .	29,923	30,263	15.9	16.1	17,451	17,733	9.3	9.4
North Carolina . . . . .	85,123	84,388	15.0	15.1	48,341	45,233	8.1	8.1
South Carolina . . . . .	49,805	49,958	16.8	17.0	53,923	53,668	16.2	16.4
Georgia . . . . .	95,980	89,446	18.4	17.5	69,418	65,898	13.3	12.9
Florida . . . . .	131,923	120,839	14.3	13.6	110,575	103,406	12.0	11.7
East South Central . . . . .	244,630	238,984	17.3	16.9	170,091	171,445	12.0	12.2
Kentucky . . . . .	60,778	60,182	17.2	17.1	34,291	36,513	9.7	10.4
Tennessee . . . . .	73,500	72,261	16.5	16.5	58,751	59,407	13.2	13.6
Alabama . . . . .	62,814	60,628	16.6	16.1	49,006	48,807	13.0	12.9
Mississippi . . . . .	47,538	45,913	19.5	18.9	28,043	26,718	11.5	11.0
West South Central . . . . .	435,463	426,701	18.9	19.0	300,482	285,958	13.1	12.7
Arkansas . . . . .	36,863	35,008	16.7	16.1	25,197	24,947	11.4	11.4
Louisiana . . . . .	79,202	79,413	19.3	19.8	41,858	41,816	10.1	10.4
Oklahoma . . . . .	50,681	47,214	17.2	16.3	46,509	44,462	15.8	15.4
Texas . . . . .	268,717	265,066	19.6	19.8	187,118	174,743	13.6	13.1
Mountain . . . . .	225,939	215,659	20.6	20.2	241,393	244,766	22.0	22.9
Montana . . . . .	13,928	13,803	17.7	17.6	8,367	8,246	10.7	10.5
Idaho . . . . .	19,495	19,686	21.3	21.8	13,084	13,568	14.3	15.0
Wyoming . . . . .	9,539	8,946	20.4	19.9	6,825	6,032	14.6	13.4
Colorado . . . . .	50,279	47,813	17.8	17.2	34,078	31,889	12.0	11.5
New Mexico . . . . .	25,661	25,570	20.0	20.6	16,324	16,785	12.7	13.5
Arizona . . . . .	50,173	45,707	19.7	18.7	30,230	29,549	11.8	12.1
Utah . . . . .	43,708	42,304	31.0	30.9	17,074	16,823	12.1	12.3
Nevada . . . . .	13,156	11,830	17.9	16.9	115,411	121,874	156.8	173.6
Pacific . . . . .	541,196	487,865	17.4	16.0	305,092	285,578	9.8	9.4
Washington . . . . .	67,972	55,077	16.9	14.0	46,617	45,809	11.6	11.7
Oregon . . . . .	43,998	42,984	17.1	17.0	23,115	21,907	9.0	8.7
California <sup>2</sup> . . . . .	401,581	363,463	17.4	16.0	218,404	201,133	9.4	8.9
Alaska . . . . .	9,368	8,912	23.0	22.0	5,286	5,071	13.0	12.5
Hawaii . . . . .	18,277	17,429	19.5	19.0	11,670	11,658	12.5	12.7

<sup>1</sup>Data are either marriages reported or marriage licenses issued; see Technical notes.<sup>2</sup>Marriage data include nonlicensed marriages; see Technical notes.

Table 2. Deaths, infant deaths, and rates: Each reporting area, 1979 and 1980

[By place of occurrence. Rates for deaths at all ages are per 1,000 population. Infant mortality rates are deaths under 1 year per 1,000 live births]

Area	Deaths (all ages)				Infant deaths (under 1 year)			
	Number		Rate		Number		Rate	
	1980	1979	1980	1979	1980	1979	1980	1979
New England	113,639	110,061	9.2	9.0	1,614	1,706	10.3	10.8
Maine	10,857	10,367	9.9	9.5	140	152	8.7	9.6
New Hampshire	7,547	7,287	8.4	8.2	111	131	8.1	10.2
Vermont	4,312	4,364	8.6	8.9	63	57	8.2	7.7
Massachusetts	54,773	52,624	9.5	9.1	803	764	10.9	10.5
Rhode Island	9,553	9,295	10.4	10.0	150	186	12.0	15.2
Connecticut	26,597	26,124	8.5	8.4	347	416	10.2	11.3
Middle Atlantic	355,896	342,332	9.7	9.3	6,461	6,849	13.3	14.2
New York	167,769	160,937	9.5	9.1	3,210	3,661	13.8	15.8
New Jersey	64,727	64,126	8.8	8.7	1,072	1,089	11.8	11.9
Pennsylvania	123,400	117,269	10.5	10.0	2,179	2,099	13.5	13.3
East North Central	359,924	351,921	8.7	8.5	8,188	8,326	12.4	12.9
Ohio	97,779	93,197	9.1	8.7	2,020	1,966	11.9	12.0
Indiana	46,721	47,153	8.6	8.7	983	1,126	11.2	12.9
Illinois	100,450	100,218	9.0	8.9	2,696	2,750	14.4	15.2
Michigan	74,002	72,480	8.0	7.9	1,794	1,916	12.5	13.5
Wisconsin	40,972	38,873	8.6	8.2	695	568	9.3	7.8
West North Central	158,035	153,715	9.2	9.0	3,316	3,324	11.5	11.9
Minnesota	33,048	32,450	8.0	8.0	694	706	10.2	10.9
Iowa	26,714	26,237	9.2	9.0	530	476	11.0	10.1
Missouri	49,881	48,558	10.2	10.0	1,113	1,165	14.0	14.8
North Dakota	5,850	5,566	8.9	8.5	157	161	12.1	12.6
South Dakota	6,462	6,236	9.3	9.1	125	126	9.6	10.0
Nebraska	14,681	14,116	9.3	9.0	320	305	11.5	11.7
Kansas	21,399	20,552	9.0	8.7	377	385	9.6	10.4
South Atlantic	332,442	319,722	9.3	9.1	7,730	7,847	14.1	14.9
Delaware	5,201	5,048	9.0	8.7	123	144	12.9	15.8
Maryland	33,337	32,002	8.0	7.7	614	623	11.7	12.4
District of Columbia	9,165	9,042	14.4	13.8	522	392	29.3	19.3
Virginia	41,889	40,183	8.0	7.7	970	1,049	12.9	14.2
West Virginia	19,120	19,140	10.2	10.2	384	413	12.8	13.6
North Carolina	49,059	47,168	8.6	8.4	1,236	1,292	14.5	15.3
South Carolina	24,337	23,736	8.2	8.1	769	859	15.4	17.2
Georgia	43,519	42,646	8.3	8.3	1,208	1,264	12.6	14.1
Florida	106,815	100,757	11.6	11.4	1,904	1,811	14.4	15.0
East South Central	134,770	130,840	9.5	9.3	3,483	3,495	14.2	14.6
Kentucky	33,268	32,552	9.4	9.2	717	710	11.8	11.8
Tennessee	43,205	41,264	9.7	9.4	1,065	1,094	14.5	15.1
Alabama	35,386	34,304	9.4	9.1	946	872	15.1	14.4
Mississippi	22,911	22,720	9.4	9.4	755	819	15.9	17.8
West South Central	195,085	191,169	8.5	8.5	5,434	5,471	12.5	12.8
Arkansas	22,565	21,554	10.2	9.9	431	442	11.7	12.6
Louisiana	35,626	34,918	8.7	8.7	1,222	1,245	15.4	15.7
Oklahoma	28,308	27,204	9.6	9.4	555	527	11.0	11.2
Texas	108,586	107,493	7.9	8.0	3,226	3,257	12.0	12.3
Mountain	81,241	77,823	7.4	7.3	2,529	2,617	11.2	12.1
Montana	6,592	6,407	8.4	8.2	142	136	10.2	9.9
Idaho	6,431	6,061	7.0	6.7	151	155	7.7	7.9
Wyoming	3,062	2,929	6.6	6.5	63	80	6.6	8.9
Colorado	19,503	19,057	6.9	6.9	555	542	11.0	11.3
New Mexico	9,080	8,596	7.1	6.9	272	344	10.6	13.5
Arizona	21,609	20,385	8.5	8.3	684	671	13.6	14.7
Utah	8,556	8,546	6.1	6.3	505	536	11.6	12.7
Nevada	6,408	5,842	8.7	8.3	157	153	11.9	12.9
Pacific	251,417	227,288	8.1	7.5	6,247	5,456	11.5	11.2
Washington	32,495	29,496	8.1	7.5	789	599	11.6	10.9
Oregon	21,793	21,071	8.5	8.3	556	477	12.6	11.1
California	190,247	169,954	8.2	7.5	4,593	4,052	11.4	11.1
Alaska	1,692	1,639	4.1	4.0	115	137	12.3	15.4
Hawaii	5,190	5,128	5.5	5.6	194	191	10.6	11.0

Table 3. Divorces and divorce rates: United States and each reporting area, 1979 and 1980

[By place of occurrence. Rates per 1,000 population in specified area]

Area	Number		Rate	
	1980	1979	1980	1979
United States <sup>1</sup>	1,182,000	1,170,000	5.3	5.3
Total, 49 areas	1,115,309	1,119,279	5.2	5.3
Alabama	26,856	26,900	7.1	7.1
Alaska	3,435	3,513	8.4	8.7
Arizona	19,921	19,917	7.8	8.1
Arkansas	21,778	19,337	9.9	8.9
California	134,309	137,714	5.8	6.1
Colorado	18,155	16,688	6.4	6.0
Connecticut	11,935	12,780	3.8	4.1
Delaware	2,313	3,166	4.0	5.4
District of Columbia	3,473	4,173	5.5	6.4
Florida	71,409	70,155	7.8	7.9
Georgia	33,636	32,842	6.4	6.4
Hawaii	4,386	5,035	4.7	5.5
Idaho	6,643	6,519	7.3	7.2
Illinois	50,465	53,842	4.5	4.8
Iowa	11,757	11,403	4.0	3.9
Kansas	13,399	13,017	5.6	5.5
Kentucky	16,988	16,913	4.8	4.8
Maine	6,239	6,110	5.7	5.6
Maryland	16,293	15,541	3.9	3.7
Massachusetts	16,487	17,405	2.9	3.0
Michigan	40,850	45,951	4.4	5.0
Minnesota	15,132	14,705	3.7	3.6
Mississippi	13,458	12,901	5.5	5.3
Missouri	27,820	28,467	5.7	5.8
Montana	4,963	5,159	6.3	6.6
Nebraska	6,481	6,021	4.1	3.8
Nevada	13,659	10,465	18.6	14.9
New Hampshire	5,222	5,051	5.8	5.7
New Jersey	25,910	23,544	3.5	3.2
New Mexico	10,444	9,329	8.1	7.5
New York	54,224	59,898	3.1	3.4
North Carolina	28,161	27,523	5.0	4.9
North Dakota	2,142	2,076	3.3	3.2
Ohio	58,225	60,108	5.4	5.6
Oklahoma	24,226	22,823	8.2	7.9
Oregon	17,925	17,709	7.0	7.0
Pennsylvania	34,853	39,689	3.0	3.4
Rhode Island	3,583	3,599	3.9	3.9
South Carolina	13,810	13,965	4.7	4.8
South Dakota	2,823	2,635	4.1	3.8
Tennessee	30,100	32,349	6.8	7.4
Texas	97,161	91,454	7.1	6.8
Utah	7,957	7,542	5.6	5.5
Vermont	2,522	2,296	5.0	4.7
Virginia	23,608	23,648	4.5	4.6
Washington	28,424	26,802	7.0	6.8
West Virginia	9,915	10,066	5.3	5.4
Wisconsin	17,864	16,880	3.7	3.6
Wyoming	3,970	3,654	8.5	8.1

<sup>1</sup>Data are estimated; see Technical notes.

