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Annual Summary of Births, Marriages, Divorces, and Deaths: United States, 1986

The provisional number of live births for 1986 was slightly lower than the number reported for 1985. The birth rate per 1,000 population and the fertility rate per 1,000 women 15-44 years also decreased between 1985 and 1986. The provisional fertility rate for 1986 was the lowest ever recorded in the United States.

In 1986 the provisional number of marriages and the marriage rate per 1,000 population decreased from the comparable figures for 1985. The marriage rate for 1986 was the lowest rate recorded since 1977.

Both the number of divorces and the divorce rate per 1,000 population decreased between 1985 and 1986. The decline in the divorce rate in 1986 may indicate the rate is resuming its downward trend after being relatively stable between 1982 and 1985.

The provisional number of deaths increased in 1986 to the highest number ever recorded, primarily reflecting the continued increase in the proportion of the population 65 years of age and over. The age-adjusted death rate and the infant mortality rate, however, fell to the lowest levels on record in the United States, and life expectancy at birth reached a new high. Age-adjusted death rates decreased in 1986 for Diseases of heart, Cerebrovascular diseases, Diabetes mellitus, and Atherosclerosis. Rates increased for three violent causes: Accidents and adverse effects, Suicide, and Homicide and legal intervention.

Births

An estimated 3,731,000 babies were born in the United States during 1986, slightly fewer than the number reported

for 1985 (3,749,000). The birth rate was 15.5 live births per 1,000 total population, 1 percent below the 1985 rate of 15.7 (table A). The fertility rate of 64.9 live births per 1,000 women aged 15-44 years was 2 percent lower than the rate for 1985 (66.1), and the lowest ever observed in the United States (table B and figure 1).

The number of births declined because the 1-percent increase in the number of women in the childbearing ages (15-44 years) was not enough to compensate for the 2-percent decline in the fertility rate.

The seasonally adjusted monthly birth and fertility rates in 1986 were higher than in 1985 for 4 months and lower for 8 months. There was no consistent pattern in the seasonally adjusted rates (table C).

Changes in the annual number of births are affected by two factors: Trends in age-specific birth rates and changes in the number of women in the childbearing ages. The 2-percent decline in the general fertility rate between 1985 and 1986 indicates that there were declines in at least some of the age-specific birth rates. In recent years, increases in these rates have occurred primarily among women in their thirties and declines have been measured for women aged 15-29 years, the ages during which more than three-quarters of childbearing typically occurs in the United States.

The total number of women in the childbearing ages increased between 1985 and 1986, but only by 1 percent overall; changes in the number of women at various ages were not uniform. The number of teenagers 15-19 years of age was slightly above the 1985 number; the number of women 20-24 years declined 3 percent. Almost one-third of

Table A. Vital statistics rates: United States, 1979-86

[Infant mortality rates per 1,000 live births; all other rates per 1,000 population]

Rate	1986 (prov.)	1985 (prov.)	1984		1983 (final)	1982 (final)	1981 (final)	1980 (final)	1979 (final)
			(prov.)	(final)					
Birth	15.5	15.7	15.7	15.5	15.5	15.9	15.8	15.9	15.6
Death	8.7	8.7	8.7	8.6	8.6	8.5	8.6	8.8	8.5
Natural increase	6.8	7.0	7.0	6.9	6.9	7.4	7.2	7.1	7.1
Marriage	10.0	10.2	10.5	10.5	10.5	10.6	10.6	10.6	10.4
Divorce	4.8	5.0	4.9	5.0	4.9	5.0	5.3	5.2	5.3
Infant mortality	10.4	10.6	^a 10.7	10.8	11.2	11.5	11.9	12.6	13.1

^aRevised.

Table B. Live births, birth rates, and fertility rates, by month: United States, 1985 and 1986

[Rates on an annual basis. Birth rates per 1,000 population and fertility rates per 1,000 women 15-44 years. Due to rounding, figures may not add to totals. Figures include revisions and, therefore, may differ from those previously published]

Month	Number		Birth rate		Fertility rate	
	1986	1985	1986	1985	1986	1985
Total	3,731,000	3,749,000	15.5	15.7	64.9	66.1
January	310,000	314,000	15.2	15.6	64.0	65.5
February	283,000	280,000	15.3	15.4	64.4	64.7
March	324,000	302,000	15.9	15.0	66.7	63.0
April	298,000	312,000	15.1	16.0	63.2	67.2
May	306,000	300,000	15.0	14.9	62.8	62.5
June	307,000	324,000	15.5	16.6	65.1	69.6
July	322,000	335,000	15.7	16.5	66.0	69.5
August	330,000	334,000	16.1	16.5	67.5	69.2
September	343,000	329,000	17.3	16.8	72.4	70.5
October	310,000	318,000	15.1	15.7	63.3	65.9
November	303,000	297,000	15.3	15.1	64.1	63.5
December	295,000	304,000	14.4	14.9	60.3	62.6

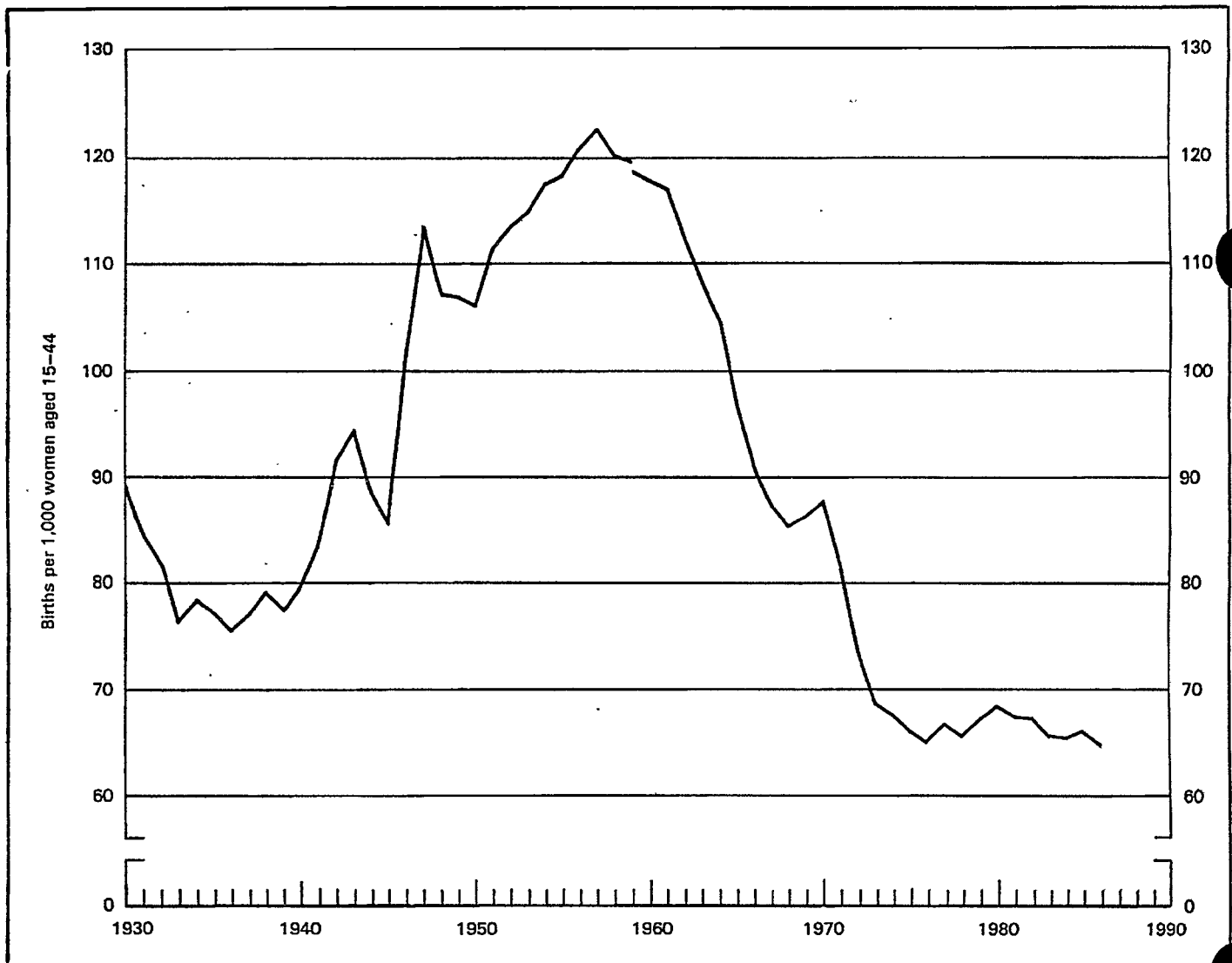


Figure 1. Fertility rates: United States, 1930-86

all births are to women aged 20-24 years. Increases of 1-2 percent in the number of women were measured for age groups 25-29, 30-34, and 40-44 years; a 6-percent increase was observed for women aged 35-39 years (U.S. Bureau of the Census, 1987). Rates of childbearing for women aged 35-39, however, tend to be relatively low.

According to projections prepared by the U.S. Bureau of the Census, the total number of women in the child-bearing ages is not expected to change for the remainder of this decade (U.S. Bureau of the Census, 1984). The number of women aged 15-24 years will continue to decline, however, as those born during the low birth years of the early to middle 1970's reach the childbearing ages. During the next several years, therefore, if the number of births is to increase, there would have to be increases in the birth rates for at least some age groups.

Provisional data by place of occurrence indicate that there were increases (1-2 percent) in the number of births between 1985 and 1986 in only two geographic divisions (South Atlantic and Middle Atlantic). The number of births declined in six divisions, by 1 percent in the East North Central and East South Central Divisions, by 2 percent in the New England and West South Central Divisions, and by 3 percent in the West North Central and Mountain Divisions. The number was relatively unchanged in the Pacific Division.

Birth rates per 1,000 total population increased by 1 percent in one division (Middle Atlantic) and declined 1-4 percent in the other eight divisions. The largest decreases were in the West North Central and Mountain Divisions (4 percent).

Between 1985 and 1986 the provisional number of births increased in 15 States, declined in 31 States and the District of Columbia, and was virtually unchanged in 4 States. Birth rates increased in 7 States, declined in 38 States and the District of Columbia, and were unchanged in 5 States.

Table C. Seasonally adjusted birth and fertility rates, by month: United States, 1985 and 1986

[Rates on an annual basis. Birth rates per 1,000 population and fertility rates per 1,000 women 15-44 years. For method of seasonal adjustment, see Technical notes. Figures include revisions and, therefore, may differ from those previously published]

Month	Birth rate		Fertility rate	
	1986	1985	1986	1985
January	15.9	16.3	67.1	68.6
February	15.6	15.7	65.6	66.0
March	16.1	15.2	67.5	64.1
April	15.6	16.6	65.5	69.8
May	15.4	15.3	64.5	64.4
June	15.5	16.4	64.8	69.1
July	15.0	15.7	63.2	66.2
August	15.1	15.6	63.6	65.4
September	16.1	15.6	67.8	65.8
October	15.1	15.7	63.2	65.7
November	15.6	15.5	65.5	64.9
December	14.7	15.2	62.0	64.0

Natural Increase

During 1986 an estimated 1,632,000 persons were added to the population as a result of natural increase, the excess of births over deaths. The rate of natural increase in 1986 was 6.8 persons per 1,000 population, 3 percent below the rate for 1985 (7.0). This decrease was due entirely to the decline in the birth rate.

Marriages

According to provisional statistics, fewer couples married in 1986 (2,400,000) than in 1985 (2,425,000) (table D). The national marriage rate fell 2 percent, from 10.2 per 1,000 population in 1985, to 10.0 per 1,000 in 1986. This was the second consecutive drop in the marriage rate after a period of fairly steady rates from 1980-84. The 1986 rate of 10.0 was the lowest rate since 1977 (9.9). The marriage rate, recorded since 1867, has ranged from a high of 16.4 in 1946 to a low of 7.9 in the depression year of 1932 (figure 2).

The marriage rate is determined both by the likelihood of marriage and by the percent of the population eligible for marriage, that is, the percent who are old enough to marry and are currently unmarried. From the mid-1970's to 1984, an unusually large proportion of the population consisted of divorced and single people in the most marriageable ages. This group was large enough that the number of marriages kept pace with population growth even though the likelihood of marriage was falling. Consequently the marriage rate remained relatively high. In 1985 and 1986, however, there were not enough marriages to keep pace with population growth and the marriage rate per 1,000 population fell.

Marriages in 1986 exhibited the usual seasonal pattern. More marriages were recorded in June than in any other month (tables D and E). The fewest marriages were recorded in January. The marriage rate for June (13.1) was nearly twice the January rate (6.6).

Marriages in 1986 also exhibited the usual geographic pattern by place of occurrence. Marriage rates were lowest on average in the northeastern States, intermediate in the midwestern States, and highest in the southern and western States. Marriage rates ranged from lows of 7.0 in Massachusetts, 7.2 in West Virginia, and 7.4 in Pennsylvania, to highs of 15.3 in Hawaii, 16.0 in South Carolina, and 114.0 in Nevada. Between 1985 and 1986 marriage rates fell in 35 States, rose in 12 States and the District of Columbia, and remained steady in 3 States.

