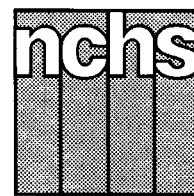


Monthly Vital Statistics Report



Preliminary Data From the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

Births and Deaths: United States, July 1996–June 1997

by Robert N. Anderson, Ph.D.; Stephanie J. Ventura, A.M.; Kimberley D. Peters;
and T. J. Mathews, M.S., Division of Vital Statistics

Abstract

Objectives—This report presents preliminary data on births and deaths in the United States from the National Center for Health Statistics (NCHS) for the 12 months ending June 1997. U.S. data on births are shown by age, race, and Hispanic origin of mother. National and State data on marital status, prenatal care, cesarean delivery, and low birthweight are also presented. Mortality data presented include life expectancy, leading causes of death, and infant mortality.

Methods—Data in this report are based on 89–98 percent samples of births and deaths in the United States for the 12 months ending June 1997. The records are weighted to independent control counts of births, infant deaths, and total deaths received in State vital statistics offices from July 1996 to June 1997.

Results—Preliminary data for July 1996–June 1997 show that the birth rate for teenagers dropped 3 percent. Birth rates for women aged 20–34 years increased 1 to 2 percent, whereas rates for women aged 35–49 years rose 4 percent. The number of births to unmarried women and the percent of all births to unmarried women each increased about 1 percent, while the birth rate for unmarried women increased slightly. The rate of prenatal care utilization continued to improve. The overall low birthweight rate increased to 7.5 percent.

The preliminary infant mortality rate declined by 5 percent. A record low infant mortality rate was achieved for the black population. Life expectancy reached a record high of 76.2 years. The largest declines in age-adjusted death rates among the leading causes of death were for Human immunodeficiency virus (HIV) infection (44 percent) and homicide (10 percent). Smaller declines were noted for other leading causes of death. The age-adjusted death rate increased for Pneumonia and influenza, Chronic obstructive pulmonary diseases, kidney disease, and Alzheimer's disease.

Keywords: births • deaths • vital statistics

Introduction

This report presents preliminary data on births and deaths based on a substantial sample of vital records. This series, which is published biannually by NCHS, includes detailed tabulations from the preliminary natality and mortality files. This report is the fourth in the series and shows preliminary data for the 12-month period from July 1996 to June 1997.

Sources and methods

The preliminary data in this series are based on records of births and deaths that occurred during the period July 1996–June 1997 and were received and processed by NCHS as of December 1, 1997. This represents about 98 percent of the births that occurred in the United States during this 12-month period. Demographic information is available for about 94 percent of infant deaths and about 95 percent of deaths to persons aged 1

Acknowledgments

This report was prepared in the Division of Vital Statistics under the general direction of Mary Anne Freedman, Director, Division of Vital Statistics; Harry M. Rosenberg, Chief, Mortality Statistics Branch (MSB); and Kenneth G. Keppel, Acting Chief, Reproductive Statistics Branch (RSB). Nicholas F. Pace, Chief, Systems, Programming, and Statistical Resources Branch (SPSRB), and David Johnson, Charles E. Royer, Gail Parr, Manju Sharma, and Jordan S. Sacks of SPSRB provided computer programming support and statistical tables. Thomas D. Dunn of SPSRB provided content review. Staff of the Data Acquisition and Evaluation Branch (DAEB) carried out quality evaluation and acceptance procedures for the State data files on which this report is based, and the Registration Methods staff of the Division of Vital Statistics consulted with State vital statistics offices regarding the collection of birth certificate data. Van L. Parsons and Lester R. Curtin of the Office of Research and Methodology provided information on the statistical methodology. Staff of the Division of Data Processing were responsible for receipt and processing of the basic data files. This report was edited by Demarius V. Miller and typeset by Jacqueline M. Davis of the Publications Branch, Division of Data Services.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics



year and over. For these death records, medical or cause-of-death information is processed separately and is available for about 89 percent of infant deaths and about 91 percent of deaths to persons aged 1 year and over.

To produce the preliminary estimates shown in this report, records in each of the files were weighted using independent control counts of births, infant deaths, and total deaths received in the State vital statistics offices from July 1996 through June 1997. Two separate sets of weights were applied to the death records—one set for the demographic information and one set for the medical information. This results in slight inconsistencies between comparable data from the mortality demographic and medical tables (see [Technical notes](#)). Preliminary estimates are subject to sampling variation as well as random variation.

Cause of death is not always available when the preliminary data are sent to NCHS, but is available later for final data processing. As a result, estimates based on preliminary mortality data may differ from statistics that come from the final mortality data. Sampling bias tends to affect certain causes of death where the cause is pending investigation, such as homicides, suicides, accidents, HIV infection, and Sudden infant death syndrome (SIDS). To account for sampling bias, correction factors that may be applied to these causes are included in the [Technical notes](#). NCHS is currently exploring procedures for correcting possible sampling bias for other causes of death.

In addition to national and State estimates of total births and birth rates, this report includes preliminary statistics on births by age, live-birth order, marital status, race, Hispanic origin, and selected maternal and infant health characteristics: receipt of prenatal care, cesarean delivery, and low birthweight. Mortality data in this report are also more detailed than in the provisional data reports, with more information on life expectancy, infant mortality, and causes of death. Race and Hispanic origin are reported as separate items on the birth and death certificates. Data for Hispanic origin are also included in the data for each race group, according to the mother's reported race for births and the decedent's reported race for deaths (see [Technical notes](#)).

State-specific preliminary data are shown only for those States and areas for which at least 75 percent of the records for the 12-month period ending June 1996 have been processed. The number of death records processed for California was below the 75-percent criterion and are therefore not included in the State-specific tabulations, but are included in the U.S. totals. Detailed information on the nature, sources, and qualifications of the preliminary data is given in the [Technical notes](#).

Results

Natality patterns

The preliminary number of **births** in the United States during the 12-month period ending June 1997 totaled 3,903,260, about 1 percent more than the preliminary number for the 12-month period ending June 1996 (3,881,967) ([table A](#)). The **crude birth rate** for the 12 months ending June 1997 declined slightly to 14.6 births per 1,000 population, compared with 14.7 for the 12 months ending a year earlier. The **fertility rate**—defined as the number of births per 1,000 women aged 15–44 years—was 65.4 for the 12 months ending June 1997, slightly higher than the rate for the 12 months ending June 1996 (65.2). (See [tables 1–4](#) for births, birth rates, and fertility rates.) Birth and fertility rates by State for the two time periods are shown in [table 4](#).

Fertility rates for the 12 months ending June 1997 for white (64.3), black (71.2), Asian or Pacific Islander (API) women (66.1), and Hispanic women (104.8) were each up to 1 percent higher compared with the 12 months ending June 1996. The rate for American Indian women (68.5) declined 1 percent.

The **birth rate for teenagers** for the 12-month period ending June 1997 was 53.5 births per 1,000 women aged 15–19 years, 3 percent lower than the rate for the comparable period ending in June 1996 (55.2) ([table 1](#)). Birth rates for teenagers have been declining since 1991. **Rates for teenage subgroups 10–14, 15–17, and 18–19 years** continued to fall as well. The rate for the youngest group, 10–14 years, was 1.1 per 1,000 for the 12 months ending June 1997 compared with

1.3 for the same period ending June 1996. The rate for teenagers 15–17 years for the 12-month period ending June 1997, 33.2 per 1,000, was 4 percent lower than the rate for the same period ending June 1996 (34.6). The rate for older teenagers 18–19 years declined 2 percent, from 87.1 to 85.0 per 1,000.

Birth rates for teenagers 15–19 years fell 2 percent for black teenagers (90.6) and 3 percent for white teenagers (47.3). Rates declined 4 percent for API (24.8) and Hispanic teenagers (100.1), and 5 percent for American Indian teenagers (72.6). Rates for teenage subgroups by race and Hispanic origin declined, but there was no clear pattern in the changes. Among white, black, and Hispanic teenagers, declines were larger for younger than for older teenagers. The rate for American Indian teenagers 18–19 years dropped 8 percent.

Birth rates for women aged 20–24 and 25–29 years, the principal childbearing ages, increased 1 and 2 percent, respectively, between the 12 months ending June 1996 and the same period ending a year later. The rate for women aged 20–24 years increased from 110.0 to 110.9, and the rate for women aged 25–29 years rose from 112.2 to 114.1 per 1,000 ([table 1](#)).

Birth rates for women aged 30–34 and 35–39 years increased 2 and 4 percent, respectively, to 84.8 and 36.0 per 1,000. Birth rates for women in their thirties in the 12-month period ending June 1997 were higher than any observed in about three decades (1). The **birth rate for women aged 40–44 years** increased from 6.7 to 7.0 per 1,000.

Concurrent with the declines in teenage birth rates and increases in birth rates for women aged 20 years and over, the proportion of all births occurring to women under age 20 years declined from 13.0 to 12.8 percent ([table A](#)). The proportions of births to teenagers by State for the 12-month periods ending June 1996 and June 1997 are shown in [table 5](#).

The **total fertility rate** provides an estimate of lifetime childbearing. It is computed by assuming that a hypothetical group of 1,000 women will experience throughout their childbearing years the age-specific birth rates observed at a single point in time. The rate for the

Table A. Total births and percent of births with selected demographic and health characteristics, by race and Hispanic origin of mother: United States, preliminary data for 12 months ending June 1996 and 1997

Characteristic	All races ¹		White		Black		Hispanic ²	
	1997	1996	1997	1996	1997	1996	1997	1996
	Number							
Births	3,903,260	3,881,967	3,094,579	3,088,653	601,998	592,246	710,019	688,584
	Percent							
Births to mothers under 20 years . . .	12.8	13.0	11.2	11.4	22.6	23.0	17.2	17.7
Births to unmarried mothers	32.5	32.3	25.8	25.6	69.7	69.8	41.0	41.0
Low birthweight ³	7.5	7.3	6.4	6.3	13.0	13.0	6.3	6.3
Very low birthweight ⁴	1.39	1.36	1.10	1.08	2.99	2.97	1.11	1.13
Births delivered by cesarean	20.7	20.7	20.7	20.6	21.8	21.7	20.1	20.0
Prenatal care beginning in first trimester	82.3	81.5	84.5	83.7	71.8	70.9	73.1	71.2
Prenatal care beginning in third trimester or no care	3.9	4.2	3.2	3.5	7.3	7.5	6.4	7.2

¹Includes races other than white and black.
²Persons of Hispanic origin may be of any race; race and Hispanic origin are reported separately on the birth certificate. Data for persons of Hispanic origin are also included in the data for each race group, according to the mother's reported race; see [Technical notes](#).
³Birthweight of less than 2,500 grams (5 lb 8 oz).
⁴Birthweight of less than 1,500 grams (3 lb 4 oz).

12-month period ending June 1997 was 2,038.5, 1 percent higher than the rate for the comparable period ending June 1996, 2,018.0. Rates increased 1 percent for white (2,015.5), black (2,166.5), and Hispanic women (3,053.5). The rate for American Indian women (2,029.0) declined slightly whereas the rate for API women (1,915.0) increased slightly.

The **preliminary number of births to unmarried women** for the 12 months ending June 1997 was 1,269,971, 1 percent more than for the 12-month period ending June 1996 (1,252,418). The **proportion of all births to unmarried women** rose from 32.3 to 32.5 percent ([tables A and B](#)). The proportion for white births increased from 25.6 to 25.8 percent. The proportion for black births declined slightly, from 69.8 to 69.7 percent, while the proportion for Hispanic births was unchanged at 41.0 percent ([table 6](#)).

The **preliminary birth rate for unmarried women** in the 12-month period ending June 1997 was 44.3 births per 1,000 unmarried women aged 15–44 years, less than 1 percent higher than the rate for the same period ending in 1996 (44.2).

The procedures for reporting marital status in California changed beginning January 1, 1997. Up to that date, the mother's marital status was inferred by comparing the surnames of the mother, father, and child. Beginning in 1997, two changes were implemented. First, a law went into effect mandating that the father's name could not be included on the birth

certificate unless either the parents were married or a paternity affidavit was filed. Second, a direct question on the mother's marital status, similar to the one in effect in most other States, was added to the California birth certificate (see [Technical notes](#)). Reporting procedures for marital status in California are now essentially the same as those in most other States.

Because California accounts for 14 percent of U.S. births, birth data by marital status were compared for the two 6-month periods, July–December 1996 and January–June 1997, to determine the effect of this reporting change on the national data. These changes did not affect the total numbers and proportions of non-marital births for the United States as a whole or for California, but they did affect the data by age in different ways. There was a tendency for the proportions to increase between the two 6-month periods for teenagers and women aged 20–24 years, and for the proportions to

decrease for women aged 25–44 years. This was a real change—it was found for the balance of all States (exclusive of California). However, the pattern is much more pronounced in the data for California. The effect of this change will be described in more detail in the next report of preliminary birth data, which will include data for the full 1997 calendar year.

The preliminary number of births to unmarried teenagers (under 20 years) was less than 1 percent higher in the 12-month period ending June 1997 than the same period ending June 1996 ([table B](#)). Births to unmarried teenagers under 15 years declined 9 percent, while births to teenagers 15–17 years declined very slightly. The number of births to older unmarried teenagers, 18–19 years, increased 2 percent. The percent of all teenage births occurring to unmarried women was higher in the current 12-month period (77.3 percent) than in the earlier 12-month period

Table B. Number and percent of births to unmarried women, all ages and women under 20 years: United States, preliminary data for 12 months ending June 1996 and 1997

[Figures for 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age of mother	Number		Percent	
	1997	1996	1997	1996
All ages	1,269,971	1,252,418	32.5	32.3
Under 20 years	386,379	384,486	77.3	76.0
Under 15 years	10,090	11,037	94.6	93.9
15–19 years	376,289	373,449	76.9	75.5
15–17 years	157,338	158,517	85.6	84.1
18–19 years	218,952	214,932	71.6	70.3

(76.0 percent) because total births to teenagers declined 1 percent while births to unmarried teenagers increased slightly. Birth rates for unmarried teenagers for the 12-month periods ending June 1996 and June 1997 are not yet available; see [Technical notes](#).

The preliminary proportions of births to unmarried women in 36 States, Puerto Rico, the Virgin Islands, and Guam were higher for the 12 months ending June 1997 compared with June 1996, while the proportions in 10 States and the District of Columbia were lower. There was no change in the proportions in four States ([table 6](#)).

The **low-birthweight rate** was 7.5 percent for the 12 months ending June 1997, 3 percent higher than for the 12 months ending June 1996 ([table A](#)). For more than a decade the percent low birthweight (birthweight of less than 2,500 grams or 5 pounds 8 ounces) has risen steadily, from 6.7 percent in 1984. Low birthweight did not change for black or Hispanic births at 13.0 and 6.3 percent, respectively. The rate for white births rose slightly from 6.3 to 6.4 percent. All age groups, except those 25 to 29 years of age, showed increases in low birthweight. The percent low birthweight was 10.0 percent or more in the District of Columbia, Louisiana, and Puerto Rico ([table 7](#)).

The **cesarean delivery rate** remained steady at 20.7 percent for the latest period ([table A](#)). The rates for black, Hispanic, and white births showed very little change between the two time periods ([table 8](#)). The cesarean rate had been declining since 1989 (22.8 percent). The primary cesarean rate remained the same at 14.6, but the rate of vaginal birth after cesarean decreased from 28.2 to 27.9. Rates by State are shown in [table 8](#).

The proportion of mothers beginning **prenatal care in the first trimester** of pregnancy rose for the latest period, to 82.3 percent ([table A](#)). Initiation of prenatal care during the first trimester has improved throughout the 1990's, from 75.5 percent in 1989. This rise has been observed for black, Hispanic, and white mothers. All age groups, except those under 15 years, showed increases in early care receipt. Most States showed a rise in the percent of mothers receiving first

trimester prenatal care between the two time periods ([table 9](#)).

Mortality patterns

The preliminary number of **deaths** in the United States for the 12 months ending June 1997 totaled 2,334,722, an increase of 17,097 more than the 12-month period ending June 1996. The **crude death rate** of 876.1 per 100,000 population dropped slightly from the rate of 877.3 per 100,000 in the previous 12-month period. The age-adjusted death rate, which accounts for changes in the age distribution of the population, was 487.9 per 100,000 U.S. standard population, a record low for the United States. Age-adjusted death rates are better indicators than crude death rates for showing changes in the risk of death over time when the age distribution of the population is changing and for comparing the mortality of subgroups of the population that have different age compositions. The age-adjusted death rate for the previous 12-month period was 498.7. (See [tables C, D, and 10–18](#) for mortality data.)

The decline in the U.S. age-adjusted death rate continues the long-term downward trend in mortality, and reflects statistically significant reductions in mortality for black, white, and Hispanic males, as well as black and Hispanic females. Age-adjusted death rates for Hispanic males declined by 8 percent, for black males by 6 percent, and for white males by 3 percent. The decline for Hispanic females was 6 percent and for black females, 3 percent. Changes in the age-adjusted death rate for white females, American Indians, and Asian and Pacific Islanders were not statistically significant.

The overall reductions in mortality between the 12 months ending June 1996 and the 12 months ending June 1997 were the result of declines for most age groups under 85 years. The greatest declines for both males and females occurred in the 25–34 year age group where the age-specific death rates declined by 14 percent and 9 percent, respectively.

Preliminary estimates of life expectancy at birth for the 12-month period ending June 1997 increased to another record high of 76.2 years, compared with

75.9 years in the 12-month period ending June 1996 ([tables C and 16](#)). The previous record high life expectancy was 76.1 years recorded for calendar year 1996 (2). Record high life expectancies were reached for white and black males and for black females (74.0 years, 66.7 years, and 74.4 years, respectively). For white females, life expectancy has remained unchanged at 79.6 years since 1994, slightly below the record high of 79.8 years reached in 1992.

The **15 leading causes of death** for the 12 months ending June 1997 were Diseases of heart (heart disease); Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (cancer); Cerebrovascular diseases (stroke); Chronic obstructive pulmonary disease and allied conditions (COPD); Accidents and adverse effects; Pneumonia and influenza; Diabetes mellitus; Suicide; Nephritis, nephrotic syndrome, and nephrosis (kidney disease); Chronic liver disease and cirrhosis; Alzheimer's disease; Septicemia (blood poisoning); Human immunodeficiency virus infection (HIV); Homicide and legal intervention (homicide); and Atherosclerosis ([table D](#)). Although the 15 leading causes for the 12 months ending June 1997 were the same as in the previous 12-month period, the order changed somewhat. Of particular note, HIV infection dropped from the 8th leading cause of death in the 12-month period ending June 1996 to the 13th leading cause in the 12-month period ending June 1997. Homicide dropped from 12th to 14th, Alzheimer's disease rose from 14th to 11th, kidney disease rose from 11th to 9th, and both suicide and septicemia each rose one place in the ranking.