Table 4. Abridged life table for the total population: United States, 1980

[For explanation of the columns of the life table, see Section 5 of *Vital Statistics of the United States, 1976, Volume II, Part A*]

Age interval  Period of life between two exact ages stated in years  (1)	Proportion dying	Of 100,000 born alive		Stationary population		Average remaining lifetime
	Proportion of persons alive at beginning of age interval dying during interval  (2)	Number living at beginning of age interval  (3)	Number dying during age interval  (4)	In the age interval  (5)	In this and all subsequent age intervals  (6)	Average number of years of life remaining at beginning of age interval  (7)
$x$ to $x + n$	$nq_x$	$l_x$	$nd_x$	$nL_x$	$T_x$	$e_x$
0-1	0.0126	100,000	1,257	98,903	7,363,073	73.6
1-5	0.0026	98,743	257	394,375	7,264,170	73.6
5-10	0.0017	98,486	163	491,992	6,869,795	69.8
10-15	0.0015	98,323	149	491,301	6,377,803	64.9
15-20	0.0051	98,174	498	489,741	5,886,502	60.0
20-25	0.0068	97,676	665	486,739	5,396,761	55.3
25-30	0.0068	97,011	658	483,410	4,910,022	50.6
30-35	0.0073	96,353	704	480,081	4,426,612	45.9
35-40	0.0089	95,649	852	476,252	3,946,531	41.3
40-45	0.0140	94,797	1,328	470,884	3,470,279	36.6
45-50	0.0223	93,469	2,089	462,449	2,999,395	32.1
50-55	0.0356	91,380	3,254	449,271	2,536,946	27.8
55-60	0.0545	88,126	4,802	429,272	2,087,675	23.7
60-65	0.0814	83,324	6,779	400,454	1,658,403	19.9
65-70	0.1163	76,545	8,905	361,330	1,257,949	16.4
70-75	0.1668	67,640	11,285	310,881	896,619	13.3
75-80	0.2648	56,355	14,924	244,987	585,738	10.4
80-85	0.3629	41,431	15,036	168,966	340,751	8.2
85 and over	1.0000	26,395	26,395	171,795	171,795	6.5

Table 5. Death rates by month: United States, 1966-80

[For 1979 and 1980, based on provisional figures; for all other years, based on final data. Rates on an annual basis per 1,000 population]

Month	1980	1979	1978	1977	1976	1975	1974	1973	1972 <sup>1</sup>	1971	1970	1969	1968	1967	1966
Annual . . . . .	8.9	8.7	8.8	8.8	8.9	8.9	9.2	9.4	9.4	9.3	9.5	9.5	9.7	9.4	9.5
January . . . . .	9.2	9.1	10.6	9.5	9.3	10.1	9.6	10.8	11.0	10.0	10.6	10.9	11.6	9.8	10.1
February . . . . .	10.1	9.5	9.7	9.3	10.2	9.9	9.6	10.2	10.3	10.0	10.4	9.8	10.0	9.8	10.1
March . . . . .	9.6	8.8	8.9	9.1	9.9	9.1	9.6	9.3	9.3	9.6	9.5	9.8	9.6	9.6	9.9
April . . . . .	9.1	8.9	8.6	8.8	9.0	8.8	9.5	9.3	9.2	9.5	9.3	9.4	9.2	9.3	9.9
May . . . . .	8.6	8.4	8.6	8.6	8.5	8.6	8.9	9.2	9.1	9.2	9.1	9.3	9.1	9.3	9.4
June . . . . .	8.4	8.4	8.4	8.4	8.4	8.5	8.8	9.1	8.9	9.2	9.0	9.2	9.2	9.1	9.3
July . . . . .	8.6	8.5	8.4	8.6	8.3	8.5	8.9	9.0	9.3	8.9	9.1	9.2	9.1	8.9	9.6
August . . . . .	8.5	8.3	8.2	8.2	8.1	8.4	8.5	8.9	8.9	8.8	8.8	8.9	9.0	8.7	8.7
September . . . . .	8.2	8.1	8.3	8.2	8.2	8.4	8.7	9.0	8.8	8.8	8.8	8.8	8.8	8.9	8.8
October . . . . .	8.6	8.5	8.6	8.7	8.6	8.6	9.0	9.1	9.2	9.1	9.2	9.2	9.1	9.2	9.3
November . . . . .	8.7	8.8	8.7	8.7	8.9	8.6	9.0	9.4	9.4	9.4	9.5	9.6	9.7	9.5	9.3
December . . . . .	9.5	8.8	9.1	9.4	9.2	9.1	9.6	9.7	10.0	9.9	9.7	10.0	11.3	10.2	9.8

<sup>1</sup>Based on a 50-percent sample of deaths.

Table 6. Death rates by age, race, and sex: United States, 1950, 1960, and 1970-80

[For 1979 and 1980, based on a 10-percent sample of deaths; for all other years, based on final data. Rates per 100,000 population in specified group]

Race, sex, and year	All ages <sup>1</sup>	Under 1 year	1-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75-84 years	85 years and over
<b>Total</b>												
1980 (est.)	892.6	1,310.7	65.7	31.5	118.8	140.7	225.9	590.7	1,381.1	2,968.5	7,178.4	14,489.6
1979 (est.)	866.2	1,372.5	62.7	34.8	118.2	139.1	227.9	588.5	1,371.1	2,921.9	7,014.0	13,831.0
1978	883.4	1,434.4	69.2	33.9	117.5	135.5	238.9	609.7	1,416.3	3,027.2	7,187.8	14,700.7
1977	878.1	1,485.6	68.8	34.6	117.1	136.2	247.5	620.7	1,434.9	3,055.6	7,181.9	14,725.9
1976	889.6	1,595.0	69.9	34.7	113.5	136.2	254.1	634.8	1,475.6	3,127.6	7,331.6	15,486.9
1975	888.5	1,641.0	70.8	35.7	118.9	143.2	266.8	649.6	1,495.5	3,189.2	7,359.2	15,187.9
1974	915.1	1,755.7	73.9	38.2	121.7	146.8	278.6	675.0	1,549.2	3,327.6	7,654.8	16,532.8
1973	940.2	1,805.2	79.5	41.0	128.3	153.6	295.9	697.4	1,611.9	3,440.0	7,932.1	17,429.4
1972 <sup>2</sup>	943.2	1,829.2	80.9	40.8	127.7	153.9	302.1	710.4	1,631.1	3,526.9	7,965.4	17,351.8
1971	934.7	1,904.8	82.6	41.1	126.6	156.5	307.5	710.2	1,622.8	3,486.2	7,866.6	17,426.4
1970	945.3	2,142.4	84.5	41.3	127.7	157.4	314.6	730.0	1,658.8	3,582.7	8,004.4	16,344.9
1960	954.7	2,696.4	109.1	46.6	106.3	146.4	299.4	756.0	1,735.1	3,822.1	8,745.2	19,857.5
1950	963.8	3,299.2	139.4	60.1	128.1	178.7	358.7	853.9	<sup>3</sup> 1,901.0	<sup>3</sup> 4,104.3	9,331.1	20,196.9
<b>Male</b>												
1980 (est.)	997.0	1,454.8	74.0	37.1	179.6	205.5	301.7	778.6	1,844.9	4,064.6	9,405.1	16,901.6
1979 (est.)	974.7	1,552.4	67.8	44.2	179.9	204.6	303.4	767.1	1,855.6	4,018.2	9,127.3	16,077.8
1978	994.4	1,591.7	78.2	41.4	173.5	192.6	313.8	797.3	1,906.3	4,185.4	9,385.3	17,258.9
1977	994.1	1,659.0	76.5	42.6	172.8	193.6	323.2	814.0	1,936.0	4,230.3	9,384.8	17,299.1
1976	1,007.0	1,762.6	78.2	42.6	167.7	191.3	331.6	834.0	1,999.5	4,337.1	9,509.1	17,983.9
1975	1,013.2	1,829.3	77.8	43.9	176.8	202.7	346.9	856.3	2,034.7	4,414.5	9,519.4	17,572.6
1974	1,041.0	1,970.4	82.3	46.9	181.3	205.1	358.6	890.5	2,111.9	4,584.8	9,786.9	18,875.7
1973	1,072.9	2,032.1	88.8	50.0	189.8	214.5	380.4	916.6	2,206.6	4,731.5	10,108.1	19,809.4
1972 <sup>2</sup>	1,080.3	2,063.6	90.0	48.9	188.1	211.8	386.6	940.0	2,245.6	4,816.6	10,124.0	19,595.8
1971	1,072.6	2,142.4	90.8	49.5	186.2	214.0	392.5	931.5	2,226.2	4,760.5	9,919.1	19,746.5
1970	1,090.3	2,410.0	93.2	50.5	188.5	215.3	402.6	958.5	2,282.7	4,873.8	10,010.2	17,821.5
1960	1,104.5	3,059.3	119.5	55.7	152.1	187.9	372.8	992.2	2,309.5	4,914.4	10,178.4	21,188.3
1950	1,106.1	3,728.0	151.7	70.9	167.9	216.5	428.8	1,067.1	<sup>3</sup> 2,395.3	<sup>3</sup> 4,931.4	10,426.0	21,636.0
<b>Female</b>												
1980 (est.)	793.9	1,159.3	57.1	25.5	57.3	77.5	154.1	413.3	965.0	2,122.9	5,840.4	13,427.0
1979 (est.)	763.4	1,184.3	57.2	25.0	55.7	75.2	156.5	420.5	936.4	2,078.1	5,739.3	12,829.4
1978	778.3	1,269.6	59.9	26.1	60.9	79.7	167.8	433.2	976.3	2,137.6	5,863.1	13,541.2
1977	788.2	1,303.5	60.8	26.3	60.7	80.1	175.6	439.3	985.0	2,152.8	5,846.7	13,542.3
1976	778.3	1,419.0	61.3	26.5	58.6	82.3	180.5	448.3	1,005.5	2,198.3	6,002.5	14,312.1
1975	770.3	1,443.7	63.5	27.2	60.5	85.1	190.8	456.3	1,012.6	2,247.0	6,030.4	14,031.4
1974	795.6	1,530.7	65.2	29.1	61.7	89.9	202.7	473.7	1,045.8	2,361.0	6,329.5	15,387.6
1973	814.2	1,588.8	69.9	31.6	66.4	94.4	215.6	493.1	1,079.8	2,445.5	6,562.5	16,234.0
1972 <sup>2</sup>	812.8	1,585.1	71.4	32.4	67.2	97.6	221.7	496.6	1,081.1	2,529.9	6,584.4	16,202.5
1971	803.8	1,656.1	74.0	32.4	67.4	100.8	226.8	504.1	1,082.4	2,498.3	6,531.5	16,215.7
1970	807.8	1,863.7	75.4	31.8	68.1	101.6	231.1	517.2	1,098.9	2,579.7	6,677.6	15,518.0
1960	809.2	2,321.3	98.4	37.3	61.3	106.6	229.4	526.7	1,196.4	2,871.8	7,633.1	19,008.4
1950	823.5	2,854.6	126.7	48.9	89.1	142.7	290.3	641.5	<sup>3</sup> 1,404.8	<sup>3</sup> 3,333.2	8,399.6	19,194.7
<b>White</b>												
1980 (est.)	905.7	1,115.9	59.9	30.5	115.0	123.0	186.5	540.2	1,301.1	2,902.3	7,095.8	15,188.8
1979 (est.)	879.3	1,160.1	57.2	33.9	115.4	120.0	188.4	538.8	1,303.3	2,865.1	6,953.1	14,474.9
1978	895.7	1,218.3	62.7	32.2	113.9	118.0	206.0	559.8	1,343.6	2,962.2	7,155.2	15,316.0
1977	888.2	1,266.2	62.5	33.1	112.8	117.6	213.2	567.9	1,361.0	2,985.3	7,164.0	15,292.2
1976	899.4	1,356.2	64.1	33.2	107.6	116.0	218.5	580.9	1,403.3	3,053.3	7,340.0	16,068.5
1975	896.8	1,413.0	64.4	33.9	111.5	121.1	229.2	597.1	1,422.8	3,107.2	7,384.0	15,707.5
1974	921.9	1,524.5	67.1	36.5	113.0	122.9	237.6	617.4	1,471.6	3,231.0	7,703.9	17,055.6
1973	944.2	1,585.1	71.4	38.8	118.5	128.2	252.0	633.6	1,529.5	3,335.2	7,976.7	17,926.6
1972 <sup>2</sup>	946.4	1,577.5	73.4	39.1	116.2	126.5	255.1	646.2	1,550.1	3,429.1	8,017.4	17,864.5
1971	936.6	1,655.3	74.3	38.7	113.7	128.4	261.1	649.0	1,543.7	3,391.6	7,913.5	17,912.2
1970	946.3	1,869.7	75.1	39.1	115.8	129.9	267.0	668.2	1,577.1	3,490.1	8,043.3	16,889.7
1960	947.8	2,357.7	95.2	43.9	99.1	123.6	260.4	692.3	1,632.8	3,739.8	8,827.2	20,354.5
1950	945.7	2,992.6	124.1	56.4	111.7	148.3	307.6	765.0	1,799.6	4,023.1	9,416.5	20,678.6
<b>White, male</b>												
1980 (est.)	1,001.9	1,253.6	68.5	35.1	173.6	178.3	260.5	716.2	1,747.2	4,018.4	9,362.6	17,821.5
1979 (est.)	980.0	1,330.0	60.8	43.5	176.1	174.2	259.8	705.8	1,768.5	3,975.4	9,127.5	16,965.5
1978	999.8	1,359.6	71.7	39.2	168.5	166.7	268.1	733.8	1,819.2	4,135.6	9,420.5	18,100.3
1977	998.2	1,429.7	69.7	40.6	167.3	165.9	276.6	747.8	1,848.9	4,181.3	9,440.7	18,041.7
1976	1,010.4	1,511.8	71.9	40.7	159.4	161.7	283.7	765.9	1,915.5	4,281.1	9,595.0	18,767.6
1975	1,015.3	1,594.4	71.3	41.5	165.9	169.1	295.8	790.2	1,954.5	4,355.8	9,608.1	18,257.9
1974	1,041.6	1,727.0	75.3	44.8	168.8	170.6	305.1	820.3	2,026.1	4,509.6	9,903.1	19,543.7
1973	1,071.2	1,776.5	79.8	47.0	176.2	177.6	324.4	839.7	2,118.2	4,653.9	10,214.3	20,436.1
1972 <sup>2</sup>	1,077.3	1,800.4	82.5	47.0	170.7	172.5	325.4	861.4	2,160.8	4,746.7	10,227.3	20,266.2
1971	1,069.6	1,876.5	81.9	46.4	167.1	174.4	334.9	860.6	2,145.1	4,696.5	10,027.1	20,420.4
1970	1,086.7	2,113.2	83.6	48.0	170.8	176.6	343.5	882.9	2,202.6	4,810.1	10,098.8	18,551.7
1960	1,098.5	2,694.1	104.9	52.7	143.7	163.2	332.6	932.2	2,225.2	4,848.4	10,299.6	21,750.0
1950	1,089.5	3,400.5	135.5	67.2	152.4	185.3	380.9	984.5	2,304.4	4,864.9	10,526.3	22,116.3