Divorces

Both the divorce rate and the number of divorces fell between 1985 and 1986. The estimated number of divorces for the United States in 1986—1,159,000—was 2 percent below the number in 1985—1,187,000 (table F). The divorce rate for 1986, 4.8 per 1,000 population, was 4 percent

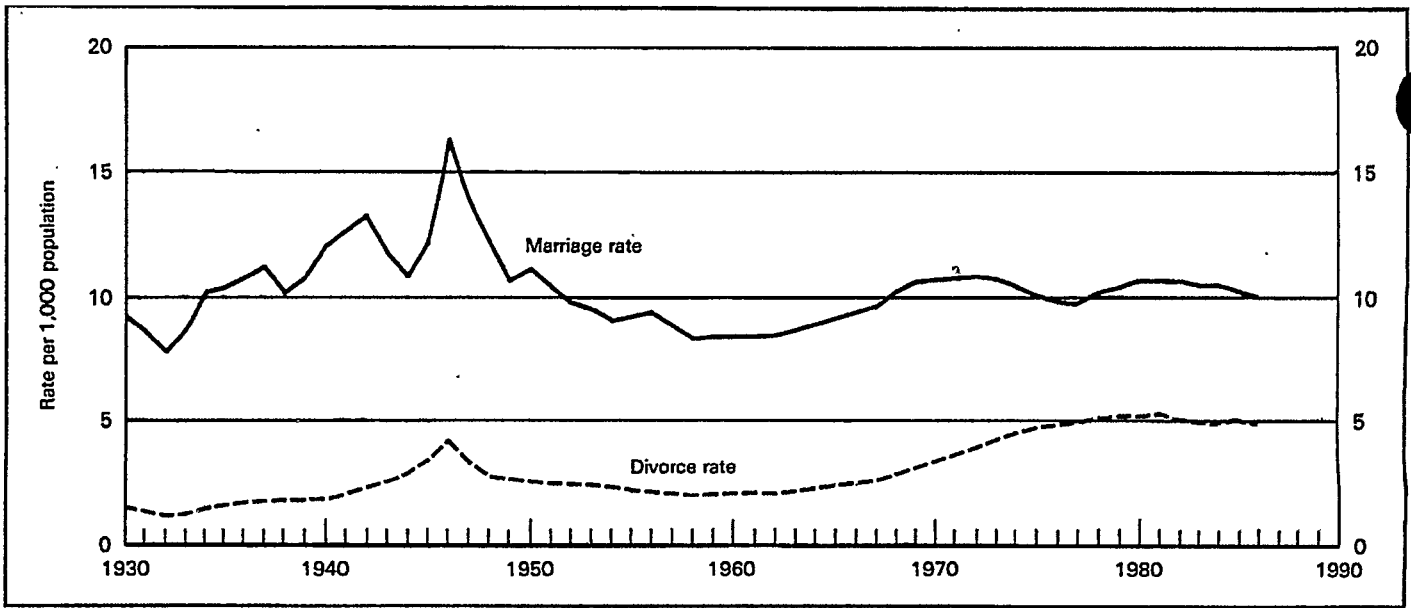


Figure 2. Marriage and divorce rates: United States, 1930-86

Table D. Marriages and marriage rates, by month: United States, 1985 and 1986

[Rates on an annual basis per 1,000 population. Due to rounding, figures may not add to totals. Figures include revisions and, therefore, may differ from those previously published]

Month	Number		Rate	
	1986	1985	1986	1985
Total	2,400,000	2,425,000	10.0	10.2
January	135,000	129,000	6.6	6.4
February	147,000	146,000	8.0	8.0
March	150,000	157,000	7.4	7.8
April	185,000	174,000	9.4	8.9
May	228,000	238,000	11.2	11.8
June	259,000	280,000	13.1	14.3
July	237,000	235,000	11.6	11.6
August	243,000	255,000	11.9	12.6
September	231,000	235,000	11.6	12.0
October	211,000	206,000	10.3	10.2
November	174,000	182,000	8.7	9.3
December	200,000	187,000	9.7	9.2

Table E. Marriage rates, seasonally adjusted and unadjusted, by month: United States, 1985 and 1986

[Rates on an annual basis per 1,000 women 15-44 years. For method of seasonal adjustment, see Technical notes. Figures include revisions and, therefore, may differ from those previously published]

Month	Unadjusted for seasonal variation		Adjusted for seasonal variation	
	1986	1985	1986	1985
Total	41.6	42.8	...	...
January	27.7	27.0	45.0	41.7
February	33.5	33.7	47.2	47.3
March	30.9	32.7	37.2	40.7
April	39.3	37.5	43.2	40.5
May	46.8	49.6	41.2	44.3
June	54.9	60.2	38.3	42.1
July	48.5	48.7	42.9	42.5
August	49.8	52.9	39.3	41.7
September	48.8	50.3	43.0	45.5
October	43.2	42.8	43.6	42.8
November	36.7	38.9	40.8	43.5
December	40.9	38.6	43.7	40.8

below the 1985 rate of 5.0. This is the lowest the divorce rate has been since 1975 when it was also 4.8.

The divorce rate rose fairly steadily through the 1960's and 1970's, reaching an all-time high of 5.3 in 1979 and 1981. It then dropped to 5.0 in 1982 and remained between 4.9 and 5.0 for 1983-85. The 4-percent drop in the divorce rate between 1985 and 1986 may indicate that the rate has resumed its fall after being relatively stable between 1982 and 1985.

Like marriage rates, divorce rates by place of occurrence were lowest on average in the northeastern States, intermediate in the midwestern States, and highest in the southern and western States. Divorce rates ranged from lows of 2.9 in Connecticut, and 3.3 in Minnesota and North

Dakota, to highs of 7.2 in Alaska, 7.5 in Oklahoma, and 14.0 in Nevada. Between 1985 and 1986 divorce rates fell in 29 States and the District of Columbia, rose in 12 States, and remained the same in 7 States. Provisional divorce data are not available from two States: Indiana and Louisiana.

Deaths

During 1986 an estimated 2,099,000 deaths occurred in the United States, the greatest number ever recorded. However, because the U.S. population increased at an even greater rate than the number of deaths, the provisional death rate for 1986 of 870.8 deaths per 100,000 population was approximately 1 percent lower than the provisional rate

Table F. Divorces and divorce rates, by month: United States, 1985 and 1986

[Includes reported annulments. Rates on an annual basis per 1,000 population. Data are estimated; see Technical notes. Due to rounding, figures may not add to totals. Figures include revisions and, therefore, may differ from those previously published]

Month	Number		Rate	
	1986	1985	1986	1985
Total	1,159,000	1,187,000	4.8	5.0
January	97,000	96,000	4.8	4.7
February	85,000	85,000	4.6	4.7
March	91,000	96,000	4.5	4.8
April	97,000	97,000	4.9	4.9
May	100,000	101,000	4.9	5.0
June	97,000	100,000	4.9	5.1
July	105,000	112,000	5.1	5.5
August	97,000	109,000	4.7	5.4
September	99,000	98,000	5.0	5.0
October	99,000	101,000	4.8	5.0
November	91,000	92,000	4.6	4.7
December	101,000	100,000	4.9	4.9

for 1985 (874.8). The record number of deaths in 1986 is consistent with a general increase in the size of the population, especially for ages 65 years and over. As a result of the continued decline in death rates for many age groups, especially ages 45-54 years and over, the provisional age-adjusted death rate declined from 545.9 deaths per 100,000 population in 1985 to 540.2 in 1986, the lowest age-adjusted death rate ever recorded in the United States (figure 3). Age-adjusted death rates control for changes and variations in the age composition of the population; therefore, they are better indicators than crude death rates for showing changes in mortality risk over time and for showing differences between race-sex groups within the population.

Unadjusted death rates per 1,000 population were somewhat higher for March, May, and June in 1986 than for the same months in 1985. Rates for July, August, September, and November were the same; for the

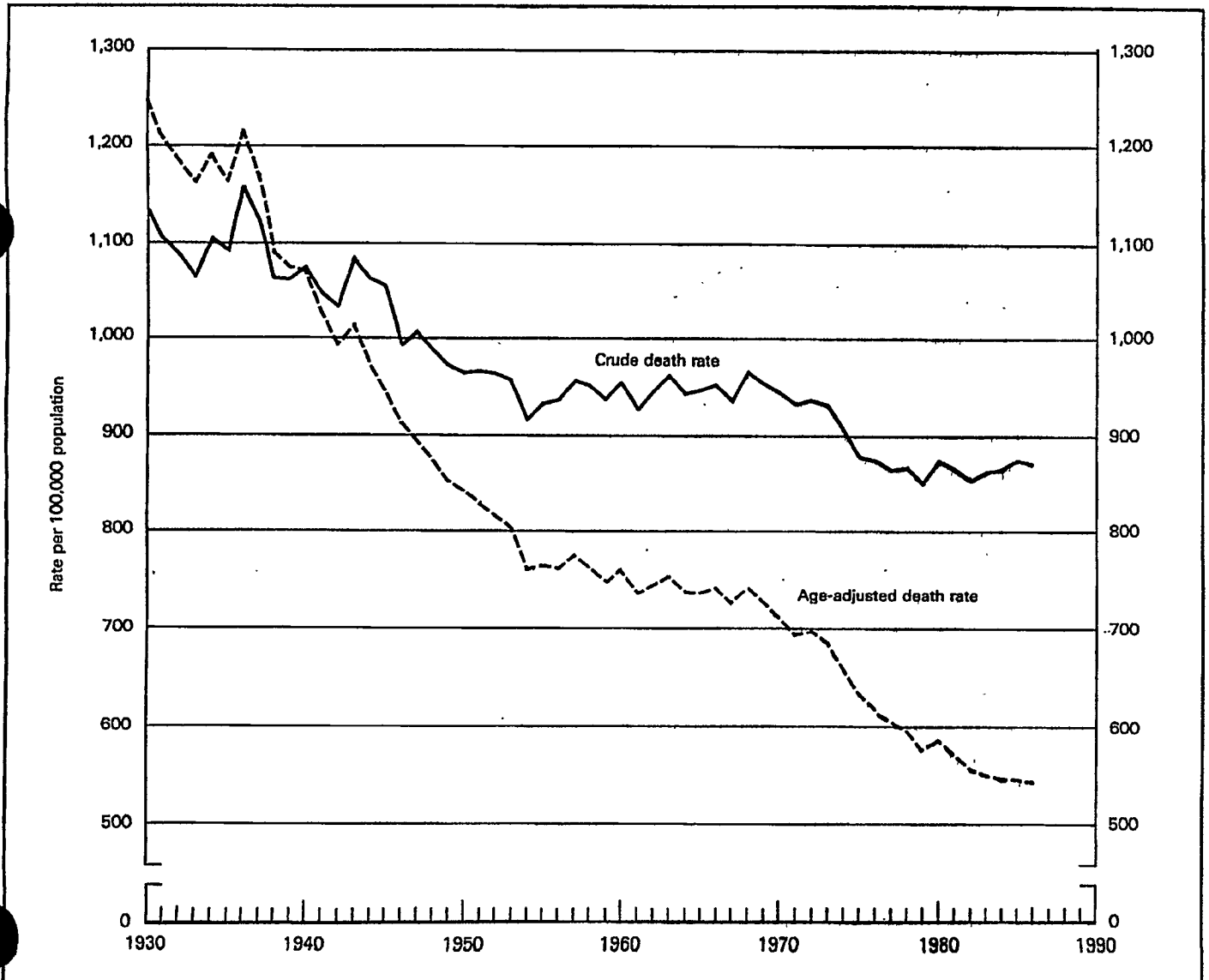


Figure 3. Crude and age-adjusted death rates: United States, 1930-86

remaining months of 1986, death rates were lower than for the previous year (table G).

Death rates by race and sex, and by age

The lowest estimated age-adjusted death rate was for white females (387.0 deaths per 100,000 population), followed by black females (585.0), white males (680.7), and black males (1,003.4). The rates for white males and black males were the lowest ever recorded. Between 1985 and 1986 the rate decreased about 2 percent for black males and 1 percent for white males. For white females, the age-adjusted rate was also the lowest on record; however, the change between 1985 and 1986 was not statistically significant. For black females, the small change in the rate from the previous year was not statistically significant.

Between 1985 and 1986 provisional death rates decreased for each age group 55 years and over and increased for those aged 15-24 years and 25-34 years. Death rates for other age groups did not change significantly between the two years (table H).

Expectation of life

The expectation of life at birth in 1986 reached a new record high of 74.9 years. Provisional data showed that among the white population, from 1985 to 1986, life expectancy at birth for both females and males increased by 0.2 years. Among the black population, life expectancy at birth also increased by 0.2 years for males, but declined by 0.1 years for females. 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.

Table G. Deaths and death rates, by month: United States, 1985 and 1986

[Rates on an annual basis per 1,000 population. Due to rounding, figures may not add to totals. Figures include revisions and, therefore, may differ from those previously published]

Month	Number		Rate	
	1986	1985	1986	1985
Total	2,099,000	2,084,000	8.7	8.7
January	191,000	192,000	9.3	9.6
February	181,000	186,000	9.8	10.2
March	193,000	186,000	9.5	9.2
April	175,000	181,000	8.9	9.3
May	175,000	167,000	8.6	8.3
June	167,000	162,000	8.4	8.3
July	173,000	170,000	8.4	8.4
August	161,000	160,000	7.9	7.9
September	165,000	163,000	8.3	8.3
October	171,000	169,000	8.3	8.4
November	170,000	166,000	8.5	8.5
December	178,000	181,000	8.6	8.9

Table H. Death rates by age for 1985 and 1986 and percent difference between 1985 and 1986: United States

[Based on a 10-percent sample of deaths. Rates per 100,000 population in specified group. For information on standard errors of the estimates and further discussion, see Technical notes]

Age	1986	1985	Percent difference
All ages ¹	870.8	874.8	-0.5
Under 1 year ²	1,036.7	1,055.2	-1.8
1-4 years	50.8	51.1	-0.6
5-14 years	26.4	27.9	-5.4
15-24 years	102.6	94.8	8.2
25-34 years	130.2	122.3	6.5
35-44 years	212.5	210.5	1.0
45-54 years	504.6	516.3	-2.3
55-64 years	1,259.0	1,284.7	-2.0
65-74 years	2,787.8	2,839.1	-1.8
75-84 years	6,316.4	6,411.3	-1.5
85 years and over	15,291.1	15,486.3	-1.3

¹ Figures for age not stated are included in "All ages" but are not distributed among age groups.

² Death rates under 1 year (based on population estimates) differ from infant mortality rates (based on live births); see table 10 for infant mortality rates and Technical notes for further discussion of the difference.

Major causes of death

The 15 leading causes of death in 1986 accounted for 87 percent of all deaths in the United States (table J). The leading causes of death for 1979 through 1986 have been the same, but the order has often varied. Septicemia (the 14th leading cause of death in 1985) moved ahead of Certain conditions originating in the perinatal period to become the 13th leading cause in 1986.

For most causes, age-adjusted death rates are better indicators than crude death rates for showing changes in mortality risk over time. Such rates are used to depict trends for 13 of the 15 leading causes of death. For the other two leading causes of death, which occur mainly among infants under 1 year of age (Certain conditions originating in the perinatal period and Congenital anomalies), age-adjusted death rates are not shown. Changes in mortality for these two causes are measured by the infant mortality rate per 100,000 live births. The difference between the infant mortality rate for Certain conditions originating in the perinatal period for 1986 (481.3 infant deaths per 100,000 live births) and the 1985 rate (484.3) was not statistically significant. Similarly, the difference in the 1986 rate for Congenital anomalies (218.9) and the 1985 rate (236.7) was not statistically significant.

Age-adjusted death rates were lower in 1986 than in 1985 for four leading causes: Diseases of heart, Cerebrovascular diseases, Diabetes mellitus, and Atherosclerosis. The age-adjusted death rate for all of these causes has generally declined since 1950, except Diabetes mellitus, which has generally declined since 1968 (figure 4).