Reductions occurred in a number of the leading causes of death. From July 1996 to June 1997, the preliminary age-adjusted death rate for the leading cause of death, **heart disease**, declined by 3 percent, while the age-adjusted death rate for **cancer** declined by about 2 percent ([tables D and 11](#)). Together the deaths from these two diseases combined accounted for more than 1.2 million deaths, which is more than half of the total deaths that occurred in the 12-month period ending June 1997. While heart

Table C. Deaths, age-adjusted death rates, and life expectancy at birth, by race and sex and infant mortality rate, United States, preliminary data for 12 months ending June 1996 and 1997

Measure and sex	All races ¹		White		Black	
	12 months ending June		12 months ending June		12 months ending June	
	1997	1996	1997	1996	1997	1996
All deaths	2,334,722	2,317,625	2,016,109	1,993,233	278,369	285,588
Age-adjusted death rate ²	487.9	498.7	465.1	472.8	718.8	755.2
Male	616.1	636.4	586.4	602.5	935.4	996.5
Female	380.7	383.3	363.1	363.7	551.2	567.4
Life expectancy at birth ³	76.2	75.9	76.9	76.7	70.7	69.9
Male	73.3	72.8	74.0	73.6	66.7	65.6
Female	79.1	79.0	79.6	79.6	74.4	74.0
All infant deaths	27,902	29,047	18,630	19,243	8,281	8,834
Infant mortality rate ⁴	7.1	7.5	6.0	6.2	13.8	14.9

¹Includes races other than white and black.
²Age-adjusted death rates are per 100,000 U.S. standard million population. For method of computation, see [Technical notes](#).
³Life expectancy at birth stated in years.
⁴Infant mortality rates are deaths under 1 year per 1,000 live births in specified group.

Table D. Deaths, death rates, and age-adjusted death rates for the 12 months ending June 1997 for the 15 leading causes of death, and percent changes in age-adjusted death rates from 12 months ending June 1996 to 12 months ending June 1997: United States

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see [Technical notes](#). For explanation of asterisks preceding cause-of-death categories, see [Technical notes](#). Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to the totals]

Rank ¹	Causes of Death (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i>)	Number	Death rate	Age-adjusted death rate		
				July 1996–June 1997	July 1995–June 1996	Percent change
...	All causes	2,334,716	876.1	487.5	498.7	-2.2
1	Diseases of heart (390–398, 402, 404–429)	735,384	276.0	132.9	136.4	-2.6
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140–208)	540,656	202.9	126.9	129.1	-1.7
3	Cerebrovascular diseases (430–438)	161,681	60.7	26.3	26.6	-1.1
4	Chronic obstructive pulmonary diseases and allied conditions (490–496)	110,259	41.4	21.5	20.6	4.4
5	Accidents and adverse effects (E800–E949)	93,597	35.1	29.6	30.9	-4.2
	Motor vehicle accidents (E810–E825)	43,415	16.3	16.0	16.4	-2.4
	All other accidents and adverse effects (E800–E807, E826–E949)	50,182	18.8	13.6	14.4	-5.6
6	Pneumonia and influenza (480–487)	88,878	33.4	13.3	12.7	4.7
7	Diabetes mellitus (250)	62,570	23.5	13.6	13.5	0.7
8	Suicide (E950–E959)	30,246	11.3	10.5	11.0	-4.5
9	Nephritis, nephrotic syndrome, and nephrosis (580–589)	25,550	9.6	4.5	4.2	7.1
10	Chronic liver disease and cirrhosis (571)	24,803	9.3	7.3	7.7	-5.2
11	Alzheimer's disease (331.0)	22,638	8.5	2.8	2.7	3.7
12	Septicemia (038)	22,630	8.5	4.3	4.0	7.5
13	Human immunodeficiency virus infection (*042–*044)	22,567	8.5	8.0	14.2	-43.7
14	Homicide and legal intervention (E960–E978)	20,002	7.5	8.1	9.0	-10.0
15	Atherosclerosis (440)	16,424	6.2	2.1	2.2	-4.5
...	All other causes	356,831	133.9	---	---	---

... Category not applicable.
 --- Data not available.
¹Rank based on number of deaths; see [Technical notes](#).

disease mortality has followed a consistent downward trend since 1950, cancer mortality has declined only since 1990.

The preliminary age-adjusted death rate for **HIV infection** showed a very large decline of 44 percent in the period from July 1996 to June 1997 ([table D](#)). Although delays in reporting HIV deaths may have resulted in a slight overestimate, this decline is consistent with a previous vital statistics report based on provisional data (3). In addition, the

decline is consistent with trends based on preliminary mortality data for the period July 1995 to June 1996 and for the 1996 calendar year which shows that the decline in HIV mortality was 9 percent and 26 percent, respectively (2,4).

The preliminary age-adjusted death rates dropped for **homicide** by 10 percent and for **suicide** by 5 percent. The decline in mortality due to both homicide and suicide continues the downward trend reported for the 1995 and 1996 calendar

years (2,5). Age-adjusted death rates declined for **Accidents and adverse effects** by 4 percent following the general downward trend in accident mortality since the 1980's. Declines were also noted for deaths due to **Chronic liver disease and cirrhosis** (5 percent) and **Atherosclerosis** (5 percent).

The age-adjusted death rate increased from July 1996 to June 1997 for **Pneumonia and influenza** by 5 percent. This increase was likely the result of an

influenza epidemic during the 1996–97 winter season (6). Age-adjusted death rates increased also for COPD by 4 percent, for **kidney disease** by 7 percent, and for **Alzheimer's disease** by 4 percent (table 11). The increase in Alzheimer's disease mortality is consistent with the long-term upward trend since 1979 and may reflect changes in diagnostic practices rather than real increases from this cause of death.

During the 12-month period ending June 1997, preliminary age-adjusted death rates decreased appreciably for **firearm injuries** (7 percent), **drug-induced causes** (7 percent), and **alcohol-induced causes** (5 percent) (table 11). The final rates for these causes may change when 100 percent of death records are received for this period.

Among the major race and ethnic groups, the lowest mortality was reported for the Asian and Pacific Islander and Hispanic populations. Preliminary age-adjusted death rates for these groups were 41 percent and 25 percent lower, respectively, than that for the white population. In contrast, the age-adjusted death rate for the black population was 55 percent higher than that for the white population. Mortality for race (other than white and black) and ethnic groups may be substantially understated due to inconsistencies in reporting race on censuses, population surveys, and vital statistics (7).

The preliminary **infant mortality rate** for the 12-month period ending June 1997 was 7.1 infant deaths per 1,000 live births, a 5 percent decline from the previous 12-month period (7.5) (table C and 14). Declines occurred among neonates (infant deaths under 28 days of age) as well as for postneonates (aged 28 days–11 months). The white infant mortality rate declined by about 3 percent from 6.2 per 1,000 live births to 6.0, whereas the black infant mortality rate declined 7 percent from 14.9 to 13.8. The change in the Hispanic infant mortality rate was not statistically significant. Because of inconsistencies in reporting Hispanic origin on birth and death certificates, infant mortality rates for Hispanic origin should be interpreted with caution (7).

The leading cause of infant mortality, **Congenital anomalies**, accounted for 22 percent of all infant deaths and declined

by 4 percent from July 1996 to June 1997 (table 18). The infant mortality rate for **Sudden infant death syndrome (SIDS)**, which accounted for 10 percent of all infant deaths, declined by almost 15 percent. While deaths due to SIDS have been declining since 1989, part of the decline in the 12-month period ending June 1997 may be attributable to delays in receiving cause-of-death information for these deaths in the preliminary data file. **Disorders related to short gestation and unspecified low birthweight**, the second leading cause of death for all infants, but the leading cause of death for black infants, declined by 4 percent in the 12-month period ending June 1997.

Death rates by place of residence were lowest in Alaska, with a crude death rate of 418.0 per 100,000 population, and were highest in the District of Columbia where the crude death rate was 1,216.3. However, comparisons of crude death rates between States may be misleading due to differences in age composition. Age-adjusted death rates are better indicators of relative mortality risk between States. When the crude death rates are standardized for differences in age composition among States, **Hawaii** had the lowest mortality, with an age-adjusted death rate of 386.5 deaths per 100,000 U.S. standard population. Mortality in the **District of Columbia** remained the highest in the United States, with an age-adjusted death rate of 764.3 per 100,000 U.S. standard population (table 13).

References

1. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Report of final natality statistics, 1995. Monthly vital statistics report; vol 45 no 11 supp 1. Hyattsville, Maryland: National Center for Health Statistics. 1997.
2. Ventura SJ, Peters KD, Martin JA, Maurer JD. Births and deaths: United States, 1996. Monthly vital statistics report; vol 46 no 1 supp 2. Hyattsville, Maryland: National Center for Health Statistics. 1997.
3. National Center for Health Statistics. Births, marriages, divorces, and deaths for July 1997. Monthly vital statistics report; vol 46 no 7. Hyattsville, Maryland: National Center for Health Statistics. 1998.
4. Peters KD, Martin JA, Ventura SJ, Maurer JD. Births and deaths: United States,

July 1995–June 1996. Monthly vital statistics report; vol 45 no 10 supp 2. Hyattsville, Maryland: National Center for Health Statistics. 1997.

5. Anderson RN, Kochanek KD, Murphy SL. Report of final mortality statistics, 1995. Monthly vital statistics report; vol 45 no 11 supp 2. Hyattsville, Maryland: National Center for Health Statistics. 1997.
6. Centers for Disease Control and Prevention. Update: influenza activity—United States and worldwide, 1996–97 season, and composition of the 1997–98 influenza vaccine. MMWR 46(15):325–30. 1997.
7. Sorlie PD, Rogot E, Johnson NJ. Validity of demographic characteristics on the death certificate. Epidemiology 3(2):181–4. 1992.
8. National Center for Health Statistics. Vital statistics of the United States, 1992, vol I, natality. Washington: Public Health Service. 1996.
9. National Center for Health Statistics. Vital statistics of the United States, 1992, vol II, mortality, part A. Washington: Public Health Service. 1996.
10. U.S. Bureau of the Census. U.S. population estimates by age, sex, race, and Hispanic origin: January 1, 1996. Census file RES0196. 1997.
11. U.S. Bureau of the Census. U.S. population estimates by age, sex, race, and Hispanic origin: January 1, 1997. Census file RES0197. 1998.
12. Ventura SJ. Births to unmarried mothers: United States, 1980–92. Vital Health Stat 21(53). National Center for Health Statistics. 1995.
13. 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.
14. National Center for Health Statistics. Vital statistics, instructions for classifying the underlying cause of death. NCHS instruction manual: part 2a. Hyattsville, Maryland: Public Health Service. Published annually.
15. U.S. Bureau of the Census. Unpublished data from the 1990 census for persons of Spanish origin by State.
16. Sirken MG. Comparison of two methods of constructing abridged life tables by reference to a "standard" table. National Center for Health Statistics. Vital Health Stat 2(4). 1966.

- 17. U.S. Bureau of the Census. Estimates of the resident population of States by single year of age and sex for July 1, 1995. 95AG795. 1996.
- 18. U.S. Bureau of the Census. Estimates of the resident population of States by single year of age and sex for July 1, 1996. 95AGE796. 1997.

List of detailed tables

- 1. Births and birth rates, by age, race, and Hispanic origin of mother: United States, preliminary data for 12 months ending June 1996 and 1997 8
- 2. Live births by age of mother, live-birth order, and race and Hispanic origin of mother: United States, preliminary data for 12 months ending June 1997 10
- 3. Birth rates by age of mother, live-birth order, and race and Hispanic origin of mother: United States, preliminary data for 12 months ending June 1997 11
- 4. Live births by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997 12
- 5. Percent of live births to mothers under 20 years of age by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997 13
- 6. Percent of live births to unmarried mothers by race and Hispanic origin

- of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997 14
- 7. Percent low birthweight by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997 15
- 8. Percent of live births by cesarean delivery by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997 16
- 9. Percent of mothers receiving prenatal care in first trimester of pregnancy by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997 17
- 10. Deaths and death rates, by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997 18
- 11. Deaths, death rates, and age-adjusted death rates for 72 selected causes, Human immunodeficiency virus infection, Alzheimer's disease, Injury by firearms, Drug-induced deaths, Alcohol-induced deaths, and Injury at work: United States, preliminary data for 12 months ending June 1996 and 1997 24

- 12. Deaths, death rates, and age-adjusted death rates for 16 selected subcategories of Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues: United States, preliminary data for 12 months ending June 1996 and 1997 26
- 13. Deaths, death rates, and age-adjusted death rates: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997 27
- 14. Infant deaths and infant mortality rates, by age and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997 28
- 15. Infant deaths and infant mortality rates for 61 selected causes and Human immunodeficiency virus infection: United States, preliminary data for 12 months ending June 1996 and 1997 29
- 16. Expectation of life by age, race, and sex: United States, preliminary data for 12 months ending June 1996 and 1997 31
- 17. Deaths and death rates for the 10 leading causes of death in specified age groups: United States, preliminary data for 12 months ending June 1997 32
- 18. Infant deaths and infant mortality rates for the 10 leading causes of infant death, by race and Hispanic origin: United States, preliminary data for 12 months ending June 1997 34

Table 1. Births and birth rates, by age, race, and Hispanic origin of mother: United States, preliminary data for 12 months ending June 1996 and 1997

[Data for 1997 are based on a continuous file of records received from the States. Figures for 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age and race/Hispanic origin	1997		1996	
	Number	Rate	Number	Rate
All races				
15-44 years ¹	3,903,260	65.4	3,881,967	65.2
10-14 years	10,666	1.1	11,759	1.3
15-19 years	489,458	53.5	494,423	55.2
15-17 years	183,855	33.2	188,492	34.6
18-19 years	305,603	85.0	305,931	87.1
20-24 years	944,174	110.9	951,215	110.0
25-29 years	1,076,467	114.1	1,062,982	112.2
30-34 years	897,133	84.8	899,940	83.4
35-39 years	407,763	36.0	389,471	34.5
40-44 years	74,372	7.0	69,303	6.7
45-49 years	3,228	0.3	2,874	0.3
White				
15-44 years ¹	3,094,579	64.3	3,088,653	64.2
10-14 years	5,322	0.7	5,746	0.8
15-19 years	341,875	47.3	347,351	48.9
15-17 years	121,939	27.8	125,199	29.1
18-19 years	219,936	77.2	222,152	79.6
20-24 years	723,345	107.4	732,958	107.0
25-29 years	879,670	117.0	872,921	115.2
30-34 years	745,354	87.3	750,297	85.7
35-39 years	336,429	36.3	321,185	34.7
40-44 years	60,006	6.8	55,899	6.5
45-49 years	2,578	0.3	2,296	0.3
Black				
15-44 years ¹	601,998	71.2	592,246	70.6
10-14 years	4,935	3.4	5,580	3.9
15-19 years	130,995	90.6	130,555	92.2
15-17 years	55,358	63.5	56,987	66.0
18-19 years	75,637	132.0	73,568	133.0
20-24 years	181,406	138.9	179,141	135.5
25-29 years	135,728	99.8	131,711	97.0
30-34 years	95,094	64.2	94,450	63.6
35-39 years	44,824	29.7	42,633	28.4
40-44 years	8,674	6.4	7,908	6.1
45-49 years	342	0.3	268	0.3
American Indian²				
15-44 years ¹	38,003	68.5	37,734	68.9
10-14 years	208	1.8	194	1.7
15-19 years	7,736	72.6	7,798	76.2
15-17 years	3,126	46.2	3,027	46.4
18-19 years	4,611	118.6	4,771	128.3
20-24 years	12,208	134.5	12,019	132.3
25-29 years	8,888	98.4	8,792	98.8
30-34 years	5,798	63.5	5,812	62.7
35-39 years	2,630	28.6	2,572	28.3
40-44 years	516	6.2	528	6.5
45-49 years	17	*	19	*
Asian or Pacific Islander				
15-44 years ¹	168,681	66.1	163,334	65.9
10-14 years	201	0.5	239	0.6
15-19 years	8,851	24.8	8,719	25.7
15-17 years	3,432	15.5	3,279	15.6
18-19 years	5,420	40.3	5,440	41.7
20-24 years	27,214	71.4	27,097	70.0
25-29 years	52,181	111.8	49,558	111.0
30-34 years	50,887	108.9	49,381	108.8
35-39 years	23,879	52.7	23,081	52.2
40-44 years	5,176	12.1	4,968	12.1
45-49 years	291	0.8	291	0.8

See footnotes at end of table.

Table 1. Births and birth rates, by age, race, and Hispanic origin of mother: United States, preliminary data for 12 months ending June 1996 and 1997 - Con.

[Data for 1997 are based on a continuous file of records received from the States. Figures for 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age and race/Hispanic origin	1997		1996	
	Number	Rate	Number	Rate
Hispanic ³				
15-44 years ¹	710,019	104.8	688,584	104.4
10-14 years	2,963	2.5	3,155	2.7
15-19 years	118,931	100.1	118,979	103.8
15-17 years	48,567	67.9	48,649	71.0
18-19 years	70,364	148.9	70,330	152.6
20-24 years	216,519	189.1	210,367	187.5
25-29 years	188,314	163.3	181,162	157.8
30-34 years	121,633	98.8	116,991	96.7
35-39 years	51,118	45.5	48,043	44.5
40-44 years	10,100	10.8	9,506	10.7
45-49 years	442	0.6	381	0.5

- Quantity zero.

* Figure does not meet standards of reliability or precision.

¹ Numbers include births to women of all ages. Fertility rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

² Includes births to Aleuts and Eskimos.

³ Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.

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

Table 2. Live births by age of mother, live-birth order, and race and Hispanic origin of mother: United States, preliminary data for 12 months ending June 1997

[Data are based on a continuous file of records received from the States. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Live-birth order and race/Hispanic origin of mother	All ages	Age of mother							
		Under 15 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
All races	3,903,260	10,666	489,458	944,174	1,076,467	897,133	407,763	74,372	3,228
First child	1,588,171	10,352	379,917	439,161	403,756	249,613	89,346	15,367	660
Second child	1,259,453	238	89,231	321,001	373,066	324,139	130,820	20,302	655
Third child	630,345	7	15,330	127,702	186,827	189,528	95,036	15,369	546
Fourth child and over	405,148	1	2,409	51,926	107,610	129,046	90,050	22,782	1,324
Not stated	20,143	68	2,571	4,383	5,209	4,808	2,511	551	42
White	3,094,579	5,322	341,875	723,345	879,670	745,354	336,429	60,006	2,578
First child	1,266,107	5,185	273,006	351,227	338,940	209,354	74,906	12,935	554
Second child	1,018,486	100	57,831	249,867	311,410	273,275	108,847	16,620	536
Third child	500,495	4	8,304	90,083	150,488	159,525	79,398	12,247	446
Fourth child and over	294,463	-	1,025	29,043	74,958	99,395	71,275	17,757	1,010
Not stated	15,028	33	1,710	3,124	3,875	3,804	2,004	447	32
Black	601,998	4,935	130,995	181,406	135,728	95,094	44,824	8,674	342
First child	232,028	4,779	93,888	67,562	36,059	20,600	7,810	1,276	54
Second child	174,497	117	28,524	59,342	42,893	29,374	12,215	1,965	66
Third child	101,732	3	6,515	32,965	28,806	21,221	10,258	1,911	53
Fourth child and over	89,472	1	1,249	20,397	26,916	23,155	14,153	3,439	162
Not stated	4,268	35	819	1,140	1,054	744	388	83	7
American Indian ¹	38,003	208	7,736	12,208	8,888	5,798	2,630	516	17
First child	13,670	203	6,032	4,465	1,761	866	294	47	3
Second child	10,318	5	1,435	4,429	2,552	1,317	499	80	2
Third child	6,500	-	224	2,188	2,145	1,331	526	88	-
Fourth child and over	7,407	-	31	1,101	2,399	2,268	1,295	301	12
Not stated	108	-	15	26	31	17	17	1	-
Asian or Pacific Islander	168,681	201	8,851	27,214	52,181	50,887	23,879	5,176	291
First child	76,366	185	6,991	15,907	26,996	18,792	6,336	1,110	49
Second child	56,153	15	1,442	7,364	16,211	20,173	9,259	1,637	51
Third child	21,618	-	288	2,466	5,389	7,451	4,854	1,123	47
Fourth child and over	13,805	-	103	1,385	3,337	4,227	3,326	1,285	141
Not stated	739	1	27	93	248	243	103	20	3
Hispanic ²	710,019	2,963	118,931	216,519	188,314	121,633	51,118	10,100	442
First child	267,890	2,869	89,564	93,769	50,231	22,905	7,253	1,258	41
Second child	213,767	71	23,784	76,480	64,292	35,239	12,002	1,834	66
Third child	127,085	3	4,059	32,303	44,156	31,798	12,623	2,076	67
Fourth child and over	97,130	-	612	12,644	28,635	31,103	18,993	4,882	261
Not stated	4,147	20	912	1,322	999	588	248	51	7

- Quantity zero.