See footnotes at end of table.

Table 6. Death rates by age, race, and sex: United States, 1950, 1960, and 1970-80—Con.

[For 1979 and 1980, based on a 10-percent sample of deaths; for all other years, based on final data. Rates per 100,000 population in specified group]

Race, sex, and year	All ages <sup>1</sup>	Under 1 year	1-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75-84 years	85 years and over
<b>White, female</b>												
1980 (est.)	814.2	970.9	50.9	25.6	55.1	67.6	134.5	371.7	897.9	2,042.4	5,754.6	14,043.7
1979 (est.)	783.4	981.1	53.4	23.9	53.2	65.6	138.8	379.5	883.0	2,012.6	5,662.2	13,374.6
1978	796.5	1,069.7	53.3	25.0	58.1	69.3	145.8	393.9	914.0	2,063.8	5,810.2	14,079.0
1977	783.3	1,094.8	55.0	25.3	57.2	69.3	151.9	397.4	920.4	2,070.4	5,805.1	14,039.7
1976	793.6	1,192.1	55.9	25.4	54.7	70.3	155.4	405.9	942.0	2,114.1	5,984.6	14,823.3
1975	783.8	1,222.3	57.1	25.8	56.0	73.3	164.6	414.8	944.6	2,152.8	6,034.7	14,494.1
1974	807.6	1,312.6	58.5	27.9	56.2	75.5	172.1	426.4	973.6	2,252.5	6,354.6	15,845.4
1973	823.0	1,342.8	62.5	30.2	60.0	79.3	181.8	439.9	1,000.7	2,324.7	6,582.2	16,685.8
1972 <sup>2</sup>	821.3	1,343.1	63.8	30.9	61.2	81.0	187.1	444.3	1,001.6	2,416.8	6,619.6	16,657.3
1971	809.7	1,422.9	66.2	30.7	60.2	83.0	189.8	450.6	1,003.3	2,386.6	6,558.8	16,629.2
1970	812.6	1,614.6	66.1	29.9	61.6	84.1	193.3	462.9	1,014.9	2,470.7	6,698.7	15,980.2
1960	800.9	2,007.7	85.2	34.7	54.9	85.0	191.1	458.8	1,078.9	2,779.3	7,696.6	19,477.7
1950	803.3	2,566.8	112.2	45.1	71.5	112.8	235.8	546.4	1,293.8	3,242.8	8,481.5	19,679.5
<b>All other</b>												
1980 (est.)	811.3	2,205.2	91.7	36.1	139.4	253.8	427.7	955.6	2,097.1	3,566.9	8,136.2	8,689.4
1979 (est.)	783.2	2,388.4	87.3	39.2	134.2	263.8	433.1	958.3	1,988.9	3,435.5	7,716.0	8,291.7
1978	805.1	2,456.7	99.0	41.9	137.6	250.3	466.3	990.7	2,085.5	3,620.8	7,558.2	9,228.7
1977	813.0	2,546.4	97.6	42.0	141.4	261.6	482.2	1,032.3	2,126.0	3,708.8	7,384.2	9,595.6
1976	824.8	2,781.5	96.9	42.2	147.5	273.9	499.6	1,065.5	2,153.2	3,828.7	7,238.5	10,018.5
1975	833.6	2,765.3	101.0	45.4	162.8	295.8	529.8	1,077.8	2,176.4	3,970.7	7,076.1	10,102.9
1974	869.1	2,922.9	107.8	47.3	174.1	314.4	568.4	1,153.3	2,285.1	4,266.9	7,080.8	11,245.5
1973	912.6	3,020.1	121.1	53.0	187.4	334.2	609.9	1,235.4	2,399.7	4,470.8	7,419.6	12,137.9
1972 <sup>2</sup>	920.9	3,125.6	120.0	49.9	199.1	349.2	642.5	1,260.4	2,406.0	4,490.1	7,338.6	11,854.1
1971	921.5	3,250.7	126.4	54.3	209.0	355.0	649.4	1,242.6	2,380.8	4,414.7	7,271.7	11,990.5
1970	938.4	3,597.1	134.1	53.7	203.6	348.7	664.3	1,290.9	2,431.1	4,488.4	7,511.1	10,750.3
1960	1,008.5	4,626.4	190.8	64.3	158.2	318.6	633.4	1,342.9	2,774.6	4,784.9	7,631.1	13,907.6
1950	1,119.4	5,368.4	250.8	86.0	251.3	440.2	805.3	1,706.1	<sup>3</sup> 3,126.6	<sup>3</sup> 5,205.0	8,039.7	14,473.6
<b>All other, male</b>												
1980 (est.)	966.0	2,387.8	98.8	47.1	212.9	392.8	611.1	1,251.2	2,744.9	4,471.4	9,789.5	10,219.8
1979 (est.)	940.5	2,622.8	100.1	47.7	201.5	418.5	633.7	1,244.7	2,671.5	4,400.6	9,125.0	9,265.1
1978	959.7	2,708.5	108.1	52.3	201.9	377.2	659.3	1,305.2	2,730.1	4,632.6	8,992.4	10,678.2
1977	967.1	2,780.4	108.1	52.8	205.1	396.8	671.7	1,354.5	2,772.7	4,682.2	8,783.8	11,286.1
1976	983.5	3,012.4	107.5	52.2	217.3	410.5	692.4	1,402.5	2,812.3	4,852.8	8,652.1	11,519.1
1975	999.1	3,001.1	108.8	56.7	242.6	454.6	736.1	1,418.9	2,806.6	4,970.8	8,604.9	11,693.8
1974	1,036.3	3,212.7	117.5	58.7	259.0	467.8	768.7	1,499.7	2,942.3	5,285.0	8,555.6	12,782.5
1973	1,084.6	3,335.4	135.6	66.8	275.2	498.6	815.7	1,591.5	3,069.5	5,456.7	8,965.7	13,605.7
1972 <sup>2</sup>	1,101.3	3,440.0	129.6	59.4	299.3	514.2	868.4	1,639.2	3,073.2	5,490.1	8,939.7	13,325.5
1971	1,094.1	3,610.0	138.9	66.7	312.0	516.1	852.8	1,572.0	3,013.1	5,377.6	8,746.0	13,351.0
1970	1,115.9	4,020.0	144.7	65.0	304.6	504.1	873.5	1,646.1	3,046.6	5,474.4	8,981.0	11,405.2
1960	1,152.0	5,189.4	207.3	75.2	213.8	386.4	729.2	1,551.0	3,151.5	5,664.0	8,662.6	15,238.7
1950	1,251.1	5,991.6	271.2	97.1	289.9	496.2	860.7	1,857.3	<sup>3</sup> 3,480.8	<sup>3</sup> 5,794.9	9,029.6	16,022.1
<b>All other, female</b>												
1980 (est.)	671.0	2,016.6	84.4	25.0	68.8	135.5	278.2	699.4	1,546.6	2,854.4	6,889.2	7,930.2
1979 (est.)	640.3	2,146.4	74.3	30.6	69.2	132.5	269.2	710.6	1,407.8	2,676.9	6,682.0	7,777.1
1978	664.5	2,206.5	89.7	31.5	75.9	142.7	308.4	718.7	1,534.6	2,821.7	6,513.6	8,449.0
1977	672.5	2,304.5	87.1	31.0	80.1	146.9	326.4	752.5	1,572.9	2,933.0	6,370.3	8,673.5
1976	680.0	2,542.2	86.1	32.0	80.6	157.8	340.8	772.3	1,590.1	3,009.4	6,217.6	9,175.2
1975	682.5	2,523.0	93.0	34.0	86.6	160.8	359.9	780.8	1,636.2	3,172.0	5,978.5	9,177.3
1974	716.3	2,614.2	98.2	35.8	93.4	184.0	402.8	852.2	1,716.3	3,442.8	6,015.4	10,342.3
1973	755.4	2,697.2	106.5	39.2	103.9	194.1	439.6	926.0	1,821.7	3,662.0	6,291.8	11,115.9
1972 <sup>2</sup>	755.5	2,815.9	110.2	40.3	103.9	208.3	455.1	929.4	1,830.2	3,678.9	6,178.0	10,939.0
1971	763.3	2,896.7	113.9	41.8	111.9	217.8	480.1	953.8	1,829.4	3,630.0	6,195.6	11,271.1
1970	775.3	3,169.4	123.3	42.3	108.8	215.7	490.5	979.4	1,886.9	3,675.6	6,392.6	10,288.9
1960	872.6	4,067.1	174.4	53.4	106.1	260.0	547.3	1,144.9	2,409.7	3,981.4	6,708.4	12,871.2
1950	993.5	4,749.0	230.3	75.0	216.4	390.4	754.0	1,554.9	<sup>3</sup> 2,763.0	<sup>3</sup> 4,610.7	7,064.7	13,366.8

<sup>1</sup>Figures for age not stated included in "All ages" but not distributed among age groups.<sup>2</sup>Based on a 50-percent sample of deaths.<sup>3</sup>Based on enumerated population adjusted for age bias in the "All other" population at ages 55-69 years.