Age-adjusted rates increased between 1985 and 1986 for the three violent leading causes: Accidents and adverse effects, Suicide, and Homicide and legal intervention. Within Accidents and adverse effects, the age-adjusted death rate for Motor vehicle accidents also increased

Table J. Death rates and percent of total deaths for the 15 leading causes of death: United States, 1986

[Based on a 10-percent sample of deaths. Rates per 100,000 population. See table 8 for category numbers of causes of death. For information on standard errors of the estimates and further discussion, see Technical notes]

Rank	Cause of death (Ninth Revision, International Classification of Diseases, 1975)	Death rate	Percent of total deaths
...	All causes	870.8	100.0
1	Diseases of heart	318.7	36.6
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues	193.3	22.2
3	Cerebrovascular diseases	61.3	7.0
4	Accidents and adverse effects	39.7	4.6
...	Motor vehicle accidents	20.1	2.3
...	All other accidents and adverse effects	19.5	2.2
5	Chronic obstructive pulmonary diseases and allied conditions	31.3	3.6
6	Pneumonia and influenza	29.2	3.4
7	Diabetes mellitus	15.1	1.7
8	Suicide	13.1	1.5
9	Chronic liver disease and cirrhosis	10.9	1.2
10	Atherosclerosis	9.2	1.1
11	Nephritis, nephrotic syndrome, and nephrosis	9.0	1.0
12	Homicide and legal intervention	8.9	1.0
13	Septicemia	7.7	0.9
14	Certain conditions originating in the perinatal period	7.5	0.9
15	Congenital anomalies	5.1	0.6
...	All other causes	110.8	12.7

in 1986, a change that is not consistent with the general downward pattern observed since 1979.

For the remaining six leading causes of death, provisional data did not indicate a statistically significant change between 1985 and 1986.

Infant mortality

The infant mortality rate for 1986 was 10.4 per 1,000 live births, 2 percent lower than the rate of 10.6 for 1985

(figure 5). For 1986 the estimated infant mortality rate for infants under 28 days was 6.7 deaths per 1,000 live births, for infants 28 days-11 months the rate was 3.7 deaths per 1,000 live births. Between 1985 and 1986 the changes in mortality rates for infants under 28 days and for infants 28 days-11 months were not greater than would be expected due to sampling variation and therefore are not statistically significant. Individually, none of the causes of infant mortality changed significantly between 1985 and 1986.

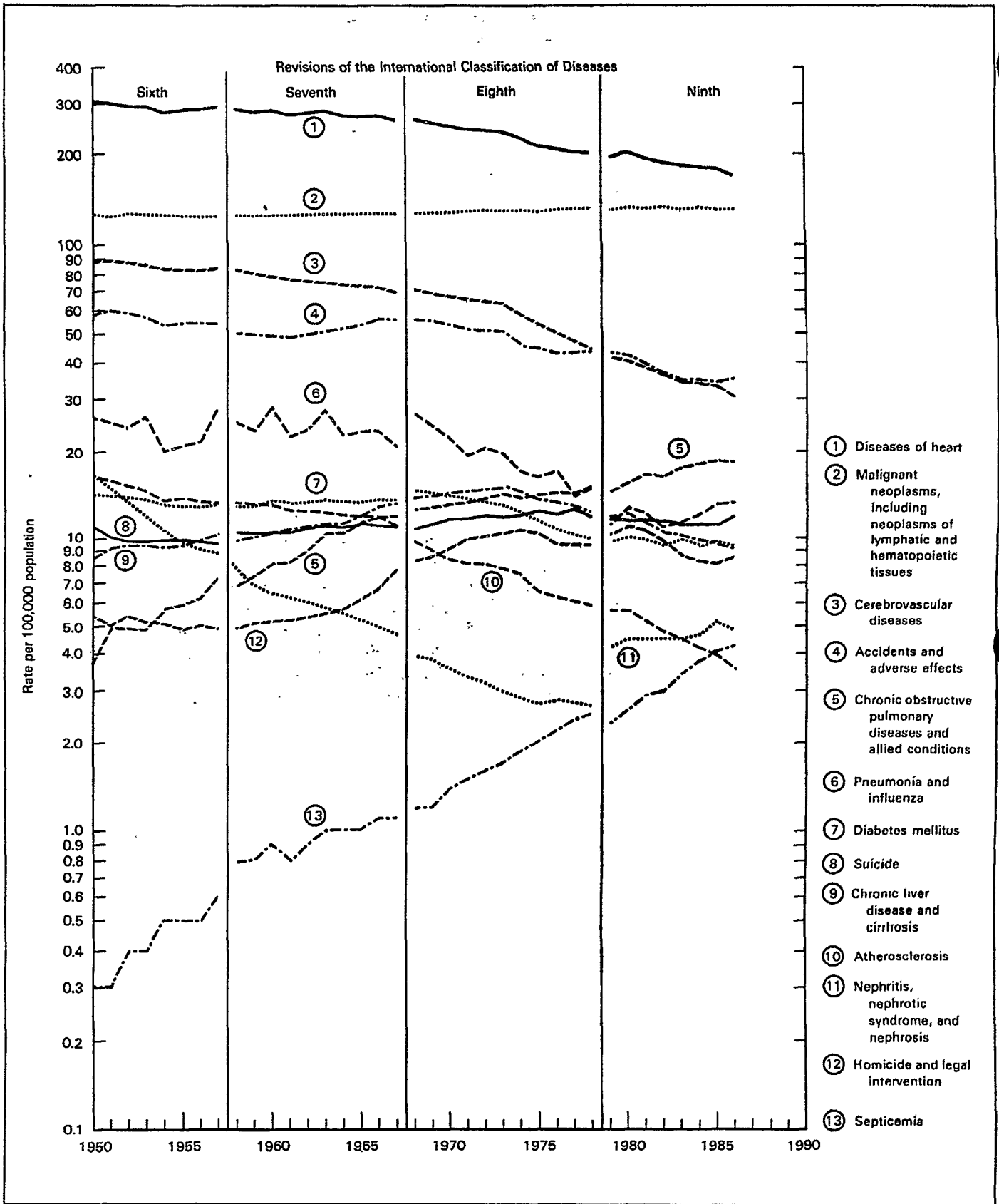


Figure 4. Age-adjusted death rates for 13 of the 15 leading causes of death: United States, 1950-86

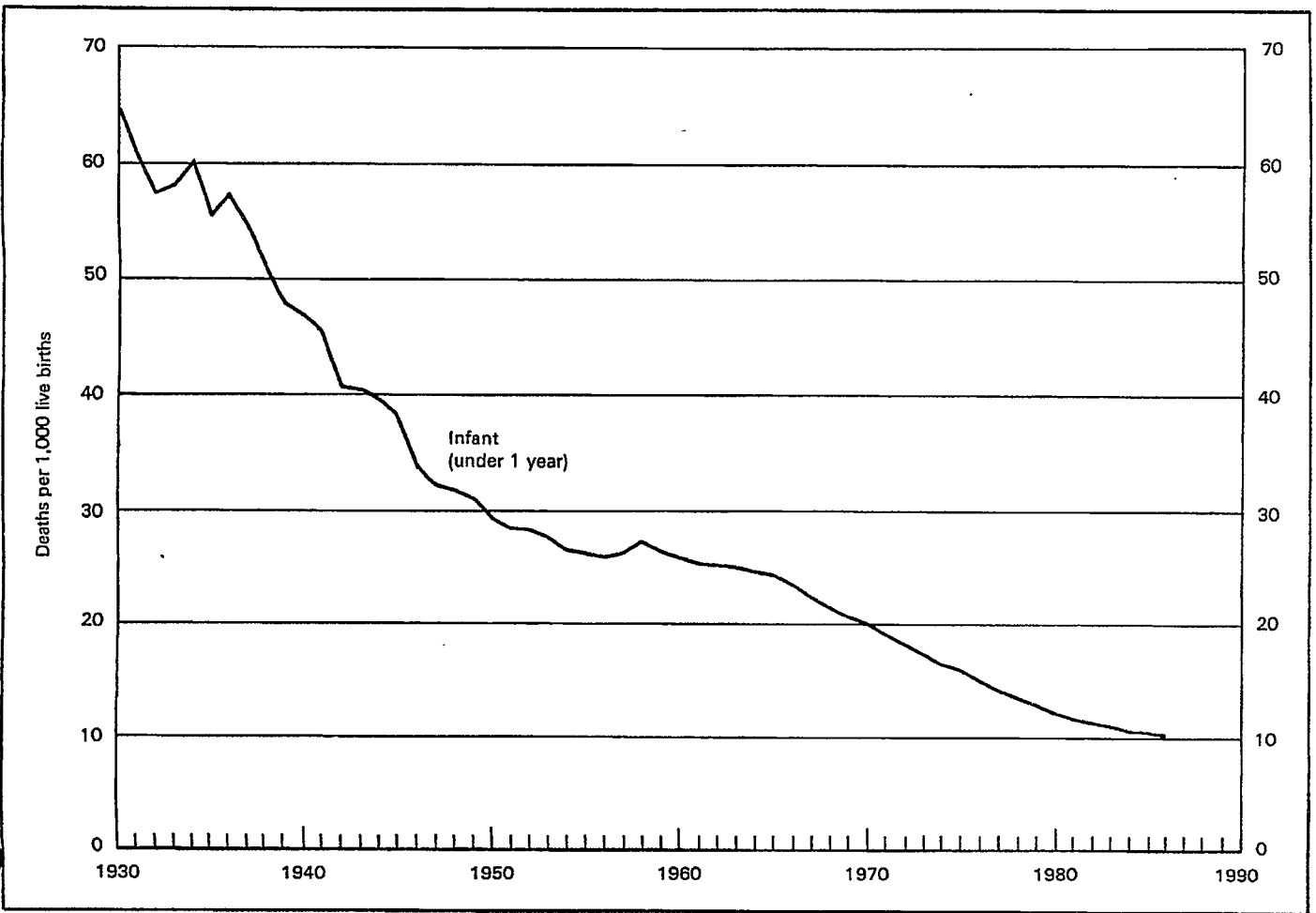


Figure 5. Infant mortality rates: United States, 1930-86

References

- National Center for Health Statistics. Published annually. Vital statistics, instructions for classifying the underlying cause of death. *NCHS Instruction Manual*, Part 2a. Public Health Service. Rockville, Md.
- National Center for Health Statistics. 1965. Comparability of mortality statistics for the Sixth and Seventh Revisions, United States, 1958. *Vital Statistics—Special Reports*. Vol. 51, No. 4. Public Health Service. Washington: U.S. Government Printing Office.
- National Center for Health Statistics. 1966. Comparison of two methods of constructing abridged life tables by reference to a "standard" table. *Vital and Health Statistics*. Series 2, No. 4. PHS Pub. No. 1000. Public Health Service. Washington: U.S. Government Printing Office.
- National Center for Health Statistics. 1979. Annual summary for the United States, 1978. *Monthly Vital Statistics Report*. Vol. 27, No. 13, pp. 13-14. DHHS Pub. No. (PHS) 79-1120. Public Health Service. Hyattsville, Md.
- National Center for Health Statistics. 1986. Annual summary of births, marriages, divorces, and deaths: United States, 1985. *Monthly Vital Statistics Report*. Vol. 34, No. 13, p. 25. DHHS Pub. No. (PHS) 86-1120. Public Health Service. Hyattsville, Md.
- National Center for Health Statistics. 1987. *Vital Statistics of the United States, 1983*, Vol. II, Sec. 6, Life Tables. DHHS Pub. No. (PHS) 87-1104. Public Health Service. Washington: U.S. Government.
- National Center for Health Statistics, A. J. Klebba and A. B. Dolman. 1975. Comparability of mortality statistics for the Seventh and Eighth Revisions of the International Classification of Diseases, United States. *Vital and Health Statistics*. Series 2, No. 66. DHEW Pub. No. (HRA) 76-1340. Health Resources Administration. Washington: U.S. Government Printing Office.
- National Center for Health Statistics, A. J. Klebba and J. H. Scott. 1980. 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. *Monthly Vital Statistics Report*. Vol. 28, No. 11 Supp. DHEW Pub. No. (PHS) 80-1120. Public Health Service. Hyattsville, Md.
- U.S. Bureau of the Census. 1967. *The X-11 Variant of the Census Method II Seasonal Adjustment Program*. Technical Paper No. 15, 1967 revision. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 1974. Estimates of coverage of the population by sex, race, and age—Demographic analysis. *1970 Census of Population and Housing. Evaluation and Research Program*. PHC(E)-4. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 1977. Developmental estimates of the coverage of the population of States in the 1970 Census—Demographic analysis. *Current Population Reports*. Series P-23, No. 65. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 1984. Projections of the population of the United States, by age, sex, and race: 1983 to 2080. *Current Population Reports*. Series P-25, No. 952. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 1985. Estimates of the population of the United States, by age, sex, and race: 1980 to 1984. *Current Population Reports*. Series P-25, No. 965. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 1986a. Estimates of the population of the United States, by age, sex, and race: 1980 to 1985. *Current Population Reports*. Series P-25, No. 985. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 1986b. Press release CB86-02. To be published in *Current Population Reports*. Series P-25.
- U.S. Bureau of the Census. 1987. Estimates of the population of the United States, by age, sex, and race: 1980 to 1986. *Current Population Reports*. Series P-25, No. 1000. Washington: U.S. Government Printing Office.
- World Health Organization. 1977. *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.