¹ Includes births to Aleuts and Eskimos.

² Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.

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

Table 3. Birth rates by age of mother, live-birth order, and race and Hispanic origin of mother: United States, preliminary data for 12 months ending June 1997

[Data are based on a continuous file of records received from the States. Rates per 1,000 women in specified age and racial group]

Live-birth order and race/Hispanic origin of mother	Age of mother								
	15-44 years ¹	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
All races	65.4	1.1	53.5	110.9	114.1	84.8	36.0	7.0	0.3
First child	26.8	1.1	41.8	51.8	43.0	23.7	7.9	1.4	0.1
Second child	21.2	0.0	9.8	37.9	39.7	30.8	11.6	1.9	0.1
Third child	10.6	*	1.7	15.1	19.9	18.0	8.4	1.4	0.1
Fourth child and over	6.8	*	0.3	6.1	11.5	12.3	8.0	2.1	0.1
White	64.3	0.7	47.3	107.4	117.0	87.3	36.3	6.8	0.3
First child	26.5	0.7	37.9	52.4	45.3	24.7	8.1	1.5	0.1
Second child	21.3	0.0	8.0	37.3	41.6	32.2	11.8	1.9	0.1
Third child	10.5	*	1.2	13.4	20.1	18.8	8.6	1.4	0.1
Fourth child and over	6.2	*	0.1	4.3	10.0	11.7	7.7	2.0	0.1
Black	71.2	3.4	90.6	138.9	99.8	64.2	29.7	6.4	0.3
First child	27.6	3.3	65.4	52.1	26.7	14.0	5.2	0.9	0.0
Second child	20.8	0.1	19.9	45.7	31.8	20.0	8.2	1.5	0.1
Third child	12.1	*	4.5	25.4	21.4	14.4	6.9	1.4	0.0
Fourth child and over	10.7	*	0.9	15.7	20.0	15.8	9.5	2.6	0.1
American Indian ²	68.5	1.8	72.6	134.5	98.4	63.5	28.6	6.2	*
First child	24.7	1.7	56.7	49.3	19.6	9.5	3.2	0.6	*
Second child	18.7	*	13.5	48.9	28.4	14.5	5.5	1.0	*
Third child	11.8	*	2.1	24.1	23.8	14.6	5.8	1.1	*
Fourth child and over	13.4	*	0.3	12.1	26.7	24.9	14.2	3.6	*
Asian or Pacific Islander ...	66.1	0.5	24.8	71.4	111.8	108.9	52.7	12.1	0.8
First child	30.1	0.5	19.7	41.9	58.1	40.4	14.0	2.6	0.1
Second child	22.1	*	4.1	19.4	34.9	43.4	20.5	3.8	0.1
Third child	8.5	*	0.8	6.5	11.6	16.0	10.8	2.6	0.1
Fourth child and over	5.4	*	0.3	3.6	7.2	9.1	7.4	3.0	0.4
Hispanic ³	104.8	2.5	100.1	189.1	163.3	98.8	45.5	10.8	0.6
First child	39.8	2.4	76.0	82.4	43.8	18.7	6.5	1.4	0.1
Second child	31.7	0.1	20.2	67.2	56.0	28.8	10.7	2.0	0.1
Third child	18.9	*	3.4	28.4	38.5	25.9	11.3	2.2	0.1
Fourth child and over	14.4	*	0.5	11.1	25.0	25.4	17.0	5.2	0.4

* Figure does not meet standards of reliability or precision.

0.0 Quantity more than zero but less than 0.05.

¹ Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

² Includes births to Aleuts and Eskimos.

³ Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.

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

Table 4. Live births by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1997, and birth and fertility rates, preliminary data for 12 months ending June 1996 and 1997

[By place of residence. Data are based on a continuous file of records received from the States. Birth rates per 1,000 total population; fertility rates per 1,000 women aged 15-44 years. Figures for 1996 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Area	Number						Birth rate		Fertility rate	
	All races	White	Black	American Indian ¹	Asian or Pacific Islander	Hispanic ²	12 months ending June			
							1997	1996	1997	1996
United States ³	3,903,260	3,094,579	601,998	38,003	168,681	710,019	14.6	14.7	65.4	65.2
Alabama	60,766	40,262	19,842	135	527	1,029	14.2	14.1	62.4	61.5
Alaska	9,993	6,620	468	2,404	501	601	16.5	16.7	71.4	72.1
Arizona	74,430	65,342	2,390	5,209	1,488	28,012	16.8	17.6	76.2	81.5
Arkansas	36,573	28,069	7,919	210	375	1,410	14.6	14.4	67.5	66.3
California	532,561	433,068	38,085	3,281	58,126	252,929	16.7	17.3	73.8	75.7
Colorado	56,313	51,533	2,575	580	1,625	12,927	14.7	14.7	64.2	63.2
Connecticut	45,832	38,777	5,546	105	1,404	5,981	14.0	13.6	63.6	61.2
Delaware	10,273	7,587	2,472	11	203	645	14.2	14.2	60.5	60.8
District of Columbia	8,332	2,035	6,156	1	140	749	15.3	15.7	61.9	63.0
Florida	192,438	144,472	43,344	691	3,931	36,732	13.4	13.3	65.6	64.7
Georgia	116,888	74,637	39,585	210	2,456	6,741	15.9	15.6	66.1	64.4
Hawaii	17,793	4,614	535	189	12,454	2,179	15.0	15.6	70.1	71.9
Idaho	18,601	18,015	58	284	243	2,331	15.6	15.8	71.2	72.0
Illinois	183,141	140,604	36,118	231	6,187	33,256	15.5	15.5	69.0	68.4
Indiana	81,010	70,505	9,443	132	931	3,214	13.9	14.3	60.9	62.3
Iowa	37,014	34,993	1,081	206	734	1,537	13.0	12.9	60.3	59.6
Kansas	37,000	33,067	2,768	309	856	3,399	14.4	14.2	65.7	64.9
Kentucky	53,199	47,834	4,772	86	507	658	13.7	13.5	60.0	58.9
Louisiana	65,535	37,353	26,885	292	1,005	1,242	15.1	14.9	65.4	64.4
Maine	13,717	13,400	94	81	142	117	11.0	11.1	49.3	49.4
Maryland	71,061	45,362	22,975	179	2,545	3,315	14.0	14.2	59.7	59.8
Massachusetts	82,029	70,490	7,600	178	3,761	8,119	13.5	13.3	58.3	57.2
Michigan	133,366	105,654	24,428	766	2,518	5,235	13.9	14.0	61.1	60.7
Minnesota	64,726	57,667	3,223	1,074	2,762	2,579	13.9	13.7	61.5	60.4
Mississippi	41,409	21,761	19,096	187	365	309	15.2	15.1	66.3	65.7
Missouri	73,301	61,122	10,744	260	1,175	1,600	13.7	13.8	61.7	61.8
Montana	10,875	9,477	35	1,259	104	283	12.4	12.7	58.6	59.8
Nebraska	23,531	21,509	1,242	366	413	1,951	14.2	14.2	64.8	64.4
Nevada	24,924	21,210	1,939	399	1,377	6,883	15.5	16.8	72.0	77.0
New Hampshire	14,422	14,114	109	23	176	233	12.4	12.7	52.9	53.8
New Jersey	116,214	86,992	21,524	195	7,503	20,131	14.5	14.4	65.9	64.3
New Mexico	27,306	23,183	508	3,216	399	13,353	15.9	16.1	71.9	72.2
New York	265,382	190,610	56,626	581	17,564	52,500	14.6	14.7	65.0	65.1
North Carolina	107,763	76,281	27,767	1,622	2,092	6,319	14.7	14.3	64.9	62.3
North Dakota	8,412	7,434	92	785	102	149	13.1	13.1	61.0	61.0
Ohio	152,519	129,086	21,236	269	1,928	3,086	13.7	13.6	60.6	60.2
Oklahoma	46,865	37,118	4,488	4,471	787	3,085	14.2	13.9	65.9	63.9
Oregon	43,907	40,458	946	708	1,795	5,640	13.7	13.8	63.1	62.9
Pennsylvania	145,427	121,454	20,404	243	3,327	6,674	12.1	12.4	55.9	57.2
Rhode Island	12,464	10,993	896	136	438	1,723	12.6	13.0	56.1	57.6
South Carolina	51,615	32,571	18,294	136	614	1,067	14.0	13.8	60.1	59.1
South Dakota	10,681	8,855	84	1,636	106	158	14.6	14.3	67.9	66.4
Tennessee	74,391	56,793	16,443	153	1,002	1,554	14.0	13.9	61.4	60.6
Texas	332,874	283,553	39,384	829	9,108	145,772	17.4	17.4	75.6	75.2
Utah	43,893	41,655	272	673	1,294	4,261	21.9	20.8	92.9	88.3
Vermont	6,708	6,625	26	10	47	32	11.4	11.5	49.8	49.8
Virginia	92,732	67,402	21,186	159	3,985	5,307	13.9	13.9	58.7	58.0
Washington	78,585	68,119	3,162	1,782	5,522	9,258	14.2	14.2	62.5	62.0
West Virginia	21,252	20,349	745	17	140	130	11.6	11.4	53.7	52.1
Wisconsin	66,842	57,831	6,334	830	1,847	3,105	13.0	13.1	58.0	58.4
Wyoming	6,377	6,063	50	214	51	515	13.2	13.1	60.6	59.7
Puerto Rico	64,421	59,526	4,896	---	---	---	17.0	16.8	72.2	71.3
Virgin Islands	2,063	391	1,604	59	8	393	18.2	16.7	82.4	75.0
Guam	4,370	726	91	4	3,549	42	30.2	29.3	138.6	152.8

--- Data not available.

¹ Includes births to Aleuts and Eskimos.

² Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.

³ Excludes data for Puerto Rico, Virgin Islands, and Guam.

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

Table 5. Percent of live births to mothers under 20 years of age by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997

[By place of residence. Data are based on a continuous file of records received from the States]

Area	<i>All races</i> ¹		<i>White</i>		<i>Black</i>		<i>Hispanic</i> ²	
	<i>12 months ending June</i>							
	1997	1996	1997	1996	1997	1996	1997	1996
United States ³	12.8	13.0	11.2	11.4	22.6	23.0	17.2	17.7
Alabama	18.0	18.6	13.7	14.4	27.0	27.5	14.5	16.9
Alaska	10.9	11.4	8.5	9.5	16.9	14.8	12.0	11.9
Arizona	14.8	15.2	14.5	14.9	21.6	20.9	20.4	21.4
Arkansas	19.3	20.0	16.3	17.0	30.4	30.6	17.2	18.4
California	11.8	12.3	12.1	12.5	18.3	18.7	15.7	16.4
Colorado	12.0	12.1	11.6	11.7	20.3	19.8	21.9	22.8
Connecticut	8.3	8.4	7.1	7.1	18.5	18.7	22.0	23.3
Delaware	13.7	13.0	9.4	9.2	27.8	26.4	15.3	21.4
District of Columbia	16.4	16.6	6.2	6.8	20.0	20.0	12.4	16.2
Florida	13.5	13.4	11.0	10.9	22.3	22.9	13.1	13.0
Georgia	15.8	16.2	12.2	12.5	23.4	23.8	15.7	16.0
Hawaii	10.9	10.3	6.1	5.6	10.1	9.6	19.0	17.3
Idaho	13.0	13.9	13.0	13.9	*	*	19.1	21.9
Illinois	12.6	13.0	9.6	10.0	25.9	26.3	16.2	17.3
Indiana	14.3	14.5	12.8	13.2	26.6	26.8	18.0	19.5
Iowa	11.0	10.9	10.5	10.4	27.2	29.1	17.6	18.3
Kansas	12.9	13.1	11.9	11.9	26.4	27.6	19.2	20.4
Kentucky	16.8	17.1	15.9	16.2	27.1	27.1	16.8	18.4
Louisiana	18.8	18.9	13.5	13.2	26.5	27.5	14.0	14.3
Maine	10.0	9.8	10.0	9.7	*	*	*	*
Maryland	10.3	10.2	6.9	6.9	18.1	18.1	10.9	11.3
Massachusetts	7.3	7.3	6.6	6.6	15.2	14.6	22.4	21.5
Michigan	12.0	12.3	9.7	9.8	22.5	23.7	19.3	21.3
Minnesota	8.8	8.5	7.4	7.2	23.5	23.1	19.2	20.2
Mississippi	21.1	21.7	14.3	14.9	29.0	29.6	11.6	13.3
Missouri	13.8	14.3	12.0	12.3	25.2	26.0	16.4	18.5
Montana	12.1	12.6	10.3	11.1	*	*	23.3	19.8
Nebraska	10.5	10.2	9.5	9.1	26.2	25.9	15.8	17.5
Nevada	13.5	13.1	12.6	12.5	26.1	23.4	16.2	16.8
New Hampshire	7.2	7.7	7.2	7.6	*	*	18.9	17.8
New Jersey	7.9	7.9	5.8	5.9	18.5	18.8	14.9	14.8
New Mexico	17.9	18.1	18.0	18.0	22.3	23.7	22.7	23.4
New York	9.0	9.3	7.6	8.0	15.4	15.8	14.7	15.3
North Carolina	14.7	15.1	11.5	11.7	23.7	24.0	18.0	16.7
North Dakota	9.2	9.8	7.8	8.5	*	*	19.6	17.1
Ohio	13.4	13.5	11.6	11.6	25.5	25.2	21.8	23.2
Oklahoma	16.9	17.4	15.1	15.6	25.6	26.7	19.4	20.6
Oregon	12.7	13.2	12.6	13.0	23.2	24.4	19.1	19.6
Pennsylvania	10.4	10.7	8.5	8.7	23.0	23.6	24.4	25.9
Rhode Island	10.4	10.4	9.4	9.2	19.6	21.1	20.8	19.4
South Carolina	16.8	16.9	12.2	12.4	25.1	25.2	15.6	16.2
South Dakota	11.6	11.3	9.5	9.2	*	*	16.1	19.5
Tennessee	16.6	16.7	14.2	14.3	25.6	25.9	16.3	16.0
Texas	16.2	16.4	15.6	15.8	23.7	23.8	19.7	20.1
Utah	10.6	10.9	10.5	10.8	19.7	22.3	19.8	20.3
Vermont	8.3	8.8	8.2	8.8	*	*	*	*
Virginia	11.0	11.3	8.6	8.9	20.3	20.6	11.6	11.8
Washington	11.0	11.5	10.7	11.2	18.7	19.8	18.5	19.0
West Virginia	16.6	16.7	16.4	16.3	24.7	28.9	*	*
Wisconsin	10.4	10.6	8.1	8.2	28.9	29.1	21.1	21.4
Wyoming	14.2	14.8	13.9	14.5	*	*	20.3	24.1
Puerto Rico	20.8	20.3	20.6	20.2	22.4	21.4	---	---
Virgin Islands	15.2	16.6	15.6	19.7	15.5	16.3	16.5	23.8
Guam	15.0	14.6	12.1	11.3	*	*	*	*

* Figure does not meet standards of reliability or precision.

--- Data not available.

¹ Includes races other than white and black.

² Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.

³ Excludes data for Puerto Rico, Virgin Islands, and Guam.