**Table 7. Deaths and death rates, by age, race, and sex: United States, 1980**

[Based on a 10-percent sample of deaths. Rates per 100,000 population in specified group. Due to rounding estimates of deaths, figures may not add to totals]

Age	Total			White			All other		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
<b>Number</b>									
All ages . . . . .	1,986,000	1,077,880	907,660	1,735,000	935,970	799,030	250,540	141,910	108,630
Under 1 year . . . . .	45,000	25,590	19,430	31,480	18,140	13,340	13,540	7,450	6,090
1-4 years . . . . .	8,270	4,760	3,510	6,160	3,610	2,550	2,110	1,150	960
5-14 years . . . . .	10,680	6,440	4,240	8,520	5,020	3,500	2,160	1,420	740
15-24 years . . . . .	49,100	37,350	11,770	40,120	30,610	9,510	9,000	6,740	2,260
25-34 years . . . . .	50,840	36,750	14,140	38,380	27,850	10,530	12,510	8,900	3,610
35-44 years . . . . .	58,210	37,860	20,380	44,190	28,840	15,350	14,050	9,020	5,030
45-54 years . . . . .	134,450	86,110	48,370	107,990	70,020	37,970	26,490	16,090	10,400
55-59 years . . . . .	127,260	81,020	46,240	106,150	68,030	38,120	21,110	12,990	8,120
60-64 years . . . . .	166,010	104,320	61,690	142,200	90,300	51,900	23,810	14,020	9,790
65-69 years . . . . .	214,810	131,390	83,420	187,190	115,820	71,370	27,620	15,570	12,050
70-74 years . . . . .	247,640	144,390	103,250	219,830	129,420	90,410	27,810	14,970	12,840
75-79 years . . . . .	263,780	139,720	124,060	237,360	125,730	111,630	26,420	13,990	12,430
80-84 years . . . . .	252,440	114,500	137,940	231,670	104,310	127,360	20,770	10,190	10,580
85 years and over . . . . .	356,010	127,100	228,930	333,090	117,800	215,290	22,940	9,300	13,640
Not stated . . . . .	950	650	310	690	500	190	270	150	120
<b>Rate</b>									
All ages <sup>1</sup> . . . . .	892.6	997.0	793.9	905.7	1,001.9	814.2	811.3	966.0	671.0
Under 1 year . . . . .	1,310.7	1,454.8	1,159.3	1,115.9	1,253.6	970.9	2,205.2	2,387.8	2,016.6
1-4 years . . . . .	65.7	74.0	57.1	59.9	68.5	50.9	91.7	98.8	84.4
5-14 years . . . . .	31.5	37.1	25.5	30.5	35.1	25.6	36.1	47.1	25.0
15-24 years . . . . .	118.8	179.6	57.3	115.0	173.6	55.1	139.4	212.9	68.8
25-34 years . . . . .	140.7	205.5	77.5	123.0	178.3	67.6	253.8	392.8	135.5
35-44 years . . . . .	225.9	301.7	154.1	196.5	260.5	134.5	427.7	611.1	278.2
45-54 years . . . . .	590.7	778.6	413.3	540.2	716.2	371.7	955.6	1,251.2	699.4
55-59 years . . . . .	1,116.3	1,489.1	776.0	1,037.9	1,388.9	715.3	1,799.7	2,392.3	1,288.9
60-64 years . . . . .	1,688.6	2,265.4	1,180.7	1,604.8	2,168.6	1,105.0	2,457.2	3,179.1	1,854.2
65-69 years . . . . .	2,458.1	3,373.3	1,722.1	2,398.6	3,320.5	1,653.6	2,954.0	3,816.2	2,282.2
70-74 years . . . . .	3,621.0	4,996.2	2,614.6	3,534.2	4,949.1	2,507.9	4,492.7	5,443.6	3,732.6
75-79 years . . . . .	6,073.7	8,185.1	4,708.2	5,926.6	8,070.0	4,561.9	7,839.8	9,326.7	6,611.7
80-84 years . . . . .	8,863.8	11,496.0	7,452.2	8,893.3	11,602.9	7,465.4	8,547.3	10,505.2	7,246.6
85 years and over . . . . .	14,489.6	16,901.6	13,427.0	15,188.8	17,821.5	14,043.7	8,689.4	10,219.8	7,930.2

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

**Table B. Age-specific and age-adjusted death rates for 15 leading causes and selected components: United States, 1979 and 1980**

[Based on a 10-percent sample of deaths. Rates per 100,000 population in specified group]

Cause of death (Ninth Revision International Classification of Diseases, 1975)	Year	Age											Age- adjusted rate <sup>1</sup>
		All ages	Under 1 year	1-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75-84 years	85 years and over	
All causes .....	1980	892.6	1,310.7	40.7	118.8	140.7	225.9	590.7	1,381.1	2,968.5	7,178.4	14,489.6	594.1
	1979	866.2	1,372.5	42.1	118.2	139.1	227.9	588.5	1,371.1	2,921.9	7,014.0	13,831.0	587.4
Diseases of heart ..... 390-398, 402, 404-429	1980	343.0	21.8	1.4	2.6	8.6	43.4	181.9	510.8	1,210.8	3,229.7	7,134.7	205.3
	1979	331.3	18.6	0.9	2.3	7.6	46.4	183.0	514.4	1,206.6	3,151.3	6,704.5	203.0
Rheumatic fever and rheumatic heart disease ..... 390-398	1980	3.6	-	0.0	0.2	0.3	1.4	4.3	8.3	16.1	21.0	24.4	2.7
	1979	3.4	-	-	0.1	0.4	1.4	3.7	7.8	15.6	21.5	24.0	2.5
Hypertensive heart disease ..... 402	1980	9.9	-	-	0.0	0.3	1.4	6.8	17.6	35.3	88.3	181.5	6.2
	1979	9.3	-	0.0	0.0	0.4	1.7	6.8	16.6	34.8	85.5	152.2	6.0
Hypertensive heart and renal disease ..... 404	1980	1.5	-	-	-	0.0	0.2	0.6	1.1	4.6	16.3	42.7	0.8
	1979	1.4	-	-	0.0	0.0	0.1	0.3	0.9	4.1	15.6	47.6	0.7
Ischemic heart disease ..... 410-414	1980	254.9	-	0.0	0.2	3.7	29.0	132.5	383.4	924.3	2,448.1	5,139.6	152.4
	1979	249.8	1.2	0.0	0.3	3.1	30.7	138.2	393.1	934.9	2,398.2	4,918.1	153.1
Acute myocardial infarction ..... 410	1980	135.4	-	0.0	0.1	2.3	19.1	92.3	254.1	564.6	1,227.4	1,798.1	87.9
	1979	137.2	0.9	-	0.2	2.2	21.7	97.3	268.5	585.8	1,234.8	1,734.1	91.0
Other acute and subacute forms of ischemic heart disease ..... 411	1980	2.0	-	-	-	0.0	0.4	2.2	3.9	7.6	17.0	26.9	1.4
	1979	2.0	0.3	-	-	0.0	0.4	2.3	5.0	6.8	13.8	29.6	1.4
Angina pectoris ..... 413	1980	0.2	-	-	-	0.0	-	0.0	0.5	0.4	1.7	2.4	0.1
	1979	0.2	-	-	-	0.0	0.0	-	0.2	1.0	1.0	3.9	0.1
Old myocardial infarction and other forms of chronic ischemic heart disease ..... 412, 414	1980	117.3	-	0.0	0.1	1.3	9.4	37.9	124.9	351.6	1,202.1	3,312.2	63.0
	1979	110.4	-	0.0	0.0	0.8	8.5	38.6	119.5	341.3	1,148.7	3,150.5	60.6
Other diseases of endocardium ..... 424	1980	3.2	0.3	0.0	0.1	0.3	0.7	1.7	4.6	11.2	31.2	52.5	2.0
	1979	2.8	-	0.1	0.0	0.2	0.6	1.0	4.9	10.1	29.6	43.7	1.8
All other forms of heart disease ..... 415-423, 425-429	1980	70.0	21.5	1.2	2.0	3.9	10.7	36.0	95.8	219.3	624.9	1,693.9	41.2
	1979	64.6	17.4	0.8	1.8	3.5	12.0	33.1	91.1	207.0	600.8	1,518.9	38.9
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues ..... 140-208	1980	186.3	1.5	4.7	6.6	12.6	48.8	178.9	442.5	814.8	1,331.8	1,413.1	134.2
	1979	183.5	3.0	4.7	5.9	13.3	49.3	182.9	442.1	797.5	1,300.1	1,452.8	133.4
Malignant neoplasms of lip, oral cavity, and pharynx. . . 140-149	1980	3.8	-	0.0	0.1	0.1	1.2	5.2	11.8	15.4	20.7	22.0	2.9
	1979	3.6	-	0.0	0.0	0.2	0.8	4.9	11.6	14.9	17.9	21.9	2.7
Malignant neoplasms of digestive organs and peritoneum ..... 150-159	1980	49.3	0.3	0.2	0.4	1.4	8.2	36.7	105.6	214.3	423.7	496.9	33.4
	1979	49.5	0.6	0.1	0.2	1.7	8.9	35.4	104.4	225.1	422.2	503.0	33.7
Malignant neoplasms of respiratory and intrathoracic organs ..... 160-165	1980	48.6	-	0.0	0.1	0.8	9.5	55.4	146.6	244.3	270.5	159.5	36.7
	1979	46.7	-	0.0	0.2	0.7	10.6	56.2	146.5	226.1	251.1	165.5	35.8
Malignant neoplasm of breast ..... 174-175	1980	15.7	-	-	0.0	1.9	9.1	24.7	43.1	55.4	81.4	107.0	12.3
	1979	16.0	-	-	0.0	1.6	8.9	26.6	43.4	59.1	77.7	119.6	12.7
Malignant neoplasms of genital organs ..... 179-187	1980	20.8	-	0.0	0.6	1.1	4.7	13.2	36.3	88.6	194.3	239.3	13.7
	1979	20.5	-	0.0	0.5	1.4	5.3	14.0	35.6	88.2	188.8	243.1	13.8
Malignant neoplasms of urinary organs ..... 188-189	1980	7.9	0.3	0.1	0.1	0.3	0.9	4.7	15.4	37.1	68.6	85.5	5.2
	1979	8.0	0.3	0.3	0.1	0.2	1.1	5.2	16.8	33.2	73.4	93.5	5.4

See footnotes at end of table.

Table 8. Age-specific and age-adjusted death rates for 15 leading causes and selected components: United States, 1979 and 1980—Con.

[Based on a 10-percent sample of deaths. Rates per 100,000 population in specified group]

