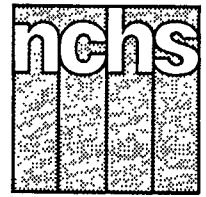


*Rec'd 7/7/93*

# Monthly Vital Statistics Report



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

## Births, Marriages, Divorces, and Deaths for January 1993

### Mortality Surveillance System

pages 4-7

### Human immunodeficiency virus infection:

25-44 years of age by sex  
Males 25-44 years of age by race

### State Maps

pages 8-9

### Human immunodeficiency virus infection by sex

Due to the availability of population estimates that are based on the results of the 1990 census enumeration, provisional rates for 1992 have been recomputed to permit a valid comparison with the 1993 provisional rates. Provisional birth, death, marriage, and divorce rates for each month of 1992 and the 12 months ending with January 1992 have been recomputed, using revised population estimates based on the 1990 enumerated population and therefore, are comparable with the rates shown for 1993. Rates for charts showing data for each month and for successive 12-month periods of 1992 have been recomputed also. Estimated death

rates by age, sex, race, and cause, based on a 10-percent sample of death certificates for December 1992 and January-December 1992 shown in tables 5-7, have not been recomputed; they are based on the same population series as the rates shown for 1991. Beginning with the February issue of this report, tables 5-7 will include recomputed rates for 1992 that will be comparable with the rates for 1993.

### Births

According to provisional reports, an estimated 327,000 births occurred in the United States during January 1993. This was a decrease of 2 percent

### Provisional Vital Statistics for the United States

[Rates for infant deaths are deaths under 1 year per 1,000 live births; fertility rates are live births per 1,000 women aged 15-44 years; all other rates per 1,000 total population. Data are subject to monthly reporting variation; see Technical notes]

| Item                                       | January |         |       |       | 12 months ending with January |           |       |       |
|--|---------|---------|-------|-------|-------------------------------|-----------|-------|-------|
|  | Number  |         | Rate  |       | Number                        |           | Rate  |       |
|  | 1993    | 1992    | 1993  | 1992  | 1993                          | 1992      | 1993  | 1992  |
| Live births . . . . .                      | 327,000 | 334,000 | 15.0  | 15.6  | 4,077,000                     | 4,120,000 | 16.0  | 16.3  |
| Fertility rate . . . . .                   | ...     | ...     | 65.1  | 66.9  | ...                           | ...       | 69.1  | 69.7  |
| Deaths . . . . .                           | 199,000 | 207,000 | 9.1   | 9.6   | 2,168,000                     | 2,177,000 | 8.5   | 8.6   |
| Infant deaths . . . . .                    | 2,900   | 3,200   | 8.5   | 9.4   | 34,100                        | 36,400    | 8.4   | 8.9   |
| Natural increase . . . . .                 | 128,000 | 127,000 | 5.9   | 6.0   | 1,909,000                     | 1,943,000 | 7.5   | 7.7   |
| Marriages . . . . .                        | 104,000 | 112,000 | 4.8   | 5.2   | 2,353,000                     | 2,363,000 | 9.2   | 9.4   |
| Divorces . . . . .                         | 92,000  | 103,000 | 4.2   | 4.8   | 1,204,000                     | 1,195,000 | 4.7   | 4.7   |
| Population base<br>(in millions) . . . . . | ...     | ...     | 256.6 | 253.7 | ...                           | ...       | 255.3 | 252.4 |

NOTE: Figures include all revisions received from the States. Twelve-month figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published. Rates for 1992 (except infant mortality) have been recomputed based on revised population estimates; see Technical notes.



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



from the provisional number of births reported for January 1992 (334,000). The birth rate, 15.0 live births per 1,000 population, was 4 percent lower than the rate of 15.6 for January 1992. The fertility rate, 65.1 live births per 1,000 women aged 15–44 years, was 3 percent lower than the comparable rate for January 1992 (66.9). The seasonally adjusted fertility rate (68.6) also was 3 percent lower than the comparable rate for January 1992 (70.4).

An estimated 4,077,000 live births occurred in the 12-month period ending with January 1993, a decline of 1 percent from the 4,120,000 births reported for the same period a year earlier. The birth rate of 16.0 was 2 percent lower than the rate of 16.3 for the preceding 12 months. The fertility rate for the most recent 12-month period was 69.1, 1 percent lower than the rate for the 12 months ending with January 1992 (69.7). These lower rates continue the generally downward trend observed since early 1991.

**Natural increase**

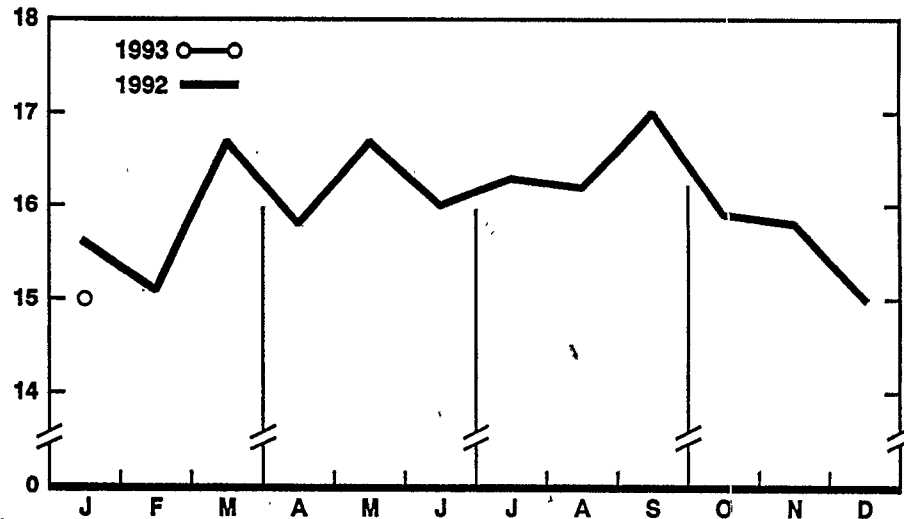
As a result of natural increase, the excess of births over deaths, an estimated 128,000 people, or 5.9 persons per 1,000 population, were added to the population during January 1993.

For the 12-month period ending with January 1993, 1,909,000 persons were added to the population. This represents a rate of natural increase of 7.5, 3 percent lower than the rate of 7.7 for the preceding 12-month period. The decline in the rate of natural increase is due to a larger decrease in the birth rate than in the death rate.

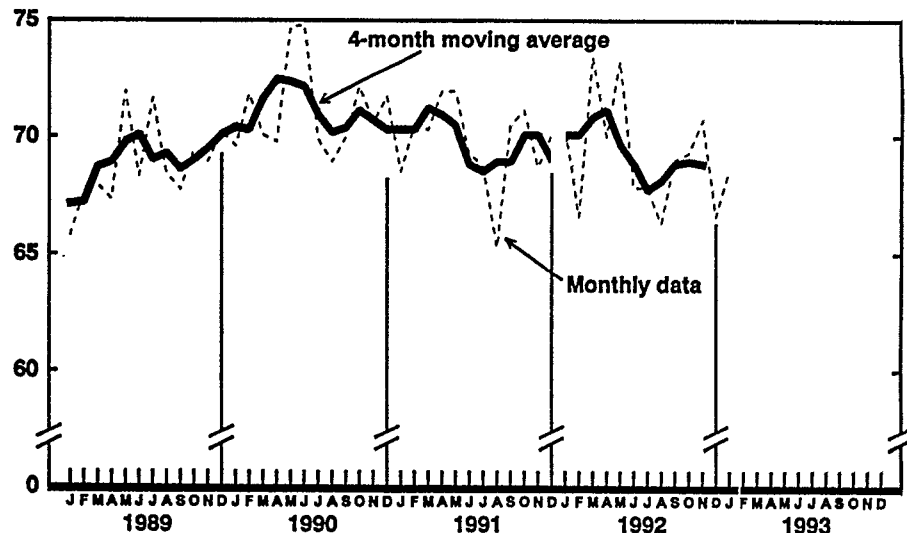
**Marriages**

The provisional number of marriages for January 1993 (104,000) was 8,000 fewer than for January 1992 (112,000). The marriage rate per 1,000 population for January also was lower in 1993 (4.8) than in 1992 (5.2). Typically, January has the smallest number of marriages and the lowest rate of any month of the year.