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

Table 6. Percent of live births to unmarried mothers by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997

[By place of residence. Data are based on a continuous file of records received from the States]

Area	All races ¹		White		Black		Hispanic ²	
	12 months ending June							
	1997	1996	1997	1996	1997	1996	1997	1996
United States ³	32.5	32.3	25.8	25.6	69.7	69.8	41.0	41.0
Alabama	33.7	34.2	16.6	16.7	69.1	70.4	23.3	26.0
Alaska	30.5	30.5	21.6	21.9	42.9	38.8	29.1	29.4
Arizona	38.5	38.9	35.6	36.1	65.6	63.2	49.4	50.8
Arkansas	33.9	33.4	22.7	22.0	74.2	73.9	34.5	31.3
California	31.9	32.0	31.6	31.8	61.0	61.5	38.8	38.6
Colorado	25.0	25.0	23.6	23.3	56.4	56.2	40.3	41.5
Connecticut	32.1	31.0	26.4	25.3	70.1	70.4	65.3	64.5
Delaware	36.4	34.7	25.3	23.8	72.7	72.8	50.2	55.9
District of Columbia	65.0	65.9	26.9	25.0	78.5	79.6	56.7	52.3
Florida	36.1	35.7	27.2	26.6	67.6	68.2	34.5	34.3
Georgia	35.3	35.2	19.1	19.1	67.4	66.9	27.3	26.2
Hawaii	30.1	29.3	16.8	16.7	23.7	19.7	44.6	43.8
Idaho	20.8	20.8	20.3	20.2	39.7	38.6	27.5	28.0
Illinois	33.6	33.7	23.5	23.3	77.4	78.1	39.2	39.5
Indiana	33.0	32.1	27.5	27.0	76.3	77.2	41.5	42.5
Iowa	26.2	25.6	24.6	24.4	73.6	70.2	38.1	39.0
Kansas	27.2	26.2	23.7	22.7	69.7	67.7	37.9	38.1
Kentucky	29.5	29.4	25.3	24.9	72.0	74.3	29.3	29.4
Louisiana	43.9	42.4	23.3	22.0	73.6	72.4	30.9	29.3
Maine	29.5	28.6	29.3	28.3	45.7	51.3	35.1	27.0
Maryland	33.7	33.2	20.6	20.1	62.4	62.9	37.3	36.8
Massachusetts	25.6	25.3	22.3	21.9	59.4	59.4	60.1	59.5
Michigan	33.7	34.1	24.4	24.7	75.9	77.5	41.7	42.5
Minnesota	24.7	24.4	21.3	21.1	66.9	69.4	45.9	46.8
Mississippi	45.2	45.1	19.1	18.9	75.4	75.2	31.7	26.9
Missouri	32.9	32.7	25.2	24.6	77.5	78.3	37.2	36.4
Montana	28.2	26.8	23.0	22.1	*	46.7	34.3	31.6
Nebraska	25.3	24.2	22.1	20.9	70.9	71.9	39.5	39.5
Nevada	39.8	41.9	36.7	38.9	73.1	75.7	49.6	54.4
New Hampshire	23.0	23.1	23.0	23.1	44.0	42.5	41.2	37.1
New Jersey	28.5	27.4	20.8	20.0	66.7	65.8	49.7	48.1
New Mexico	42.5	42.5	38.6	38.3	59.2	59.5	49.2	49.7
New York	39.7	38.4	30.8	30.6	71.3	70.3	62.9	62.2
North Carolina	32.0	31.8	19.2	18.7	67.2	67.0	37.5	34.3
North Dakota	25.6	24.4	21.0	20.0	24.2	28.8	28.4	26.7
Ohio	33.2	33.1	26.4	25.8	76.4	76.9	47.0	50.2
Oklahoma	31.2	30.9	25.2	24.7	69.1	69.8	32.8	33.2
Oregon	29.2	29.3	28.1	28.5	69.8	67.3	37.6	36.1
Pennsylvania	32.5	32.3	25.3	25.1	78.3	78.0	63.1	62.3
Rhode Island	32.7	32.5	29.2	29.0	69.0	68.0	57.1	59.3
South Carolina	37.8	36.9	20.3	19.9	69.7	68.1	29.8	29.6
South Dakota	30.0	29.3	21.8	21.4	34.9	24.5	32.9	43.8
Tennessee	33.8	32.9	22.5	21.9	73.7	73.0	31.9	28.7
Texas	30.6	30.2	26.7	26.3	63.3	63.0	33.8	33.6
Utah	16.4	16.1	15.6	15.2	54.4	47.2	36.1	37.1
Vermont	25.3	25.9	25.3	25.8	*	*	*	*
Virginia	29.2	29.1	19.5	19.4	63.8	63.6	37.4	37.3
Washington	27.1	27.2	25.5	25.6	55.7	55.3	37.2	37.3
West Virginia	31.2	30.9	29.8	29.2	74.9	76.0	28.4	*
Wisconsin	27.6	27.5	21.4	21.3	82.9	82.3	44.8	45.2
Wyoming	27.1	26.1	25.9	24.7	42.9	41.0	41.3	41.2
Puerto Rico	45.0	43.4	43.6	42.0	62.0	60.5	---	---
Virgin Islands	64.7	62.3	50.2	49.6	70.5	66.7	59.8	56.8
Guam	49.2	46.5	35.6	27.0	34.4	*	*	*

* Figure does not meet standards of reliability or precision.

--- Data not available.

¹ Includes races other than white and black.

² Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.

³ Excludes data for Puerto Rico, Virgin Islands, and Guam.

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

Table 7. Percent low birthweight by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997

[By place of residence. Data are based on a continuous file of records received from the States. Low birthweight is less than 2,500 grams]

Area	All races ¹		White		Black		Hispanic ²	
	12 months ending June							
	1997	1996	1997	1996	1997	1996	1997	1996
United States ³	7.5	7.3	6.4	6.3	13.0	13.0	6.3	6.3
Alabama	9.2	9.3	7.3	7.2	13.1	13.6	6.7	5.6
Alaska	5.8	5.1	5.3	4.8	12.2	12.6	6.5	5.1
Arizona	6.7	6.7	6.6	6.5	12.3	12.7	6.4	6.5
Arkansas	8.4	8.5	7.0	7.1	13.3	13.6	6.1	6.6
California	6.1	6.1	5.5	5.5	11.9	12.0	5.5	5.5
Colorado	8.7	8.7	8.4	8.4	14.2	15.3	8.9	8.6
Connecticut	7.4	7.1	6.6	6.3	12.8	12.6	8.9	8.8
Delaware	8.9	8.5	7.2	7.0	14.2	13.8	7.2	8.3
District of Columbia	14.2	13.5	6.5	5.8	16.9	16.0	7.6	7.5
Florida	7.9	7.8	6.7	6.5	12.2	12.2	6.6	6.3
Georgia	8.7	8.6	6.5	6.5	12.8	12.8	5.4	5.7
Hawaii	7.2	7.1	4.9	5.1	9.8	10.9	6.5	6.3
Idaho	6.0	6.1	5.9	6.0	*	*	6.6	7.0
Illinois	7.9	7.9	6.3	6.2	14.3	14.6	5.8	6.0
Indiana	7.9	7.6	7.2	6.9	13.8	13.6	7.4	6.3
Iowa	6.5	6.2	6.2	6.0	12.3	12.6	6.6	7.3
Kansas	7.0	6.6	6.5	6.0	13.1	12.6	5.8	5.8
Kentucky	7.9	7.7	7.4	7.2	12.6	12.5	7.6	6.1
Louisiana	10.0	9.7	6.9	6.8	14.4	14.0	5.3	6.6
Maine	5.8	6.0	5.7	5.9	*	*	*	*
Maryland	8.9	8.4	6.5	6.1	13.7	13.2	6.8	5.3
Massachusetts	6.7	6.4	6.3	5.9	10.3	10.7	8.3	7.9
Michigan	7.7	7.6	6.5	6.2	13.4	13.8	6.8	6.6
Minnesota	5.9	5.8	5.5	5.5	11.9	11.1	6.8	6.1
Mississippi	9.8	10.0	7.2	7.5	12.9	12.9	6.5	*
Missouri	7.6	7.5	6.6	6.4	13.1	13.8	6.5	6.5
Montana	6.1	6.4	6.1	6.3	*	*	7.8	8.0
Nebraska	6.8	6.3	6.5	6.1	11.0	11.0	6.0	6.1
Nevada	7.6	7.5	6.9	6.9	14.4	13.4	6.0	6.3
New Hampshire	5.2	5.1	5.2	5.0	*	*	*	*
New Jersey	7.9	7.5	6.5	6.2	13.8	12.9	7.3	7.1
New Mexico	7.4	7.6	7.3	7.7	13.6	10.1	7.4	7.9
New York	7.8	7.6	6.6	6.4	11.7	12.3	7.5	7.6
North Carolina	8.9	8.7	7.0	6.8	14.0	13.7	6.3	5.8
North Dakota	6.2	5.6	6.1	5.5	*	*	*	*
Ohio	7.5	7.5	6.6	6.5	12.9	13.5	6.6	7.3
Oklahoma	7.4	7.1	6.9	6.6	13.1	12.5	6.4	6.6
Oregon	5.3	5.4	5.2	5.3	10.2	11.0	5.5	6.0
Pennsylvania	7.4	7.5	6.4	6.4	14.0	14.1	8.7	9.4
Rhode Island	7.0	7.1	6.6	6.7	12.0	12.2	7.5	7.8
South Carolina	9.0	9.2	6.7	6.9	13.1	13.3	6.5	6.2
South Dakota	5.3	5.8	5.3	5.8	*	*	*	*
Tennessee	8.9	8.6	7.4	7.3	14.2	13.4	6.2	7.5
Texas	7.2	7.1	6.5	6.4	12.3	12.1	6.5	6.5
Utah	6.7	6.3	6.6	6.3	15.6	9.1	7.7	8.1
Vermont	5.8	6.3	5.8	6.3	*	*	*	*
Virginia	7.7	7.7	6.2	6.1	12.4	12.6	6.7	6.3
Washington	5.6	5.4	5.3	5.1	10.4	11.3	5.4	5.2
West Virginia	8.2	8.1	8.1	7.9	11.8	13.6	*	*
Wisconsin	6.4	6.1	5.7	5.3	12.9	13.3	6.8	6.5
Wyoming	8.6	8.1	8.6	8.0	*	*	9.0	8.2
Puerto Rico	10.5	10.3	10.5	10.3	10.5	10.2	*	*
Virgin Islands	7.5	8.8	*	9.0	8.5	8.8	---	---
Guam	6.9	7.6	5.4	5.3	*	*	*	*

* Figure does not meet standards of reliability or precision.

--- Data not available.

¹ Includes races other than white and black.

² Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.

³ Excludes data for Puerto Rico, Virgin Islands, and Guam.

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

Table 8. Percent of live births by cesarean delivery by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997

[By place of residence. Data are based on a continuous file of records received from the States]

Area	<i>All races</i> ¹		<i>White</i>		<i>Black</i>		<i>Hispanic</i> ²	
	<i>12 months ending June</i>							
	1997	1996	1997	1996	1997	1996	1997	1996
United States ³	20.7	20.7	20.7	20.6	21.8	21.7	20.1	20.0
Alabama	23.7	23.2	24.1	23.7	23.0	22.3	21.4	21.2
Alaska	17.6	15.1	20.1	17.4	22.0	19.4	21.4	18.8
Arizona	16.4	16.2	16.5	16.3	19.9	17.3	15.4	14.9
Arkansas	24.7	25.4	24.4	25.4	26.4	25.6	21.5	22.0
California	20.8	20.5	20.8	20.4	22.9	23.0	20.1	19.6
Colorado	15.3	14.7	15.2	14.6	17.1	17.4	14.2	14.1
Connecticut	19.9	19.6	19.9	19.5	20.2	20.5	18.2	17.5
Delaware	21.1	20.9	21.3	21.2	20.9	20.5	17.3	17.4
District of Columbia	21.6	20.8	20.1	18.4	22.4	21.6	15.8	11.9
Florida	21.8	21.6	22.2	22.2	20.6	20.0	24.3	23.9
Georgia	20.8	20.9	20.6	20.7	21.5	21.5	16.1	16.1
Hawaii	17.1	18.1	20.0	18.9	23.0	21.8	18.5	17.7
Idaho	16.4	15.7	16.3	15.5	*	24.4	18.4	14.5
Illinois	19.3	19.6	19.2	19.6	19.4	19.5	16.5	17.3
Indiana	20.1	20.6	20.0	20.6	20.7	20.9	21.0	23.9
Iowa	18.8	18.7	19.0	18.7	17.1	20.5	17.5	16.8
Kansas	18.8	19.4	18.9	19.5	18.5	18.9	16.7	18.6
Kentucky	21.7	21.7	21.7	21.8	21.8	20.9	16.2	21.7
Louisiana	26.0	26.6	27.4	28.0	24.3	25.1	24.2	25.5
Maine	21.2	21.1	21.2	21.2	22.6	*	24.8	23.0
Maryland	21.3	21.7	20.8	21.2	22.4	22.9	17.2	17.9
Massachusetts	19.6	20.1	19.8	20.3	20.5	19.9	17.1	17.2
Michigan	20.2	20.1	20.5	20.4	19.0	19.1	19.8	18.4
Minnesota	17.1	16.5	17.5	16.8	16.1	16.8	16.7	16.6
Mississippi	26.7	26.1	28.0	27.6	25.3	24.5	23.6	24.6
Missouri	20.0	20.5	20.4	20.9	17.8	19.0	18.7	18.6
Montana	19.3	18.8	19.0	18.7	*	*	18.9	20.9
Nebraska	20.2	19.2	20.3	19.4	19.0	17.5	19.6	18.4
Nevada	19.1	19.4	18.6	19.3	22.5	21.0	15.5	16.2
New Hampshire	19.9	20.3	19.9	20.3	20.6	21.7	18.0	22.8
New Jersey	24.5	23.3	24.7	23.3	24.0	23.4	25.3	23.5
New Mexico	17.0	17.6	17.5	18.2	22.9	22.0	17.2	17.6
New York	23.0	22.7	23.1	22.8	23.2	22.8	22.3	21.3
North Carolina	21.1	21.3	21.2	21.3	21.4	21.6	16.1	16.5
North Dakota	18.6	18.9	18.1	18.3	*	*	18.9	23.3
Ohio	19.1	19.1	19.3	19.1	18.3	19.1	19.4	18.9
Oklahoma	22.3	22.4	22.0	22.3	23.9	23.2	20.1	23.4
Oregon	16.7	17.3	16.7	17.3	20.6	19.6	15.1	15.8
Pennsylvania	19.3	19.5	19.5	19.7	18.8	18.9	17.2	17.1
Rhode Island	17.6	17.9	17.7	18.2	19.9	17.9	16.0	17.5
South Carolina	22.6	22.5	22.6	23.0	22.7	21.8	20.2	22.8
South Dakota	20.2	20.6	20.5	20.9	24.1	21.3	21.3	28.9
Tennessee	21.9	21.2	22.1	21.5	21.5	20.9	21.0	21.5
Texas	23.2	23.4	23.1	23.3	24.6	24.5	22.3	22.8
Utah	16.0	15.8	16.0	15.8	22.4	22.0	17.7	16.6
Vermont	16.0	16.2	15.9	16.2	*	*	*	*
Virginia	21.3	21.1	20.9	20.7	22.4	22.8	19.0	18.0
Washington	16.5	17.1	16.3	16.9	19.9	22.3	16.3	17.4
West Virginia	23.8	23.1	23.7	23.1	27.0	25.9	20.4	*
Wisconsin	15.4	15.6	15.9	16.2	12.8	12.1	13.8	14.7
Wyoming	18.9	18.0	19.0	18.0	*	*	17.8	20.0
Puerto Rico	32.4	30.7	33.0	31.2	25.3	24.5	---	---
Virgin Islands	23.5	21.1	26.9	26.9	22.9	19.8	25.9	23.2
Guam	14.9	15.1	14.6	15.6	*	*	*	*

* Figure does not meet standards of reliability or precision.

--- Data not available.

¹ Includes races other than white and black.² Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.³ Excludes data for Puerto Rico, Virgin Islands, and Guam.

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

Table 9. Percent of mothers receiving prenatal care in first trimester of pregnancy by race and Hispanic origin of mother: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997

[By place of residence. Data are based on a continuous file of records received from the States]

Area	All races ¹		White		Black		Hispanic ²	
	12 months ending June							
	1997	1996	1997	1996	1997	1996	1997	1996
United States ³	82.3	81.5	84.5	83.7	71.8	70.9	73.1	71.2
Alabama	82.0	81.8	87.9	88.1	69.9	68.9	61.5	62.8
Alaska	80.5	81.9	82.7	84.8	81.2	82.2	76.6	78.9
Arizona	75.2	72.3	76.4	73.3	70.4	69.7	64.5	60.8
Arkansas	75.0	75.6	79.1	79.5	60.7	62.0	57.3	57.5
California	81.4	79.2	81.4	79.1	79.0	77.4	76.8	73.8
Colorado	82.4	80.9	82.8	81.5	76.8	74.2	68.6	66.1
Connecticut	88.6	87.8	90.2	89.5	78.6	76.3	78.5	75.1
Delaware	83.4	84.8	86.9	88.1	72.0	74.4	68.6	67.7
District of Columbia	65.6	62.1	79.3	77.3	60.9	57.1	61.2	60.5
Florida	83.7	82.7	86.9	86.0	72.8	71.6	81.0	80.0
Georgia	85.6	84.6	89.4	88.9	78.3	76.6	74.4	72.7
Hawaii	82.7	84.1	88.7	89.1	85.8	91.8	82.4	81.4
Idaho	78.0	80.0	78.4	80.2	69.2	81.3	60.4	61.7
Illinois	82.1	81.0	85.2	84.3	69.4	68.1	72.3	70.4
Indiana	79.8	80.5	81.8	82.2	65.1	65.5	65.1	65.4
Iowa	87.5	86.9	88.2	87.4	74.0	74.1	70.6	70.9
Kansas	85.6	85.4	86.5	86.5	77.1	74.4	64.6	63.8
Kentucky	85.2	84.4	86.2	85.6	74.9	73.0	73.2	75.2
Louisiana	81.0	80.9	88.6	88.6	70.5	69.9	82.9	79.6
Maine	89.3	89.2	89.6	89.5	79.4	78.5	76.5	73.6
Maryland	88.8	88.2	92.8	92.3	79.5	78.4	80.8	81.2
Massachusetts	86.1	86.4	87.7	88.1	74.7	74.4	73.7	74.6
Michigan	84.4	83.7	87.4	86.7	70.8	70.4	74.2	70.9
Minnesota	83.9	83.4	86.5	86.0	63.6	63.7	57.9	61.5
Mississippi	79.1	78.0	88.6	87.4	68.3	67.1	77.4	80.5
Missouri	85.7	85.6	88.0	87.9	72.6	72.5	77.3	77.6
Montana	83.0	81.8	84.9	83.6	80.0	82.2	76.8	73.5
Nebraska	84.8	84.1	85.8	85.1	73.5	71.2	67.9	65.1
Nevada	77.2	77.2	78.1	77.9	66.5	69.0	65.3	64.2
New Hampshire	89.6	89.4	89.7	89.6	78.7	77.2	79.8	78.6
New Jersey	81.2	82.6	85.2	86.1	64.1	67.2	70.4	71.2
New Mexico	70.8	69.4	73.4	71.6	62.8	62.0	68.1	65.9
New York	80.1	78.4	83.7	81.9	69.1	67.4	69.9	66.5
North Carolina	83.6	83.3	88.1	88.0	72.2	71.3	68.8	66.8
North Dakota	84.8	84.3	86.3	85.8	79.1	81.3	75.0	80.1
Ohio	85.4	85.3	87.4	87.6	72.5	71.3	77.1	75.3
Oklahoma	79.3	78.1	81.5	80.8	68.8	65.7	69.8	69.3
Oregon	81.0	79.1	81.4	79.5	78.9	74.8	66.2	64.1
Pennsylvania	84.1	83.8	86.9	86.8	67.8	65.7	71.5	69.6
Rhode Island	89.7	89.8	90.8	91.0	79.0	80.1	82.1	85.1
South Carolina	79.8	78.8	86.5	85.8	67.8	66.2	66.7	63.4
South Dakota	82.4	81.5	85.7	85.4	69.9	64.9	75.5	76.2
Tennessee	83.6	83.1	87.0	86.5	71.8	71.3	64.7	65.6
Texas	78.3	77.7	78.6	78.0	74.1	74.0	70.6	69.7
Utah	84.0	83.8	84.9	84.8	73.1	61.1	65.0	65.7
Vermont	88.2	87.4	88.3	87.5	87.6	78.8	90.0	78.1
Virginia	84.7	84.1	88.5	88.1	72.6	71.7	72.8	70.6
Washington	83.5	82.6	84.3	83.5	76.1	75.5	70.5	69.9
West Virginia	82.1	82.1	82.7	82.8	64.5	63.9	71.5	77.8
Wisconsin	84.4	83.7	87.2	86.7	67.2	66.6	69.2	69.3
Wyoming	81.8	83.5	82.7	84.0	67.3	69.5	71.3	69.8
Puerto Rico	77.7	77.1	78.5	78.1	68.1	65.2	---	---
Virgin Islands	56.4	55.0	61.8	57.8	55.1	54.0	52.0	53.9
Guam	65.6	67.5	77.0	76.1	67.9	71.9	75.7	87.5

--- Data not available.

¹ Includes races other than white and black.