Table 1. Live births and birth rates: Each reporting area, 1985 and 1986

[By place of occurrence. Rates per 1,000 population in specified area. Number of events reported; see Technical notes]

Area	Live births			
	1986		1985	
	Number	Rate	Number	Rate
New England	170,440	13.4	173,127	13.7
Maine	16,022	13.6	16,211	13.9
New Hampshire	16,361	15.9	15,724	15.8
Vermont	7,529	13.9	7,925	14.8
Massachusetts	75,998	13.0	82,872	14.2
Rhode Island	13,935	14.3	13,517	14.0
Connecticut	40,595	12.7	36,878	11.6
Middle Atlantic	529,790	14.2	521,643	14.0
New York	264,844	14.9	256,049	14.4
New Jersey	104,506	13.7	103,308	13.7
Pennsylvania	160,440	13.5	162,286	13.7
East North Central	618,696	14.8	626,650	15.0
Ohio	158,277	14.7	160,898	15.0
Indiana	79,630	14.5	80,774	14.7
Illinois	172,321	14.9	177,803	15.4
Michigan	136,198	14.9	134,090	14.8
Wisconsin	72,270	15.1	73,085	15.3
West North Central	265,986	15.1	275,155	15.7
Minnesota	64,819	15.4	66,270	15.8
Iowa	38,794	13.6	42,084	14.6
Missouri	76,224	15.0	77,186	15.3
North Dakota	11,900	17.5	12,717	18.6
South Dakota	11,714	16.5	12,253	17.3
Nebraska	24,433	15.3	25,688	16.0
Kansas	38,102	15.5	38,957	15.9
South Atlantic	606,735	14.8	601,687	15.0
Delaware	9,768	15.4	9,843	15.8
Maryland	61,953	13.9	60,019	13.7
District of Columbia	20,368	32.5	20,541	32.8
Virginia	84,209	14.6	83,184	14.6
West Virginia	24,195	12.6	25,589	13.2
North Carolina	90,597	14.3	89,859	14.4
South Carolina	49,604	14.7	49,300	14.7
Georgia	98,786	16.2	99,792	16.7
Florida	167,255	14.3	163,560	14.4
East South Central	221,525	14.6	223,449	14.8
Kentucky	51,682	13.9	51,710	13.9
Tennessee	71,890	15.0	70,547	14.8
Alabama	56,417	13.9	58,807	14.6
Mississippi	41,536	15.8	42,385	16.2
West South Central	474,837	17.7	483,106	18.2
Arkansas	34,063	14.4	35,079	14.9
Louisiana	77,953	17.3	81,136	18.1
Oklahoma	48,061	14.5	51,910	15.7
Texas	314,760	18.9	314,981	19.2
Mountain	229,868	17.7	236,406	18.5
Montana	12,372	15.1	13,236	16.0
Idaho	16,329	16.3	17,492	17.4
Wyoming	8,011	15.8	8,838	17.4
Colorado	55,724	17.1	55,319	17.1
New Mexico	23,952	16.2	28,904	19.9
Arizona	60,890	18.4	58,829	18.5
Utah	37,368	22.4	38,431	23.4
Nevada	15,222	15.8	15,357	16.4
Pacific	618,566	17.3	618,184	17.6
Washington	68,754	15.4	76,205	17.3
Oregon	40,356	15.0	40,448	15.1
California	478,822	17.7	470,733	17.9
Alaska	12,371	23.2	12,570	24.1
Hawaii	18,263	17.2	18,228	17.3

All data are by State of occurrence rather than by State of residence and should be interpreted accordingly.

Table 2. Marriages, divorces, and rates: Each reporting area, 1985 and 1986

[By place of occurrence. Includes reported annulments. Rates per 1,000 population in specified area. Number of events reported; see Technical notes]

Area	Marriages ¹				Divorces			
	1986		1985		1986		1985	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
New England	104,415	8.2	114,857	9.1	45,469	3.6	47,319	3.7
Maine	12,082	10.3	11,257	9.7	5,573	4.7	6,243	5.4
New Hampshire	11,708	11.4	11,159	11.2	4,737	4.6	4,941	5.0
Vermont	5,607	10.4	5,622	10.5	2,377	4.4	2,282	4.3
Massachusetts	40,717	7.0	51,648	8.9	19,958	3.4	19,794	3.4
Rhode Island	8,044	8.3	7,963	8.2	3,672	3.8	3,589	3.7
Connecticut	26,257	8.2	27,208	8.6	9,152	2.9	10,470	3.3
Middle Atlantic	325,821	8.7	315,466	8.5	128,004	3.4	137,410	3.7
New York	176,862	10.0	164,864	9.3	59,542	3.4	68,310	3.8
New Jersey	60,792	8.0	61,915	8.2	28,397	3.7	29,295	3.9
Pennsylvania	88,167	7.4	88,687	7.5	40,065	3.4	39,805	3.4
East North Central ²	359,925	8.6	365,658	8.8	154,231	4.3	156,254	4.3
Ohio	96,994	9.0	94,176	8.8	53,358	5.0	53,208	5.0
Indiana	50,514	9.2	52,688	9.6	---	---	---	---
Illinois	96,261	8.3	97,909	8.5	46,511	4.0	48,431	4.2
Michigan	77,770	8.5	80,813	8.9	37,654	4.1	37,735	4.2
Wisconsin	38,386	8.0	40,072	8.4	16,708	3.5	16,880	3.5
West North Central	155,803	8.9	157,251	9.0	73,704	4.2	73,882	4.2
Minnesota	34,964	8.3	34,458	8.2	13,893	3.3	13,750	3.3
Iowa	23,350	8.2	24,720	8.6	10,206	3.6	10,578	3.7
Missouri	50,273	9.9	49,014	9.7	25,889	5.1	25,393	5.0
North Dakota	5,164	7.6	5,467	8.0	2,264	3.3	2,300	3.4
South Dakota	7,447	10.5	7,836	11.1	2,585	3.7	2,567	3.6
Nebraska	12,027	7.5	12,185	7.6	6,233	3.9	6,465	4.0
Kansas	22,578	9.2	23,571	9.6	12,634	5.1	12,829	5.2
South Atlantic	442,498	10.8	443,595	11.0	211,093	5.2	210,757	5.2
Delaware	5,473	8.6	5,345	8.6	3,082	4.9	2,981	4.8
Maryland	45,985	10.3	47,069	10.7	15,520	3.5	16,202	3.7
District of Columbia	5,125	8.2	5,040	8.1	2,384	3.8	2,829	4.5
Virginia	66,836	11.5	66,670	11.7	24,974	4.3	24,220	4.2
West Virginia	13,783	7.2	14,649	7.6	9,821	5.1	9,990	5.2
North Carolina	50,204	7.9	50,575	8.1	31,659	5.0	30,273	4.8
South Carolina	54,126	16.0	52,776	15.8	13,454	4.0	13,628	4.1
Georgia	71,952	11.8	73,541	12.3	32,637	5.3	33,042	5.5
Florida	129,014	11.1	127,930	11.3	77,562	6.6	77,592	6.8
East South Central	176,682	11.6	172,440	11.4	87,945	5.8	86,301	5.7
Kentucky	47,147	12.6	46,949	12.6	19,288	5.2	18,774	5.0
Tennessee	58,877	12.3	54,942	11.5	29,172	6.1	30,210	6.3
Alabama	46,539	11.5	45,816	11.4	25,315	6.2	25,137	6.3
Mississippi	24,119	9.2	24,733	9.5	14,170	5.4	12,180	4.7
West South Central	306,507	11.4	319,824	12.1	141,192	6.3	143,733	6.5
Arkansas	31,162	13.1	30,496	12.9	16,563	7.0	16,171	6.9
Louisiana	36,663	8.1	39,666	8.9	---	---	---	---
Oklahoma	33,776	10.2	35,896	10.9	24,729	7.5	26,360	8.0
Texas	204,906	12.3	213,766	13.1	99,900	6.0	101,202	6.2
Mountain	231,913	17.8	233,304	18.2	87,475	6.7	85,753	6.7
Montana	6,785	8.3	7,179	8.7	4,341	5.3	4,261	5.2
Idaho	10,524	10.5	12,542	12.5	6,023	6.0	6,223	6.2
Wyoming	5,348	10.5	5,355	10.5	3,553	7.0	3,799	7.5
Colorado	32,454	9.9	33,938	10.5	19,308	5.9	19,172	5.9
New Mexico	14,142	9.6	14,585	10.1	8,872	6.0	9,027	6.2
Arizona	36,021	10.9	35,706	11.2	23,399	7.1	21,204	6.7
Utah	16,869	10.1	17,077	10.4	8,480	5.1	8,580	5.2
Nevada	109,770	114.0	106,922	114.2	13,499	14.0	13,487	14.4
Pacific	306,592	8.6	314,542	9.0	177,679	5.0	177,649	5.1
Washington	43,782	9.8	44,514	10.1	26,108	5.8	25,563	5.8
Oregon	21,638	8.0	22,414	8.3	15,490	5.7	15,848	5.9
California	218,959	8.1	226,113	8.6	127,641	4.7	127,406	4.8
Alaska	5,925	11.1	6,182	11.9	3,836	7.2	3,996	7.7
Hawaii	16,288	15.3	15,319	14.5	4,604	4.3	4,836	4.6

¹Data are either marriages reported or marriage licenses issued; see Technical notes.²Divorce data exclude figures for Indiana.³Divorce data exclude figures for Louisiana.

All data are by State of occurrence rather than by State of residence and should be interpreted accordingly.

Table 3. Deaths, death rates, and infant deaths: Each reporting area, 1985 and 1986

[By place of occurrence. Rates for deaths at all ages are per 1,000 population in specified area. Number of events reported; see Technical notes]

Area	Deaths (all ages)				Infant deaths (under 1 year)	
	1986		1985		1986	1985
	Number	Rate	Number	Rate	Number	Number
New England	115,900	9.1	117,601	9.3	1,427	1,605
Maine	10,983	9.4	11,351	9.8	123	144
New Hampshire	8,387	8.2	8,311	8.3	118	106
Vermont	4,840	8.9	4,800	9.0	62	58
Massachusetts	54,393	9.3	54,935	9.4	604	755
Rhode Island	9,915	10.2	9,829	10.2	138	128
Connecticut	27,382	8.6	28,375	8.9	382	414
Middle Atlantic	366,883	9.8	365,307	9.8	5,486	5,658
New York	172,857	9.7	171,089	9.6	2,840	2,810
New Jersey	69,333	9.1	69,966	9.3	876	1,033
Pennsylvania	124,693	10.5	124,252	10.5	1,770	1,815
East North Central	371,994	8.9	364,866	8.8	6,640	6,595
Ohio	99,947	9.3	98,371	9.2	1,554	1,656
Indiana	50,175	9.1	48,430	8.8	862	837
Illinois	100,536	8.7	99,381	8.6	2,033	1,993
Michigan	79,157	8.7	77,191	8.5	1,549	1,474
Wisconsin	42,179	8.8	41,493	8.7	642	635
West North Central	164,394	9.4	165,110	9.4	2,599	2,639
Minnesota	35,136	8.3	34,797	8.3	605	634
Iowa	26,617	9.3	27,051	9.4	308	356
Missouri	53,844	10.6	54,109	10.8	872	811
North Dakota	5,685	8.4	5,979	8.7	113	126
South Dakota	6,658	9.4	6,610	9.3	136	103
Nebraska	14,812	9.3	14,934	9.3	248	271
Kansas	21,642	8.8	21,630	8.8	317	338
South Atlantic	373,524	9.1	362,837	9.0	7,099	7,055
Delaware	5,688	9.0	5,491	8.8	109	130
Maryland	36,595	8.2	35,928	8.2	637	574
District of Columbia	8,403	13.4	8,158	13.0	400	454
Virginia	45,701	7.9	44,521	7.8	881	926
West Virginia	19,834	10.3	19,672	10.2	253	268
North Carolina	54,871	8.7	53,377	8.5	1,058	1,086
South Carolina	27,339	8.1	25,780	7.7	649	691
Georgia	50,241	8.2	47,712	8.0	1,220	1,074
Florida	124,852	10.7	122,198	10.8	1,892	1,852
East South Central	142,825	9.4	141,136	9.3	2,561	2,757
Kentucky	34,419	9.2	34,299	9.2	477	555
Tennessee	47,436	9.9	45,525	9.6	820	876
Alabama	37,335	9.2	37,322	9.3	786	763
Mississippi	23,635	9.0	23,990	9.2	478	563
West South Central	210,959	7.9	210,703	7.9	4,948	5,051
Arkansas	23,896	10.1	24,067	10.2	326	380
Louisiana	36,614	8.1	37,121	8.3	943	967
Oklahoma	28,787	8.7	29,195	8.8	508	605
Texas	121,662	7.3	120,320	7.4	3,171	3,099
Mountain	91,829	7.1	89,167	7.0	2,210	2,268
Montana	6,609	8.1	6,626	8.0	86	109
Idaho	7,017	7.0	6,877	6.8	177	134
Wyoming	3,049	6.0	3,087	6.1	55	70
Colorado	21,318	6.5	20,636	6.4	529	588
New Mexico	10,354	7.0	9,552	6.6	256	280
Arizona	26,413	8.0	25,344	8.0	595	562
Utah	9,317	5.6	9,348	5.7	365	394
Nevada	7,752	8.0	7,697	8.2	147	131
Pacific	262,178	7.3	269,668	7.7	5,555	5,956
Washington	32,899	7.4	35,579	8.1	694	778
Oregon	23,418	8.7	24,030	8.9	360	409
California	197,538	7.3	201,901	7.7	4,205	4,479
Alaska	2,174	4.1	2,054	3.9	124	125
Hawaii	6,149	5.8	6,104	5.8	172	165

All data are by State of occurrence rather than by State of residence and should be interpreted accordingly.