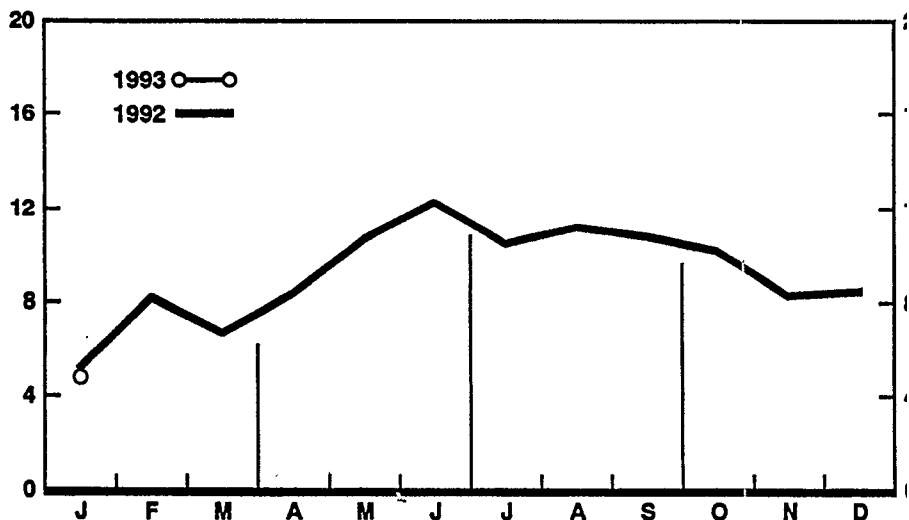
For the 12-month period ending with January 1993, the number of marriages totaled 2,353,000, a drop of less



Provisional birth rates per 1,000 population by month: United States, 1992-93



Provisional seasonally adjusted fertility rates per 1,000 women aged 15-44 years: United States, 1989-93



Provisional marriage rates per 1,000 population by month: United States, 1992-93

than 1 percent from the number for the same period a year earlier (2,363,000). The marriage rate was 2 percent lower for the current period (9.2) than for the period a year earlier (9.4).

**Divorces**

Divorces granted in January 1993 numbered 92,000 compared with 103,000 in January 1992. The divorce rate per 1,000 population for January dropped from 4.8 in 1992 to 4.2 in 1993.

The number of divorces granted during the 12-month period ending with January 1993 (1,204,000) was 1 percent higher than for the same period a year earlier (1,195,000), while the divorce rate was constant at 4.7.

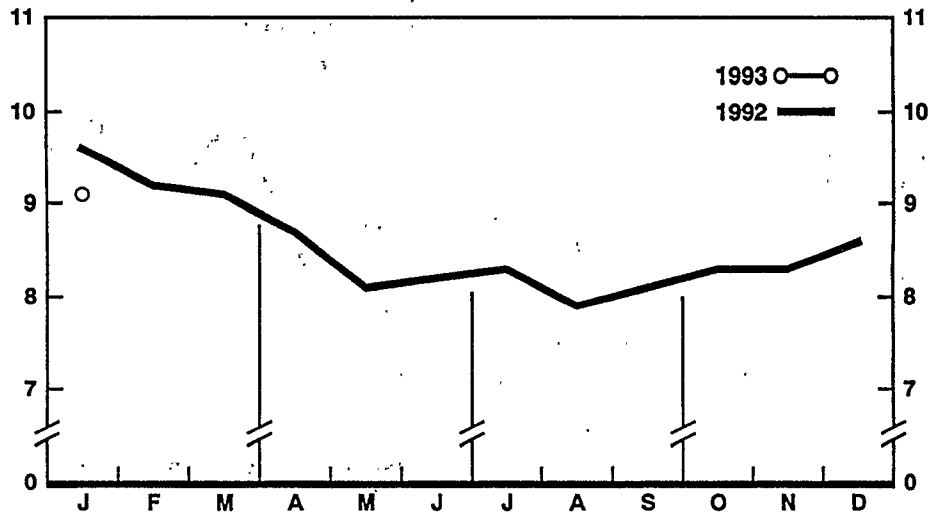
**Deaths**

For January 1993 there were an estimated 199,000 deaths in the United States. The death rate was 9.1 deaths per 1,000 population, 5 percent lower than the rate of 9.6 for January a year earlier. Among the 199,000 deaths for January 1993 were 2,900 deaths at ages under 1 year.

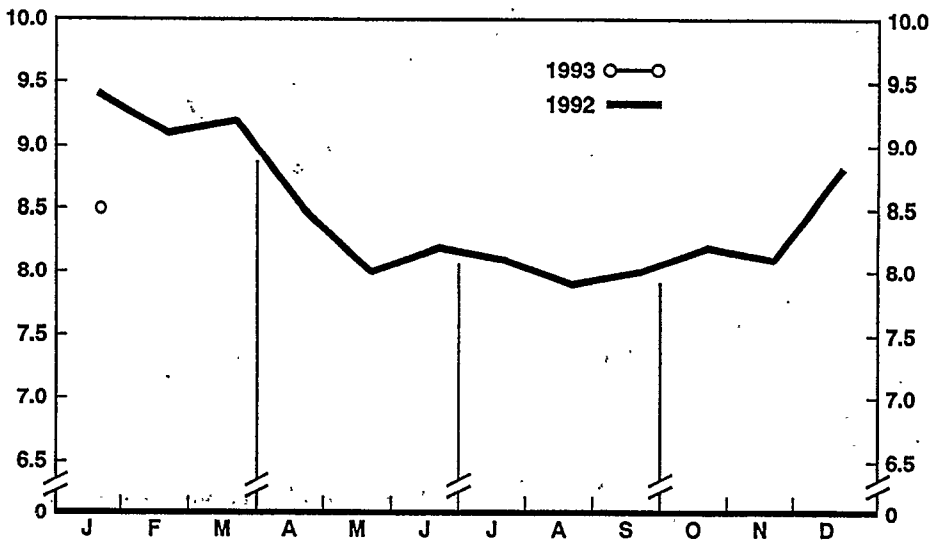
According to provisional statistics, the death rate for the 12 months ending with January 1993 was 8.5 deaths per 1,000 population, 1 percent lower than the rate of 8.6 for the comparable 12-month period a year earlier. The infant mortality rate for this 12-month period was 8.4 per 1,000 live births, 6 percent lower than the rate of 8.9 for the 12 months ending with January 1992.

**Mortality for 1992**

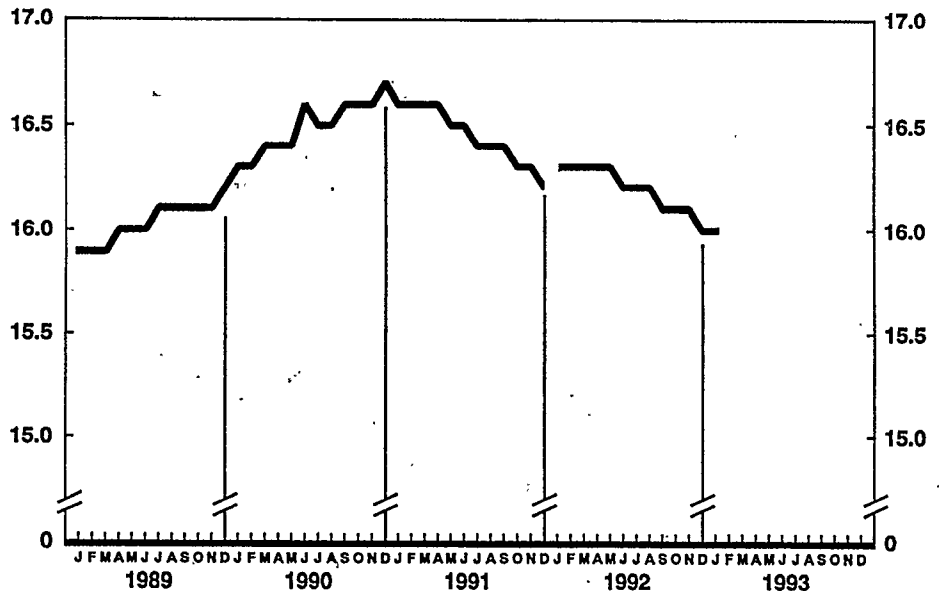
Provisional mortality data based on the Current Mortality Sample (a 10-percent sample of the death certificates) are available for the entire year. The provisional death rate per 100,000 population for 1992 was 853.3 compared with a rate of 853.9 for 1991. The change in the death rate was not statistically significant. The provisional age-adjusted death rate for 1992 was 499.4 per 100,000 population, 2 percent lower than the rate of 507.8 for