² Race and Hispanic origin are reported separately on the birth certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the mother's reported race; see Technical notes.

³ Excludes data for Puerto Rico, Virgin Islands, and Guam.

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

Table 10. Deaths and death rates, by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race/Hispanic origin, and sex	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
All races, both sexes				
All ages	2,334,722	876.1	2,317,625	877.3
Under 1 year ¹	27,902	745.6	29,047	766.4
1-4 years	5,539	36.0	6,153	39.4
5-14 years	8,173	21.2	8,580	22.5
15-24 years	31,923	87.8	33,570	92.7
25-34 years	47,869	119.6	55,598	137.1
35-44 years	92,241	210.8	100,862	234.3
45-54 years	144,838	438.4	145,039	455.2
55-64 years	233,582	1,084.4	235,349	1,108.1
65-74 years	473,058	2,545.7	477,356	2,547.7
75-84 years	675,417	5,827.7	656,680	5,810.2
85 years and over	593,699	15,537.3	568,882	15,300.2
Not stated	480	...	509	...
Age-adjusted rate ² .....	...	487.9	...	498.7
All races, male				
All ages	1,167,203	894.8	1,172,228	907.1
Under 1 year ¹	15,784	824.8	16,275	839.6
1-4 years	3,123	39.6	3,464	43.4
5-14 years	4,845	24.5	5,214	26.7
15-24 years	23,749	127.1	25,330	136.1
25-34 years	33,578	167.7	39,651	195.5
35-44 years	60,754	279.2	68,620	320.8
45-54 years	90,845	561.9	91,881	589.4
55-64 years	140,386	1,368.8	142,190	1,407.4
65-74 years	268,901	3,241.0	271,956	3,258.7
75-84 years	331,650	7,259.5	321,891	7,285.8
85 years and over	193,241	17,667.0	185,388	17,618.7
Not stated	346	...	368	...
Age-adjusted rate ² .....	...	616.1	...	636.4
All races, female				
All ages	1,167,519	858.2	1,145,397	848.9
Under 1 year ¹	12,118	662.8	12,772	689.7
1-4 years	2,416	32.1	2,689	35.3
5-14 years	3,328	17.7	3,366	18.1
15-24 years	8,173	46.3	8,240	46.8
25-34 years	14,290	71.4	15,947	78.7
35-44 years	31,487	143.1	32,242	148.9
45-54 years	53,993	320.0	53,158	326.6
55-64 years	93,196	825.9	93,159	836.5
65-74 years	204,157	1,984.9	205,400	1,976.7
75-84 years	343,767	4,896.1	334,789	4,863.2
85 years and over	400,458	14,683.1	383,494	14,385.2
Not stated	134	...	141	...
Age-adjusted rate ² .....	...	380.7	...	383.3

See footnotes at end of table.

Table 10. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997 - Con.

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race/Hispanic origin, and sex	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
White, both sexes				
All ages	2,016,109	914.2	1,993,233	910.1
Under 1 year ¹	18,630	628.1	19,243	636.0
1-4 years	3,880	31.8	4,146	33.6
5-14 years	5,943	19.4	6,263	20.7
15-24 years	22,697	78.5	23,788	82.4
25-34 years	33,737	103.9	39,063	118.3
35-44 years	66,818	183.8	72,128	201.3
45-54 years	111,524	396.4	111,234	408.9
55-64 years	189,759	1,022.4	191,452	1,044.8
65-74 years	408,392	2,488.7	412,241	2,484.0
75-84 years	608,379	5,799.5	590,619	5,770.4
85 years and over	545,984	15,784.9	522,678	15,509.6
Not stated	364	...	378	...
Age-adjusted rate ² .....	...	465.1	...	472.8
White, male				
All ages	998,508	920.4	997,681	926.7
Under 1 year ¹	10,637	699.6	10,939	705.2
1-4 years	2,223	35.5	2,354	37.2
5-14 years	3,554	22.7	3,788	24.4
15-24 years	16,613	111.0	17,773	119.2
25-34 years	23,983	146.2	28,352	169.8
35-44 years	44,825	245.4	49,952	277.6
45-54 years	70,461	506.1	70,883	527.0
55-64 years	114,959	1,286.1	116,570	1,322.3
65-74 years	234,254	3,172.2	236,728	3,179.0
75-84 years	300,011	7,228.6	290,799	7,246.3
85 years and over	176,715	18,017.9	169,265	17,925.9
Not stated	273	...	278	...
Age-adjusted rate ² .....	...	586.4	...	602.5
White, female				
All ages	1,017,601	908.1	995,552	894.0
Under 1 year ¹	7,993	552.9	8,304	563.1
1-4 years	1,657	27.9	1,792	29.8
5-14 years	2,389	16.1	2,475	16.8
15-24 years	6,084	43.6	6,015	43.1
25-34 years	9,754	60.7	10,711	65.6
35-44 years	21,993	121.7	22,176	124.4
45-54 years	41,063	288.9	40,351	293.5
55-64 years	74,801	777.4	74,882	787.5
65-74 years	174,138	1,929.5	175,513	1,918.4
75-84 years	308,369	4,863.9	299,820	4,818.5
85 years and over	369,269	14,901.2	353,413	14,569.0
Not stated	91	...	100	...
Age-adjusted rate ² .....	...	363.1	...	363.7

See footnotes at end of table.

Table 10. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997 - Con.

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race/Hispanic origin, and sex	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
Black, both sexes				
All ages	278,369	825.2	285,588	857.4
Under 1 year ¹	8,281	1,470.9	8,834	1,588.0
1-4 years	1,431	60.7	1,689	69.4
5-14 years	1,847	30.6	1,951	32.9
15-24 years	7,970	144.3	8,504	154.9
25-34 years	12,515	231.7	14,811	274.0
35-44 years	22,857	424.3	26,212	498.2
45-54 years	29,496	842.9	30,134	902.3
55-64 years	38,544	1,771.9	38,838	1,810.1
65-74 years	56,388	3,439.3	57,034	3,504.5
75-84 years	57,713	6,742.8	57,251	6,822.6
85 years and over	41,223	14,239.6	40,212	14,229.8
Not stated	104	...	118	...
Age-adjusted rate ² .....	...	718.8	...	755.2
Black, male				
All ages	146,120	912.3	152,817	966.6
Under 1 year ¹	4,582	1,606.8	4,799	1,703.4
1-4 years	783	65.5	943	76.4
5-14 years	1,062	34.6	1,197	39.8
15-24 years	6,224	224.6	6,626	240.8
25-34 years	8,477	331.0	10,128	395.4
35-44 years	14,310	567.7	17,060	694.1
45-54 years	18,155	1,144.8	18,864	1,245.8
55-64 years	22,275	2,360.0	22,693	2,434.8
65-74 years	29,982	4,372.9	30,655	4,512.6
75-84 years	26,738	8,486.6	26,456	8,588.7
85 years and over	13,469	15,935.3	13,317	16,174.2
Not stated	64	...	79	...
Age-adjusted rate ² .....	...	935.4	...	996.5
Black, female				
All ages	132,249	746.4	132,771	758.8
Under 1 year ¹	3,699	1,331.4	4,035	1,469.6
1-4 years	647	55.6	746	62.2
5-14 years	785	26.4	754	25.8
15-24 years	1,746	63.5	1,878	68.6
25-34 years	4,038	142.1	4,683	164.7
35-44 years	8,547	298.2	9,152	326.5
45-54 years	11,341	592.7	11,270	617.4
55-64 years	16,270	1,321.2	16,145	1,330.3
65-74 years	26,407	2,768.3	26,379	2,782.2
75-84 years	30,975	5,726.9	30,795	5,798.3
85 years and over	27,755	13,540.8	26,895	13,430.4
Not stated	40	...	39	...
Age-adjusted rate ² .....	...	551.2	...	567.4

See footnotes at end of table.

Table 10. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997 - Con.

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race/Hispanic origin, and sex	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
American Indian³, both sexes				
All ages	10,306	447.0	10,031	441.6
Under 1 year ¹	335	838.5	297	741.7
1-4 years	94	58.1	136	83.3
5-14 years	139	29.8	137	29.6
15-24 years	483	120.3	498	126.2
25-34 years	669	178.9	740	198.8
35-44 years	973	281.4	970	286.4
45-54 years	1,229	527.4	1,152	515.0
55-64 years	1,507	1,112.3	1,415	1,072.4
65-74 years	1,923	2,225.2	1,909	2,244.2
75-84 years	1,805	4,021.8	1,710	4,003.0
85 years and over	1,143	6,519.9	1,066	6,659.6
Not stated	6	...	1	...
Age-adjusted rate ² .....	...	458.6	...	460.0
American Indian³, male				
All ages	5,831	509.4	5,556	492.9
Under 1 year ¹	198	985.6	150	744.6
1-4 years	46	56.2	75	90.9
5-14 years	80	33.8	88	37.4
15-24 years	362	177.4	382	189.6
25-34 years	490	254.9	513	269.4
35-44 years	639	375.7	645	388.4
45-54 years	741	657.0	675	623.3
55-64 years	876	1,372.0	819	1,316.6
65-74 years	1,065	2,724.5	1,044	2,718.9
75-84 years	873	4,739.7	785	4,533.1
85 years and over	456	7,952.6	379	7,271.7
Not stated	4	...	1	...
Age-adjusted rate ² .....	...	573.9	...	565.3
American Indian³, female				
All ages	4,475	385.4	4,475	391.2
Under 1 year ¹	137	689.8	147	738.8
1-4 years	48	60.1	61	75.5
5-14 years	60	26.2	49	21.5
15-24 years	121	61.3	116	60.0
25-34 years	178	98.0	227	124.9
35-44 years	334	190.1	325	188.3
45-54 years	488	405.8	477	413.4
55-64 years	631	880.8	596	854.6
65-74 years	858	1,812.8	865	1,853.6
75-84 years	932	3,522.2	925	3,641.6
85 years and over	687	5,823.5	687	6,364.1
Not stated	2	...	-	...
Age-adjusted rate ² .....	...	355.8	...	365.0

See footnotes at end of table.

Table 10. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997 - Con.

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race/Hispanic origin, and sex	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
Asian or Pacific Islander, both sexes				
All ages	29,938	301.9	28,773	300.7
Under 1 year ¹	657	379.8	673	400.5
1-4 years	135	19.9	182	27.1
5-14 years	244	15.7	229	15.3
15-24 years	773	51.9	780	53.0
25-34 years	948	52.8	984	56.6
35-44 years	1,593	94.7	1,552	95.6
45-54 years	2,589	221.4	2,519	229.1
55-64 years	3,771	562.5	3,644	571.1
65-74 years	6,355	1,422.9	6,172	1,440.0
75-84 years	7,520	3,784.0	7,100	3,836.2
85 years and over	5,349	9,687.6	4,926	9,953.1
Not stated	5	...	12	...
Age-adjusted rate ² .....	...	273.4	...	279.1
Asian or Pacific Islander, male				
All ages	16,743	348.9	16,174	348.7
Under 1 year ¹	368	418.5	387	453.2
1-4 years	71	20.5	92	26.8
5-14 years	150	18.8	141	18.4
15-24 years	550	73.0	549	73.6
25-34 years	628	73.0	658	78.6
35-44 years	980	122.3	963	124.7
45-54 years	1,487	272.0	1,459	283.1
55-64 years	2,276	733.7	2,108	717.7
65-74 years	3,600	1,919.4	3,529	1,947.7
75-84 years	4,029	4,757.9	3,851	4,835.0
85 years and over	2,601	11,425.4	2,427	11,880.2
Not stated	4	...	10	...
Age-adjusted rate ² .....	...	351.0	...	357.2
Asian or Pacific Islander, female				
All ages	13,194	257.8	12,599	255.6
Under 1 year ¹	289	339.7	286	346.1
1-4 years	64	19.2	90	27.4
5-14 years	94	12.4	88	12.1
15-24 years	222	30.1	231	31.8
25-34 years	320	34.3	326	36.2
35-44 years	613	69.6	589	69.2
45-54 years	1,102	176.9	1,060	181.5
55-64 years	1,495	415.0	1,536	446.1
65-74 years	2,755	1,063.4	2,643	1,068.3
75-84 years	3,492	3,061.8	3,249	3,081.6
85 years and over	2,747	8,465.3	2,499	8,598.6
Not stated	1	...	2	...
Age-adjusted rate ² .....	...	211.4	...	216.5

See footnotes at end of table.

Table 10. Deaths and death rates by age, sex, and race and Hispanic origin and age-adjusted death rates, by sex and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997 - Con.

[Data are based on a continuous file of records received from the States. Age-specific rates per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. standard population. The number of deaths and death rates for Hispanic origin and specified races other than white and black should be interpreted with caution because of inconsistencies between reporting Hispanic origin and race on death certificates and censuses and surveys; see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Age, race/Hispanic origin, and sex	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
Hispanic⁴, both sexes				
All ages	92,795	322.7	95,975	345.4
Under 1 year ¹	4,115	610.1	4,124	620.5
1-4 years	787	30.1	912	35.5
5-14 years	972	18.3	1,107	21.7
15-24 years	4,365	86.5	4,958	100.9
25-34 years	5,725	110.4	7,039	137.7
35-44 years	7,651	178.6	8,866	217.7
45-54 years	8,633	341.2	8,860	372.8
55-64 years	11,130	753.4	11,501	806.6
65-74 years	17,377	1,731.4	17,328	1,786.4
75-84 years	17,798	3,806.1	17,383	3,938.4
85 years and over	14,183	9,073.2	13,823	9,535.3
Not stated	60	...	74	...
Age-adjusted rate ² .....	...	348.4	...	376.2
Hispanic⁴, male				
All ages	53,699	363.4	56,387	395.2
Under 1 year ¹	2,393	692.1	2,361	693.2
1-4 years	434	32.3	515	39.2
5-14 years	568	20.9	672	25.7
15-24 years	3,506	129.2	4,031	152.4
25-34 years	4,406	157.3	5,533	200.9
35-44 years	5,524	248.6	6,605	313.7
45-54 years	5,801	463.5	6,000	511.9
55-64 years	6,847	984.6	6,955	1,037.7
65-74 years	9,852	2,207.3	9,779	2,270.4
75-84 years	8,874	4,781.2	8,591	4,963.8
85 years and over	5,438	10,199.0	5,277	10,688.2
Not stated	57	...	68	...
Age-adjusted rate ² .....	...	451.4	...	490.5
Hispanic⁴, female				
All ages	39,096	279.7	39,588	292.8
Under 1 year ¹	1,722	523.8	1,763	544.1
1-4 years	354	27.8	397	31.7
5-14 years	404	15.6	435	17.5
15-24 years	859	36.8	927	40.9
25-34 years	1,319	55.3	1,506	63.9
35-44 years	2,126	103.2	2,261	115.0
45-54 years	2,833	221.5	2,860	237.5
55-64 years	4,283	547.8	4,546	601.6
65-74 years	7,525	1,350.2	7,549	1,399.9
75-84 years	8,924	3,164.3	8,792	3,277.0
85 years and over	8,745	8,490.5	8,546	8,939.8
Not stated	3	...	6	...
Age-adjusted rate ² .....	...	256.2	...	272.7

... Category not applicable.

- Quantity zero.

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

² For method of computation, see Technical notes.

³ Includes deaths among Aleuts and Eskimos.

⁴ Race and Hispanic origin are reported separately on the death certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the decedent's reported race; see Technical notes. Hispanic origin data exclude Oklahoma; see Technical notes.

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

Table 11. Deaths, death rates, and age-adjusted death rates for 72 selected causes, Human immunodeficiency virus infection, Alzheimer's disease, Injury by firearms, Drug-induced deaths, Alcohol-induced deaths, and Injury at work: United States, preliminary data for 12 months ending June 1996 and 1997

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical notes. For explanation of asterisks preceding cause-of-death categories, see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Cause of death (Based on the Ninth Revision, International Classification of Diseases, 1975)	12 months ending June					
	1997			1996		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
All causes	2,334,716	876.1	487.5	2,317,625	877.3	498.7
Shigellosis and amebiasis (004,006)	7	*	*	9	*	*
Certain other intestinal infections (007-009)	896	0.3	0.2	852	0.3	0.2
Tuberculosis (010-018)	1,169	0.4	0.3	1,251	0.5	0.3
Tuberculosis of respiratory system (010-012)	884	0.3	0.2	962	0.4	0.2
Other tuberculosis (013-018)	284	0.1	0.1	289	0.1	0.1
Whooping cough (033)	4	*	*	3	*	*
Streptococcal sore throat, scarlatina, and erysipelas (034-035)	9	*	*	11	*	*
Meningococcal infection (036)	290	0.1	0.1	288	0.1	0.1
Septicemia (038)	22,630	8.5	4.3	21,024	8.0	4.0
Acute poliomyelitis (045)	1	*	*	1	*	*
Measles (055)	1	*	*	-	*	*
Viral hepatitis (070)	3,848	1.4	1.1	3,557	1.3	1.1
Syphilis (090-097)	64	0.0	0.0	58	0.0	0.0
All other infectious and parasitic diseases (001-003,005,020-032,037,039-041,*042-*044,046-054,056-066,071-088,098-139)	29,558	11.1	9.9	46,753	17.7	16.2
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	540,656	202.9	126.9	540,176	204.5	129.1
Malignant neoplasms of lip, oral cavity, and pharynx (140-149)	7,935	3.0	2.1	7,865	3.0	2.1
Malignant neoplasms of digestive organs and peritoneum (150-159)	126,130	47.3	28.1	126,990	48.1	28.9
Malignant neoplasms of respiratory and intrathoracic organs (160-165)	158,599	59.5	39.2	157,116	59.5	39.5
Malignant neoplasm of breast (174-175)	42,743	16.0	10.7	44,216	16.7	11.3
Malignant neoplasms of genital organs (179-187)	59,787	22.4	12.3	60,380	22.9	12.6
Malignant neoplasms of urinary organs (188-189)	23,201	8.7	5.1	22,858	8.7	5.1
Malignant neoplasms of all other and unspecified sites (170-173,190-199)	66,526	25.0	16.5	66,097	25.0	16.6
Leukemia (204-208)	20,193	7.6	4.7	20,489	7.8	4.9
Other malignant neoplasms of lymphatic and hematopoietic tissues (200-203)	35,543	13.3	8.3	34,165	12.9	8.1
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature (210-239)	7,870	3.0	1.7	7,746	2.9	1.7
Diabetes mellitus (250)	62,570	23.5	13.6	60,376	22.9	13.5
Nutritional deficiencies (260-269)	3,892	1.5	0.5	3,740	1.4	0.5
Anemias (280-285)	4,389	1.6	0.8	4,400	1.7	0.8
Meningitis (320-322)	788	0.3	0.3	707	0.3	0.2
Major cardiovascular diseases (390-448)	954,529	358.2	168.9	951,801	360.3	172.8
Diseases of heart (390-398,402,404-429)	735,384	276.0	132.9	736,221	278.7	136.4
Rheumatic fever and rheumatic heart disease (390-398)	4,847	1.8	1.0	5,062	1.9	1.1
Hypertensive heart disease (402)	26,314	9.9	5.1	25,722	9.7	5.2
Hypertensive heart and renal disease (404)	2,471	0.9	0.4	2,455	0.9	0.4
Ischemic heart disease (410-414)	474,684	178.1	85.2	478,622	181.2	88.0
Acute myocardial infarction (410)	211,150	79.2	41.0	216,763	82.1	43.0
Other acute and subacute forms of ischemic heart disease (411)	3,044	1.1	0.6	2,728	1.0	0.6
Angina pectoris (413)	787	0.3	0.1	843	0.3	0.1
Old myocardial infarction and other forms of chronic ischemic heart disease (412,414)	259,702	97.5	43.5	258,288	97.8	44.2
Other diseases of endocardium (424)	17,376	6.5	2.7	16,855	6.4	2.7
All other forms of heart disease (415-423,425-429)	209,693	78.7	38.4	207,505	78.6	39.0
Hypertension with or without renal disease (401,403)	13,235	5.0	2.3	12,674	4.8	2.3
Cerebrovascular diseases (430-438)	161,681	60.7	26.3	159,350	60.3	26.6
Intracerebral and other intracranial hemorrhage (431-432)	24,906	9.3	5.4	23,022	8.7	5.1
Cerebral thrombosis and unspecified occlusion of cerebral arteries (434.0,434.9)	12,727	4.8	2.0	13,514	5.1	2.1
Cerebral embolism (434.1)	635	0.2	0.1	646	0.2	0.1
All other and late effects of cerebrovascular diseases (430,433,435-438)	123,413	46.3	18.8	122,168	46.2	19.2
Atherosclerosis (440)	16,424	6.2	2.1	16,764	6.3	2.2
Other diseases of arteries, arterioles, and capillaries (441-448)	27,805	10.4	5.3	26,792	10.1	5.3
Acute bronchitis and bronchiolitis (466)	492	0.2	0.1	494	0.2	0.1
Pneumonia and influenza (480-487)	88,878	33.4	13.3	82,399	31.2	12.7
Pneumonia (480-486)	87,839	33.0	13.1	81,803	31.0	12.6
Influenza (487)	1,039	0.4	0.1	596	0.2	0.1
Chronic obstructive pulmonary diseases and allied conditions (490-496)	110,259	41.4	21.5	103,424	39.2	20.6
Bronchitis, chronic and unspecified (490-491)	3,169	1.2	0.6	3,217	1.2	0.6
Emphysema (492)	17,848	6.7	3.7	16,929	6.4	3.5
Asthma (493)	5,538	2.1	1.5	5,648	2.1	1.5
Other chronic obstructive pulmonary diseases and allied conditions (494-496)	83,704	31.4	15.8	77,630	29.4	14.9

See footnotes at end of table.