Cause of death (Ninth Revision International Classification of Diseases, 1975)	Year	Age											Age- adjusted rate <sup>1</sup>
		All ages	Under 1 year	1-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75-84 years	85 years and over	
Malignant neoplasms of all other and unspecified sites . . . . . 170-173, 190-199	1980	22.9	0.6	2.0	2.2	3.3	8.8	24.7	50.7	92.2	148.2	173.4	17.1
	1979	22.3	1.8	1.9	2.1	3.8	8.0	25.6	52.3	86.6	141.8	171.1	16.9
Leukemia . . . . . 204-208	1980	7.7	0.3	1.9	2.1	1.9	2.9	5.9	12.8	27.0	54.5	68.0	5.7
	1979	7.4	-	1.9	1.7	1.8	2.7	6.2	11.4	26.1	55.7	71.2	5.5
Other malignant neoplasms of lymphatic and hematopoietic tissues . . . . . 200-203	1980	9.6	-	0.5	1.1	1.9	3.3	8.4	20.1	40.6	69.9	61.5	7.0
	1979	9.3	0.3	0.4	1.1	1.7	3.0	8.8	20.0	38.1	71.6	63.9	6.9
Cerebrovascular diseases . . . . . 430-438	1980	76.6	3.8	0.3	1.2	2.7	8.6	26.1	67.8	222.4	834.7	2,094.0	41.5
	1979	76.9	2.4	0.3	0.9	2.6	9.3	27.4	68.7	228.7	858.5	2,113.2	42.5
Accidents and adverse effects . . . . . E800-E949	1980	47.9	34.1	18.2	62.7	49.0	36.0	40.0	46.3	58.6	126.0	275.5	43.4
	1979	47.9	28.3	20.9	63.8	47.0	37.1	38.1	44.9	57.1	133.4	265.9	43.6
Motor vehicle accidents . . . . . E810-E825	1980	24.4	7.6	8.7	45.0	30.9	19.6	21.3	18.1	21.7	33.0	24.8	23.7
	1979	24.5	7.3	9.8	46.4	29.6	22.1	17.8	18.3	20.4	33.5	27.4	23.9
All other accidents and adverse effects . . E800-E807, E826-E949	1980	23.5	26.5	9.4	17.7	18.1	16.4	18.7	28.1	36.9	93.0	250.7	19.6
	1979	23.4	21.0	11.0	17.4	17.4	15.0	20.3	26.5	36.7	99.9	238.4	19.7
Chronic obstructive pulmonary diseases and allied conditions . . . . . 490-496	1980	25.1	1.5	0.2	0.3	0.5	1.6	10.9	44.0	125.2	243.5	249.1	16.2
	1979	22.7	2.1	0.2	0.3	0.3	1.7	8.3	40.2	115.5	230.2	211.4	14.8
Pneumonia and influenza . . . . . 480-487	1980	23.7	29.4	0.9	0.9	1.3	3.1	8.1	18.4	52.9	229.5	778.2	12.6
	1979	20.0	35.1	0.7	0.8	1.5	2.9	6.9	16.8	46.8	198.0	635.9	11.1
Diabetes mellitus . . . . . 250	1980	15.4	0.3	0.2	0.2	1.7	4.0	10.0	25.9	62.7	136.6	205.5	10.1
	1979	15.0	-	0.1	0.3	1.7	4.0	8.2	25.9	60.2	142.3	204.1	9.9
Chronic liver disease and cirrhosis . . . . . 571	1980	14.1	0.3	0.0	0.2	4.1	13.7	31.4	45.6	43.1	31.0	15.9	12.6
	1979	13.6	0.9	0.1	0.3	3.6	14.8	31.3	40.7	42.4	29.9	17.6	12.3
Atherosclerosis . . . . . 440	1980	13.4	-	-	-	0.1	0.2	1.3	4.4	24.1	140.6	597.1	5.8
	1979	13.0	-	-	0.0	-	0.2	0.9	4.6	23.6	128.9	629.9	5.6
Suicide . . . . . E950-E959	1980	12.7	...	0.2	12.8	16.8	16.7	17.1	17.4	18.8	22.0	16.3	12.2
	1979	12.6	...	0.4	12.1	17.6	14.2	17.6	18.8	18.5	22.5	14.6	12.0
Homicide and legal intervention . . . . . E960-E978	1980	11.3	7.6	1.4	16.9	21.0	14.3	12.9	7.3	5.5	6.1	3.7	11.4
	1979	10.5	5.8	1.4	15.5	19.4	13.7	10.9	7.0	6.5	5.7	5.6	10.6
Certain conditions originating in the perinatal period . . . . 760-779	1980	10.1	653.0	0.2	0.0	-	-	0.1	-	-	-	-	(2)
	1979	10.4	691.9	0.2	0.1	0.0	-	0.0	-	-	-	-	(2)
Nephritis, nephrotic syndrome, and nephrosis . . . . . 580-589	1980	7.8	7.9	0.0	0.3	0.5	1.7	3.5	9.6	25.5	77.5	162.8	4.7
	1979	7.3	7.0	0.1	0.2	0.9	1.6	3.4	8.0	25.3	73.9	146.2	4.5
Congenital anomalies . . . . . 740-759	1980	6.2	266.4	3.3	1.8	1.1	1.2	1.6	2.2	2.7	3.2	3.3	(2)
	1979	6.1	272.8	3.2	1.4	1.2	1.3	1.8	1.9	2.5	4.3	6.0	(2)
Septicemia . . . . . 038	1980	4.1	7.9	0.3	0.2	0.5	0.8	2.1	6.3	13.5	35.0	77.7	2.6
	1979	3.8	9.4	0.2	0.2	0.5	0.6	2.0	5.2	12.8	35.0	69.5	2.5

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

<sup>2</sup>Since deaths from these causes occur primarily among infants, rates adjusted to the total population in 1940 are not shown. See table H.

Table 9. Deaths from 72 selected causes: United States, 1970 and 1980

[For 1979 and 1980, based on a 10-percent sample of deaths; for all other years, based on final data. Data for 1979 and 1980 are based on the Ninth Revision International Classification of Diseases; for all other years, based on the Eighth Revision; see Technical notes. Comparability of causes of death between the Eighth and Ninth Revisions is described in the Technical notes. Comparability ratios are shown in table 11]

Cause of death (Ninth Revision International Classification of Diseases, 1975)	1980 (est.)	1979 (est.)	1978	1977	1976	1970
All causes	1,986,000	1,906,000	1,927,788	1,899,597	1,909,440	1,921,031
Shigellosis and amebiasis	004-006	10	30	53	55	89
Certain other intestinal infections	007-009	340	350	1,874	1,855	1,939
Tuberculosis	010-018	1,770	1,980	2,914	2,968	3,130
Tuberculosis of respiratory system	010-012	1,540	1,620	2,256	2,324	2,419
Other tuberculosis	013-018	230	360	658	644	711
Whooping cough	033	10	20	6	10	7
Streptococcal sore throat, scarlatina, and erysipelas	034-035	10	30	5	14	14
Meningococcal infection	036	410	390	403	338	330
Septicemia	038	9,230	8,350	7,800	7,112	6,401
Acute poliomyelitis	045	20	20	13	16	16
Measles	055	10	-	11	15	12
Viral hepatitis	070	790	650	508	508	567
Syphilis	090-097	180	180	169	196	225
All other infectious and parasitic diseases	001-003,005,020-032,037,039-041,046-054,056-066,071-088,098-139	3,730	3,320	4,305	3,845	3,857
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues	140-208	414,320	403,780	396,992	386,686	377,312
Malignant neoplasms of lip, oral cavity, and pharynx	140-149	8,500	7,890	8,341	8,454	8,114
Malignant neoplasms of digestive organs and peritoneum	150-159	109,730	108,910	105,427	102,951	101,729
Malignant neoplasms of respiratory and intrathoracic organs	160-165	108,000	102,740	99,898	95,182	91,131
Malignant neoplasm of breast	174-175	34,940	35,290	34,609	34,762	33,403
Malignant neoplasms of genital organs	179-187	46,250	45,190	45,131	44,273	44,461
Malignant neoplasms of urinary organs	188-189	17,574	17,680	17,574	17,382	16,980
Malignant neoplasms of all other and unspecified sites	170-173,190-199	50,990	49,180	48,943	47,276	45,975
Leukemia	204-208	17,060	16,330	15,391	15,329	15,056
Other malignant neoplasms of lymphatic and hematopoietic tissues	200-203	21,270	20,570	21,678	21,077	20,463
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature	210-239	5,710	5,800	4,963	4,925	4,719
Diabetes mellitus	250	34,230	33,060	33,841	32,989	34,508
Nutritional deficiencies	260-269	2,300	2,250	2,855	2,606	2,619
Anemias	280-285	3,420	2,940	3,300	3,121	3,182
Meningitis	320-322	1,320	1,490	1,560	1,526	1,589
Major cardiovascular diseases	390-448	989,690	953,100	966,120	961,539	974,429
Diseases of heart	390-398,402,404-429	763,060	729,210	729,510	718,850	723,878
Rheumatic fever and rheumatic heart disease	390-398	7,950	7,470	13,402	12,770	13,110
Hypertensive heart disease	402	22,100	20,520	7,087	6,905	6,870
Hypertensive heart and renal disease	404	3,340	3,150	3,249	3,530	4,020
Ischemic heart disease	410-414	566,930	549,820	642,270	638,427	646,073
Acute myocardial infarction	410	301,210	302,010	302,664	306,398	319,477
Other acute and subacute forms of ischemic heart disease	411	4,520	4,400	4,090	3,993	4,028
Angina pectoris	413	370	370	253	206	186
Old myocardial infarction and other forms of chronic ischemic heart disease	412,414	260,830	243,040	335,263	327,830	322,382
Other diseases of endocardium	424	7,030	6,160	4,072	4,024	4,195
All other forms of heart disease	415-423,425-429	155,710	142,090	59,430	53,194	49,810
Hypertension with or without renal disease	401,403	7,140	6,910	5,490	5,695	6,130
Cerebrovascular diseases	430-438	170,420	169,350	175,629	181,934	188,623
Intracerebral and other intracranial hemorrhage	431-432	20,900	22,760	22,633	23,832	24,845
Cerebral thrombosis and unspecified occlusion of cerebral arteries	434,0,434,9	34,510	35,110	38,710	42,016	44,803
Cerebral embolism	434.1	710	810	760	731	826
All other and late effects of cerebrovascular diseases	430,433,435-438	114,300	110,670	113,526	115,355	118,149
Atherosclerosis	440	29,830	28,650	28,940	28,754	29,366
Other diseases of arteries, arterioles, and capillaries	441-448	19,240	18,980	26,551	26,306	26,432
Acute bronchitis and bronchiolitis	466	590	470	756	697	854
Pneumonia and influenza	480-487	52,720	44,110	58,319	51,193	61,866
Pneumonia	480-486	50,130	43,520	54,267	49,889	53,989
Influenza	487	2,590	590	4,052	1,304	7,877
Chronic obstructive pulmonary diseases and allied conditions	490-496	55,810	49,980	21,875	22,363	24,410
Bronchitis, chronic and unspecified	490-491	3,940	3,220	4,376	4,313	4,639
Emphysema	492	14,130	14,070	15,627	16,376	17,796
Asthma	493	2,500	2,540	1,872	1,674	1,975
Other chronic obstructive pulmonary diseases and allied conditions	494-496	35,240	30,150	...	...	...
Ulcer of stomach and duodenum	531-533	5,750	5,520	5,645	6,900	6,428
Appendicitis	540-543	650	750	735	731	752
Hernia of abdominal cavity and intestinal obstruction without mention of hernia	550-553, 560	5,430	5,010	5,568	115,355	5,919
Chronic liver disease and cirrhosis	571	31,330	29,860	30,066	30,848	31,453
Cholelithiasis and other disorders of gallbladder	574-575	3,110	2,840	2,941	2,957	2,956
Nephritis, nephrotic syndrome, and nephrosis	580-589	17,390	16,080	8,868	8,519	8,541
Acute glomerulonephritis and nephrotic syndrome	580-581	340	220	2,073	1,833	1,759
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified	582-583,587	2,450	2,460	6,795	6,686	6,782
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause	584-586,588-589	14,600	13,400	6,795	6,686	6,782

Table 9. Deaths from 72 selected causes: United States, 1970 and 1976-80—Con.

[For 1979 and 1980, based on a 10-percent sample of deaths; for all other years, based on final data. Data for 1979 and 1980 are based on the Ninth Revision International Classification of Diseases; for all other years, based on the Eighth Revision; see Technical notes. Comparability of causes of death between the Eighth and Ninth Revisions is described in the Technical notes. Comparability ratios are shown in table 11]

<i>Cause of death (Ninth Revision International Classification of Diseases, 1975)</i>	<i>1980 (est.)</i>	<i>1979 (est.)</i>	<i>1978</i>	<i>1977</i>	<i>1976</i>	<i>1970</i>	
Infections of kidney . . . . .	590	2,640	3,070	3,096	3,712	4,017	8,190
Hyperplasia of prostate . . . . .	600	810	580	854	998	1,077	2,168
Complications of pregnancy, childbirth, and the puerperium . . . . .	630-676	250	270	321	373	390	803
Pregnancy with abortive outcome . . . . .	630-638	50	60	16	20	16	128
Other complications of pregnancy, childbirth, and the puerperium . . . . .	640-676	200	210	305	353	374	675
Congenital anomalies . . . . .	740-759	13,730	13,390	12,968	12,983	13,002	16,824
Certain conditions originating in the perinatal period . . . . .	760-779	22,570	22,880	22,033	23,401	24,809	43,205
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .	767-769	7,500	8,270	11,710	12,633	13,432	22,801
Other conditions originating in the perinatal period . . . . .	760-766,770-779	15,070	14,610	10,323	10,768	11,377	20,404
Symptoms, signs, and ill-defined conditions . . . . .	780-799	29,130	28,210	31,324	32,149	30,802	25,781
All other diseases . . . . .	Residual	112,510	105,350	137,396	130,428	125,340	101,128
Accidents and adverse effects . . . . .	E800-E949	106,550	105,420	105,561	103,202	100,761	114,638
Motor vehicle accidents . . . . .	E810-E825	54,200	53,990	52,411	49,510	47,038	54,633
All other accidents and adverse effects . . . . .	E800-E807,E826-E949	52,350	51,430	53,150	53,692	53,723	60,005
Suicide . . . . .	E950-E959	28,290	27,640	27,294	28,681	26,832	23,480
Homicide and legal intervention . . . . .	E960-E978	25,090	23,040	20,432	19,968	19,554	16,848
All other external causes . . . . .	E980-E999	3,510	3,880	4,163	4,457	4,766	5,427

Table 10. Death rates for 72 selected causes: United States, 1970 and 1976-80

[For 1979 and 1980, based on a 10-percent sample of deaths; for all other years, based on final data. Data for 1979 and 1980 are based on the Ninth Revision International Classification of Diseases; for all other years, based on the Eighth Revision; see Technical notes. Comparability of causes of death between the Eighth and Ninth Revisions is described in the Technical notes. Comparability ratios are shown in table 11. Rates per 100,000 population.]