Provisional death rates per 1,000 population by month: United States, 1992-93



Provisional Infant mortality rates per 1,000 live births by month: United States, 1992-93



Provisional birth rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1989-93

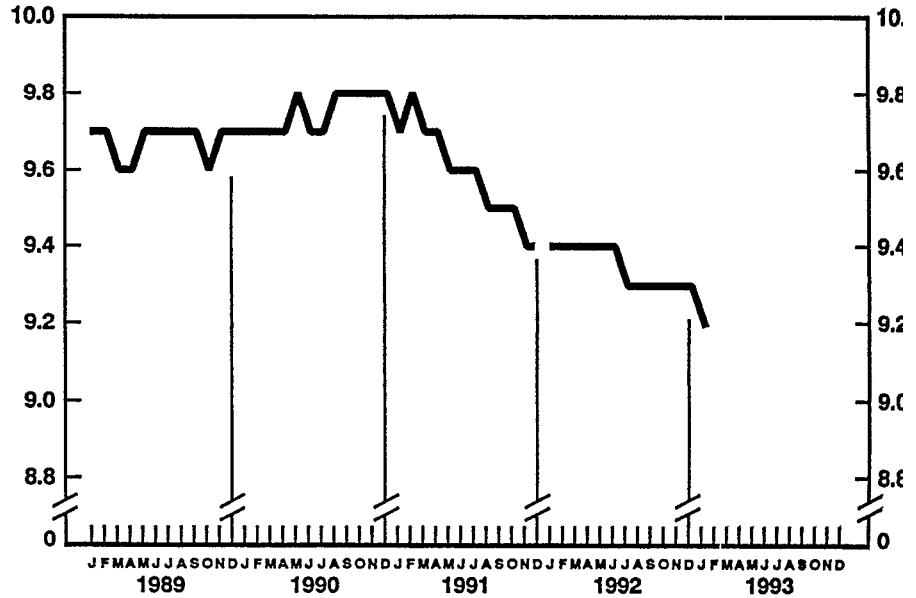
1991. Age-adjusted death rates control for changes and variations in the age composition of the population; therefore, they are better indicators than crude rates for showing changes in mortality risk over time and for showing differences between race-sex groups within the population. Among the race-sex groups, the estimated age-adjusted death rates decreased for white males and white females. By age, the death rate for the total population decreased for the following age groups: under 1 year, 15-24 years, 55-64 years, 65-74 years, 75-84 years, and 85 years and over. The death rate increased for the age group 35-44 years.

Among the major causes of death, the estimated death rate was higher in 1992 than in 1991 for Human immunodeficiency virus infection. The death rate was lower in 1992 than in 1991 for Accidents and adverse effects.

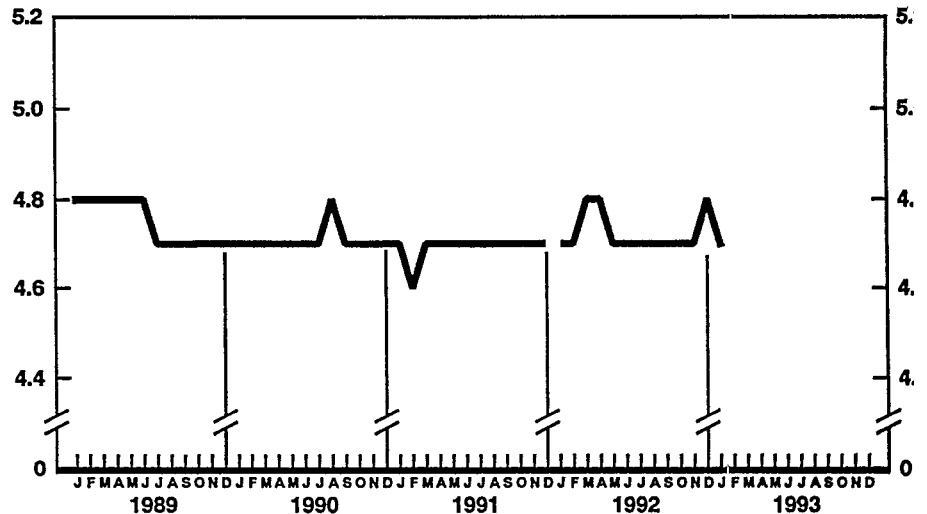
The infant mortality rate for 1992 was 848.7 per 100,000 live births, 5 percent lower than the rate of 892.8 for 1991. For 1992 the estimated infant mortality rate for infants under 28 days was 537.2 compared with a rate of 555.0 for 1991. Between 1991 and 1992, the change in the mortality rate for infants under 28 days was not statistically significant. The infant mortality rate for infants 28 days to 11 months was 311.7, 8 percent lower than the rate of 337.8 for 1991. Among causes of infant death, the infant mortality rate decreased between 1991 and 1992 for Disorders relating to short gestation and unspecified low birthweight.

**Mortality Surveillance System**

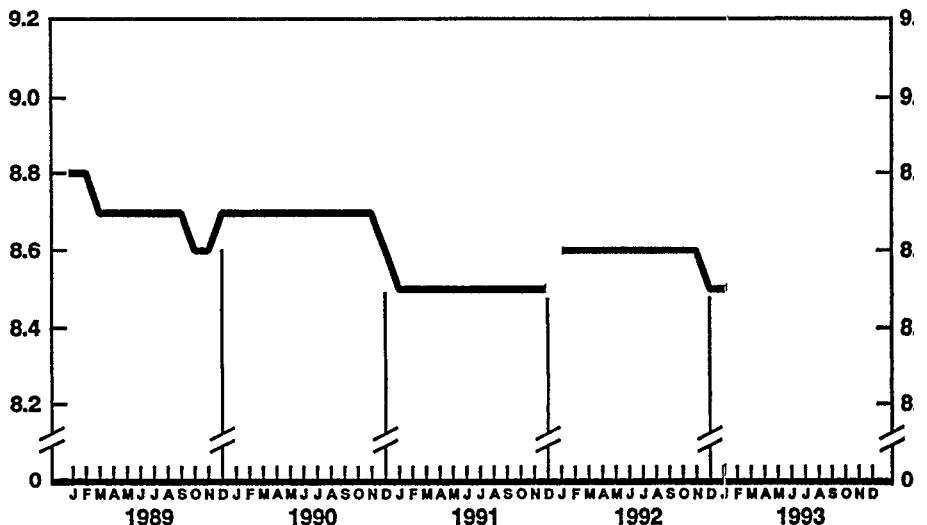
Discussed this month are recent trends in death rates for Human immunodeficiency virus infection (HIV infection) for men and women aged 25-44 years and for black and white men aged 25-44 years. In this issue, final mortality data are analyzed for data year 1990 and provisional data from January 1987-June 1992. A new classification for HIV infection was introduced in the United States beginning with mortality data for 1987 (see Technical notes).