Table 11. Deaths, death rates, and age-adjusted death rates for 72 selected causes, Human immunodeficiency virus infection, Alzheimer's disease, Injury by firearms, Drug-induced deaths, Alcohol-induced deaths, and Injury at work: United States, preliminary data for 12 months ending June 1996 and 1997 - Con.

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical notes. For explanation of asterisks preceding cause-of-death categories, see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Cause of death (Based on the Ninth Revision, International Classification of Diseases, 1975)	12 months ending June					
	1997			1996		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
Ulcer of stomach and duodenum (531-533)	5,104	1.9	0.9	5,231	2.0	1.0
Appendicitis (540-543)	398	0.1	0.1	403	0.2	0.1
Hernia of abdominal cavity and intestinal obstruction without mention of hernia (550-553,560)	6,674	2.5	1.1	6,307	2.4	1.1
Chronic liver disease and cirrhosis (571)	24,803	9.3	7.3	25,477	9.6	7.7
Cholelithiasis and other disorders of gallbladder (574-575)	2,885	1.1	0.5	2,696	1.0	0.5
Nephritis, nephrotic syndrome, and nephrosis (580-589)	25,550	9.6	4.5	23,733	9.0	4.2
Acute glomerulonephritis and nephrotic syndrome (580-581)	310	0.1	0.0	289	0.1	0.1
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified (582-583,587)	1,682	0.6	0.3	1,537	0.6	0.3
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause (584-586,588-589)	23,558	8.8	4.1	21,907	8.3	3.9
Infections of kidney (590)	868	0.3	0.2	912	0.3	0.1
Hyperplasia of prostate (600)	453	0.2	0.1	419	0.2	0.1
Complications of pregnancy, childbirth, and the puerperium (630-676)	262	0.1	0.1	288	0.1	0.1
Pregnancy with abortive outcome (630-638)	30	0.0	0.0	37	0.0	0.0
Other complications of pregnancy, childbirth, and the puerperium (640-676)	232	0.1	0.1	251	0.1	0.1
Congenital anomalies (740-759)	11,725	4.4	4.2	11,814	4.5	4.3
Certain conditions originating in the perinatal period (760-779)	12,652	4.7	5.2	13,183	5.0	5.3
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome (767-769)	1,929	0.7	0.8	2,060	0.8	0.8
Other conditions originating in the perinatal period (760-766,770-779)	10,723	4.0	4.4	11,123	4.2	4.5
Symptoms, signs, and ill-defined conditions (780-799)	30,954	11.6	8.2	27,085	10.3	7.0
All other diseases (Residual)	232,578	87.3	42.4	218,867	82.9	41.2
Accidents and adverse effects (E800-E949)	93,597	35.1	29.6	95,519	36.2	30.9
Motor vehicle accidents (E810-E825)	43,415	16.3	16.0	44,035	16.7	16.4
All other accidents and adverse effects (E800-E807,E826-E949)	50,182	18.8	13.6	51,484	19.5	14.4
Suicide (E950-E959)	30,246	11.3	10.5	30,987	11.7	11.0
Homicide and legal intervention (E960-E978)	20,002	7.5	8.1	22,212	8.4	9.0
All other external causes (E980-E999)	3,166	1.2	1.1	3,422	1.3	1.2
Human immunodeficiency virus infection ¹ (*042-*044)	22,567	8.5	8.0	39,767	15.1	14.2
Alzheimer's disease ² (331.0)	22,638	8.5	2.8	21,020	8.0	2.7
Injury by firearms ³ (E922,E955.0-E955.4,E965.0-E965.4,E970,E985.0-E985.4)	33,104	12.4	12.5	35,178	13.3	13.4
Drug-induced deaths ³ (292,304,305.2-305.9,E850-E858,E950.0-E950.5,E962.0,E980.0-E980.5)	13,686	5.1	4.8	14,448	5.5	5.1
Alcohol-induced deaths ³ (291,303,305.0,357.5,425.5,535.3,571.0-571.3,790.3,E860)	19,300	7.2	6.2	20,198	7.6	6.6
Injury at work ⁴	5,782	2.2	2.1	5,789	2.2	2.1

- Quantity zero.

* Figure does not meet standards of reliability or precision (see Technical notes).

¹ Included in All other infectious and parasitic diseases.

² Included in All other diseases.

³ Included in selected categories.

⁴ Injury at work described in Technical notes.

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

Table 12. Deaths, death rates, and age-adjusted death rates for 16 selected subcategories of Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues: United States, preliminary data for 12 months ending June 1996 and 1997

[Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual]

Cause of death (Based on the Ninth Revision, International Classification of Diseases, 1975)	12 months ending June					
	1997			1996		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues ¹ (140-208)	540,656	202.9	126.9	540,176	204.5	129.1
Malignant neoplasm of esophagus (150)	11,286	4.2	2.8	11,157	4.2	2.9
Malignant neoplasm of stomach (151)	13,172	4.9	2.9	13,393	5.1	3.1
Malignant neoplasm of colon, rectum, rectosigmoid junction, and anus (153,154)	56,341	21.1	12.0	56,995	21.6	12.4
Malignant neoplasm of pancreas (157)	27,215	10.2	6.1	27,245	10.3	6.2
Malignant neoplasm of trachea, bronchus, and lung (162)	153,387	57.6	37.8	151,906	57.5	38.1
Malignant neoplasm of skin (172)	7,260	2.7	1.9	7,059	2.7	1.9
Malignant neoplasm of cervix uteri (180)	4,529	1.7	1.3	4,503	1.7	1.3
Malignant neoplasm of body of uterus and of uterus, part unspecified (179,182)	6,251	2.3	1.4	6,284	2.4	1.4
Malignant neoplasm of ovary (183.0)	13,487	5.1	3.2	13,225	5.0	3.3
Malignant neoplasm of prostate (185)	33,639	12.6	5.9	34,411	13.0	6.2
Malignant neoplasm of bladder (188)	11,448	4.3	2.2	11,293	4.3	2.2
Malignant neoplasm of kidney and other and unspecified urinary organs (189)	11,753	4.4	2.9	11,565	4.4	2.9
Malignant neoplasm of brain and other and unspecified parts of nervous system (191,192)	12,401	4.7	3.6	12,265	4.6	3.6
Hodgkin's disease (201)	1,468	0.6	0.4	1,399	0.5	0.4
Malignant lymphoma other than Hodgkin's disease (200,202)	23,556	8.8	5.5	22,617	8.6	5.4
Multiple myeloma and other immunoproliferative neoplasms (203)	10,519	3.9	2.4	10,149	3.8	2.3

¹ Includes figures for subcategories not shown.

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

Table 13. Deaths, death rates, and age-adjusted death rates: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1996 and 1997

[By place of residence. Data are based on a continuous file of records received from the States. Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Area	12 months ending June					
	1997			1996		
	Number	Rate	Age-adjusted rate	Number	Rate	Age-adjusted rate
United States ¹	2,334,722	876.1	487.9	2,317,625	877.3	498.7
Alabama	43,157	1,010.0	580.9	43,062	1,012.5	589.8
Alaska	2,537	418.0	462.4	2,661	440.8	511.5
Arizona	37,100	837.8	479.8	36,456	864.3	511.9
Arkansas	27,284	1,087.1	564.7	26,968	1,085.8	566.7
California ²	*	*	*	226,581	717.3	466.3
Colorado	26,185	685.0	437.7	25,130	670.7	439.5
Connecticut	30,563	933.4	450.3	29,299	894.7	447.9
Delaware	6,569	906.3	524.7	6,333	883.0	527.3
District of Columbia	6,607	1,216.3	764.3	6,784	1,224.0	799.7
Florida	153,100	1,063.2	473.5	153,959	1,086.9	495.3
Georgia	60,129	817.7	570.1	59,222	822.4	578.6
Hawaii	7,965	672.9	386.5	7,777	655.3	395.7
Idaho	9,149	769.3	449.3	8,626	741.5	442.4
Illinois	106,348	897.7	505.7	107,246	906.6	518.6
Indiana	53,249	911.7	503.4	53,058	914.2	514.5
Iowa	28,028	982.8	430.5	28,185	991.8	440.8
Kansas	24,357	947.0	469.5	24,026	936.6	468.4
Kentucky	38,330	986.9	557.1	37,322	966.8	556.9
Louisiana	39,598	910.2	584.4	39,931	919.6	599.0
Maine	11,921	958.8	462.2	11,727	944.7	472.6
Maryland	42,487	837.7	520.8	41,430	821.6	525.5
Massachusetts	57,346	941.3	448.9	54,963	905.0	446.5
Michigan	84,777	883.6	507.5	83,515	874.6	509.8
Minnesota	37,730	810.0	417.1	37,460	812.7	420.3
Mississippi	27,012	994.5	607.1	27,308	1,012.4	626.2
Missouri	55,603	1,037.6	531.9	54,188	1,017.9	528.3
Montana	7,785	885.3	456.9	7,686	883.2	471.7
Nebraska	15,663	948.1	445.0	15,348	937.5	449.3
Nevada	13,052	814.1	541.8	12,954	846.6	575.1
New Hampshire	9,666	831.5	458.7	9,232	804.0	457.5
New Jersey	73,458	919.6	477.3	72,566	913.3	488.5
New Mexico	12,661	738.9	477.8	12,578	746.3	490.0
New York	164,650	905.4	482.4	165,544	912.8	502.7
North Carolina	66,660	910.3	538.9	65,771	914.1	547.2
North Dakota	6,225	967.3	433.2	6,008	936.7	428.3
Ohio	106,006	948.8	502.7	105,563	946.7	512.5
Oklahoma	33,633	1,018.9	543.2	33,155	1,011.5	543.3
Oregon	29,672	926.2	470.2	28,778	916.3	477.8
Pennsylvania	132,250	1,097.0	509.0	127,439	1,055.7	501.5
Rhode Island	9,981	1,008.0	455.3	9,533	963.1	450.2
South Carolina	33,808	914.0	576.2	33,798	920.1	586.8
South Dakota	6,882	939.6	448.9	6,840	938.2	454.5
Tennessee	52,115	979.7	563.5	51,708	983.8	575.5
Texas	140,188	732.9	491.6	140,770	751.8	509.9
Utah	11,571	578.4	420.1	11,124	570.0	423.6
Vermont	5,004	850.1	453.9	4,880	834.5	461.6
Virginia	54,297	813.4	502.0	52,882	799.0	503.6
Washington	42,177	762.3	437.9	41,144	757.6	446.5
West Virginia	20,940	1,146.9	552.9	20,379	1,114.7	550.5
Wisconsin	45,990	891.3	447.4	45,110	880.6	445.4
Wyoming	3,764	781.9	471.4	3,618	753.5	467.3
Puerto Rico ³	30,289	800.7	584.2	29,582	792.9	594.3
Virgin Islands ³	616	544.0	487.0	605	540.4	495.2
Guam ³	632	436.5	523.3	602	418.5	507.2

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

¹ Excludes data for Puerto Rico, Virgin Islands, and Guam.

² Due to data processing problems, California data for 12 months ending June 1997 are not shown separately but are included in U.S. totals, see Technical notes.

³ Age-adjusted death rates for Puerto Rico, Virgin Islands, and Guam are calculated using a different procedure, see Technical notes.

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

Table 14. Infant deaths and infant mortality rates, by age and race and Hispanic origin: United States, preliminary data for 12 months ending June 1996 and 1997

[Data are based on a continuous file of records received from the States. Rates per 1,000 live births. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals. Rates for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on birth and death certificates; see Technical notes]

Age and race	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
All races ¹				
Under 1 year	27,902	7.1	29,047	7.5
Under 28 days	18,179	4.7	18,883	4.9
28 days-11 months	9,723	2.5	10,164	2.6
White				
Under 1 year	18,630	6.0	19,243	6.2
Under 28 days	12,212	3.9	12,536	4.1
28 days-11 months	6,418	2.1	6,707	2.2
Black				
Under 1 year	8,281	13.8	8,834	14.9
Under 28 days	5,365	8.9	5,760	9.7
28 days-11 months	2,915	4.8	3,074	5.2
Hispanic ²				
Under 1 year	4,115	5.8	4,124	6.0
Under 28 days	2,651	3.7	2,682	3.9
28 days-11 months	1,464	2.1	1,442	2.1

¹ Includes races other than white and black.

² Race and Hispanic origin are reported separately on both the birth and death certificates. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the decedent's reported race; see Technical notes. Hispanic origin data exclude Oklahoma; see Technical notes.

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

Table 15. Infant deaths and infant mortality rates for 61 selected causes and Human immunodeficiency virus infection: United States, preliminary data for 12 months ending June 1996 and 1997

[Data are based on a continuous file of records received from the States. Rates per 100,000 live births. For explanation of asterisks preceding cause-of-death categories, see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Cause of death (Based on the Ninth Revision, International Classification of Diseases, 1975)	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
All causes	27,899	714.8	29,047	748.3
Certain intestinal infections (008-009)	196	5.0	208	5.4
Whooping cough (033)	4	*	3	*
Meningococcal infection (036)	40	1.0	47	1.2
Septicemia (038)	201	5.1	206	5.3
Viral diseases (045-079)	92	2.4	107	2.8
Congenital syphilis (090)	6	*	4	*
Remainder of infectious and parasitic diseases (001,007,010-032,034-035,037,039-041,*042-*044,080-088,091-139)	152	3.9	170	4.4
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	101	2.6	79	2.0
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature (210-239)	72	1.8	67	1.7
Diseases of thymus gland (254)	3	*	1	*
Cystic fibrosis (277.0)	9	*	9	*
Diseases of blood and blood-forming organs (280-289)	79	2.0	80	2.1
Meningitis (320-322)	113	2.9	100	2.6
Other diseases of nervous system and sense organs (323-389)	371	9.5	338	8.7
Acute upper respiratory infections (460-465)	14	*	17	*
Bronchitis and bronchiolitis (466,490-491)	100	2.6	97	2.5
Pneumonia and influenza (480-487)	427	10.9	519	13.4
Pneumonia (480-486)	412	10.6	509	13.1
Influenza (487)	14	*	10	*
Remainder of diseases of respiratory system (470-478,492-519)	278	7.1	249	6.4
Hernia of abdominal cavity and intestinal obstruction without mention of hernia (550-553,560)	75	1.9	68	1.8
Gastritis, duodenitis, and noninfective enteritis and colitis (535,555-558)	76	1.9	83	2.1
Remainder of diseases of digestive system (520-534,536-543,562-579)	205	5.3	166	4.3
Congenital anomalies (740-759)	6,231	159.6	6,477	166.8
Anencephalus and similar anomalies (740)	332	8.5	347	8.9
Spina bifida (741)	55	1.4	53	1.4
Congenital hydrocephalus (742.3)	142	3.6	132	3.4
Other congenital anomalies of central nervous system and eye (742.0-742.2,742.4-742.9,743)	285	7.3	313	8.1
Congenital anomalies of heart (745-746)	1,880	48.2	1,946	50.1
Other congenital anomalies of circulatory system (747)	320	8.2	365	9.4
Congenital anomalies of respiratory system (748)	964	24.7	951	24.5
Congenital anomalies of digestive system (749-751)	82	2.1	88	2.3
Congenital anomalies of genitourinary system (752-753)	333	8.5	355	9.1
Congenital anomalies of musculoskeletal system (754-756)	434	11.1	484	12.5
Down's syndrome (758.0)	112	2.9	102	2.6
Other chromosomal anomalies (758.1-758.9)	749	19.2	787	20.3
All other and unspecified congenital anomalies (744,757,759)	543	13.9	554	14.3
Certain conditions originating in the perinatal period (760-779)	12,553	321.6	13,105	337.6
Newborn affected by maternal conditions which may be unrelated to present pregnancy (760)	153	3.9	193	5.0
Newborn affected by maternal complications of pregnancy (761)	1,266	32.4	1,262	32.5
Newborn affected by complications of placenta, cord, and membranes (762)	941	24.1	919	23.7
Newborn affected by other complications of labor and delivery (763)	73	1.9	76	2.0
Slow fetal growth and fetal malnutrition (764)	53	1.4	41	1.1
Disorders relating to short gestation and unspecified low birthweight (765)	3,677	94.2	3,818	98.4
Disorders relating to long gestation and high birthweight (766)	-	*	-	*
Birth trauma (767)	189	4.8	195	5.0
Intrauterine hypoxia and birth asphyxia (768)	413	10.6	483	12.4
Fetal distress in liveborn infant (768.2-768.4)	106	2.7	134	3.5
Birth asphyxia (768.5-768.9)	308	7.9	349	9.0
Respiratory distress syndrome (769)	1,299	33.3	1,360	35.0
Other respiratory conditions of newborn (770)	1,688	43.2	1,894	48.8
Infections specific to the perinatal period (771)	796	20.4	755	19.4
Neonatal hemorrhage (772)	334	8.6	301	7.8
Hemolytic disease of newborn, due to isoimmunization, and other perinatal jaundice (773-774)	17	*	32	0.8
Syndrome of "infant of a diabetic mother" and neonatal diabetes mellitus (775.0-775.1)	13	*	8	*
Hemorrhagic disease of newborn (776.0)	1	*	4	*
All other and ill-defined conditions originating in the perinatal period (775.2-775.9,776.1-779)	1,638	42.0	1,764	45.4
Symptoms, signs, and ill-defined conditions (780-799)	3,910	100.2	4,182	107.7
Sudden infant death syndrome (798.0)	2,794	71.6	3,257	83.9
Symptoms, signs, and all other ill-defined conditions (780-797,798.1-799)	1,117	28.6	925	23.8
Accidents and adverse effects (E800-E949)	766	19.6	828	21.3

See footnotes at end of table.