Table 4. Deaths and death rates, by age, race, and sex: United States, 1986

[Based on a 10-percent sample of deaths. Rates per 100,000 population in specified group. Due to rounding of estimates, figures may not add to totals. For information on standard errors of the estimates and further discussion, see Technical notes]

Age	All races						All other					
	All races			White			Total			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number											
All ages	2,099,000	1,100,600	998,710	1,829,410	953,470	875,940	269,900	147,130	122,770	246,800	133,920	112,880
Under 1 year	38,600	22,070	16,580	26,520	15,360	11,160	12,130	6,710	5,420	11,010	6,100	4,910
1-4 years	7,310	4,130	3,180	5,330	3,050	2,280	1,980	1,080	900	1,730	920	810
5-14 years	8,950	5,540	3,410	6,690	4,190	2,500	2,260	1,350	910	1,940	1,180	760
15-24 years	40,050	29,870	10,180	32,030	23,840	8,190	8,020	6,030	1,990	6,940	5,240	1,700
25-34 years	55,690	40,630	15,060	41,260	30,440	10,820	14,430	10,190	4,240	13,340	9,430	3,910
35-44 years	70,270	46,700	23,570	53,230	35,550	17,680	17,040	11,150	5,890	15,420	10,130	5,290
45-54 years	115,110	73,860	41,250	90,680	58,700	31,980	24,430	15,160	9,270	22,530	14,000	8,530
55-59 years	110,630	69,180	41,450	92,180	58,230	33,950	18,450	10,950	7,500	17,140	10,250	6,890
60-64 years	169,250	103,120	66,130	143,890	88,550	55,340	25,360	14,570	10,790	23,610	13,520	10,090
65-69 years	218,070	130,280	87,790	190,120	114,630	75,490	27,950	15,650	12,300	26,170	14,510	11,660
70-74 years	264,910	149,560	115,350	234,570	133,900	100,670	30,340	15,660	14,680	28,020	14,320	13,700
75-79 years	291,190	152,610	138,580	260,910	137,100	123,810	30,280	15,510	14,770	27,530	13,970	13,560
80-84 years	280,510	128,320	152,190	255,880	117,280	138,600	24,630	11,040	13,590	22,290	9,790	12,500
85 years and over . . .	427,540	143,890	283,650	395,180	131,980	263,200	32,360	11,910	20,450	28,890	10,390	18,500
Not stated	1,180	840	340	940	670	270	240	170	70	240	170	70
	Rate											
All ages ¹	870.8	937.8	807.2	895.4	955.3	838.3	733.9	838.2	638.6	842.1	964.0	732.3
Under 1 year ²	1,036.7	1,156.7	911.5	877.3	989.7	758.2	1,723.0	1,884.8	1,557.5	1,952.1	2,140.4	1,759.9
1-4 years	50.8	56.1	45.2	45.7	51.0	40.2	72.0	77.6	66.3	80.2	84.0	76.2
5-14 years	26.4	32.0	20.6	24.5	29.9	18.8	34.6	40.7	28.3	36.9	44.2	29.3
15-24 years	102.6	151.5	52.7	99.6	146.3	51.6	116.7	176.1	57.7	124.0	189.9	59.9
25-34 years	130.2	189.9	70.4	114.5	167.3	60.6	214.2	318.5	119.8	252.4	379.0	139.7
35-44 years	212.5	286.7	140.4	187.0	250.8	123.7	370.5	527.7	236.9	440.7	635.9	277.5
45-54 years	504.6	666.8	351.5	460.2	607.4	318.6	785.3	1,072.9	545.9	923.7	1,282.1	633.7
55-59 years	981.8	1,290.9	701.5	931.0	1,228.0	658.1	1,349.7	1,774.7	1,000.0	1,546.9	2,033.7	1,140.7
60-64 years	1,544.0	2,023.2	1,127.5	1,477.3	1,946.6	1,066.3	2,075.3	2,663.6	1,598.5	2,365.7	3,024.6	1,834.0
65-69 years	2,257.2	2,976.5	1,661.1	2,201.7	2,918.3	1,603.8	2,724.2	3,485.5	2,128.0	3,075.2	3,921.6	2,424.0
70-74 years	3,456.6	4,576.5	2,624.0	3,402.5	4,545.1	2,550.5	3,940.3	4,878.5	3,269.5	4,378.1	5,465.6	3,634.0
75-79 years	5,173.0	6,946.3	4,037.9	5,131.0	6,924.2	3,987.4	5,566.2	7,147.5	4,516.8	6,090.7	7,982.9	4,895.3
80-84 years	8,197.3	10,792.3	6,815.5	8,162.0	10,829.2	6,751.1	8,581.9	10,415.1	7,508.3	9,326.4	11,383.7	8,169.9
85 years and over . . .	15,291.1	18,167.9	14,154.2	15,503.3	18,536.5	14,327.7	13,048.4	14,703.7	12,245.5	13,563.4	15,507.5	12,671.2

¹Figures for age not stated are included in "All ages" but are not distributed among age groups.

²Death rates under 1 year (based on population estimates) differ from infant mortality rates (based on live births); see table 10 for infant mortality rates and Technical notes for further discussion of the difference.

Table 5. Death rates by age, race, and sex and age-adjusted death rates by race and sex: United States, 1960, 1970, and 1980-86

[For 1985 and 1986, based on a 10-percent sample of deaths; for all other years, based on final data. Data for 1970 and 1980-84 exclude deaths of nonresidents of the United States. Rates per 100,000 population in specified group based on populations enumerated as of April 1 for census years and estimated as of July 1 for all other years. For method of computation of age-adjusted rates, information on standard errors of the estimates, and further discussion, see Technical notes]

Race, sex, and year	All ages ¹	Under 1 year ²	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	Age-adjusted rate
All races													
1986	870.8	1,036.7	50.8	26.4	102.6	130.2	212.5	504.6	1,259.0	2,787.8	6,316.4	15,291.1	540.2
1985 ^a	874.8	1,055.2	51.1	27.9	94.8	122.3	210.5	516.3	1,284.7	2,839.1	6,411.3	15,486.3	545.9
1984 ^a	862.3	1,085.6	51.9	26.7	96.8	121.1	204.8	521.1	1,287.8	2,848.1	6,399.3	15,223.6	545.9
1983 ^a	862.8	1,107.3	55.9	26.9	96.0	121.4	201.9	535.7	1,299.5	2,874.3	6,441.5	15,168.0	550.5
1982 ^a	852.0	1,164.2	57.6	28.3	101.0	125.2	207.4	549.7	1,297.9	2,885.2	6,329.8	15,048.3	553.8
1981 ^a	862.4	1,207.3	60.2	29.4	107.1	132.1	221.3	573.5	1,322.1	2,922.3	6,429.9	15,379.7	568.2
1980 ^a	878.3	1,288.3	63.9	30.6	115.4	135.5	227.9	584.0	1,346.3	2,994.9	6,692.6	15,980.3	585.8
1970 ^a	945.3	2,142.4	84.5	41.3	127.7	157.4	314.5	730.0	1,658.8	3,582.7	8,004.4	16,344.9	714.3
1960 ^a	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	760.9
Male													
1986	937.8	1,156.7	56.1	32.0	151.5	189.9	286.7	666.8	1,647.9	3,660.4	8,296.8	18,167.9	707.1
1985 ^a	945.1	1,178.0	56.7	33.3	141.2	178.7	285.5	670.3	1,686.9	3,788.4	8,514.3	18,210.6	717.4
1984 ^a	935.9	1,198.2	57.0	32.1	141.6	173.9	270.2	676.6	1,705.2	3,813.0	8,445.9	18,119.1	716.7
1983 ^a	942.6	1,223.7	63.3	32.5	140.4	174.6	265.8	694.5	1,725.6	3,885.4	8,539.1	17,977.4	725.3
1982 ^a	938.0	1,291.5	63.3	34.1	149.2	180.6	272.6	720.4	1,736.1	3,929.2	8,391.4	17,782.0	733.1
1981 ^a	954.5	1,331.8	67.3	35.7	158.3	190.6	291.9	751.7	1,774.7	3,994.6	8,519.6	18,138.2	753.3
1980 ^a	976.9	1,428.5	72.6	36.7	172.3	196.1	299.2	767.3	1,815.1	4,105.2	8,816.7	18,801.1	777.2
1970 ^a	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	931.6
1960 ^a	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	21,186.3	949.3
Female													
1986	807.2	911.5	45.2	20.6	52.7	70.4	140.4	351.5	913.7	2,098.3	5,132.7	14,154.2	405.4
1985 ^a	804.9	927.1	45.1	22.2	47.5	65.9	137.7	371.2	927.8	2,095.1	5,162.2	14,389.8	408.3
1984 ^a	792.7	967.5	46.5	21.1	51.1	68.5	141.5	374.6	918.4	2,096.4	5,188.2	14,053.9	409.7
1983 ^a	787.4	985.4	48.3	21.0	50.7	68.9	140.2	386.0	923.8	2,092.3	5,200.0	14,010.6	411.5
1982 ^a	770.7	1,030.8	51.6	22.3	51.6	70.4	144.4	389.9	913.9	2,084.7	5,120.7	13,895.2	411.2
1981 ^a	775.4	1,076.7	52.8	22.8	54.8	74.3	153.2	406.9	925.2	2,100.6	5,201.0	14,202.5	420.4
1980 ^a	785.3	1,141.7	54.7	24.2	57.5	75.9	159.3	412.9	934.3	2,144.7	5,440.1	14,746.9	432.6
1970 ^a	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	532.5
1960 ^a	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	590.6
White													
1986	895.4	877.3	45.7	24.5	99.6	114.5	187.0	460.2	1,201.9	2,734.8	6,287.0	15,503.3	518.2
1985 ^a	897.2	930.0	46.1	26.1	91.2	107.5	184.0	469.6	1,219.1	2,776.5	6,385.2	15,787.0	523.2
1984 ^a	885.2	931.8	46.9	25.4	94.7	107.2	179.1	477.1	1,223.7	2,784.6	6,367.2	15,508.3	523.6
1983 ^a	884.6	948.1	50.8	25.6	93.2	107.6	177.8	490.8	1,233.0	2,808.0	6,415.6	15,477.4	528.0
1982 ^a	872.9	1,018.5	52.8	27.0	98.3	110.2	182.7	504.0	1,233.3	2,822.3	6,329.3	15,296.9	531.8
1981 ^a	880.3	1,062.0	54.3	28.0	104.6	116.2	192.5	524.9	1,255.7	2,855.9	6,423.4	15,628.0	544.6
1980 ^a	892.5	1,099.9	57.9	29.1	112.0	118.4	197.2	531.6	1,276.7	2,921.1	6,664.9	16,220.0	559.4
1970 ^a	946.3	1,869.7	75.1	39.1	115.8	129.9	267.0	666.2	1,577.1	3,490.1	8,043.3	16,889.7	679.6
1960 ^a	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	727.0
White, male													
1986	955.3	989.7	51.0	29.9	146.3	167.3	250.8	607.4	1,579.8	3,615.5	8,304.9	18,536.5	680.7
1985 ^a	960.1	1,046.7	52.6	31.6	135.0	157.5	247.2	608.0	1,609.8	3,723.1	8,517.0	18,637.4	689.5
1984 ^a	951.1	1,038.4	51.8	30.5	138.8	154.3	235.1	617.9	1,625.5	3,745.3	8,459.1	18,552.7	689.9
1983 ^a	957.4	1,052.9	57.3	31.1	137.0	154.8	232.9	636.5	1,642.9	3,816.1	8,556.9	18,443.3	698.4
1982 ^a	951.8	1,135.5	58.2	32.5	145.6	158.7	238.6	659.9	1,654.6	3,859.8	8,444.7	18,123.1	706.0
1981 ^a	965.1	1,182.0	60.5	34.2	154.5	167.3	252.4	686.5	1,692.0	3,926.9	8,565.2	18,454.0	724.4
1980 ^a	983.3	1,230.3	66.1	35.0	167.0	171.3	257.4	698.9	1,728.5	4,035.7	8,829.8	19,097.3	745.3
1970 ^a	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	893.4
1960 ^a	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	917.7
White, female													
1986	838.3	758.2	40.2	18.8	51.6	60.6	123.7	318.6	862.8	2,035.6	5,087.4	14,327.7	387.0
1985 ^a	837.1	806.8	39.1	20.3	46.3	56.6	121.5	336.7	868.8	2,030.7	5,128.0	14,681.7	390.0
1984 ^a	822.3	818.5	41.6	20.0	49.6	59.5	123.9	341.9	864.9	2,032.5	5,140.0	14,319.6	391.3
1983 ^a	815.3	837.6	43.9	19.7	48.3	60.1	123.4	351.0	867.8	2,024.7	5,162.2	14,278.3	392.7
1982 ^a	797.9	895.2	47.0	21.2	49.5	61.3	127.7	355.1	859.8	2,022.9	5,100.7	14,123.9	393.3
1981 ^a	799.6	935.4	47.7	21.6	53.2	64.7	133.6	370.9	869.4	2,032.8	5,176.3	14,438.2	401.4
1980 ^a	806.1	962.5	49.3	22.9	55.5	65.4	138.2	372.7	876.2	2,066.6	5,401.7	14,979.6	411.1
1970 ^a	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	501.7
1960 ^a	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	555.0

See footnotes at end of table.

Table 5. Death rates by age, race, and sex and age-adjusted death rates by race and sex: United States, 1960, 1970, and 1980-86—Con.

[For 1985 and 1986, based on a 10-percent sample of deaths; for all other years, based on final data. Data for 1970 and 1980-84 exclude deaths of nonresidents of the United States. Rates per 100,000 population in specified group based on populations enumerated as of April 1 for census years and estimated as of July 1 for all other years. For method of computation of age-adjusted rates, information on standard errors of the estimates, and further discussion, see Technical notes]