Cause of death (Ninth Revision International Classification of Diseases, 1975)	1980 (est.)	1979 (est.)	1978	1977	1976	1970
All causes	892.6	866.2	883.4	878.1	889.6	945.3
Shigellosis and amebiasis	004,006	0.0	0.0	0.0	0.0	0.0
Certain other intestinal infections	007-009	0.2	0.2	0.9	0.9	1.3
Tuberculosis	010-018	0.8	0.9	1.3	1.4	2.6
Tuberculosis of respiratory system	010-012	0.7	0.7	1.0	1.1	2.0
Other tuberculosis	013-018	0.1	0.2	0.3	0.3	0.5
Whooping cough	033	0.0	0.0	0.0	0.0	0.0
Streptococcal sore throat, scarlatina, and erysipelas	034-035	0.0	0.0	0.0	0.0	0.0
Meningococcal infection	036	0.2	0.2	0.2	0.2	0.3
Septicemia	038	4.1	3.8	3.6	3.3	1.7
Acute poliomyelitis	045	0.0	0.0	0.0	0.0	0.0
Measles	055	0.0	-	0.0	0.0	0.0
Viral hepatitis	070	0.4	0.3	0.2	0.2	0.5
Syphilis	090-097	0.1	0.1	0.1	0.1	0.2
All other infectious and parasitic diseases	001-003,005,020-032,037,039-041,046-054,056-066,071-088,098-139	1.7	1.5	2.0	1.8	1.8
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues	140-208	186.3	183.5	181.9	178.7	175.8
Malignant neoplasms of lip, oral cavity, and pharynx	140-149	3.8	3.6	3.8	3.9	3.8
Malignant neoplasms of digestive organs and peritoneum	150-159	49.3	49.5	48.3	47.6	47.4
Malignant neoplasms of respiratory and intrathoracic organs	160-165	48.6	46.7	45.8	44.0	42.5
Malignant neoplasm of breast	174-175	15.7	16.0	15.9	16.1	15.6
Malignant neoplasms of genital organs	179-187	20.8	20.5	20.7	20.5	20.7
Malignant neoplasms of urinary organs	188-189	7.9	8.0	8.1	8.0	7.9
Malignant neoplasms of all other and unspecified sites	170-173,190-199	22.9	22.3	22.4	21.9	21.4
Leukemia	204-208	7.7	7.4	7.1	7.1	7.0
Other malignant neoplasms of lymphatic and hematopoietic tissues	200-203	9.6	9.3	9.9	9.7	9.5
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature	210-239	2.6	2.6	2.3	2.3	2.2
Diabetes mellitus	250	15.4	15.0	15.5	15.2	16.1
Nutritional deficiencies	260-269	1.0	1.0	1.3	1.2	1.2
Anemias	280-285	1.5	1.3	1.5	1.4	1.5
Meningitis	320-322	0.6	0.7	0.7	0.7	0.8
Major cardiovascular diseases	390-448	444.9	433.0	442.7	444.5	454.0
Diseases of heart	390-398,402,404-429	343.0	331.3	334.3	332.3	337.2
Rheumatic fever and rheumatic heart disease	390-398	3.6	3.4	6.1	5.9	6.1
Hypertensive heart disease	402	9.9	9.3	3.2	3.2	3.1
Hypertensive heart and renal disease	404	1.5	1.4	1.5	1.6	1.9
Ischemic heart disease	410-414	254.9	249.8	294.3	295.1	301.0
Acute myocardial infarction	410	135.4	137.2	138.7	141.6	148.8
Other acute and subacute forms of ischemic heart disease	411	2.0	2.0	1.9	1.8	1.9
Angina pectoris	413	0.2	0.2	0.1	0.1	0.1
Old myocardial infarction and other forms of chronic ischemic heart disease	412,414	117.3	110.4	153.6	151.5	150.2
Other diseases of endocardium	424	3.2	2.8	1.9	1.9	2.0
All other forms of heart disease	415-423,425-429	70.0	64.6	27.2	24.6	23.2
Hypertension with or without renal disease	401-403	3.2	3.1	2.5	2.6	2.9
Cerebrovascular diseases	430-438	76.6	76.9	80.5	84.1	87.9
Intracerebral and other intracranial hemorrhage	431-432	9.4	10.3	10.4	11.0	11.6
Cerebral thrombosis and unspecified occlusion of cerebral arteries	434,0,434.9	15.5	16.0	17.7	19.4	20.9
Cerebral embolism	434.1	0.3	0.4	0.3	0.3	0.4
All other and late effects of cerebrovascular diseases	430,433,435-438	51.4	50.3	52.0	53.3	55.0
Atherosclerosis	440	13.4	13.0	13.3	13.3	13.7
Other diseases of arteries, arterioles, and capillaries	441-448	8.6	8.6	12.2	12.2	12.3
Acute bronchitis and bronchiolitis	466	0.3	0.2	0.3	0.3	0.4
Pneumonia and influenza	480-487	23.7	20.0	26.7	23.7	28.8
Pneumonia	480-486	22.5	19.8	24.9	23.1	25.2
Influenza	487	1.2	0.3	1.9	0.6	3.7
Chronic obstructive pulmonary diseases and allied conditions	490-496	25.1	22.7	10.0	10.3	11.4
Bronchitis, chronic and unspecified	490-491	1.8	1.5	2.0	2.0	2.2
Emphysema	492	6.4	6.4	7.2	7.6	8.3
Asthma	493	1.1	1.2	0.9	0.8	0.9
Other chronic obstructive pulmonary diseases and allied conditions	494-496	15.8	13.7	...	...	...
Ulcer of stomach and duodenum	531-533	2.6	2.5	2.5	2.7	3.0
Appendicitis	540-543	0.3	0.3	0.3	0.3	0.4
Hernia of abdominal cavity and intestinal obstruction without mention of hernia	550-553,560	2.4	2.3	2.6	2.6	2.8
Chronic liver disease and cirrhosis	571	14.1	13.6	13.8	14.3	14.7
Cholelithiasis and other disorders of gallbladder	574-575	1.4	1.3	1.3	1.4	1.4
Nephritis, nephrotic syndrome, and nephrosis	580-589	7.8	7.3	4.1	3.9	4.0
Acute glomerulonephritis and nephrotic syndrome	580-581	0.2	0.1	0.9	0.8	0.8
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified	582-583,587	1.1	1.1	3.1	3.1	3.2
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause	584-586,588-589	6.6	6.1	3.1	3.1	3.2
Infections of kidney	590	1.2	1.4	1.4	1.7	1.9
Hyperplasia of prostate	600	0.4	0.3	0.4	0.5	0.5

Table 10. Death rates for 72 selected causes: United States, 1970 and 1976-80—Con.

[For 1979 and 1980, based on a 10-percent sample of deaths; for all other years, based on final data. Data for 1979 and 1980 are based on the Ninth Revision International Classification of Diseases; for all other years, based on the Eighth Revision; see Technical notes. Comparability of causes of death between the Eighth and Ninth Revisions is described in the Technical notes. Comparability ratios are shown in table 11. Rates per 100,000 population]

<i>Cause of death (Ninth Revision International Classification of Diseases, 1975)</i>	<i>1980 (est.)</i>	<i>1979 (est.)</i>	<i>1978</i>	<i>1977</i>	<i>1976</i>	<i>1970</i>	
Complications of pregnancy, childbirth, and the puerperium . . . . .	630-676	0.1	0.1	0.1	0.2	0.2	0.4
Pregnancy with abortive outcome . . . . .	630-638	0.0	0.0	0.0	0.0	0.0	0.1
Other complications of pregnancy, childbirth, and the puerperium . . . . .	640-676	0.1	0.1	0.1	0.2	0.2	0.3
Congenital anomalies . . . . .	740-769	6.2	6.1	5.9	6.0	6.1	8.3
Certain conditions originating in the perinatal period . . . . .	760-779	10.1	10.4	10.1	10.8	11.6	21.3
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .	767-769	3.4	3.8	5.4	5.8	6.3	11.2
Other conditions originating in the perinatal period . . . . .	760-766, 770-779	6.8	6.6	4.7	5.0	5.3	10.0
Symptoms, signs, and ill-defined conditions . . . . .	780-799	13.1	12.8	14.4	14.9	14.3	12.7
All other diseases . . . . .	Residual	50.6	47.9	63.0	60.3	58.4	49.8
Accidents and adverse effects . . . . .	E800-E949	47.9	47.9	48.4	47.7	46.9	56.4
Motor vehicle accidents . . . . .	E810-E825	24.4	24.5	24.0	22.9	21.9	26.9
All other accidents and adverse effects . . . . .	E800-E807, E826-E949	23.5	23.4	24.4	24.8	25.0	29.5
Suicide . . . . .	E950-E969	12.7	12.6	12.5	13.3	12.5	11.6
Homicide and legal intervention . . . . .	E960-E978	11.3	10.5	9.4	9.2	9.1	8.3
All other external causes . . . . .	E980-E999	1.6	1.8	1.9	2.1	2.2	2.7

Table 11. Comparable category numbers, estimated comparability ratios, and estimates of sampling variability of comparability ratios for 72 selected causes; based on a stratified random sample of 1976 deaths: United States

[For discussion of comparability ratios see Technical notes]