Provisional marriage rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1989-93



Provisional divorce rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1989-93



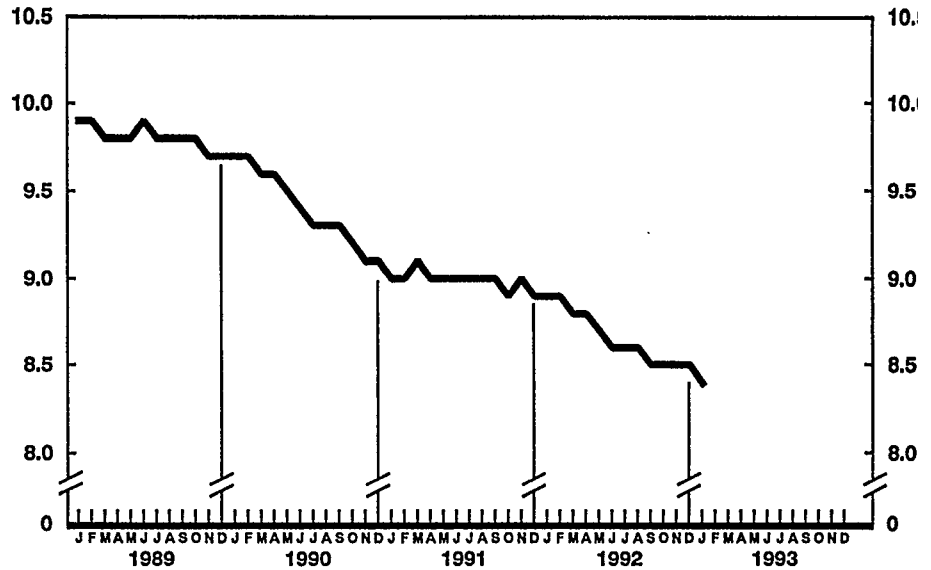
Provisional death rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1989-93

In 1990, the latest year for which final mortality data are available, HIV infection was the third leading cause of death for persons aged 25–44 years and accounted for 18,748 deaths, or 13 percent of all deaths for persons in this age group. For women aged 25–44 years, HIV infection was the sixth leading cause of death and accounted for 2,031 deaths, or 5 percent of all deaths. For men aged 25–44 years, HIV infection was the second leading cause of death (after Accidents and adverse effects) and accounted for 16,717 deaths, or 16 percent of all deaths in this age group.

HIV infection was the third leading cause of death for the white population aged 25–44 years and the second leading cause of death for the black population in this age group. For black men in this age group, HIV infection was the second leading cause of death (after Homicide and legal intervention) and accounted for 4,673 deaths, or 19 percent of all deaths. For white males aged 25–44 years, HIV infection was the second leading cause of death (after Accidents and adverse effects) and accounted for 11,912 deaths, or 16 percent of all deaths in this age group.

Based on 1990 final data, the death rate for HIV infection for men aged 25–44 years was 8.3 times the rate for women in this age group, while the rate for black men aged 25–44 years was 2.9 times the rate for white men in this age group.

Trends based on provisional data for this cause and these demographic groups are presented in the Mortality surveillance system charts and accompanying text that follow. Further analysis of deaths due to HIV infection can be found in another publication (1).

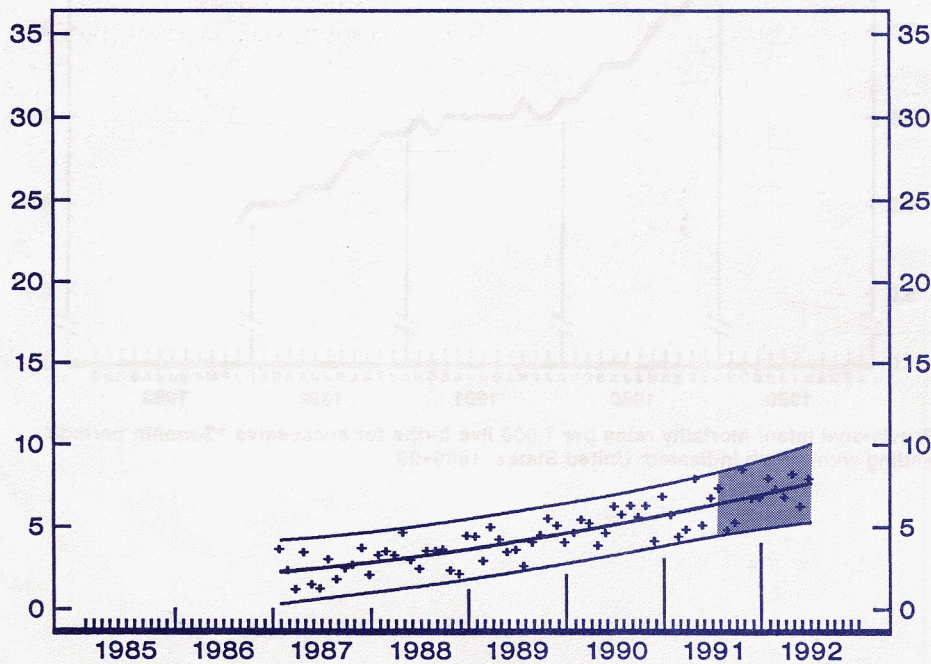


Provisional infant mortality rates per 1,000 live births for successive 12-month periods ending with month indicated: United States, 1989–93



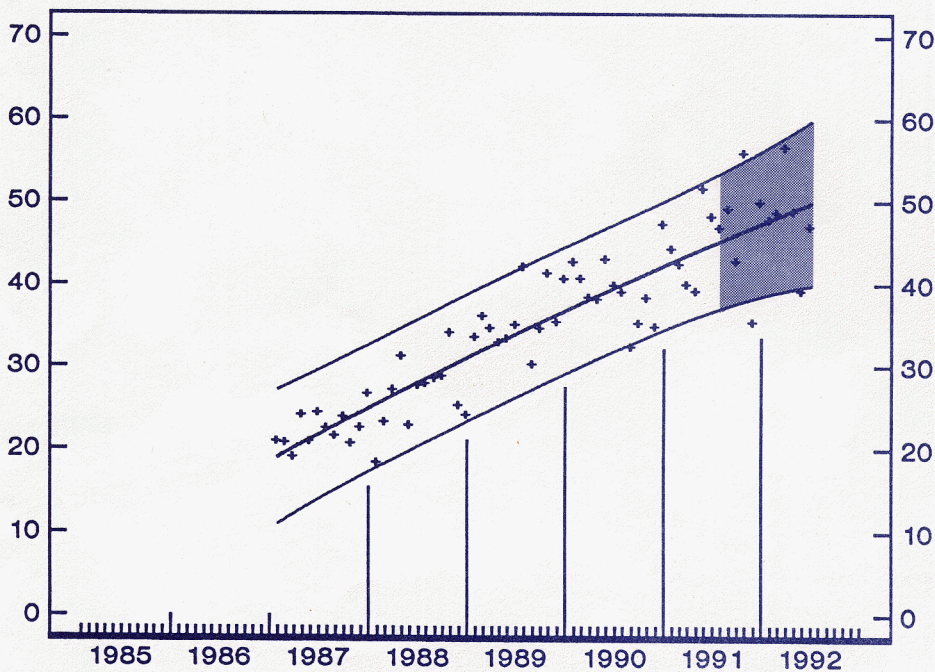
## Mortality Surveillance System charts

[Observed and fitted provisional monthly death rates and 95-percent prediction intervals. Model fitted using death rates for January 1987–June 1991; projected for July 1991–June 1992. See Technical notes]



Provisional death rates per 100,000 females 25–44 years of age for HIV infection, by month: United States, 1987–92

- For the modeled period, provisional death rates increased.
- For the projection period, observed provisional monthly death rates fell within 95-percent prediction intervals.