Table 15. Infant deaths and infant mortality rates for 61 selected causes and Human immunodeficiency virus infection: United States, preliminary data for 12 months ending June 1996 and 1997 - Con.

[Data are based on a continuous file of records received from the States. Rates per 100,000 live births. For explanation of asterisks preceding cause-of-death categories, see Technical notes. Figures for the 12 months ending June 1997 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Cause of death (Based on the Ninth Revision, International Classification of Diseases, 1975)	12 months ending June			
	1997		1996	
	Number	Rate	Number	Rate
Inhalation and ingestion of food or other object causing obstruction of respiratory tract or suffocation (E911-E912)	76	1.9	80	2.1
Accidental mechanical suffocation (E913)	285	7.3	300	7.7
Other accidental causes and adverse effects (E800-E910,E914-E949)	405	10.4	448	11.5
Homicide (E960-E969)	317	8.1	309	8.0
Child battering and other maltreatment (E967)	106	2.7	117	3.0
Other homicide (E960-E966,E968-E969)	211	5.4	192	4.9
All other causes (Residual)	1,509	38.7	1,528	39.4
Human immunodeficiency virus infection ¹ (*042.*044)	26	0.7	49	1.3

* Figure does not meet standard of reliability or precision (see Technical notes).
 - Quantity zero.
¹ Included in Remainder of infectious and parasitic diseases.

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

Table 16. Expectation of life by age, race, and sex: United States, preliminary data for 12 months ending June 1996 and 1997

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

Age (Years) and race	Both sexes		Male		Female	
	12 months ending June					
	1997	1996	1997	1996	1997	1996
All races ¹						
0	76.2	75.9	73.3	72.8	79.1	79.0
1	75.8	75.5	72.8	72.4	78.6	78.5
5	71.9	71.6	69.0	68.5	74.7	74.7
10	66.9	66.7	64.0	63.6	69.7	69.7
15	62.0	61.8	59.1	58.6	64.8	64.8
20	57.2	57.0	54.4	54.0	59.9	59.9
25	52.5	52.3	49.8	49.4	55.1	55.1
30	47.8	47.6	45.2	44.8	50.2	50.2
35	43.1	42.9	40.5	40.2	45.4	45.4
40	38.4	38.3	36.0	35.8	40.7	40.7
45	33.9	33.8	31.5	31.4	36.0	36.1
50	29.5	29.4	27.2	27.1	31.4	31.5
55	25.2	25.2	23.1	23.0	27.0	27.1
60	21.2	21.2	19.2	19.2	22.8	22.9
65	17.5	17.5	15.7	15.7	18.9	19.0
70	14.1	14.1	12.5	12.5	15.2	15.3
75	11.0	11.1	9.8	9.8	11.9	12.0
80	8.3	8.4	7.3	7.3	8.8	9.0
85	6.0	6.1	5.3	5.3	6.3	6.4
White						
0	76.9	76.7	74.0	73.6	79.6	79.6
1	76.3	76.1	73.5	73.1	79.0	79.1
5	72.4	72.2	69.6	69.2	75.1	75.1
10	67.5	67.3	64.7	64.3	70.2	70.2
15	62.5	62.4	59.8	59.4	65.2	65.3
20	57.8	57.6	55.0	54.7	60.4	60.4
25	53.0	52.8	50.4	50.0	55.5	55.5
30	48.2	48.1	45.7	45.4	50.6	50.7
35	43.5	43.4	41.0	40.8	45.8	45.9
40	38.8	38.8	36.4	36.3	41.0	41.1
45	34.2	34.2	31.9	31.8	36.3	36.4
50	29.7	29.7	27.5	27.4	31.7	31.7
55	25.4	25.4	23.3	23.2	27.2	27.3
60	21.3	21.3	19.4	19.3	23.0	23.1
65	17.5	17.6	15.8	15.8	19.0	19.1
70	14.1	14.2	12.6	12.6	15.3	15.4
75	11.0	11.1	9.8	9.8	11.9	12.0
80	8.3	8.4	7.3	7.3	8.8	9.0
85	5.9	6.0	5.3	5.3	6.2	6.4
Black						
0	70.7	69.9	66.7	65.6	74.4	74.0
1	70.7	69.9	66.7	65.6	74.4	74.0
5	66.8	66.1	62.9	61.8	70.5	70.2
10	61.9	61.2	58.0	56.9	65.6	65.3
15	57.0	56.3	53.1	52.0	60.7	60.4
20	52.3	51.6	48.6	47.5	55.8	55.5
25	47.8	47.1	44.2	43.2	51.0	50.7
30	43.3	42.6	39.8	38.9	46.3	46.0
35	38.8	38.3	35.5	34.7	41.7	41.5
40	34.4	34.0	31.3	30.7	37.2	37.0
45	30.2	30.0	27.3	26.8	32.8	32.7
50	26.3	26.0	23.6	23.2	28.6	28.5
55	22.5	22.3	20.0	19.8	24.5	24.5
60	19.0	18.9	16.8	16.6	20.7	20.7
65	15.9	15.7	14.0	13.8	17.3	17.2
70	12.8	12.8	11.3	11.1	13.9	13.9
75	10.3	10.3	9.1	9.0	11.2	11.1
80	8.0	7.9	7.0	6.9	8.5	8.5
85	5.9	5.9	5.4	5.3	6.2	6.2

¹ Includes races other than white and black.

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

Table 17. Deaths and death rates for the 10 leading causes of death in specified age groups: United States, preliminary data for 12 months ending June 1997

[Data are based on a continuous file of records received from the States. Rates per 100,000 population in specified group. For explanation of asterisks preceding cause-of-death categories, see Technical notes. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Rank ¹	Cause of death and age (Based on the Ninth Revision, International Classification of Diseases, 1975)	Number	Rate
All ages ²			
...	All causes	2,334,716	876.1
1	Diseases of heart (390-398, 402, 404-429)	735,384	276.0
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	540,656	202.9
3	Cerebrovascular diseases (430-438)	161,681	60.7
4	Chronic obstructive pulmonary diseases and allied conditions (490-496)	110,259	41.4
5	Accidents and adverse effects (E800-E949)	93,597	35.1
...	Motor vehicle accidents (E810-E825)	43,415	16.3
...	All other accidents and adverse effects (E800-E807, E826-E949)	50,182	18.8
6	Pneumonia and influenza (480-487)	88,878	33.4
7	Diabetes mellitus (250)	62,570	23.5
8	Suicide (E950-E959)	30,246	11.3
9	Nephritis, nephrotic syndrome, and nephrosis (580-589)	25,550	9.6
10	Chronic liver disease and cirrhosis (571)	24,803	9.3
...	All other causes (Residual)	461,092	173.0
1-4 years			
...	All causes	5,506	35.7
1	Accidents and adverse effects (E800-E949)	1,974	12.8
...	Motor vehicle accidents (E810-E825)	762	4.9
...	All other accidents and adverse effects (E800-E807, E826-E949)	1,212	7.9
2	Congenital anomalies (740-759)	600	3.9
3	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	421	2.7
4	Homicide and legal intervention (E960-E978)	378	2.5
5	Diseases of heart (390-398, 402, 404-429)	215	1.4
6	Pneumonia and influenza (480-487)	144	0.9
7	Human immunodeficiency virus infection (*042-*044)	88	0.6
8	Septicemia (038)	71	0.5
9	Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature (210-239)	63	0.4
10	Cerebrovascular diseases (430-438)	52	0.3
...	All other causes (Residual)	1,500	9.7
5-14 years			
...	All causes	8,111	21.0
1	Accidents and adverse effects (E800-E949)	3,288	8.5
...	Motor vehicle accidents (E810-E825)	1,929	5.0
...	All other accidents and adverse effects (E800-E807, E826-E949)	1,359	3.5
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	1,015	2.6
3	Homicide and legal intervention (E960-E978)	479	1.2
4	Congenital anomalies (740-759)	425	1.1
5	Diseases of heart (390-398, 402, 404-429)	319	0.8
6	Suicide (E950-E959)	283	0.7
7	Chronic obstructive pulmonary diseases and allied conditions (490-496)	160	0.4
8	Human immunodeficiency virus infection (*042-*044)	154	0.4
9	Pneumonia and influenza (480-487)	137	0.4
10	Cerebrovascular diseases (430-438)	93	0.2
...	All other causes (Residual)	1,758	4.6
15-24 years			
...	All causes	31,743	87.3
1	Accidents and adverse effects (E800-E949)	13,416	36.9
...	Motor vehicle accidents (E810-E825)	10,275	28.3
...	All other accidents and adverse effects (E800-E807, E826-E949)	3,141	8.6
2	Homicide and legal intervention (E960-E978)	6,220	17.1
3	Suicide (E950-E959)	4,199	11.6
4	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	1,627	4.5
5	Diseases of heart (390-398, 402, 404-429)	982	2.7
6	Congenital anomalies (740-759)	368	1.0
7	Human immunodeficiency virus infection (*042-*044)	302	0.8
8	Chronic obstructive pulmonary diseases and allied conditions (490-496)	226	0.6
9	Pneumonia and influenza (480-487)	217	0.6
10	Cerebrovascular diseases (430-438)	182	0.5
...	All other causes (Residual)	4,004	11.0

See footnotes at end of table.

Table 17. Deaths and death rates for the 10 leading causes of death in specified age groups: United States, preliminary data for 12 months ending June 1997 - Con.

[Data are based on a continuous file of records received from the States. Rates per 100,000 population in specified group. For explanation of asterisks preceding cause-of-death categories, see Technical notes. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Rank ¹	Cause of death and age (Based on the Ninth Revision, International Classification of Diseases, 1975)	Number	Rate
25-44 years			
...	All causes	139,719	166.7
1	Accidents and adverse effects (E800-E949)	26,087	31.1
...	Motor vehicle accidents (E810-E825)	14,219	17.0
...	All other accidents and adverse effects (E800-E807, E826-E949)	11,868	14.2
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	21,789	26.0
3	Diseases of heart (390-398, 402, 404-429)	16,019	19.1
4	Human immunodeficiency virus infection (*042-*044)	15,439	18.4
5	Suicide (E950-E959)	12,330	14.7
6	Homicide and legal intervention (E960-E978)	8,905	10.6
7	Chronic liver disease and cirrhosis (571)	4,048	4.8
8	Cerebrovascular diseases (430-438)	3,427	4.1
9	Diabetes mellitus (250)	2,496	3.0
10	Pneumonia and influenza (480-487)	2,036	2.4
...	All other causes (Residual)	27,143	32.4
45-64 years			
...	All causes	377,675	692.0
1	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	131,366	240.7
2	Diseases of heart (390-398, 402, 404-429)	101,513	186.0
3	Accidents and adverse effects (E800-E949)	16,708	30.6
...	Motor vehicle accidents (E810-E825)	8,021	14.7
...	All other accidents and adverse effects (E800-E807, E826-E949)	8,687	15.9
4	Cerebrovascular diseases (430-438)	15,381	28.2
5	Chronic obstructive pulmonary diseases and allied conditions (490-496)	13,106	24.0
6	Diabetes mellitus (250)	12,580	23.0
7	Chronic liver disease and cirrhosis (571)	10,719	19.6
8	Suicide (E950-E959)	7,679	14.1
9	Human immunodeficiency virus infection (*042-*044)	6,055	11.1
10	Pneumonia and influenza (480-487)	5,977	11.0
...	All other causes (Residual)	56,591	103.7
65 years and over			
...	All causes	1,743,587	5,129.2
1	Diseases of heart (390-398, 402, 404-429)	615,618	1,811.0
2	Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)	384,319	1,130.6
3	Cerebrovascular diseases (430-438)	142,306	418.6
4	Chronic obstructive pulmonary diseases and allied conditions (490-496)	95,523	281.0
5	Pneumonia and influenza (480-487)	79,932	235.1
6	Diabetes mellitus (250)	47,328	139.2
7	Accidents and adverse effects (E800-E949)	31,237	91.9
...	Motor vehicle accidents (E810-E825)	7,969	23.4
...	All other accidents and adverse effects (E800-E807, E826-E949)	23,269	68.5
8	Alzheimer's disease (331.0)	22,326	65.7
9	Nephritis, nephrotic syndrome, and nephrosis (580-589)	22,023	64.8
10	Septicemia (038)	18,298	53.8
...	All other causes (Residual)	284,677	837.5

¹ Rank based on number of deaths; see Technical notes.
² Includes deaths under 1 year of age.

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

Table 18. Infant deaths and infant mortality rates for the 10 leading causes of infant death, by race and Hispanic origin: United States, preliminary data for 12 months ending June 1997

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

Rank ¹	Cause of death and race (Based on the Ninth Revision, International Classification of Diseases, 1975)	Number	Rate
All races ²			
...	All causes	27,899	714.8
1	Congenital anomalies (740-759)	6,231	159.6
2	Disorders relating to short gestation and unspecified low birthweight (765)	3,677	94.2
3	Sudden infant death syndrome (798.0)	2,794	71.6
4	Respiratory distress syndrome (769)	1,299	33.3
5	Newborn affected by maternal complications of pregnancy (761)	1,266	32.4
6	Newborn affected by complications of placenta, cord, and membranes (762)	941	24.1
7	Infections specific to the perinatal period (771)	796	20.4
8	Accidents and adverse effects (E800-E949)	766	19.6
9	Pneumonia and influenza (480-487)	427	10.9
10	Intrauterine hypoxia and birth asphyxia (768)	413	10.6
...	All other causes (Residual)	9,289	238.0
White			
...	All causes	18,665	603.2
1	Congenital anomalies (740-759)	4,832	156.1
2	Disorders relating to short gestation and unspecified low birthweight (765)	2,051	66.3
3	Sudden infant death syndrome (798.0)	1,838	59.4
4	Respiratory distress syndrome (769)	844	27.3
5	Newborn affected by maternal complications of pregnancy (761)	839	27.1
6	Newborn affected by complications of placenta, cord, and membranes (762)	630	20.4
7	Accidents and adverse effects (E800-E949)	520	16.8
8	Infections specific to the perinatal period (771)	510	16.5
9	Intrauterine hypoxia and birth asphyxia (768)	310	10.0
10	Pneumonia and influenza (480-487)	278	9.0
...	All other causes (Residual)	6,013	194.3
Black			
...	All causes	8,244	1,369.4
1	Disorders relating to short gestation and unspecified low birthweight (765)	1,526	253.5
2	Congenital anomalies (740-759)	1,144	190.0
3	Sudden infant death syndrome (798.0)	864	143.5
4	Respiratory distress syndrome (769)	419	69.6
5	Newborn affected by maternal complications of pregnancy (761)	400	66.4
6	Newborn affected by complications of placenta, cord, and membranes (762)	276	45.8
7	Infections specific to the perinatal period (771)	260	43.2
8	Accidents and adverse effects (E800-E949)	211	35.0
9	Pneumonia and influenza (480-487)	133	22.1
10	Homicide (E960-E969)	112	18.6
...	All other causes (Residual)	2,899	481.6
Hispanic ³			
...	All causes	4,107	581.0
1	Congenital anomalies (740-759)	1,114	157.6
2	Disorders relating to short gestation and unspecified low birthweight (765)	488	69.0
3	Sudden infant death syndrome (798.0)	289	40.9
4	Respiratory distress syndrome (769)	164	23.2
5	Newborn affected by maternal complications of pregnancy (761)	152	21.5
6	Accidents and adverse effects (E800-E949)	115	16.3
7	Infections specific to the perinatal period (771)	112	15.8
8	Newborn affected by complications of placenta, cord, and membranes (762)	100	14.1
9	Pneumonia and influenza (480-487)	79	11.2
10	Homicide (E960-E969)	50	7.1
...	All other causes (Residual)	1,444	204.3

¹ Rank based on number of deaths; see Technical notes.

² Includes races other than white and black.

³ Race and Hispanic origin are reported separately on the death certificate. Data for all persons who report Hispanic origin are shown here. Data for Hispanic persons are also included above in the data for each race group, according to the decedent's reported race; see Technical notes. Hispanic origin data exclude Oklahoma; see Technical notes.

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

Technical notes

Nature and sources of data

The preliminary data for July 1996–June 1997 are based on substantial samples of vital records. The data for the 12 months ending with June 1997 are based on a continuous receipt of statistical records through December 1, 1997, by the National Center for Health Statistics (NCHS). NCHS received the data from the States' vital registration systems through the Vital Statistics Cooperative Program. In this report, U.S. totals include only events occurring within the 50 States and the District of Columbia. Data for Puerto Rico, the Virgin Islands, and Guam are included in tables showing data by State, but are not included in U.S. totals.

For the 12 months ending with June 1997, individual records of births, infant deaths (deaths under 1 year of age), and deaths of persons aged 1 year and over are weighted to independent counts of vital events received in each State. These State-specific counts serve as control totals and are the basis for the record weights in the preliminary file. If the number of records in the preliminary file is greater than the count received from the State, the State-specific number of records in the preliminary file is used instead and the weight is set at 1.0.

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

For selected variables in the natality and mortality files, unknown or not-stated values are imputed. The percent not stated in the natality files was less than 1 percent for birth-weight and method of delivery and 2.5 percent for month prenatal care began. The percent not stated in the mortality files was less than 1 percent for all variables discussed in this report. Detailed information on reporting completeness and imputation procedures may be found in the technical appendixes of the annual volumes, *Vital Statistics of the United States*, 1992 Volume I, Natality (8), and *Vital Statistics of the United States*, 1992 Volume II, Mortality, Part A (9).

Natality

Race and Hispanic origin are reported independently on the birth certificate. In this report, births to Hispanic women are also included in figures for births by race—white, black, American Indian, and Asian or Pacific Islander—according to the mother's race as reported on the birth certificate.

National estimates of births to unmarried women are based on two methods of determining marital status. For 1994–96, birth certificates in 45 States and the District of Columbia included a question about the mother's marital status. The mother's marital status was inferred in five States (California, Connecticut, Michigan, Nevada, and New York) by comparing the parents' and child's surnames and other information concerning the father. Beginning January 1, 1997, the marital status of women giving birth in California is determined by a direct question on the birth certificate, "Mother married at any time during this pregnancy?"—similar to the question asked in most other States.