Cause of death (Ninth Revision International Classification of Diseases, 1975)	Category numbers according to the Eighth Revision	Estimated comparability ratio <sup>1</sup>	Error of the estimate of the ratio in (2)		95 percent confidence limits <sup>2</sup>		
			Standard error	Relative standard error	Upper	Lower	
	(1)	(2)	(3)	(4)	(5)	(6)	
All causes	...	1.0000	...	...	...	...	
Shigellosis and amebiasis	004,006	0.9818	0.0378	3.9	1.0559	0.9077	
Certain other intestinal infections	007-009	0.1821	0.0207	11.4	0.2227	0.1415	
Tuberculosis	010-018	0.7668	0.0119	1.6	0.7901	0.7435	
Tuberculosis of respiratory system	010-012	0.8429	0.0146	1.7	0.8715	0.8143	
Other tuberculosis	013-018	0.5077	0.0167	3.3	0.5404	0.4750	
Whooping cough	033	0.8571	0.0000	0.0	0.8571	0.8571	
Streptococcal sore throat, scarlatina, and erysipelas	034-035	1.4286	0.0000	0.0	1.4286	1.4286	
Meningococcal infection	036	0.9788	0.0124	1.3	1.0030	0.9546	
Septicemia	038	0.8500	0.0180	2.1	0.8853	0.8147	
Acute poliomyelitis	045	0.5000	0.0000	0.0	0.5000	0.5000	
Measles	055	0.9167	0.0000	0.0	0.9167	0.9167	
Viral hepatitis	070	1.3986	0.0820	5.9	1.5593	1.2379	
Syphilis	090-097	1.0089	0.0259	2.6	1.0596	0.9582	
All other infectious and parasitic diseases	001-003,005,020-032,037,039-041,046-054,056-066,071-088,098-139	Remainder of 000-136	1.0321	0.0634	6.1	1.1563	0.9079
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues	140-208	1.0026	0.0017	0.2	1.0059	0.9993	
Malignant neoplasms of lip, oral cavity, and pharynx	140-149	1.0117	0.0087	0.9	1.0286	0.9948	
Malignant neoplasms of digestive organs and peritoneum	150-159	1.0330	0.0035	0.3	1.0398	1.0262	
Malignant neoplasms of respiratory and intrathoracic organs	160-165	1.0007	0.0033	0.3	1.0071	0.9943	
Malignant neoplasm of breast	174-175	1.0089	0.0022	0.2	1.0131	1.0047	
Malignant neoplasms of genital organs	179-187	1.0111	0.0031	0.3	1.0171	1.0051	
Malignant neoplasms of urinary organs	188-189	0.9924	0.0045	0.5	1.0011	0.9837	
Malignant neoplasms of all other and unspecified sites	170-173,190-199	0.9557	0.0082	0.9	0.9718	0.9396	
Leukemia	204-208	1.0070	0.0056	0.6	1.0180	0.9980	
Other malignant neoplasms of lymphatic and hematopoietic tissues	200-203	200-203,208,209	0.9385	0.0069	0.7	0.9519	0.9251
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature	210-239	210-239	1.2085	0.0261	2.2	1.2595	1.1575
Diabetes mellitus	250	250	0.9991	0.0087	0.9	1.0162	0.9820
Nutritional deficiencies	260-269	260-269	0.7167	0.0262	3.7	0.7680	0.6654
Anemias	280-285	280-285	0.9296	0.0124	1.3	0.9538	0.9054
Meningitis	320-322	320	0.9459	0.0163	1.7	0.9777	0.9141
Major cardiovascular diseases	390-448	390-448	1.0069	0.0004	0.0	1.0076	1.0062
Diseases of heart	390-398,402,404-429	390-398,402,404,410-429	1.0126	0.0039	0.4	1.0202	1.0050
Rheumatic fever and rheumatic heart disease	390-398	390-398	0.6648	0.0080	1.2	0.6804	0.6492
Hypertensive heart disease	402	402	3.3022	0.0557	1.7	3.4114	3.1930
Hypertensive heart and renal disease	404	404	1.2119	0.0438	3.6	1.2978	1.1280
Ischemic heart disease	410-414	410-413	0.8784	0.0038	0.4	0.8859	0.8709
Acute myocardial infarction	410	410	1.0003	0.0054	0.5	1.0108	0.9899
Other acute and subacute forms of ischemic heart disease	411	411	1.2224	0.0661	5.4	1.3519	1.0929
Angina pectoris	413	413	1.0484	0.0666	6.4	1.1789	0.9179
Old myocardial infarction and other forms of chronic ischemic heart disease	412,414	412	0.7533	0.0055	0.7	0.7640	0.7426
Other diseases of endocardium	424	424,428	1.2286	0.0227	1.8	1.2731	1.1841
All other forms of heart disease	415-423,425-429	420-423,425-427,429	2.5035	0.0257	1.0	2.5539	2.4531
Hypertension with or without renal disease	401,403	400,401,403	1.2703	0.0294	2.3	1.3280	1.2128
Cerebrovascular diseases	430-438	430-438	1.0049	0.0066	0.7	1.0178	0.9920
Intracerebral and other intracranial hemorrhage	431-432	431	0.9969	0.0068	0.7	1.0102	0.9836
Cerebral thrombosis and unspecified occlusion of cerebral arteries	434,0,434,9	433	1.0340	0.0222	2.1	1.0774	0.9906
Cerebral embolism	434,1	434	1.1211	0.0924	8.2	1.3022	0.9400
All other and late effects of cerebrovascular diseases	430,433,435-438	430,432,435-438	0.9948	0.0061	0.6	1.0067	0.9829
Atherosclerosis	440	440	1.0649	0.0246	2.3	1.1130	1.0168
Other diseases of arteries, arterioles, and capillaries	441-448	441-448	0.7409	0.0098	1.3	0.7600	0.7218
Acute bronchitis and bronchiolitis	466	466	0.8888	0.0274	3.1	0.9426	0.8351
Pneumonia and influenza	480-487	470-474,480-486	0.9264	0.0067	0.7	0.9394	0.9134
Pneumonia	480-486	480-486	0.9199	0.0076	0.8	0.9347	0.9051
Influenza	487	470-474	0.9714	0.0078	0.8	0.9886	0.9562
Chronic obstructive pulmonary diseases and allied conditions	490-496	490-493	1.8846	0.0150	0.8	1.9141	1.8651
Bronchitis, chronic and unspecified	490-491	490-491	0.9383	0.0134	1.4	0.9846	0.9120
Emphysema	492	492	0.9770	0.0127	1.3	1.0018	0.9522
Asthma	493	493	1.3544	0.0638	4.7	1.4790	1.2298
Other chronic obstructive pulmonary diseases and allied conditions	494-496	...	...	...	...	...	
Ulcer of stomach and duodenum	531-533	531-533	1.1192	0.0247	2.2	1.1675	1.0709
Appendicitis	540-543	540-543	1.0080	0.0264	2.6	1.0597	0.9583
Hernia of abdominal cavity and intestinal obstruction without mention of hernia	550-553,560	550-553,560	0.9432	0.0189	1.8	0.9782	0.9102

See footnotes at end of table



Table 11. Comparable category numbers, estimated comparability ratios, and estimates of sampling variability of comparability ratios for 72 selected causes; based on a stratified random sample of 1976 deaths: United States—Con.

[For discussion of comparability ratios see Technical notes]

Cause of death (Ninth Revision International Classification of Diseases, 1975)	Category numbers according to the Eighth Revision	Estimated compara- bility ratio <sup>1</sup>	Error of the estimate of the ratio in (2)		95 percent con- fidence limits <sup>2</sup>	
			Standard error	Relative standard error	Upper	Lower
	(1)	(2)	(3)	(4)	(5)	(6)
Chronic liver disease and cirrhosis . . . . .	571	1.0110	0.0069	0.7	1.0245	0.9975
Cholelithiasis and other disorders of gallbladder . . . . .	574-575	1.0494	0.0445	4.2	1.1366	0.9622
Nephritis, nephrotic syndrome, and nephrosis . . . . .	580-584	1.7397	0.0777	4.5	1.8920	1.5874
Acute glomerulonephritis and nephrotic syndrome . . . . .	580-581	0.2422	0.0185	7.6	0.2783	0.2061
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified . . . . .	582-583,587	0.4954	0.0195	3.9	0.5335	0.4573
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause . . . . .	584-586,588-589	1.6327	0.0958	5.9	1.8205	1.4449
Infections of kidney . . . . .	590	0.9878	0.0091	0.9	1.0056	0.9700
Hyperplasia of prostate . . . . .	600	1.0232	0.0226	2.2	1.0674	0.9790
Complications of pregnancy, childbirth, and the puerperium . . . . .	630-676	1.1000	0.0435	4.0	1.1853	1.0147
Pregnancy with abortive outcome . . . . .	630-638	3.8125	0.0000	0.0	3.8125	3.8125
Other complications of pregnancy, childbirth, and the puerperium . . . . .	640-645	0.9840	0.0454	4.6	1.0729	0.8951
Congenital anomalies . . . . .	640-676	0.9984	0.0100	1.0	1.0179	0.9789
Certain conditions originating in the perinatal period . . . . .	740-759	1.0765	0.0238	2.2	1.1230	1.0300
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .	760-769,2,769.4-772, 774-778	0.7483	0.0306	4.1	0.8083	0.6883
Other conditions originating in the perinatal period . . . . .	764-768,772,776	1.4639	0.0371	2.5	1.5367	1.3911
Symptoms, signs, and ill-defined conditions . . . . .	Remainder of 760-778	0.9102	0.0121	1.3	0.9338	0.8866
All other diseases . . . . .	780-796	0.7786	0.0082	1.1	0.7947	0.7625
Residual . . . . .	Residual	0.9970	0.0030	0.3	1.0029	0.9911
Accidents and adverse effects . . . . .	E800-E949	1.0117	0.0027	0.3	1.0169	1.0065
Motor vehicle accidents . . . . .	E810-E825	0.9841	0.0051	0.5	0.9941	0.9741
All other accidents and adverse effects . . . . .	E800-E807,E826-E949	1.0032	0.0042	0.4	1.0114	0.9950
Suicide . . . . .	E950-E959	1.0057	0.0030	0.3	1.0115	0.9999
Homicide and legal intervention . . . . .	E960-E978	0.9675	0.0144	1.5	0.9957	0.9393
All other external causes . . . . .	E980-E999					

<sup>1</sup>Ratio of estimated number of deaths assigned according to the Ninth Revision to deaths assigned according to the Eighth Revision.  
<sup>2</sup>The probability is 95 percent that the true comparability ratio will have a value between the upper and lower limits shown. These limits were computed before the estimated standard error was rounded to the fourth decimal.  
<sup>3</sup>Chronic obstructive lung disease without mention of asthma, bronchitis, or emphysema (ICDA No. \*519.3), introduced by NCHS to be used with the Eighth Revision, is comparable to Other chronic obstructive pulmonary diseases and allied conditions (ICD Nos. 494-496) of the Ninth Revision. The comparability ratio for this set of titles is 1.0054, with a standard error of 0.0118, a relative error of 1.2 percent, and 95 percent confidence limits of 1.0285 and 0.9823. These data are not shown in this table because there are no sample data for ICDA No. \*519.3.

Table 12. Comparable category numbers, estimated comparability ratios, and estimates of sampling variability of comparable ratios for 10 selected causes of infant death; based on a stratified random sample of 1976 infant deaths: United States  
 [For discussion of comparability ratios see Technical notes]

Cause of death (Ninth Revision International Classification of Diseases, 1975)	Category numbers according to the Eighth Revision	Estimated compara- bility ratio <sup>1</sup>	Error of the estimate of the ratio in (2)		95 percent con- fidence limits <sup>2</sup>	
			Standard error	Relative standard error	Upper	Lower
	(1)	(2)	(3)	(4)	(5)	(6)
All causes	...	1.0000	...	...	...	...
Certain gastrointestinal diseases	008-009,535,555-558	004,006-009,535, 561,563	0.4678	0.0228	4.9	0.5125 0.4231
Pneumonia and influenza	480-487	470-474,480-486	0.7471	0.0200	2.7	0.7862 0.7078
Congenital anomalies	740-759	740-759	1.0071	0.0062	0.6	1.0191 0.9949
Disorders relating to short gestation and unspecified low birthweight	765	777	0.9630	0.0107	1.1	0.9839 0.9421
Birth trauma	767	764-768(.0-.3),772	0.7154	0.0337	4.7	0.7813 0.6493
Intrauterine hypoxia and birth asphyxia	768	776.9	0.3270	0.0212	6.5	0.3684 0.2856
Respiratory distress syndrome	769	...	...	...	...	...
Other conditions originating in the perinatal period	760-764,766,770-779	Remainder of 760-778	0.8492	0.0098	1.1	0.8683 0.8301
Sudden infant death syndrome	798.0	...	...	...	...	...
All other causes	Residual	Residual	0.5455	0.0061	1.1	0.5573 0.5335

<sup>1</sup>Ratio of estimated number of deaths assigned according to the Ninth Revision to deaths assigned according to the Eighth Revision.  
<sup>2</sup>The probability is 95 percent that the true comparability ratio will have a value between the upper and lower limits shown. These limits were computed before the estimated standard error was rounded to the fourth decimal.

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**Symbols**

- Data not available
  - ... Category not applicable
  - Quantity zero
  - 0.0 Quantity more than zero but less than 0.05
  - \* Figure does not meet standards of reliability or precision
-

## Technical notes

### Nature and sources of data

All data for 1980 in this report are provisional. Data for the United States as a whole refer to events occurring within the United States; other data refer to events within the reporting areas shown.

Beginning with 1970, final birth and mortality statistics exclude data for births and deaths to nonresidents of the United States. Data for nonresidents are included in provisional data for 1979 and 1980.

Provisional or estimated figures for births, marriages, divorces, and deaths, except data estimated from the Current Mortality Sample, summarize data from monthly reports of the numbers of birth, marriage, divorce, and death certificates received in registration offices between two dates a month apart regardless of when the events occurred. Final figures are counts of events occurring in the specified year.

### Natality

Monthly estimates of births for the entire United States are based on the monthly reports adjusted for observed differences from final monthly figures. State figures are not adjusted in this manner.

### Marriages

Monthly estimates of marriages for the entire United States are based on the monthly reports adjusted for observed differences from final monthly figures. State figures are not adjusted in this manner. For most States, data represent marriages performed. For some counties of Arizona provisional data are marriage licenses issued; for New Mexico and New York City all data are marriage licenses issued.