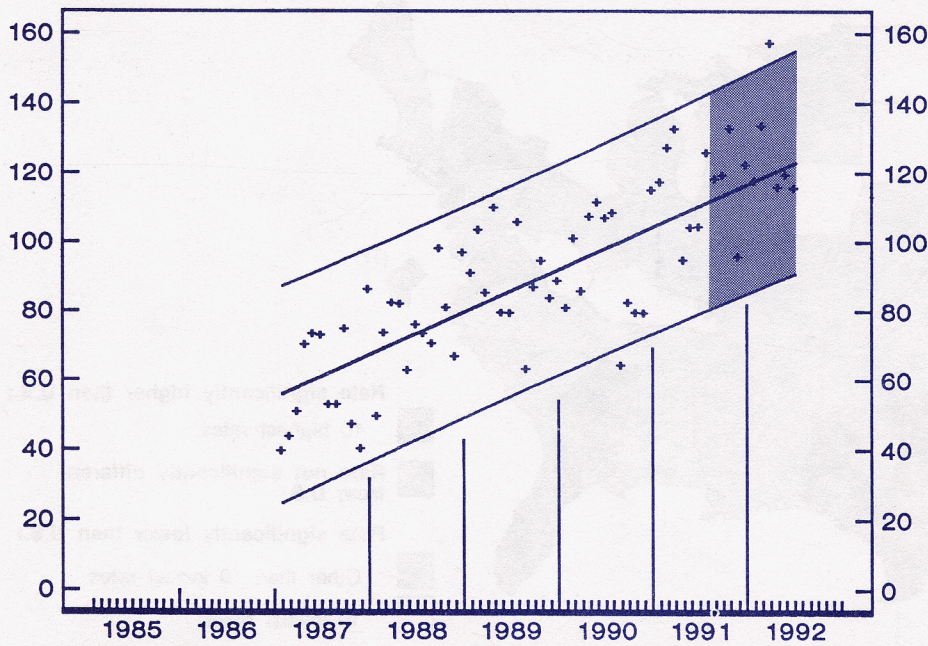
Provisional death rates per 100,000 males 25–44 years of age for HIV infection, by month: United States, 1987–92

- For the modeled period, provisional death rates increased.
- For the projection period, observed provisional monthly death rates, except for three, fell within 95-percent prediction intervals.



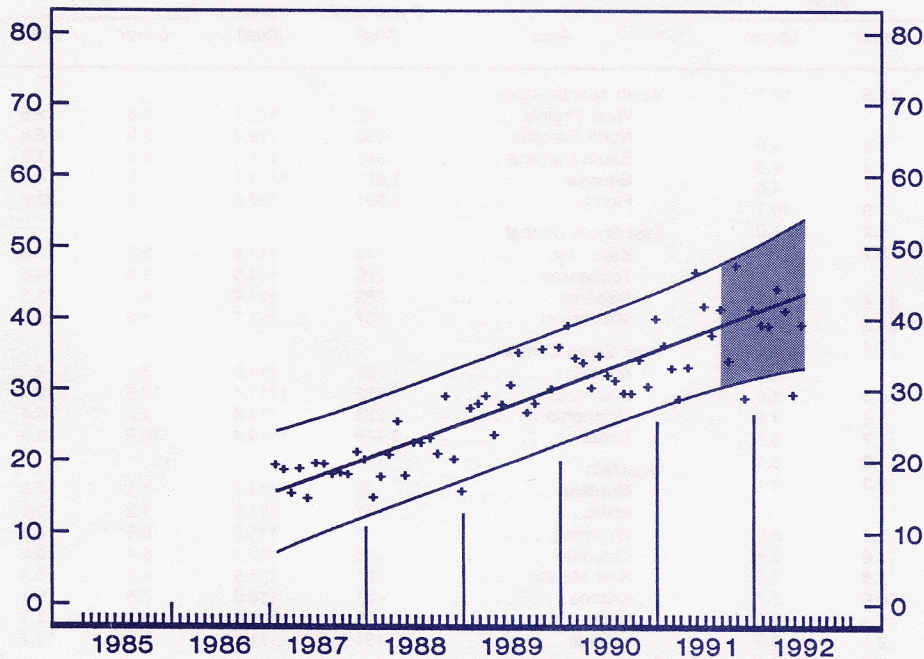
**Mortality Surveillance System charts – Con.**

[Observed and fitted provisional monthly death rates and 95-percent prediction intervals. Model fitted using death rates for January 1987–June 1991; projected for July 1991–June 1992. See Technical notes]



- For the modeled period, provisional death rates increased.
- For the projection period, observed provisional monthly death rates, except for one, fell within 95-percent prediction intervals.

Provisional death rates per 100,000 black males 25–44 years of age for HIV infection, by month: United States, 1987–92



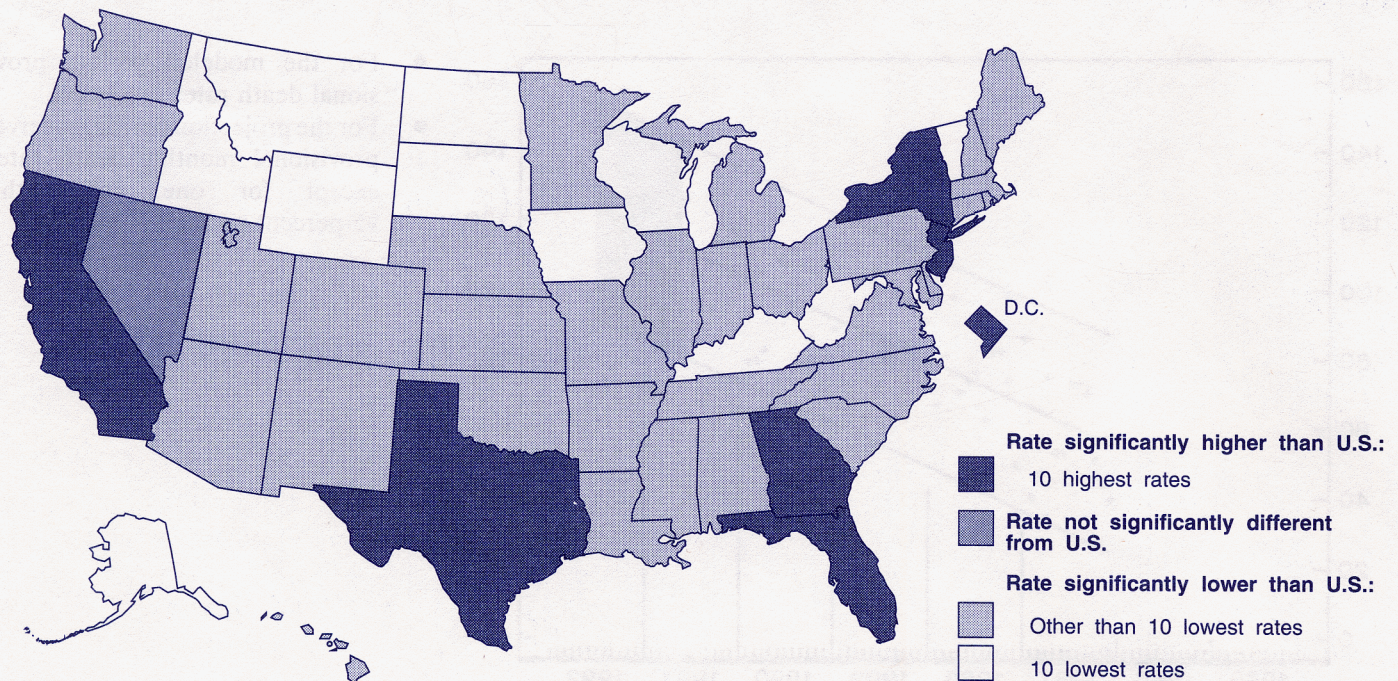
- For the modeled period, provisional death rates increased.
- For the projection period, observed provisional monthly death rates, except for two, fell within 95-percent prediction intervals.

Provisional death rates per 100,000 white males 25–44 years of age for HIV infection, by month: United States, 1987–92



**Final 3-year total number of deaths and average annual age-adjusted death rates and 95-percent confidence limits for Human immunodeficiency virus infection for males: United States and each state, 1987-89**

[Data are final by State of residence]



NOTE: "Significantly" refers to statistical significance at the 0.05 level.