A birth is inferred as nonmarital if any of these factors, listed in priority-of-use order, is present: A paternity acknowledgment was received, the father's name is missing, or the father's and mother's current surnames are different. In addition, criteria that are particularly applicable for a given State are also applied as necessary. For example, prior to 1997, special procedures were used in California to compare the parents' surnames when they were hyphenated if the parents were born in countries where naming practices can identify the parents' marital status, including Asian and Hispanic mothers.

Although Nevada's birth certificate does not include a direct question on mother's marital status, this information is being obtained from the electronic birth registration process.

The birth rates for unmarried women in this report are estimated on the basis of population distributions by marital status provided by the U.S. Bureau of the Census, as of March 1996 and 1997, applied to the national population estimates as of January 1 (10,11). The birth rates shown here thus differ from those regularly published by NCHS, which are based on populations estimated by 3-year averages of the marital status distributions, rather than a single year as shown here (12). These population estimates for a single year are not an adequate basis for computing comparable age-specific birth rates.

Mortality

The mortality statistics in this report were compiled in accordance with the World Health Organization (WHO) regulations that specify that member nations classify and code causes of death in accordance with the current revision of the *International Statistical Classification of Diseases, Injuries, and Causes of Death*. The current revision in use is the Ninth Revision (ICD-9) (13). Causes of death for data presented in this publication were coded by procedures described in annual issues of the NCHS *Instruction Manual Part 2a* (14). Beginning with data for 1987, NCHS introduced categories

Table I. Total count of records and percent completeness of preliminary files of live births, infant deaths, and deaths 1 year and over: United States, each State, Puerto Rico, Virgin Islands, and Guam, preliminary data for 12 months ending June 1997

[By place of occurrence]

Area	Live births		Infant deaths (under 1 year)			Deaths 1 year and over		
	Count of records	Percent completeness	Count of records	Percent completeness		Count of records	Percent completeness	
				Demographic file	Medical file		Demographic file	Medical file
United States ¹	3,906,662	98.3	27,967	93.8	89.3	2,310,188	95.3	91.4
Alabama	59,937	100.0	578	98.6	98.4	42,017	99.3	98.9
Alaska	9,887	100.0	60	100.0	98.3	2,438	98.8	96.5
Arizona	74,313	100.0	742	74.8	57.5	37,238	100.0	76.9
Arkansas	35,489	100.0	296	100.0	90.2	26,369	100.0	97.1
California	532,873	99.8	2,996	66.0	66.0	217,020	68.7	68.7
Colorado	56,597	100.0	419	100.0	99.8	26,142	98.8	98.8
Connecticut	45,720	95.2	303	97.0	91.4	30,414	97.9	95.9
Delaware	10,754	99.2	76	93.4	93.4	6,517	99.7	99.7
District of Columbia	14,950	100.0	229	95.2	92.1	7,714	97.9	97.5
Florida	192,728	99.9	1,365	100.0	99.9	152,915	99.5	99.5
Georgia	117,655	99.7	981	100.0	83.5	59,842	96.9	85.2
Hawaii	17,833	100.0	99	100.0	72.7	7,998	99.1	75.4
Idaho	18,214	100.0	120	100.0	100.0	8,753	97.9	97.9
Illinois	180,158	99.7	1,459	100.0	95.3	101,954	98.6	96.5
Indiana	80,885	81.7	548	88.9	88.9	53,122	76.6	76.6
Iowa	37,230	100.0	209	100.0	100.0	27,482	100.0	100.0
Kansas	35,829	100.0	257	95.7	95.7	23,449	98.8	98.8
Kentucky	51,642	99.4	389	92.5	86.4	37,595	98.6	95.5
Louisiana	65,741	99.7	594	95.8	95.8	39,407	97.6	97.6
Maine	13,532	100.0	68	100.0	85.3	11,783	100.0	79.4
Maryland	67,260	100.0	498	100.0	100.0	41,578	100.0	100.0
Massachusetts	82,930	98.0	435	89.0	82.5	57,668	91.9	87.8
Michigan	132,055	100.0	1,089	100.0	97.6	82,577	98.3	97.0
Minnesota	64,540	99.2	440	86.6	86.6	37,442	97.0	96.9
Mississippi	40,540	100.0	392	98.0	96.7	25,844	99.7	99.5
Missouri	75,790	100.0	737	96.9	74.8	56,552	97.8	74.2
Montana	10,802	100.0	70	100.0	91.4	7,727	100.0	91.0
Nebraska	23,791	99.2	223	100.0	100.0	15,634	98.3	98.3
Nevada	24,483	91.6	133	94.7	94.7	13,556	85.9	85.8
New Hampshire	13,892	100.0	59	81.4	66.1	9,454	99.4	73.0
New Jersey	113,407	98.0	718	97.1	75.5	71,102	100.0	75.9
New Mexico	26,919	98.8	172	99.4	99.4	12,502	99.1	98.9
New York	266,798	96.4	1,773	99.3	97.7	161,822	98.8	98.3
New York excluding New York City ...	140,645	93.8	853	100.0	99.9	96,562	99.1	99.0
New York City	126,153	99.2	920	98.7	95.7	65,260	98.3	97.2
North Carolina	108,739	97.9	1,020	95.9	93.7	66,270	99.1	98.1
North Dakota	9,700	99.1	58	94.8	93.1	6,540	97.8	96.6
Ohio	153,079	84.0	1,151	100.0	91.6	104,425	96.6	88.8
Oklahoma	45,729	100.0	394	90.6	90.6	32,235	98.7	98.7
Oregon	45,741	99.4	295	93.6	93.6	29,512	98.4	98.4
Pennsylvania	146,071	99.8	1,142	96.5	96.5	132,111	98.6	98.6
Rhode Island	13,398	100.0	85	100.0	100.0	10,011	99.3	99.3
South Carolina	49,576	100.0	413	100.0	100.0	32,549	100.0	100.0
South Dakota	10,796	98.3	58	100.0	100.0	6,941	99.2	99.2
Tennessee	79,264	99.4	744	100.0	85.9	54,601	99.7	90.4
Texas	336,574	100.0	2,082	100.0	100.0	140,121	100.0	100.0
Utah	44,752	96.9	265	93.6	93.6	11,696	97.7	97.7
Vermont	6,399	100.0	43	86.0	86.0	5,045	99.0	98.9
Virginia	90,466	100.0	616	100.0	100.0	53,078	100.0	99.9
Washington	77,111	99.4	437	100.0	100.0	41,785	99.4	99.4
West Virginia	22,266	97.8	163	96.9	73.0	20,622	99.4	80.2
Wisconsin	65,861	99.9	454	97.8	78.4	45,433	98.3	79.5
Wyoming	5,966	98.7	20	100.0	100.0	3,586	99.3	99.3
Puerto Rico	64,541	98.6	687	100.0	88.1	29,738	98.1	87.8
Virgin Islands	2,183	100.0	26	73.1	73.1	585	99.8	99.5
Guam	4,381	99.1	33	90.9	90.9	629	94.6	94.4

¹ Excludes data for Puerto Rico, Virgin Islands, and Guam.

NOTE: Percent completeness = $\frac{\text{Number of records in preliminary file} \times 100}{\text{Count of records}}$

*042–*044 for classifying and coding Human immunodeficiency virus (HIV) infection. The asterisks indicate that these codes are not part of ICD-9.

Cause of death is sometimes not available when preliminary data are sent to NCHS, but is available later when final data are processed. As a result, estimates based on the preliminary mortality file for certain causes may be underestimated. Causes that are reported unknown in the preliminary data are coded to Other unknown and unspecified cause (ICD-9, 799.9), a subcategory of Symptoms, signs, and ill-defined conditions (ICD-9, 780–799). In the final data, some of these are reallocated to specified causes after further information is provided. The preliminary cause-of-death data in this report have not been adjusted to correct for this type of bias, but bias correction factors (BCF) may be used to interpret the impact on Human immunodeficiency virus infection, Diseases of heart, Accidents and adverse effects, Suicide, Homicide and legal intervention, All other external causes, and Sudden infant death syndrome (table II). Because in the preliminary data some deaths for these causes are coded as Symptoms, signs, and ill-defined conditions (ICD-9, 780–799), a BCF for this category is included as well. These BCF's in table II are determined by examining the change in reporting from causes that are assigned to Other unknown and unspecified cause (ICD-9, 799.9) in the provisional data to specified causes in the final data. Comparisons of the 10-percent Current Mortality Sample data to the final data for 1990–96 are used.

Cause-of-death ranking is based on the number of deaths classified according to the List of 72 Selected Causes of Death and the categories for HIV infection and for Alzheimer's disease. HIV infection was added to the list of rankable causes effective with the data year 1987, and Alzheimer's disease was added with final mortality data for 1994. For infant deaths, ranking is based on the List of 61 Selected Causes of Infant Death and HIV infection.

Mortality data on the Hispanic-origin population are based on deaths in all States except Oklahoma, which did not include an item to identify Hispanic or ethnic origin on its death certificates. For the 12 months ending June 1997 and June 1996, death rates for Hispanic origin (table 10) include deaths to persons of Hispanic origin for the 49 States and the

District of Columbia in the numerator and include the Hispanic population for the entire United States in the denominator, because population estimates for Hispanic origin were not available by State. In 1990 the 49 States and the District of Columbia accounted for 99.6 percent of the Hispanic population in the United States (15). As a result, death rates for Hispanic origin for the 12 months ending June 1997 and 1996 may be understated by about 0.4 percent. In addition, results of a recent study comparing population survey and death certificates suggest net underreporting of Hispanic-origin deaths in vital statistics of about 7 percent because of incomplete reporting of Hispanic origin (7). Death rates for American Indian and Asian or Pacific Islander persons should also be interpreted with caution because of inconsistencies in reporting race on the death certificate as compared to race on censuses, surveys, and birth certificates.

Infant mortality rates are the most commonly used index for measuring the risk of dying during the first year of life. The rates for this report are calculated by dividing the number of infant deaths that occurred in a 12-month period by the preliminary number of live births for the same period and are presented as rates per 1,000 or per 100,000 live births. Infant mortality rates for Hispanic origin (tables 14 and 18) exclude Oklahoma in the numerator and denominator. In contrast to infant mortality rates based on live births, infant death rates are based on the estimated population under 1 year of age (table 10). Infant death rates that appear in tabulations of age-specific death rates are calculated by dividing the number of infant deaths in the 12-month period by the estimated population of persons under 1 year of age on January 1, 1997 (the midpoint for this period), and are presented as rates per 100,000 population in this age group. Because of differences in the denominators, infant death rates may differ from infant mortality rates.

Information on deaths attributed to injury at work is derived from a separate item on the death certificate that asks the medical certifier whether the death resulted from an injury sustained at work. The item is on the death certificate of all States.

U.S. abridged life tables are constructed by reference to a standard life table (16). For explanation of the columns of the

Table II. Bias correction factors for selected causes of death: United States, preliminary data for 12 months ending June 1997

Cause	Bias correction factor	Preliminary Age-adjusted rate	Preliminary Infant mortality rate	Corrected preliminary date			
				Number	Death rate	Age-adjusted rate	Infant mortality rate
Human immunodeficiency virus infection	1.0101	8.0	...	22,796	8.6	8.1	...
Diseases of heart	1.0022	132.9	...	736,978	276.7	133.2	...
Symptoms, signs, and ill-defined causes	0.8780	8.2	...	27,178	10.2	7.2	...
Accidents and adverse effects	1.0137	29.6	...	94,875	35.6	30.0	...
Motor vehicle accidents	1.0009	16.0	...	43,453	16.3	16.0	...
All other accidents and adverse effects	1.0249	13.6	...	51,431	19.3	13.9	...
Suicide	1.0059	10.5	...	30,426	11.4	10.6	...
Homicide and legal intervention	1.0081	8.1	...	20,163	7.6	8.2	...
All other external causes	1.1001	1.1	...	3,483	1.3	1.2	...
Sudden infant death syndrome	1.0063	...	71.4	2,812	...	...	71.8

... Category not applicable.

life table and for references to life table construction, see the annual report, *Vital Statistics of the United States*, Volume II, Mortality Part A (9).

Computing rates and percents

Rates are on an annual basis and, except for infant mortality rates, are per 1,000 or per 100,000 estimated population residing in the specified area as of January 1, 1997, and January 1, 1996, which were furnished by the U.S. Bureau of the Census (10,11). Infant mortality rates are per 1,000 or per 100,000 live births. Rates by State are computed on the basis of populations as of July 1, 1996, and July 1, 1995 (17,18).

Age-adjusted rates are used to compare relative mortality risks among groups and over time. However, they should be viewed as relative indexes rather than as actual measures of mortality risk. They were computed by the direct method, that is, by applying age-specific death rates to the U.S. standard population (relative age distribution of 1940 enumerated population of the United States) using the following age groups:

Age	Number	Weights (w_i)
All ages	1,000,000	1.000000
Under 1 year	15,343	0.015343
1-4 years	64,718	0.064718
5-14 years	170,355	0.170355
15-24 years	181,677	0.181677
25-34 years	162,066	0.162066
35-44 years	139,237	0.139237
45-54 years	117,811	0.117811
55-64 years	80,294	0.080294
65-74 years	48,426	0.048426
75-84 years	17,303	0.017303
85 years and over	2,770	0.002770

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

Age	Number	Weights (w_i)
All ages	1,000,000	1.000000
Under 1 year	15,343	0.015343
1-4 years	64,718	0.064718
5-14 years	170,355	0.170355
15-24 years	181,677	0.181677
25-34 years	162,066	0.162066
35-44 years	139,237	0.139237
45-54 years	117,811	0.117811
55-64 years	80,294	0.080294
65-74 years	48,426	0.048426
75 years and over	20,073	0.020073

For calculating birth rates, age and race of mother are imputed if they are not stated (0.03 percent and 0.76 percent). In computing birth rates by live-birth order, births with live-birth order not stated are distributed in proportion to stated data. Births with marital status not reported (0.04 percent) are included with births to married mothers. Percents were computed using only events for which the characteristic is reported. The "Not stated" category is subtracted from the total before the percent is computed for birthweight, prenatal care, and method of delivery. Birth and death rates for the Hispanic population are based only on events to persons reported as

Hispanic. Hispanic origin is not imputed if it is not reported. For calculating death rates, deaths with age not stated are not distributed.

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

- The State-specific sample is complete enough to provide reliable estimates. For example, a criterion of at least 75 percent of a State's records for the 12-month period is used as a basis for providing State-specific estimates. Due to processing problems, the California mortality file contained only 68.7 percent of all records (see [table I](#)) for the period ending June 1997. Data for California are included in U.S. totals, but are not shown separately (see [table 13](#)).
- Reporting for any particular variable is at least 80 percent complete. In this report no data were suppressed based on this criterion.
- A rate or percent is based on at least 20 births or deaths in the numerator or denominator.

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

Reliability of estimates

Because the preliminary estimates of births and deaths in this report are based on files that may not be complete, they are subject to sampling variability. The notion of the sample is reflected in the record weights that are used to adjust record counts to independent control totals. The lack of completeness of the vital statistics files is due to delays in receiving and processing the live birth and death records.

In addition, the natality and mortality files are subject to nonsampling errors or biases. Records that were delayed and were not included in this report are assumed to have the same characteristics as the records that were included in this report. However, this assumption may be violated in the relatively small number of records where cause of death is pending investigation (for example, homicides, suicides, accidents, HIV, and SIDS; see discussion of the bias in "Mortality") or in the causes of death that were rejected by the automated mortality coding systems for manual processing. Seasonal bias may occur because file completeness is greater during the early part than during the later part of the 12-month period for which the data are processed and tabulated.

Even if the number of vital events in this report were 100 percent complete and not subject to sampling variability, it may be affected by random variation. Thus, when the number of events is small and the probability of such an event is small, considerable caution must be observed in interpreting the data. Such infrequent events may be assumed to follow a Poisson probability distribution. The first column of [table II](#) shows the estimated RSE's of a file which is nearly 100 percent complete. The estimated RSE's of the July 1995–June 1996 data, the preliminary July 1996–June 1997 counts, and the preliminary July 1996–June 1997 data (based on nearly 100 percent of a file) are shown in the first column of [table III](#).

Data based on a sample, that is, where the file is less than 100 percent complete, are affected by sampling variation as well as by random variation. The estimated RSE's in columns 2–6 of [table III](#) for various levels of file completeness are measures of the sampling errors and the random errors of the estimates.

The estimated RSE's in [table III](#) were computed using this formula:

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

where

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

X = the estimated number of live births, infant deaths, or deaths.

N = the total count of live births, infant deaths, or deaths for the United States, or any State. (NOTE: The RSE's in [table III](#) are based on $N = 4,000,000$. If N is smaller, the RSE's may be slightly smaller than those shown.)

RSE's may be used to compute 95-percent confidence intervals for the number of events (X), for a rate (R), or for a percent (P) and to compute statistical tests concerning the equality of two rates (R_1 and R_2) or two percents (P_1 and P_2).

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

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

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

As a hypothetical example, assume the number of deaths, X_1 , is 70 from a file with 80 percent completeness. Then

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

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

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

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

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

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

As a hypothetical example, assume the death rate, R_1 , is 20.0, which is based on 70 deaths from a file with 80 percent completeness. Then

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

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

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

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

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

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

where

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

where

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

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

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

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

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

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

Table III. Relative standard errors for preliminary number of live births or deaths by percent of file completeness

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

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

years and over, use the percent completeness for the demographic or medical file as appropriate for deaths at ages 1 year and over).

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

$$z = \frac{R_1 - R_2}{\sqrt{R_1^2 (RSE(R_1)/100)^2 + R_2^2 (RSE(R_2)/100)^2}}$$

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

As a hypothetical example, assume R_1 is the same as the above example for the current 12-month period and that R_2 , 15.0, is based on 50 deaths occurring in the prior 12-month period (which implies that the file is approximately 100 percent complete for R_2). The z-test may be determined as follows:

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

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

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

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

where

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

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

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

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

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

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

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

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

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

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

Contents

Abstract 1
 Introduction 1
 Sources and methods 1
 Results 2
 Natality patterns 2
 Mortality patterns 4
 References 6
 List of detailed tables 7
 Technical notes 35

Suggested citation

Anderson RN, Ventura SJ, Peters KD, Mathews TJ. Births and deaths: United States, July 1996–June 1997. Monthly vital statistics report; vol 46 no 12, supp. Hyattsville, Maryland: National Center for Health Statistics. 1998.

Copyright information

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

National Center for Health Statistics

Director
Edward J. Sondik, Ph.D.

Deputy Director
Jack R. Anderson

Division of Vital Statistics

Director
Mary Anne Freedman

U.S. DEPARTMENT OF
HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782-2003

FIRST CLASS MAIL
POSTAGE & FEES PAID
PHS/NCHS
PERMIT NO. G-281

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

To receive this publication regularly, contact the National Center for Health Statistics by calling 301-436-8500
E-mail: nchsquery@cdc.gov
Internet: www.cdc.gov/nchswww/

DHHS Publication No. (PHS) 98–1120
8-0679 (9/98)