Race, sex, and year	All ages ¹	Under 1 year ²	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	Age-adjusted rate
All other													
1986	733.9	1,723.0	72.0	34.6	116.7	214.2	370.5	785.3	1,692.2	3,245.5	6,607.7	13,048.4	680.5
1985 ₃	737.5	1,600.0	72.6	35.5	111.7	202.5	377.3	817.5	1,796.1	3,383.5	6,671.6	12,282.7	694.8
1984 ₃	731.5	1,755.4	73.6	32.4	106.7	197.3	369.1	811.2	1,797.7	3,408.2	6,721.9	11,996.5	694.5
1983 ₃	736.6	1,802.0	78.5	32.7	109.4	198.6	357.6	838.7	1,841.1	3,464.5	6,695.1	11,796.8	703.1
1982 ₃	728.9	1,745.5	78.4	34.3	114.4	210.3	367.1	868.2	1,840.0	3,458.5	6,343.4	12,159.6	704.6
1981 ₃	755.0	1,786.5	87.3	35.6	120.0	226.2	408.2	921.0	1,890.8	3,531.9	6,478.6	12,547.9	732.6
1980 ₃	791.7	2,148.5	91.4	37.4	133.6	239.1	428.9	967.7	1,954.9	3,671.0	6,984.3	13,227.1	774.2
1970 ₃	938.4	3,597.1	134.1	53.7	203.6	348.7	664.3	1,290.9	2,431.1	4,488.4	7,511.2	10,750.3	983.4
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	1,046.1
All other, male													
1986	838.2	1,884.8	77.6	40.7	176.1	318.5	527.7	1,072.9	2,192.4	4,066.2	8,219.8	14,703.7	880.3
1985 ₃	858.3	1,762.0	74.6	40.5	171.3	301.3	547.3	1,104.6	2,321.4	4,376.2	8,461.8	14,455.7	909.8
1984 ₃	846.4	1,905.2	79.5	39.0	155.7	289.1	513.2	1,095.0	2,370.5	4,426.4	8,320.3	14,128.4	904.4
1983 ₃	854.9	1,976.3	89.5	38.7	157.2	292.9	495.5	1,117.4	2,431.9	4,521.8	8,398.0	13,478.4	916.3
1982 ₃	854.8	1,921.1	85.7	41.2	167.8	313.0	509.5	1,176.7	2,457.7	4,571.7	7,918.1	14,386.4	928.4
1981 ₃	889.4	1,934.3	98.8	43.0	178.5	338.8	567.5	1,255.7	2,522.6	4,626.0	8,056.0	14,685.9	964.3
1980 ₃	936.5	2,350.2	103.0	44.9	201.6	357.8	594.2	1,309.1	2,606.3	4,747.2	8,688.5	15,774.9	1,015.1
1970 ₃	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	1,231.4
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	1,211.0
All other, female													
1986	638.6	1,557.5	66.3	28.3	57.7	119.8	236.9	545.9	1,283.5	2,627.1	5,582.7	12,245.5	521.0
1985 ₃	627.5	1,435.2	70.5	30.4	52.9	113.7	232.8	579.4	1,367.9	2,642.0	5,513.2	11,196.2	524.7
1984 ₃	627.0	1,603.0	67.4	25.7	58.4	115.3	246.3	575.9	1,328.8	2,648.8	5,691.1	11,104.7	529.0
1983 ₃	629.2	1,618.9	67.2	26.5	62.4	115.1	240.8	607.5	1,359.4	2,682.6	5,607.8	10,944.5	535.2
1982 ₃	614.5	1,560.7	71.0	27.3	61.7	119.1	245.4	615.7	1,346.8	2,637.3	5,329.5	11,130.5	529.3
1981 ₃	633.0	1,634.5	75.6	28.2	62.8	127.3	272.4	646.1	1,383.1	2,715.2	5,463.9	11,371.7	549.4
1980 ₃	660.6	1,944.1	79.5	29.8	68.0	135.7	288.3	687.8	1,423.1	2,856.2	5,863.3	11,922.3	582.6
1970 ₃	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	770.1
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	893.0
Black													
1986	842.1	1,952.1	80.2	36.9	124.0	252.4	440.7	923.7	1,934.9	3,634.5	7,209.8	13,563.4	768.7
1985 ₃	841.4	1,817.1	79.3	37.3	118.1	232.3	452.4	953.0	2,029.8	3,730.0	7,284.4	12,843.9	779.0
1984 ₃	828.5	1,964.1	78.8	35.2	111.9	226.7	435.9	932.4	2,016.0	3,740.0	7,254.4	12,668.9	771.9
1983 ₃	830.5	2,032.9	85.3	34.5	114.4	226.1	417.2	956.6	2,059.7	3,773.6	7,215.8	12,320.9	777.9
1982 ₃	819.2	1,963.2	84.9	36.9	118.7	240.4	429.9	987.3	2,053.9	3,769.2	6,773.3	12,792.4	778.7
1981 ₃	841.7	1,992.7	93.6	37.7	124.3	255.9	470.5	1,041.1	2,094.4	3,816.3	6,904.8	13,073.7	803.9
1980 ₃	875.4	2,356.6	97.6	39.0	138.3	269.5	489.9	1,087.6	2,146.6	3,932.9	7,382.6	13,610.8	842.5
1970 ₃	999.3	3,835.6	140.0	55.5	212.4	381.2	724.9	1,383.8	2,570.6	4,719.4	7,860.7	11,300.5	1,044.0
1960	1,038.6	4,740.9	190.9	64.5	157.9	333.0	659.0	1,391.7	2,899.1	4,880.2	7,594.9	13,828.4	1,073.3
Black, male													
1986	964.0	2,140.4	84.0	44.2	189.9	379.0	635.9	1,282.1	2,499.5	4,561.7	9,103.4	15,507.5	1,003.4
1985 ₃	979.0	2,000.0	80.0	43.2	184.8	348.5	662.7	1,315.7	2,619.8	4,846.5	9,289.1	15,353.8	1,028.9
1984 ₃	958.1	2,136.6	85.2	42.4	163.9	335.6	616.0	1,273.5	2,658.3	4,874.5	9,023.0	14,642.9	1,011.7
1983 ₃	963.3	2,243.4	96.8	40.9	165.0	335.8	586.5	1,287.3	2,713.1	4,949.3	9,100.0	14,155.6	1,019.6
1982 ₃	960.4	2,168.9	93.4	44.4	175.4	360.3	606.7	1,352.1	2,758.1	5,040.1	8,477.2	15,117.9	1,035.0
1981 ₃	991.6	2,164.8	105.3	45.2	186.7	387.1	667.9	1,432.5	2,804.1	5,046.3	8,635.1	15,396.4	1,067.7
1980 ₃	1,034.1	2,586.7	110.5	47.4	209.1	407.3	689.8	1,479.9	2,873.0	5,131.1	9,231.6	16,098.8	1,112.8
1970 ₃	1,186.6	4,298.9	150.5	67.1	320.6	559.5	956.6	1,777.5	3,256.9	5,803.2	9,454.9	12,222.3	1,318.6
1960	1,181.7	5,306.8	208.5	75.1	212.0	402.5	762.0	1,624.8	3,316.4	5,798.7	8,605.1	14,844.8	1,246.1
Black, female													
1986	732.3	1,759.9	76.2	29.3	59.9	139.7	277.5	633.7	1,471.4	2,955.7	6,060.5	12,671.2	585.0
1985 ₃	717.6	1,643.9	78.5	31.3	53.7	129.4	277.0	658.4	1,545.5	2,907.7	6,059.7	11,678.6	584.6
1984 ₃	712.0	1,789.1	72.2	27.8	61.6	130.6	285.7	655.0	1,489.7	2,907.4	6,184.1	11,439.1	585.3
1983 ₃	711.2	1,818.6	73.6	28.0	65.6	130.0	276.1	685.8	1,526.3	2,930.6	6,064.6	11,329.5	590.4
1982 ₃	692.4	1,760.1	76.4	29.4	63.5	134.8	282.7	693.1	1,498.3	2,863.0	5,708.5	11,660.0	581.4
1981 ₃	707.3	1,823.4	81.6	30.0	64.0	141.1	306.1	723.9	1,527.9	2,929.7	5,822.3	11,933.0	599.1
1980 ₃	733.3	2,123.7	84.4	30.5	70.5	150.0	323.9	768.2	1,561.0	3,057.4	6,212.1	12,367.2	631.1
1970 ₃	829.2	3,368.8	129.4	43.8	111.9	231.0	533.0	1,043.9	1,986.2	3,860.9	6,691.5	10,706.6	814.4
1960	905.0	4,162.2	173.3	53.8	107.5	273.2	568.5	1,177.0	2,510.9	4,064.2	6,730.0	13,052.6	918.9

¹Figures for age not stated are included in "All ages" but not distributed among age groups.

²Death rates under 1 year (based on population) differ from infant mortality rates (based on live births); see table 10 for infant mortality rates and Technical notes for further discussion of the difference.

³Data are final; see Technical notes.

Table 6. Provisional abridged life table for the total population: United States, 1986

[Based on a 10-percent sample of deaths. For further discussion see Technical notes]

Age Interval	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)
Period of life between 2 exact ages stated in years (1)						
x to x+n	nq _x	l _x	n ^d _x	nL _x	T _x	e _x
0-1	0.0103	100,000	1,030	99,113	7,485,374	74.9
1-5	0.0020	98,970	197	395,418	7,386,261	74.6
5-10	0.0013	98,773	125	493,525	6,990,843	70.8
10-15	0.0014	98,648	135	492,978	6,497,318	65.9
15-20	0.0043	98,513	421	491,610	6,004,340	60.9
20-25	0.0059	98,092	578	489,044	5,512,730	56.2
25-30	0.0059	97,514	579	486,121	5,023,686	51.5
30-35	0.0071	96,935	686	483,001	4,537,565	46.8
35-40	0.0089	96,249	857	479,224	4,054,564	42.1
40-45	0.0129	95,392	1,229	474,107	3,575,340	37.5
45-50	0.0190	94,163	1,786	466,677	3,101,233	32.9
50-55	0.0313	92,377	2,896	455,100	2,634,556	28.5
55-60	0.0480	89,481	4,299	437,275	2,179,456	24.4
60-65	0.0747	85,182	6,360	410,871	1,742,181	20.5
65-70	0.1073	78,822	8,458	373,878	1,331,310	16.9
70-75	0.1601	70,364	11,268	324,630	957,432	13.6
75-80	0.2307	59,096	13,633	262,229	632,802	10.7
80-85	0.3420	45,463	15,549	188,653	370,573	8.2
85 and over	1.0000	29,914	29,914	181,920	181,920	6.1

Table 7. Average length of life in years by race and sex: United States, 1950, 1960, 1970, 1975-86

[For 1985 and 1986, based on a 10-percent sample of deaths; for all other years, based on final data. For further discussion see Technical notes]

Year	All other											
	All races			White			Total			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
1986	74.9	71.3	78.3	75.4	72.0	78.9	71.4	67.6	75.1	69.6	65.5	73.6
1985	74.7	71.2	78.2	75.3	71.8	78.7	71.2	67.2	75.2	69.5	65.3	73.7
1984	74.7	71.2	78.2	75.3	71.8	78.7	71.3	67.4	75.0	69.7	65.6	73.7
1983	74.6	71.0	78.1	75.2	71.7	78.7	71.1	67.2	74.9	69.6	65.4	73.6
1982	74.5	70.9	78.1	75.1	71.5	78.7	71.0	66.8	75.0	69.4	65.1	73.7
1981	74.2	70.4	77.8	74.8	71.1	78.4	70.3	66.1	74.4	68.9	64.5	73.2
1980	73.7	70.0	77.4	74.4	70.7	78.1	69.5	65.3	73.6	68.1	63.8	72.5
1979	73.9	70.0	77.8	74.6	70.8	78.4	69.8	65.4	74.1	68.5	64.0	72.9
1978	73.5	69.6	77.3	74.1	70.4	78.0	69.3	65.0	73.5	68.1	63.7	72.4
1977	73.3	69.5	77.2	74.0	70.2	77.9	68.9	64.7	73.2	67.7	63.4	72.0
1976	72.9	69.1	76.8	73.6	69.9	77.5	68.4	64.2	72.7	67.2	62.9	71.6
1975	72.6	68.8	76.6	73.4	69.5	77.3	68.0	63.7	72.4	66.8	62.4	71.3
1970	70.8	67.1	74.7	71.7	68.0	75.6	65.3	61.3	69.4	64.1	60.0	68.3
1960	69.7	66.6	73.1	70.6	67.4	74.1	63.6	61.1	66.3	---	---	---
1950	68.2	65.6	71.1	69.1	66.5	72.2	60.8	59.1	62.9	---	---	---

¹Data are final; see Technical notes.

Table 8. Age-specific and age-adjusted death rates for the 15 leading causes and selected components: United States, 1985 and 1986

[Based on a 10-percent sample of deaths. Rates per 100,000 population in specified group. For information on standard errors of the estimates and further discussion, see Technical notes]

Cause of death (Ninth Revision, International Classification of Diseases, 1975)	Year	Age											Age-adjusted rate ³
		All ages ¹	Under 1 year ²	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	1986	870.8	1,036.7	33.7	102.6	130.2	212.5	504.6	1,259.0	2,787.8	6,316.4	15,291.1	540.2
	1985	874.8	1,055.2	34.8	94.8	122.3	210.5	516.3	1,284.7	2,839.1	6,411.3	15,486.3	545.9
Diseases of heart	1986	318.7	29.2	1.3	2.4	7.6	36.9	142.8	430.9	1,047.6	2,649.2	7,169.2	175.4
	1985	325.0	28.1	1.3	2.5	8.0	40.2	155.5	437.4	1,087.4	2,727.0	7,333.6	181.7
Rheumatic fever and rheumatic heart disease	1986	2.7	-	0.1	0.1	0.3	0.6	2.2	5.1	11.1	19.8	25.0	1.8
	1985	2.6	-	0.0	0.1	0.4	0.9	1.9	5.0	11.2	19.2	21.8	1.8
Hypertensive heart disease	1986	8.2	-	-	0.0	0.4	1.4	5.0	13.5	29.7	60.8	158.8	4.9
	1985	8.6	-	-	0.1	0.3	1.8	5.8	14.3	29.8	67.9	153.1	5.2
Hypertensive heart and renal disease	1986	1.1	-	-	-	-	0.1	0.4	0.5	2.9	9.7	35.4	0.5
	1985	1.2	-	-	-	0.1	0.0	0.4	1.3	2.9	12.1	32.8	0.6
Ischemic heart disease	1986	217.4	0.3	0.1	0.3	2.5	22.6	96.2	297.9	737.9	1,840.2	4,749.3	119.6
	1985	226.5	0.8	0.0	0.3	3.0	25.5	106.9	310.4	782.2	1,920.6	4,995.2	126.6
Acute myocardial infarction	1986	109.1	0.3	0.1	0.2	1.7	13.9	61.1	179.6	423.1	923.8	1,673.8	65.0
	1985	115.7	0.8	-	0.2	1.9	16.1	65.3	192.1	458.0	976.0	1,791.1	69.7
Other acute and subacute forms of ischemic heart disease	1986	1.5	-	-	-	0.0	0.4	1.1	3.0	5.5	10.7	20.4	0.9
	1985	1.6	-	-	0.0	0.1	0.2	1.9	3.3	5.4	10.9	23.6	1.0
Angina pectoris	1986	0.4	-	-	-	-	0.0	0.1	0.5	1.7	4.2	8.6	0.2
	1985	0.4	-	-	-	-	0.1	-	0.5	2.0	3.2	6.6	0.2
Old myocardial infarction and other forms of chronic ischemic heart disease	1986	106.4	-	0.0	0.1	0.8	8.2	33.9	114.8	307.6	901.4	3,046.5	53.4
	1985	108.8	-	0.0	0.0	1.0	9.1	39.8	114.4	316.9	930.5	3,173.8	55.5
Other diseases of endocardium	1986	4.6	-	0.0	0.1	0.4	0.5	1.3	4.7	13.7	44.7	106.6	2.4
	1985	4.1	0.3	0.0	0.2	0.4	0.5	1.5	3.6	13.4	37.3	96.3	2.2
All other forms of heart disease	1986	84.7	29.0	1.1	1.9	4.1	11.8	37.8	109.2	252.3	673.8	2,094.1	46.3
	1985	82.0	27.0	1.2	1.9	3.9	11.6	39.0	102.8	248.0	670.1	2,034.7	45.4
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues	1986	193.3	1.6	3.6	5.4	12.2	46.3	164.1	447.1	841.0	1,261.4	1,602.3	132.5
	1985	191.7	4.3	3.8	4.8	12.7	46.0	165.4	448.2	837.8	1,261.9	1,569.4	132.5
Malignant neoplasms of lip, oral cavity, and pharynx	1986	3.6	-	0.0	0.1	0.2	0.9	4.2	11.2	13.9	16.7	30.0	2.6
	1985	3.5	-	0.0	0.1	0.2	1.2	4.3	10.3	14.8	16.4	20.7	2.6
Malignant neoplasms of digestive organs and peritoneum	1986	48.7	0.5	0.1	0.3	1.4	7.4	33.2	98.9	211.0	364.6	536.1	31.2
	1985	48.9	-	0.2	0.2	2.1	7.4	31.7	100.9	213.0	371.0	545.8	31.5
Malignant neoplasms of respiratory and intrathoracic organs	1986	53.1	-	0.0	0.2	0.4	7.2	50.4	156.2	268.9	295.5	206.0	38.3
	1985	52.5	0.3	0.0	0.1	0.8	8.4	52.2	155.7	265.3	285.4	195.6	38.3
Malignant neoplasm of breast	1986	17.1	-	-	0.0	1.8	10.3	22.3	45.1	62.7	81.1	135.2	12.8
	1985	16.9	-	-	0.1	1.1	8.4	23.3	46.5	62.1	86.9	119.9	12.7
Malignant neoplasms of genital organs	1986	20.9	-	0.0	0.3	1.0	4.4	11.4	33.3	90.0	174.1	247.9	12.9
	1985	20.8	-	0.1	0.4	1.2	4.0	12.2	32.5	88.0	175.1	263.1	12.9
Malignant neoplasms of urinary organs	1986	8.1	-	0.1	0.0	0.2	1.2	6.0	14.3	33.8	60.2	107.3	5.1
	1985	8.0	-	0.2	-	0.1	1.2	5.6	14.6	34.7	63.7	89.7	5.1
Malignant neoplasms of all other and unspecified sites	1986	24.3	0.5	1.6	2.3	3.7	8.9	23.5	57.3	91.8	144.8	191.7	17.5
	1985	23.5	3.5	1.4	1.6	4.0	8.2	24.0	56.6	89.8	137.4	180.8	17.1
Leukemia	1986	7.1	0.8	1.3	1.2	1.5	2.6	3.9	11.2	26.5	50.7	65.1	4.8
	1985	7.3	0.3	1.6	1.3	1.7	2.9	4.6	10.2	26.5	52.2	71.6	5.0
Other malignant neoplasms of lymphatic and hematopoietic tissues	1986	10.5	-	0.4	1.0	1.8	3.2	9.2	19.8	42.5	73.5	83.0	7.2
	1985	10.5	0.3	0.3	0.9	1.5	4.3	7.4	21.0	43.7	73.9	82.3	7.3
Cerebrovascular diseases	1986	61.3	1.3	0.2	0.6	2.1	7.0	19.7	51.0	162.4	566.2	1,750.0	30.4
	1985	64.0	2.9	0.2	0.7	2.4	7.2	21.8	55.3	171.7	592.4	1,849.8	32.3
Accidents and adverse effects	1986	39.7	22.8	14.8	52.3	39.0	31.3	32.0	34.5	49.9	104.5	248.2	35.5
	1985	38.6	19.0	15.1	48.1	35.2	32.0	31.2	36.5	50.9	102.6	257.6	34.3
Motor vehicle accidents	1986	20.1	4.3	6.9	39.6	24.5	16.9	16.5	15.4	17.6	27.7	29.0	19.8
	1985	18.8	4.8	7.1	35.3	20.8	16.9	13.9	16.5	19.1	27.7	25.8	18.3
All other accidents and adverse effects	1986	19.5	18.5	8.0	12.8	14.5	14.3	15.5	19.1	32.3	76.8	219.6	15.7
	1985	19.7	13.9	8.0	12.9	14.4	15.1	17.3	20.1	31.8	74.9	231.7	16.0