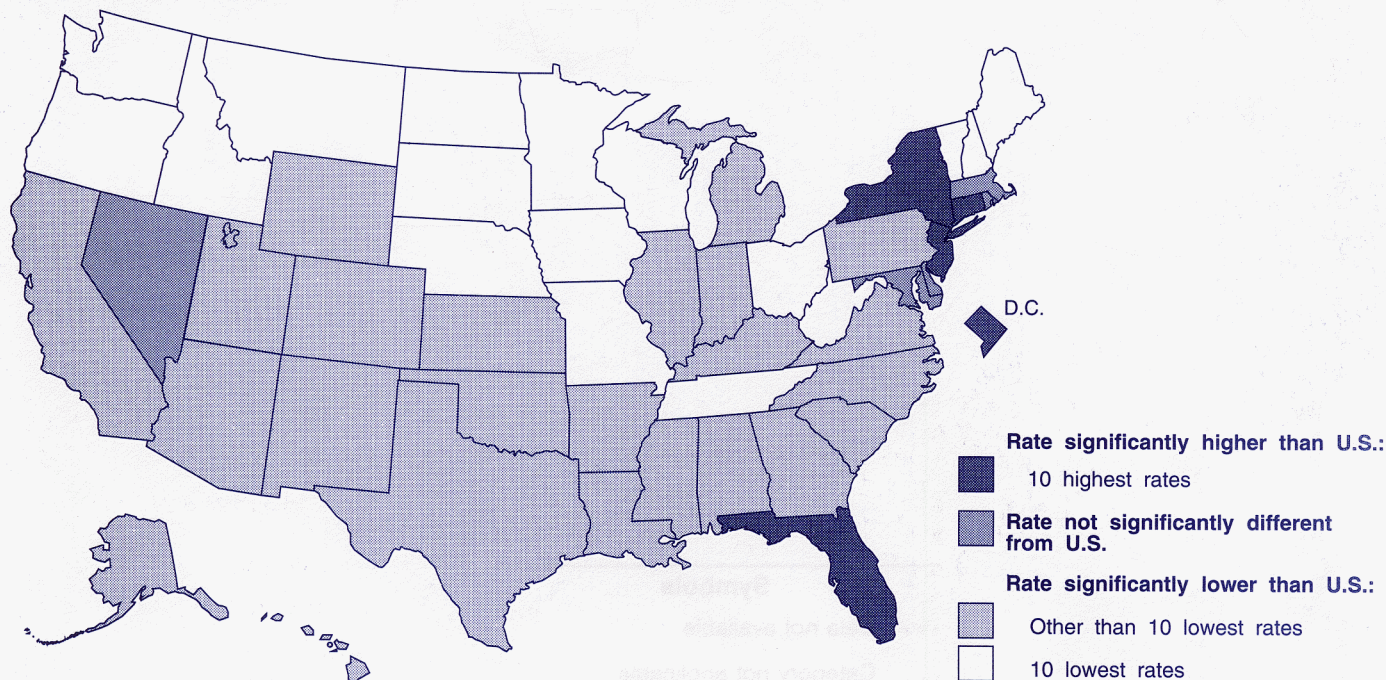
| Area                           | Deaths,<br>3-year total<br>(final) | Age-adjusted<br>rate<br>(final) | 95-percent confidence<br>limits |       | Area                     | Deaths,<br>3-year total<br>(final) | Age-adjusted<br>rate<br>(final) | 95-percent confidence<br>limits |       |
|--------------------------------|------------------------------------|---------------------------------|---------------------------------|-------|--------------------------|------------------------------------|---------------------------------|---------------------------------|-------|
|                                |                                    |                                 | Lower                           | Upper |                          |                                    |                                 | Lower                           | Upper |
| United States . . . . .        | 46,657                             | 12.6                            | 12.5                            | 12.7  | South Atlantic—Con.      |                                    |                                 |                                 |       |
| New England                    |                                    |                                 |                                 |       | West Virginia . . . . .  | 62                                 | ††2.2                           | 1.6                             | 2.8   |
| Maine . . . . .                | 59                                 | ††3.2                           | 2.4                             | 4.0   | North Carolina . . . . . | 630                                | ††6.4                           | 5.9                             | 6.9   |
| New Hampshire . . . . .        | 54                                 | ††3.2                           | 2.4                             | 4.0   | South Carolina . . . . . | 342                                | ††6.5                           | 5.8                             | 7.2   |
| Vermont . . . . .              | 24                                 | ††2.7                           | 1.7                             | 4.0   | Georgia . . . . .        | 1,351                              | ††14.1                          | 13.3                            | 14.9  |
| Massachusetts . . . . .        | 856                                | ††9.5                           | 8.9                             | 10.1  | Florida . . . . .        | 3,891                              | ††22.5                          | 21.8                            | 23.2  |
| Rhode Island . . . . .         | 111                                | ††7.6                           | 6.2                             | 9.0   | East South Central       |                                    |                                 |                                 |       |
| Connecticut . . . . .          | 472                                | ††9.6                           | 8.7                             | 10.5  | Kentucky . . . . .       | 149                                | ††2.6                           | 2.2                             | 3.0   |
| Middle Atlantic                |                                    |                                 |                                 |       | Tennessee . . . . .      | 296                                | ††4.0                           | 3.5                             | 4.5   |
| New York . . . . .             | 10,048                             | ††38.2                          | 37.5                            | 38.9  | Alabama . . . . .        | 283                                | ††4.7                           | 4.1                             | 5.3   |
| New Jersey . . . . .           | 2,928                              | ††25.2                          | 24.3                            | 26.1  | Mississippi . . . . .    | 207                                | ††5.7                           | 4.9                             | 6.5   |
| Pennsylvania . . . . .         | 1,370                              | ††7.8                           | 7.4                             | 8.2   | West South Central       |                                    |                                 |                                 |       |
| East North Central             |                                    |                                 |                                 |       | Arkansas . . . . .       | 135                                | ††4.0                           | 3.3                             | 4.7   |
| Ohio . . . . .                 | 759                                | ††4.7                           | 4.4                             | 5.0   | Louisiana . . . . .      | 732                                | ††11.4                          | 10.6                            | 12.2  |
| Indiana . . . . .              | 316                                | ††3.8                           | 3.4                             | 4.2   | Oklahoma . . . . .       | 233                                | ††4.8                           | 4.2                             | 5.4   |
| Illinois . . . . .             | 1,413                              | ††8.1                           | 7.7                             | 8.5   | Texas . . . . .          | 3,449                              | ††13.4                          | 12.9                            | 13.9  |
| Michigan . . . . .             | 648                                | ††4.7                           | 4.3                             | 5.1   | Mountain                 |                                    |                                 |                                 |       |
| Wisconsin . . . . .            | 198                                | ††2.7                           | 2.3                             | 3.1   | Montana . . . . .        | 22                                 | ††1.7                           | 1.1                             | 2.6   |
| West North Central             |                                    |                                 |                                 |       | Idaho . . . . .          | 27                                 | ††1.8                           | 1.2                             | 2.6   |
| Minnesota . . . . .            | 236                                | ††3.5                           | 3.0                             | 4.0   | Wyoming . . . . .        | 9                                  | ††1.3                           | 0.6                             | 2.5   |
| Iowa . . . . .                 | 83                                 | ††2.0                           | 1.6                             | 2.4   | Colorado . . . . .       | 505                                | ††9.2                           | 8.4                             | 10.0  |
| Missouri . . . . .             | 546                                | ††7.2                           | 6.6                             | 7.8   | New Mexico . . . . .     | 121                                | ††5.5                           | 4.5                             | 6.5   |
| North Dakota . . . . .         | 11                                 | ††1.2                           | 0.6                             | 2.1   | Arizona . . . . .        | 431                                | ††8.3                           | 7.5                             | 9.1   |
| South Dakota . . . . .         | 8                                  | ††0.8                           | 0.3                             | 1.6   | Utah . . . . .           | 99                                 | ††4.2                           | 3.3                             | 5.1   |
| Nebraska . . . . .             | 67                                 | ††2.8                           | 2.1                             | 3.5   | Nevada . . . . .         | 194                                | 11.1                            | 9.5                             | 12.7  |
| Kansas . . . . .               | 168                                | ††4.4                           | 3.7                             | 5.1   | Pacific                  |                                    |                                 |                                 |       |
| South Atlantic                 |                                    |                                 |                                 |       | Washington . . . . .     | 613                                | ††8.0                           | 7.4                             | 8.6   |
| Delaware . . . . .             | 79                                 | ††7.9                           | 6.1                             | 9.7   | Oregon . . . . .         | 278                                | ††6.4                           | 5.6                             | 7.2   |
| Maryland . . . . .             | 747                                | ††10.2                          | 9.5                             | 10.9  | California . . . . .     | 9,819                              | ††22.1                          | 21.7                            | 22.5  |
| District of Columbia . . . . . | 713                                | ††74.3                          | 68.8                            | 79.8  | Alaska . . . . .         | 19                                 | ††2.3                           | 1.4                             | 3.6   |
| Virginia . . . . .             | 683                                | ††7.1                           | 6.6                             | 7.6   | Hawaii . . . . .         | 163                                | ††9.7                           | 8.2                             | 11.2  |

NOTE: Data are final. Rates per 100,000 U.S. Standard Million Population; see Technical notes. The symbols † and †† denote statistical significance of the difference between the U.S. and State rates at the 0.05 and 0.01 levels, respectively. For method of computation of rates, confidence limits, and tests of statistical significance, see Technical notes.