Beginning with 1978 nonlicensed (confidential) marriages registered in California are included in marriage totals and rates. Nonlicensed California marriages have increased rapidly since reporting began, totaling 2,857 in 1973; 10,555 in 1974; 19,061 in 1975; 30,125 in 1976; 32,008 in 1977; 37,462 in 1978; 41,961 in 1979; and 46,001 in 1980. These nonlicensed California marriages have not been included in national totals or rates previously published for years prior to 1978. Further discussion of nonlicensed marriages is given in the final marriage statistics report for 1978.<sup>4</sup>

### Divorces

Provisional divorce data including reported annulments are shown in table 3 for the areas reporting divorce data monthly. Divorce figures for the United States for 1980 are estimated from a summary of monthly reports from 47 States and the District of Columbia. For 1979, 45 States and the District of Columbia were used. In both years, the reporting area contained over 90 percent of the population of the United States as enumerated in 1970.

### Mortality

All mortality figures exclude fetal deaths. Final mortality statistics for 1972 are based on a 50-percent sample of deaths. For all other years final data are based on all records received.

### Current Mortality Sample

Deaths and death rates for 1979 and 1980 by cause, age, race, and sex were estimated from the Current Mortality Sample. The Current Mortality Sample is a 10-percent systematic sample of death certificates received each month in the vital statistics offices in the 50 states, the District of Columbia, and the independent registration area of New York City. The sample for each of these areas consists of one-tenth of the death certificates received in the office between a given date and the same date of the following month. All death certificates received during the 1-month period are sampled regardless of the month or year in which the death occurred. As a result, the monthly sample is not strictly comparable to a sample on a month-of-occurrence basis. The proportion of death certificates received in the samples for each month of 1980 representing deaths occurring in the current month and those occurring in other months are shown in table I.

Because of the way in which death certificates are processed in California, this State contributes a high proportion of the certificates for deaths not occurring in the sample month. For the sample exclusive of California, the percent of the sample deaths occurring in the current month constitutes about 79 percent of the total as opposed to 71 percent of the entire sample. As for the year of occurrence, 95.9 percent of the 198,038 transcripts in the 1980 sample were for deaths occurring in 1980 and 4.1 percent for deaths occurring in 1979.

*Correction for bias and adjustment to provisional counts.*—The Current Mortality Sample is selected at

a specified time each month. Complete information concerning the underlying cause of death is sometimes not available in the State offices when the sample is drawn but is available later when copies of the final death certificates are processed. As a result, estimates based on sample counts for certain causes are recurrently biased estimates of final counts. Comparisons of sample and final counts for previous years have shown that these biases are primarily associated with certain cause-of-death groups.

Due to the introduction of the Ninth Revision in 1979, some modification was made in the rules for selection of a cause of death to be corrected for bias. An ICD-9 cause of death with a comparability ratio between 0.95 and 1.05 was considered as if there had been no discontinuity between 1978 and 1979. Final and sample data for the previous 3 years—1976, 1977, and 1978—were compared for the most nearly comparable ICDA-8 cause of death. If the sample count for these years departs from one-tenth of the final count by more than would be expected on the basis of sampling variability alone, the sample deaths for the corresponding ICD-9 causes were corrected by multiplying the sample frequency by an adjusted weight. The adjusted weight used was the ratio of the number of deaths from the given ICDA-8 cause in the final count of deaths for 1976-78 to the number of deaths from this cause in the sample returns for the same years, multiplied by 10 times the 3-year average sampling fraction for all causes.

The remaining ICD-9 causes, those with a comparability ratio less than 0.95 or greater than 1.05, were then examined to determine, empirically, if failure to correct for bias would lead to greater possible error in the provisional estimate for 1979 and 1980 than could be expected by the comparability discontinuity alone. On the basis of this examination, the following two causes were also chosen to be corrected for bias: Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature (ICD-9 Nos. 210-239) and Symptoms, signs, and ill-defined conditions (ICD-9 Nos. 780-799). For these two causes the adjusted weights were based on data for 1976-78 for the most nearly comparable ICDA-8 categories (ICDA-8 Nos. 210-239 and ICDA-8 Nos. 780-796, respectively).

The adjusted weights which were applied to the 1979 and 1980 samples for all ages are shown in table II. Because of comparability discontinuities, no infant causes were corrected for bias.

*Sampling variability.*—Since the estimates of deaths and death rates presented in this report (total deaths and deaths under 1 year) are based on a sample of the death certificates, they are subject to sampling variability. The estimated percent error

shown in this report is a measure of the sampling error of the estimated number of deaths (or of the estimated death rate) expressed as a percent of the estimate. The chances are about 2 out of 3 that the percent difference between an estimate and the result of a complete count is less than the percent error shown. The chances are about 19 out of 20 that the percent difference is less than twice the percent error.

Two methods are used for estimating percent errors—one for the ratio estimates for the causes of death corrected for bias and the other for estimates for the remaining causes of death or for given age-race-sex groups. The percent error of a ratio estimate for a given cause of death corrected for bias for all ages is computed as follows:

$$V = 300 \sqrt{\frac{1}{10} \left( \frac{1}{x} - \frac{1}{D} \right) + \left( \frac{1}{Y} - \frac{1}{M} \right)}$$

where

- V* = percent error of the estimate *X*
- X* = the estimated number of deaths (or estimated death rate) in a given cause or age-race-sex group
- x* = the number of deaths in the sample from the given cause
- D* = 198,038, the total number of death certificates in the sample for 1980
- Y* = the final number of deaths from the given cause in the 3 years—1976, 1977, and 1978 combined
- M* = 5,736,825, the final count of all deaths occurring in the 3 years—1976, 1977, and 1978 combined.

The percent errors for the remaining estimates for given causes of death not requiring a correction for bias or for a given age-race-sex group are computed as follows:

$$V = 300 \sqrt{\frac{1}{X} - \frac{1}{N}}$$

where

- V* = the percent error of the estimate *X*
- X* = the estimated number of deaths from a given cause or age-race-sex group
- N* = 1,986,000, the provisional number of registered deaths in 1980.

The percent error due to sampling may be obtained by using the above formula where *X* is the estimated number of deaths in a given group. For easy reference, the percent errors ascribable to sampling for estimates based on several levels in the number of deaths are shown in table III.

### Cause-of-death classification

The mortality statistics presented here are compiled in accordance with the World Health Organization regulations, which specify that member nations classify causes of death in accordance with the current revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death.

During the period 1968-78, causes of death were classified according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States, 1965 (ICDA-8)*.<sup>5</sup> Causes of death in 1979 and 1980 were classified according to the Ninth Revision (ICD-9).<sup>6</sup> This produces some major changes in the classification of causes of death. Cause-of-death comparisons between ICDA-8 and ICD-9 data require consideration of the comparability ratios and estimates of their standard errors, shown in tables 11 and 12. A description of the comparability ratios and how they were derived may be found in a previous report.<sup>7</sup>

Comparability ratios for causes of infant mortality have been computed for the List of 8 Causes of Infant Death published in the *Monthly Vital Statistics Report* for 1968-78. Because Respiratory distress syndrome (ICDA-8 No. 776.2) and Sudden infant death syndrome (ICDA-8 No. \*795.0) were contained in residual categories in this list, separate comparability ratios were not computed. However, infant mortality rates for these causes based on final data for 1978 and previous years are available and are shown in table H.

### Cause-of-death ranking

Cause-of-death ranking is based on the List of 72 Selected Causes of Death, adapted from one of the special lists for mortality tabulations recommended by the World Health Organization for use with the Ninth Revision of the International Classification of Diseases. Two group titles—Major cardiovascular diseases and Symptoms, signs, and ill-defined conditions—are not ranked. In addition, category titles that begin with the words “other” and “all other” are not ranked. The remaining titles are ranked according to the number of deaths for 1980 to determine the leading causes of death. When one of the titles that represents a subtotal is ranked (e.g., Tuberculosis), its component parts (in this case, Tuberculosis of respiratory system and Other tuberculosis) are not ranked.

### Age-adjusted rates

The age-adjusted rates presented in this report were computed by the direct method, that is, by

applying the age-specific death rates for a given cause of death to the standard population distributed by age. The total population as enumerated in 1940 was selected as the standard. The age-adjusted rates were based on 10-year age groups. Rates by cause for 1979 and 1980 were based on the same 10-year age groups except that the age group 1-14 years was used instead of 1-4 years and 5-14 years. It is important not to compare age-adjusted death rates directly with crude rates shown in other tables.

### Life tables

Abridged life table values for 1967-69 have been revised using revised intercensal population estimates. Values for 1970-73 have also been revised, using the most recent U.S. decennial life tables as standard tables. In this and other recent publications these figures may differ from those initially published in *Vital Statistics of the United States*.

### Seasonal adjustment

The method of seasonal adjustment used for birth, fertility, and marriage rates is described in *The X-11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15, November 1965, published by the U.S. Bureau of the Census. Marriage rates were adjusted for monthly variation in the number of specified days of the week (Sundays, Mondays, and so forth) because marriages are more likely on some days than on others.

### Population bases for computing rates

The populations used for computing rates shown in this report (furnished by the U.S. Bureau of the

Table 1. Percent of death certificates received in the sample each month by month of occurrence: 1980

Month	Deaths occurring in—		
	Same month	Previous month	All other months
January	74.3	12.9	12.8
February	71.0	14.6	14.4
March	71.1	13.4	15.5
April	68.8	16.4	14.8
May	71.7	14.9	13.4
June	72.4	15.3	12.3
July	70.4	16.0	13.7
August	71.6	16.3	12.1
September	68.2	16.5	15.2
October	73.5	14.7	11.9
November	72.7	14.5	12.8
December	71.6	15.7	12.7

NOTE: A list of references follows the text.

Table II. Causes of death corrected for bias and adjusted weights for all ages: 1980

Cause of death <sup>1</sup>	Adjusted weight (all ages)
Malignant neoplasms of all other and unspecified sites . . . . . 170-173,190-199	9.79
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature . . . . . 210-239	8.79
Intracerebral and other intracranial hemorrhage . . . . . 431-432	10.28
Other complications of pregnancy, childbirth, and the puerperium . . . . . 640-676	8.18
Symptoms, signs, and ill-defined conditions . . . . . 780-799	7.79
Motor vehicle accidents . . . . . E810-E825	10.35
Suicide . . . . . E950-E959	10.66
Homicide and legal intervention . . . . . E960-E978	10.44
All other external causes . . . . . E980-E999	11.02

<sup>1</sup>Causes of death eligible to have an adjusted weight were those that had 50 or more deaths based on final data for 1978.

Census) represent the population residing in the specified area. The populations for 1980 are unpublished estimates based on the 1970 Census of Population. The rates shown here for 1980 are, therefore, comparable with the rates shown for earlier years.

Provisional rates for 1981 will be based on population estimates based on the 1980 Census of Population. Beginning with the January 1981 issue of the *Monthly Vital Statistics Report*, rates for 1980 have been recomputed using revised populations based on the 1980 enumerated population to be

Table III. Percent errors for estimated numbers of deaths from the Current Mortality Sample

Estimated number of deaths	Percent error	Estimated number of deaths	Percent error
10 . . . . .	94.9	900 . . . . .	10.0
20 . . . . .	67.1	1,000 . . . . .	9.5
50 . . . . .	42.4	2,000 . . . . .	6.7
100 . . . . .	30.0	5,000 . . . . .	4.2
200 . . . . .	21.2	10,000 . . . . .	3.0
300 . . . . .	17.3	20,000 . . . . .	2.1
400 . . . . .	15.0	50,000 . . . . .	1.3
500 . . . . .	13.4	100,000 . . . . .	0.9
600 . . . . .	12.2	200,000 . . . . .	0.6
700 . . . . .	11.3	500,000 . . . . .	0.4
800 . . . . .	10.6	1,000,000 . . . . .	0.2

comparable with rates for 1981. The 1980 Census enumeration was about 4.8 million higher than the estimated population for April 1, 1980 and, therefore, rates for the total population computed using the enumerated population will be from 2 to 2.5 percent lower than the rates shown here for 1980. Final rates for 1980 will be based on the enumerated population.

Infant mortality rates are based on live births. For an explanation of the method used in computing infant mortality rates adjusted for the changing numbers of births, see "Effect of Changing Birth Rates Upon Infant Mortality Rates," *Vital Statistics—Special Reports*, Vol. 19, No. 21, Nov. 1944 (U.S. Bureau of the Census).

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