Chronic obstructive pulmonary diseases and allied conditions. .490-496	1986	31.3	2.1	0.4	0.5	0.5	1.3	10.0	46.0	146.7	290.2	361.9	18.5
	1985	31.2	1.6	0.3	0.4	0.6	1.5	10.6	48.3	142.5	292.0	373.1	18.6
Pneumonia and influenza480-487	1986	29.2	18.0	0.7	0.3	1.7	3.5	7.1	17.9	59.7	252.6	1,025.8	13.6
	1985	27.9	17.9	0.8	0.6	1.8	2.9	6.6	19.0	56.0	235.9	1,018.1	13.2
Diabetes mellitus.250	1986	15.1	-	0.1	0.5	1.8	3.4	9.3	25.4	56.7	120.9	202.8	9.4
	1985	16.2	-	0.1	0.3	1.5	4.9	8.4	27.5	63.7	129.1	222.9	10.1
SuicideE950-E959	1986	13.1	...	0.6	12.7	15.4	16.1	15.9	17.4	20.4	28.8	23.2	12.0
	1985	12.0	...	0.6	12.0	15.9	13.6	15.6	15.9	17.4	23.5	17.3	11.2
Chronic liver disease and cirrhosis.571	1986	10.9	0.5	0.0	0.2	2.4	9.1	21.5	32.0	38.2	31.2	20.7	9.2
	1985	11.2	0.3	0.1	0.1	2.7	9.9	21.7	34.5	36.0	35.6	19.9	9.6
Atherosclerosis.440	1986	9.2	-	-	-	-	0.1	0.8	3.3	14.3	77.7	416.7	3.6
	1985	9.9	-	-	-	-	0.2	0.9	4.8	16.2	79.6	460.1	4.0
Nephritis, nephrotic syndrome, and nephrosis.580-589	1986	9.0	7.2	0.1	0.2	0.7	1.0	3.6	9.4	27.5	75.7	223.2	4.9
	1985	9.4	6.9	0.2	0.2	0.7	1.3	3.1	9.3	31.3	82.8	222.1	5.2
Homicide and legal interventionE960-E978	1986	8.9	6.4	1.5	14.3	15.8	11.3	7.8	5.4	4.2	4.5	4.6	8.8
	1985	8.1	9.4	1.5	11.5	14.3	11.0	7.7	6.2	4.0	4.2	4.4	8.1
Septicemia038	1986	7.7	8.3	0.1	0.1	0.6	1.4	3.5	8.2	23.3	64.4	178.8	4.3
	1985	7.1	10.4	0.2	0.4	0.5	1.4	3.1	8.1	22.3	60.6	152.0	4.1
Certain conditions originating in the perinatal period760-779	1986	7.5	480.2	0.2	-	0.1	-	-	-	-	-	-	(4)
	1985	7.6	483.4	0.2	0.0	0.0	0.1	-	0.0	-	-	-	(4)
Congenital anomalies740-759	1986	5.1	218.3	2.8	1.1	0.8	1.5	1.3	1.3	2.7	3.2	3.2	(4)
	1985	5.5	236.2	2.6	1.1	1.1	1.3	1.4	2.1	2.7	4.1	6.6	(4)

¹ Figures for age not stated are included in "All ages" but not distributed among age groups.

² Death rates under 1 year (based on population estimates) differ from infant mortality rates (based on live births); see table 11 for infant mortality rates by cause and Technical notes for further discussion of the difference.

³ For method of computation, see Technical notes.

⁴ Because deaths from these causes occur primarily among infants, age-adjusted rates are not shown, see table 11.

Table 9. Deaths and death rates for 72 selected causes: United States, 1985 and 1986

[Based on a 10-percent sample of deaths. Rates per 100,000 population. Due to rounding of estimates, figures may not add to totals. For information on standard errors of the estimates and further discussion, see Technical notes]

Cause of death (Ninth Revision, International Classification of Diseases, 1975)	Number		Rate	
	1986	1985	1986	1985
All causes	2,099,000	2,084,000	870.8	874.8
Shigellosis and amebiasis004-006	20	50	0.0	0.0
Certain other intestinal infections007-009	260	390	0.1	0.2
Tuberculosis010-018	1,670	1,690	0.7	0.7
Tuberculosis of respiratory system010-012	1,310	1,270	0.5	0.5
Other tuberculosis013-018	360	420	0.1	0.2
Whooping cough033	-	-	-	-
Streptococcal sore throat, scarlatina, and erysipelas034-035	10	10	0.0	0.0
Meningococcal infection036	310	180	0.1	0.1
Septicemia038	18,640	17,040	7.7	7.1
Acute poliomyelitis045	-	-	-	-
Measles055	-	-	-	-
Viral hepatitis070	1,110	1,050	0.5	0.4
Syphilis090-097	90	50	0.0	0.0
All other infectious and parasitic diseases001-003,005,020-032,037,039-041,046-054,056-066,071-088,098-139	9,030	6,990	3.7	2.9
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues140-208	465,980	457,670	193.3	191.7
Malignant neoplasms of lip, oral cavity, and pharynx140-149	8,630	8,320	3.6	3.5
Malignant neoplasms of digestive organs and peritoneum150-159	117,420	116,830	48.7	48.9
Malignant neoplasms of respiratory and intrathoracic organs160-165	127,970	125,230	53.1	52.5
Malignant neoplasm of breast174-175	41,280	40,300	17.1	16.9
Malignant neoplasms of genital organs179-187	50,270	49,550	20.9	20.8
Malignant neoplasms of urinary organs188-189	19,430	19,000	8.1	8.0
Malignant neoplasms of all other and unspecified sites170-173,190-199	58,700	56,130	24.3	23.5
Leukemia204-208	17,030	17,310	7.1	7.3
Other malignant neoplasms of lymphatic and hematopoietic tissues200-203	25,240	24,990	10.5	10.5
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature210-239	6,420	6,450	2.7	2.7
Diabetes mellitus250	36,340	38,620	15.1	16.2
Nutritional deficiencies260-269	2,750	2,600	1.1	1.1
Anemias280-285	3,710	3,410	1.5	1.4
Meningitis320-322	1,200	1,170	0.5	0.5
Major cardiovascular diseases390-448	967,930	980,550	401.5	410.7
Diseases of heart390-398,402,404-429	768,350	775,890	318.7	325.0
Rheumatic fever and rheumatic heart disease390-398	6,440	6,180	2.7	2.6
Hypertensive heart disease402	19,860	20,420	8.2	8.6
Hypertensive heart and renal disease404	2,610	2,860	1.1	1.2
Ischemic heart disease410-414	524,080	540,800	217.4	226.5
Acute myocardial infarction410	263,050	276,220	109.1	115.7
Other acute and subacute forms of ischemic heart disease411	3,550	3,790	1.5	1.6
Angina pectoris413	1,070	950	0.4	0.4
Old myocardial infarction and other forms of chronic ischemic heart disease412,414	256,410	259,850	106.4	108.8
Other diseases of endocardium424	11,140	9,760	4.6	4.1
All other forms of heart disease415-423,425-429	204,220	195,870	84.7	82.0
Hypertension with or without renal disease401,403	7,580	7,380	3.1	3.1
Cerebrovascular diseases430-438	147,790	152,710	61.3	64.0
Intracerebral and other intracranial hemorrhage431-432	20,050	20,020	8.3	8.4
Cerebral thrombosis and unspecified occlusion of cerebral arteries434,0,434.9	22,850	24,230	9.5	10.1
Cerebral embolism434.1	780	730	0.3	0.3
All other and late effects of cerebrovascular diseases430,433,435-438	104,100	107,730	43.2	45.1
Atherosclerosis440	22,120	23,580	9.2	9.9
Other diseases of arteries, arterioles, and capillaries441-448	22,090	20,990	9.2	8.8
Acute bronchitis and bronchiolitis466	440	580	0.2	0.2
Pneumonia and influenza480-487	70,500	66,630	29.2	27.9
Pneumonia480-486	68,590	64,720	28.5	27.1
Influenza487	1,920	1,910	0.8	0.8
Chronic obstructive pulmonary diseases and allied conditions490-496	75,420	74,420	31.3	31.2
Bronchitis, chronic and unspecified490-491	3,510	3,630	1.5	1.5
Emphysema492	14,500	14,180	6.0	5.9
Asthma493	3,670	3,760	1.5	1.6
Other chronic obstructive pulmonary diseases and allied conditions494-496	53,750	52,850	22.3	22.1
Ulcer of stomach and duodenum531-533	5,930	6,600	2.5	2.8
Appendicitis540-543	550	420	0.2	0.2
Hernia of abdominal cavity and intestinal obstruction without mention of hernia550-553,560	5,230	5,050	2.2	2.1
Chronic liver disease and cirrhosis571	26,210	26,770	10.9	11.2
Cholelithiasis and other disorders of gallbladder574-575	2,840	2,880	1.2	1.2
Nephritis, nephrotic syndrome, and nephrosis580-589	21,790	22,560	9.0	9.4
Acute glomerulonephritis and nephrotic syndrome580-581	270	320	0.1	0.1
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified582-583,587	1,460	1,640	0.6	0.7
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause584-586,588-589	20,060	20,600	8.3	8.6

Table 9. Deaths and death rates for 72 selected causes: United States, 1985 and 1986—Con.