**Final 3-year total number of deaths and average annual age-adjusted death rates and 95-percent confidence limits for Human Immunodeficiency virus infection for females: United States and each state, 1987-89**

[Data are final by State of residence]



NOTE: "Significantly" refers to statistical significance at the 0.05 level.

| Area                           | Deaths,<br>3-year total<br>(final) | Age-adjusted<br>rate<br>(final) | 95-percent confidence<br>limits |       | Area                      | Deaths,<br>3-year total<br>(final) | Age-adjusted<br>rate<br>(final) | 95-percent confidence<br>limits |       |
|--------------------------------|------------------------------------|---------------------------------|---------------------------------|-------|---------------------------|------------------------------------|---------------------------------|---------------------------------|-------|
|                                |                                    |                                 | Lower                           | Upper |                           |                                    |                                 | Lower                           | Upper |
| United States . . . . .        | 5,495                              | 1.4                             | 1.4                             | 1.4   | South Atlantic—Con.       |                                    |                                 |                                 |       |
| <b>New England</b>             |                                    |                                 |                                 |       | West Virginia . . . . .   | 5                                  | ††0.2                           | 0.1                             | 0.5   |
| Maine . . . . .                | 2                                  | ††0.1                           | 0.0                             | 0.4   | North Carolina . . . . .  | 83                                 | ††0.8                           | 0.6                             | 1.0   |
| New Hampshire . . . . .        | 3                                  | ††0.2                           | 0.0                             | 0.6   | South Carolina . . . . .  | 47                                 | ††0.8                           | 0.6                             | 1.1   |
| Vermont . . . . .              | —                                  | ††—                             | ...                             | ...   | Georgia . . . . .         | 114                                | ††1.1                           | 0.9                             | 1.3   |
| Massachusetts . . . . .        | 111                                | 1.2                             | 1.0                             | 1.4   | Florida . . . . .         | 694                                | ††3.8                           | 3.5                             | 4.1   |
| Rhode Island . . . . .         | 20                                 | 1.3                             | 0.8                             | 2.0   | <b>East South Central</b> |                                    |                                 |                                 |       |
| Connecticut . . . . .          | 120                                | ††2.3                           | 1.9                             | 2.7   | Kentucky . . . . .        | 17                                 | ††0.3                           | 0.2                             | 0.5   |
| <b>Middle Atlantic</b>         |                                    |                                 |                                 |       | Tennessee . . . . .       | 18                                 | ††0.2                           | 0.1                             | 0.3   |
| New York . . . . .             | 1,991                              | ††7.0                           | 6.7                             | 7.3   | Alabama . . . . .         | 31                                 | ††0.5                           | 0.3                             | 0.7   |
| New Jersey . . . . .           | 799                                | ††6.5                           | 6.0                             | 7.0   | Mississippi . . . . .     | 26                                 | ††0.7                           | 0.5                             | 1.0   |
| Pennsylvania . . . . .         | 121                                | ††0.7                           | 0.6                             | 0.8   | <b>West South Central</b> |                                    |                                 |                                 |       |
| <b>East North Central</b>      |                                    |                                 |                                 |       | Arkansas . . . . .        | 12                                 | ††0.3                           | 0.2                             | 0.5   |
| Ohio . . . . .                 | 46                                 | ††0.2                           | 0.1                             | 0.3   | Louisiana . . . . .       | 51                                 | ††0.8                           | 0.6                             | 1.0   |
| Indiana . . . . .              | 27                                 | ††0.3                           | 0.2                             | 0.4   | Oklahoma . . . . .        | 15                                 | ††0.3                           | 0.2                             | 0.5   |
| Illinois . . . . .             | 112                                | ††0.6                           | 0.5                             | 0.7   | Texas . . . . .           | 146                                | ††0.6                           | 0.5                             | 0.7   |
| Michigan . . . . .             | 61                                 | ††0.4                           | 0.3                             | 0.5   | <b>Mountain</b>           |                                    |                                 |                                 |       |
| Wisconsin . . . . .            | 16                                 | ††0.2                           | 0.1                             | 0.3   | Montana . . . . .         | 3                                  | ††0.2                           | 0.0                             | 0.6   |
| <b>West North Central</b>      |                                    |                                 |                                 |       | Idaho . . . . .           | —                                  | ††—                             | ...                             | ...   |
| Minnesota . . . . .            | 9                                  | ††0.1                           | 0.0                             | 0.2   | Wyoming . . . . .         | 2                                  | †0.4                            | 0.0                             | 1.4   |
| Iowa . . . . .                 | 7                                  | ††0.2                           | 0.1                             | 0.4   | Colorado . . . . .        | 18                                 | ††0.3                           | 0.2                             | 0.5   |
| Missouri . . . . .             | 16                                 | ††0.2                           | 0.1                             | 0.3   | New Mexico . . . . .      | 6                                  | ††0.3                           | 0.1                             | 0.7   |
| North Dakota . . . . .         | —                                  | ††—                             | ...                             | ...   | Arizona . . . . .         | 25                                 | ††0.4                           | 0.3                             | 0.6   |
| South Dakota . . . . .         | 2                                  | ††0.1                           | 0.0                             | 0.4   | Utah . . . . .            | 10                                 | ††0.4                           | 0.2                             | 0.7   |
| Nebraska . . . . .             | 5                                  | ††0.2                           | 0.1                             | 0.5   | Nevada . . . . .          | 14                                 | 0.9                             | 0.5                             | 1.5   |
| Kansas . . . . .               | 10                                 | ††0.3                           | 0.1                             | 0.6   | <b>Pacific</b>            |                                    |                                 |                                 |       |
| <b>South Atlantic</b>          |                                    |                                 |                                 |       | Washington . . . . .      | 18                                 | ††0.2                           | 0.1                             | 0.3   |
| Delaware . . . . .             | 11                                 | 1.0                             | 0.5                             | 1.8   | Oregon . . . . .          | 9                                  | ††0.2                           | 0.1                             | 0.4   |
| Maryland . . . . .             | 113                                | 1.5                             | 1.2                             | 1.8   | California . . . . .      | 378                                | ††0.8                           | 0.7                             | 0.9   |
| District of Columbia . . . . . | 63                                 | ††6.3                           | 4.7                             | 7.9   | Alaska . . . . .          | 2                                  | ††0.3                           | 0.0                             | 1.1   |
| Virginia . . . . .             | 77                                 | ††0.8                           | 0.6                             | 1.0   | Hawaii . . . . .          | 9                                  | ††0.5                           | 0.2                             | 0.9   |

NOTE: Data are final. Rates per 100,000 U.S. Standard Million Population; see Technical notes. The symbols † and †† denote statistical significance of the difference between the U.S. and State rates at the 0.05 and 0.01 levels, respectively. For method of computation of rates, confidence limits, and tests of statistical significance, see Technical notes.