[Based on a 10-percent sample of deaths. Rates per 100,000 population. Due to rounding of estimates, figures may not add to totals. For information on standard errors of the estimates and further discussion, see Technical notes]

Cause of death (Ninth Revision, International Classification of Diseases, 1975)	Number		Rate	
	1986	1985	1986	1985
Infections of kidney	590	2,010	0.8	0.8
Hyperplasia of prostate . . . . .	.600	590	0.2	0.2
Complications of pregnancy, childbirth, and the puerperium . . . . .	.630-676	250	0.1	0.1
Pregnancy with abortive outcome . . . . .	.630-638	60	0.0	0.0
Other complications of pregnancy, childbirth, and the puerperium . . . . .	.640-676	190	0.1	0.1
Congenital anomalies . . . . .	.740-759	12,230	5.1	5.5
Certain conditions originating in the perinatal period . . . . .	.760-779	18,050	7.5	7.6
Birth trauma, Intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .	.767-769	4,750	2.0	2.2
Other conditions originating in the perinatal period . . . . .	.760-766,770-779	13,300	5.5	5.5
Symptoms, signs, and ill-defined conditions . . . . .	.780-799	32,960	13.7	13.6
All other diseases . . . . .	.Residual	157,430	65.3	63.2
Accidents and adverse effects . . . . .	.E800-E949	95,640	39.7	38.6
Motor vehicle accidents . . . . .	.E810-E825	48,560	20.1	18.8
All other accidents and adverse effects . . . . .	.E800-E807,E826-E949	47,080	19.5	19.7
Suicide . . . . .	.E950-E959	31,470	13.1	12.0
Homicide and legal intervention . . . . .	.E960-E978	21,400	8.9	8.1
All other external causes . . . . .	.E980-E999	2,880	1.2	1.2

Table 10. Infant mortality rates by race and sex: United States, 1960, 1970, and 1980-86

[Final data for 1970-84 exclude deaths of nonresidents of the United States. Rates per 1,000 live births in specified group. For further discussion see Technical notes]

Year	All races			White			All other					
	Both sexes	Male	Female	Both sexes	Male	Female	Total			Black		
							Both sexes	Males	Female	Both sexes	Male	Female
Provisional												
1986	10.4	---	---	---	---	---	---	---	---	---	---	---
1985	10.6	---	---	---	---	---	---	---	---	---	---	---
1984	^a 10.7	---	---	---	---	---	---	---	---	---	---	---
1983	10.9	---	---	---	---	---	---	---	---	---	---	---
Final												
1984	10.8	11.9	9.6	9.4	10.5	8.3	16.1	17.3	14.8	18.4	19.8	16.9
1983	11.2	12.3	10.0	9.7	10.8	8.6	16.8	18.3	15.2	19.2	21.1	17.2
1982	11.5	12.8	10.2	10.1	11.2	8.9	17.3	18.9	15.5	19.6	21.5	17.7
1981	11.9	13.1	10.7	10.5	11.7	9.2	17.8	19.2	16.3	20.0	21.7	18.3
1980	12.6	13.9	11.2	11.0	12.3	9.6	19.1	20.7	17.5	21.4	23.3	19.4
1970	20.0	22.4	17.5	17.8	20.0	15.4	30.9	34.2	27.5	32.6	36.2	29.0
1960	26.0	29.3	22.6	22.9	26.0	19.6	43.2	47.9	38.5	44.3	49.1	39.4

^aRevised.**Table 11. Infant mortality rates by age and for 10 selected causes of death: United States, 1983-86**

[Provisional data for 1984-86 based on a 10-percent sample of deaths. Rates per 100,000 live births. For information on standard errors of the estimates and further discussion, see Technical notes]

Age and cause of death (Ninth Revision, International Classification of Diseases, 1975)	1986 (prov.)	1985 (prov.)	1984		1983 (final)
			(prov.) ^a	(final)	
Total, under 1 year	1,039.2	1,057.0	1,068.8	1,078.7	1,116.5
Under 28 days	669.5	692.6	691.8	700.2	728.4
28 days-11 months	369.7	364.1	377.0	378.5	388.0
Certain gastrointestinal diseases008-009,535,555-558	5.9	4.8	7.6	7.2	7.4
Pneumonia and influenza480-487	18.0	17.9	17.2	18.7	21.1
Congenital anomalies740-759	218.9	236.7	230.0	233.0	240.0
Disorders relating to short gestation and unspecified low birth weight.765	87.9	83.3	94.1	88.9	91.6
Birth trauma767	8.6	7.5	9.0	10.2	12.2
Intrauterine hypoxia and birth asphyxia768	24.2	28.4	26.4	31.9	32.9
Respiratory distress syndrome769	94.4	100.7	104.8	96.9	101.2
Other conditions originating in the perinatal period760-764,766,770-779	266.2	264.5	275.0	281.2	288.5
Sudden infant death syndrome798.0	130.4	129.6	132.9	142.9	145.8
All other causesResidual	184.7	183.9	171.5	167.8	175.8

^aRevised.

Technical notes

Nature and sources of data

All data for 1985 and 1986 in this report are provisional. Data for all other years are final, unless specified as 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 1985 and 1986. All mortality figures exclude fetal deaths.

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 the month or year when the events occurred. Delay in the receipt of certificates in a registration office may result in a low count for a given month, followed by a high count for the month(s) in which the delayed records are received. While this occasionally may result in large fluctuations in State counts for a given event, the effect on provisional monthly totals for the United States is usually small. Data include all revisions received from the States and, therefore, may differ from those previously published.

Although the counts in this report are not subject to sampling variability (except the Current Mortality Sample, see below), they may be affected by random variation. When the number of events is small (perhaps less than 100) and the probability of such an event is small, considerable caution must be observed in interpreting the data. Such infrequent events may be assumed to follow a Poisson probability distribution. For this distribution a simple approximation may be used to estimate the random variation, as follows.

If N is the number of events in the population and R is the corresponding rate, the chances are 19 in 20 that

$$1. N - 2\sqrt{N} \text{ and } N + 2\sqrt{N}$$

covers the "true" number of events.

$$2. R - 2\frac{R}{\sqrt{N}} \text{ and } R + 2\frac{R}{\sqrt{N}}$$

covers the "true" rate.

If the rate R corresponding to N events is compared with the rate S corresponding to M events, the difference between the two rates may be regarded as statistically significant if it exceeds

$$2\sqrt{\frac{R^2}{N} + \frac{S^2}{M}}$$

Additional information on random variation in numbers of events, rates, and ratios may be found in the technical appendixes of *Vital Statistics of the United States, 1982*, Volumes I and II.

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 New Mexico, New York City, and some counties of Arizona, data are marriage licenses issued.

Divorces

Provisional divorce data, including reported annulments, are shown for the areas reporting divorce data monthly. Divorce figures for the United States for 1985 and 1986 are estimated from a summary of monthly reports from 48 States and the District of Columbia. These areas contained over 95 percent of the population of the United States as enumerated in 1980.

Mortality

Current mortality sample

Deaths and death rates for 1985 and 1986 by age, race, sex, and cause 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 proportions of death certificates received in the samples for each month of 1986 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 79 percent of the total as opposed to 73

Table I. Percent of death certificates received in the sample each month by month of occurrence: United States, 1986

Month	Deaths occurring in—		
	Same month	Previous month	All other months
January	74.8	19.5	5.7
February	72.9	21.0	6.1
March	70.1	18.9	10.9
April	72.5	22.1	5.4
May	72.2	20.1	7.7
June	70.6	22.0	7.5
July	74.4	19.2	6.3
August	75.2	18.8	6.0
September	72.2	20.5	7.3
October	75.8	17.3	6.8
November	72.5	18.8	8.7
December	73.8	21.0	5.2

percent of the entire sample. As for the year of occurrence, 97 percent of the 209,549 transcripts in the 1986 sample were for deaths occurring in 1986 and 3 percent for deaths occurring in 1985.

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.

The sample data in this report are corrected using rules and methodology described in the annual summary for 1978 (NCHS, 1979). The data for 1986 are adjusted for bias based on the experience of three years—1982, 1983, and 1984. If for a given cause 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 this cause are corrected by using an adjusted weight. For all causes without an adjusted weight, a weight of 10 is used. The adjusted weights that were applied to the 1986 sample for all ages and for ages under 1 year are shown in table II.

The 1985 cause-of-death data in this report were adjusted for bias using data for 1981, 1982, and 1983. Therefore, the adjusted weights for 1986 data are not the same as those used for 1985 (NCHS, 1986).

Sampling variability—Because the estimates of deaths and death rates presented in this report (with the exception of total deaths and deaths under 1 year) are based on a sample of the death certificates, they are subject to sampling variability. The estimated relative standard 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 two out of three that the percent difference

Table II. Causes of death corrected for bias and adjusted weights for all ages and for under 1 year: United States, 1986

Cause of death ¹ (Ninth Revision International Classification of Diseases, 1975)	Adjusted weight
All ages	
Syphilis 090-097	15.28
All other infectious and parasitic diseases 001-003,005,020-032, 037,039-041,046-054,056-066,071-088,098-139	10.73
Malignant neoplasms of digestive organs and peritoneum 150-159	10.11
Malignant neoplasms of all other and unspecified sites 170-173,190-199	9.67
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature 210-239	8.89
Hypertensive heart and renal disease 404	10.84
Acute myocardial infarction 410	10.07
Angina pectoris 413	13.18
Other diseases of endocardium 424	10.46
Pneumonia 480-486	10.16
Infections of kidney 590	10.83
Symptoms, signs, and ill-defined conditions 780-799	7.52
All other diseases Residual	10.13
Motor vehicle accidents E810-E825	10.30
Suicide E950-E959	10.38
Homicide and legal intervention E960-E978	10.25
All other external causes E980-E999	11.20
Under 1 year	
All other infectious and parasitic diseases 001-003,005,020-032, 037,039-041,046-054,056-066,071-088,098-139	14.32
Malignant neoplasms of lip, oral cavity, and pharynx 140-149	15.06
Malignant neoplasms of digestive organs and peritoneum 150-159	15.06
Malignant neoplasms of respiratory and intrathoracic organs 160-165	15.06
Malignant neoplasm of breast 174-175	15.06
Malignant neoplasms of genital organs 179-187	15.06
Malignant neoplasms of urinary organs 188-189	15.06
Malignant neoplasms of all other and unspecified sites 170-173,190-199	15.06
Leukemia 204-208	15.06
Other malignant neoplasms of lymphatic and hematopoietic tissues 200-203	15.06
All other forms of heart disease 415-423,425-429	11.61
Symptoms, signs, and ill-defined conditions 780-799	9.43

¹ Causes of death eligible to have an adjusted weight were those that had 50 or more deaths based on final data for 1984.

between an estimate and the result of a complete count is less than the percent shown. The chances are about 19 out of 20 that the percent difference is less than twice the percent shown.

Two methods are used for estimating relative standard 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 relative standard 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 = relative standard error (in percent) of the estimate X

X = the estimated number of deaths (or estimated death rate) from a given cause or age-race-sex group

NOTE: A list of references follows the text.

- x = the number of deaths in the sample from the given cause
- D = 209,549, the total number of death certificates in the sample for 1986
- Y = the final number of deaths from the given cause in the three years—1982, 1983, and 1984 combined
- M = 6,033,367, the final count of all deaths occurring in the three years—1982, 1983, and 1984 combined

The relative standard 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 relative standard error (in percent) of the estimate X
- X = the estimated number of deaths from a given cause or for an age-race-sex group
- N = 2,099,000, the provisional number of registered deaths in 1986

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

Comparisons made in the text between death rates based on the Current Mortality Sample, unless otherwise specified, have passed a hypothesis test at the 0.05 level of significance. Descriptions of the test can be found in most standard statistical textbooks. Lack of comment in the text about any two rates does *not* mean that the difference was tested and found not to be significant at this level.

Table III. Relative standard errors for estimated numbers of deaths from the Current Mortality Sample expressed as a percent of the estimate

Estimated number of deaths	Relative standard error (as percent)	Estimated number of deaths	Relative standard error (as percent)
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

Cause-of-death classification

The mortality statistics presented here are compiled in accordance with 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.

Causes of death for 1979-86 were classified according to the Ninth Revision (World Health Organization, 1977). For years prior to 1979 causes of death were classified according to the revision then in use. Changes in classification of causes of death due to these revisions may result in discontinuities in cause-of-death trends. Consequently, cause-of-death comparisons between revisions require consideration of the comparability ratios and, where available, estimates of their standard errors. For information about comparability ratios between the Eighth and Ninth Revisions, see *Monthly Vital Statistics Report*, Volume 28, Number 11 Supplement (NCHS, Klebba and Scott, 1980).

For information about comparability ratios between the Seventh and Eighth Revisions, see *Vital and Health Statistics*, Series "2, Number 66 (NCHS, Klebba and Dolman, 1975). For a list of other reports on the effects of revisions of the international lists on mortality statistics tabulated by cause, see *Vital Statistics—Special Reports*, Volume 51, Number 4 (NCHS, 1965).

Besides specifying the classification, the World Health Organization regulations outline the form of medical certification and the coding procedures to be used. In general, when more than one cause of death is reported, the cause designated by the certifying physician as the underlying cause of death is the cause tabulated.

Causes of death for data presented in this publication were coded by procedures outlined in issues of Part 2a of the *NCHS Instruction Manual* (NCHS, published annually).

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 category titles are ranked according to the number of deaths for 1986 to determine the leading causes of death. When one of the titles that represents a subtotal is ranked (for example, Tuberculosis), its component parts (in this case, Tuberculosis of respiratory system and Other tuberculosis) are not ranked.

NOTE: A list of references follows the text.

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 specified cause for 1985 and 1986 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 with crude rates.

Life tables

U.S. abridged life tables are constructed by reference to a standard life table (NCHS, 1966). For explanation of the columns of the life table, see *Vital Statistics of the United States, 1983*, Volume II, Section 6 (NCHS, 1987).

Infant mortality

Infant mortality rates shown in figure 5 and tables A, 10, and 11 are the most commonly used index for measuring the risk of dying during the first year of life; they are calculated by dividing the number of infant deaths in a calendar year by the number of live births registered for the same period, and are presented as rates per 1,000 or per 100,000 live births. Infant mortality rates use the number of live births in the denominator to approximate the population at risk of dying before the first birthday.

In contrast to infant mortality rates based on live births, infant death rates shown in tables H, 4, 5, and 8 are based on the estimated population under 1 year of age. Infant death rates that appear in tabulations of age-specific death rates are calculated by dividing the number of infant deaths in a calendar year by the estimated mid-year population of persons under 1 year of age (based on births occurring in the 12-month period ending with June), and are presented as rates per 100,000 population in this age group. Due to differences in the denominators, infant death rates may differ from infant mortality rates.

NOTE: A list of references follows the text.

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* (U.S. Bureau of the Census, 1967). Marriage rates were also adjusted for monthly variation in the 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 Census) represent the population residing in the specified area. Populations for 1940, 1950, 1960, 1970, and 1980 were enumerated as of April 1; all other populations were estimated as of July 1. The populations for 1986 were published by the U.S. Bureau of the Census (1986b and 1987).

Beginning with 1984 data in this report population estimates incorporate new estimates for net migration and net undocumented immigration. As a result, rates for 1984-86 are not strictly comparable with those for previous years, although trends for the total population and most age-race-sex groups are not substantially affected. Additional information has been published by the U.S. Bureau of the Census (1986a).

The U.S. Bureau of the Census has conducted extensive research to evaluate the coverage of the U.S. population (including undercount and overcount and misstatement of age, race, and sex) in the last four decennial censuses—1950, 1960, 1970, and 1980 (U.S. Bureau of the Census, 1974, 1977, 1985). These evaluative studies indicate that there is differential coverage in the censuses among the population groups; that is, some age, race, and sex groups are more completely enumerated than others. To the extent that the estimates of net census undercounts and overcounts are valid, that the net undercounts and overcounts are substantial, and that they vary among subgroups of the population, net census undercounts and overcounts can have consequences for vital statistics measures (U.S. Bureau of the Census, 1974).

SYMBOLS

- Data not available
 - ... Category not applicable
 - Quantity zero
 - 0.0 Quantity more than zero but less than 0.05
 - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
 - * Figure does not meet standards of reliability or precision
-

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