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**Symbols**

- - - Data not available
  - . . . Category not applicable
  - Quantity zero
  - 0.0 Quantity more than zero but less than 0.05
  - \* Figure does not meet standards of reliability or precision (see Technical notes)
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**Table 1. Provisional number of live births, marriages, deaths, infant deaths, and rates, by month: United States, January 1992–January 1993**

[Data are provisional and are subject to monthly reporting variation; see Technical notes]

| Period              | Live births |                                       |            |                                  | Marriages |                           | Deaths  |                           | Infant deaths |                            |
|---------------------|-------------|---------------------------------------|------------|----------------------------------|-----------|---------------------------|---------|---------------------------|---------------|----------------------------|
|                     | Number      | Rate per 1,000 women aged 15–44 years |            |                                  | Number    | Rate per 1,000 population | Number  | Rate per 1,000 population | Number        | Rate per 1,000 live births |
|                     |             | Rate per 1,000 population             | Unadjusted | Seasonally adjusted <sup>1</sup> |           |                           |         |                           |               |                            |
| <b>1992:</b>        |             |                                       |            |                                  |           |                           |         |                           |               |                            |
| January . . . . .   | 334,000     | 15.6                                  | 66.9       | 70.4                             | 112,000   | 5.2                       | 207,000 | 9.6                       | 3,200         | 9.4                        |
| February . . . . .  | 304,000     | 15.1                                  | 65.1       | 66.6                             | 166,000   | 8.2                       | 185,000 | 9.2                       | 2,900         | 9.1                        |
| March . . . . .     | 360,000     | 16.7                                  | 72.0       | 73.4                             | 145,000   | 6.7                       | 195,000 | 9.1                       | 3,200         | 9.2                        |
| April . . . . .     | 330,000     | 15.8                                  | 68.3       | 70.0                             | 175,000   | 8.4                       | 181,000 | 8.7                       | 2,800         | 8.5                        |
| May . . . . .       | 361,000     | 16.7                                  | 72.2       | 73.2                             | 231,000   | 10.7                      | 175,000 | 8.1                       | 2,800         | 8.0                        |
| June . . . . .      | 333,000     | 16.0                                  | 68.9       | 67.8                             | 256,000   | 12.3                      | 172,000 | 8.2                       | 2,700         | 8.2                        |
| July . . . . .      | 352,000     | 16.3                                  | 70.5       | 67.8                             | 228,000   | 10.5                      | 180,000 | 8.3                       | 2,800         | 8.1                        |
| August . . . . .    | 350,000     | 16.2                                  | 70.1       | 66.3                             | 242,000   | 11.2                      | 172,000 | 7.9                       | 2,700         | 7.9                        |
| September . . . . . | 357,000     | 17.0                                  | 73.7       | 69.0                             | 227,000   | 10.8                      | 169,000 | 8.1                       | 2,700         | 8.0                        |
| October . . . . .   | 345,000     | 15.9                                  | 69.1       | 69.3                             | 221,000   | 10.2                      | 181,000 | 8.3                       | 2,900         | 8.2                        |
| November . . . . .  | 332,000     | 15.8                                  | 68.6       | 70.7                             | 174,000   | 8.3                       | 175,000 | 8.3                       | 2,700         | 8.1                        |
| December . . . . .  | 325,000     | 15.0                                  | 65.0       | 66.6                             | 184,000   | 8.5                       | 186,000 | 8.6                       | 2,900         | 8.8                        |
| <b>1993:</b>        |             |                                       |            |                                  |           |                           |         |                           |               |                            |
| January . . . . .   | 327,000     | 15.0                                  | 65.1       | 68.6                             | 104,000   | 4.8                       | 199,000 | 9.1                       | 2,900         | 8.5                        |

<sup>1</sup>The method of seasonal adjustment, developed by the U.S. Bureau of the Census, is described in *The X-11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15 (1967 revision).

NOTE: Figures include all revisions received from the States and, therefore, may differ from those previously published. Rates for 1992 (except infant mortality) have been recomputed based on revised population estimates; see Technical notes.

Table 2. Provisional number of live births and deaths: each division and State, January 1991-93

[Data are estimates by State of residence; see Technical notes]

| Area                    | Live births         |                     |        | Deaths              |                     |        |
|-------------------------|---------------------|---------------------|--------|---------------------|---------------------|--------|
|                         | January             |                     |        | January             |                     |        |
|                         | 1993                | 1992                | 1991   | 1993                | 1992                | 1991   |
| New England             | 111,347             | 14,700              | 16,640 | 17,790              | 10,275              | 8,724  |
| Maine                   | 946                 | 1,306               | 1,025  | 998                 | 1,058               | 814    |
| New Hampshire           | 821                 | 1,313               | 1,377  | 666                 | 360                 | 815    |
| Vermont                 | 568                 | 576                 | 516    | 424                 | 434                 | 415    |
| Massachusetts           | 8,149               | 7,322               | 8,879  | 4,901               | 4,725               | 3,127  |
| Rhode Island            | 863                 | 1,013               | 1,040  | 801                 | 859                 | 890    |
| Connecticut             | ---                 | 3,170               | 3,803  | ---                 | 2,839               | 2,663  |
| Middle Atlantic         | 51,536              | 44,477              | 51,152 | 33,894              | 34,922              | 35,403 |
| New York                | 28,997              | 24,885              | 28,485 | 16,531              | 15,959              | 17,806 |
| New Jersey              | 7,683               | 6,281               | 7,315  | 6,006               | 6,426               | 6,064  |
| Pennsylvania            | 14,856              | 13,311              | 15,352 | 11,357              | 12,537              | 11,533 |
| East North Central      | 53,778              | 54,965              | 49,265 | 33,850              | 36,147              | 33,155 |
| Ohio                    | 12,694              | 14,622              | 13,669 | 8,906               | 9,594               | 8,371  |
| Indiana                 | 6,755               | 7,953               | 3,325  | 4,618               | 5,243               | 4,836  |
| Illinois                | 14,413              | 15,147              | 14,851 | 9,534               | 9,906               | 9,057  |
| Michigan                | 14,646              | 11,946              | 12,049 | 7,191               | 8,034               | 7,434  |
| Wisconsin               | 5,270               | 5,297               | 5,371  | 3,601               | 3,320               | 3,457  |
| West North Central      | 22,095              | 23,104              | 19,852 | 15,442              | 13,833              | 14,601 |
| Minnesota               | 5,231               | 5,355               | 5,282  | 3,258               | 3,323               | 3,244  |
| Iowa                    | 2,888               | 3,336               | 2,412  | 2,315               | 3,011               | 1,867  |
| Missouri                | 7,925               | 7,035               | 5,773  | 5,287               | 2,405               | 4,760  |
| North Dakota            | 688                 | 706                 | 655    | 513                 | 514                 | 460    |
| South Dakota            | 856                 | 1,041               | 1,106  | 649                 | 821                 | 681    |
| Nebraska                | 2,012               | 2,087               | 1,843  | 1,436               | 1,478               | 1,322  |
| Kansas                  | 2,495               | 3,544               | 2,781  | 1,984               | 2,231               | 2,267  |
| South Atlantic          | 58,459              | 56,461              | 58,599 | 37,144              | 38,094              | 35,309 |
| Delaware                | 1,013               | 1,103               | 968    | 531                 | 593                 | 532    |
| Maryland                | 5,474               | 3,690               | 6,635  | 4,672               | 2,815               | 2,540  |
| District of Columbia    | 827                 | 872                 | 883    | 470                 | 678                 | 637    |
| Virginia                | 8,767               | 8,892               | 8,328  | 4,704               | 4,912               | 4,449  |
| West Virginia           | 2,471               | 1,910               | 1,646  | 1,818               | 2,585               | 1,966  |
| North Carolina          | 8,729               | 8,893               | 8,756  | 5,744               | 5,786               | 5,275  |
| South Carolina          | 4,594               | 4,780               | 4,746  | 2,540               | 2,872               | 2,375  |
| Georgia                 | 9,489               | 9,940               | 8,381  | 4,184               | 5,578               | 5,113  |
| Florida                 | 17,095              | 16,381              | 18,256 | 12,481              | 12,275              | 12,422 |
| East South Central      | 19,138              | 23,344              | 20,321 | 14,353              | 15,730              | 11,746 |
| Kentucky                | 4,409               | 5,046               | 5,165  | 3,434               | 3,746               | 3,257  |
| Tennessee               | 5,805               | 8,286               | 7,690  | 4,427               | 5,147               | 4,159  |
| Alabama                 | 5,584               | 5,836               | 3,375  | 4,154               | 4,365               | 1,989  |
| Mississippi             | 3,340               | 4,176               | 4,091  | 2,338               | 2,472               | 2,341  |
| West South Central      | 47,321              | 40,143              | 46,082 | 24,436              | 23,333              | 22,467 |
| Arkansas                | 3,146               | 3,322               | 2,815  | 2,517               | 2,561               | 1,749  |
| Louisiana               | 8,443               | 6,973               | 7,125  | 4,628               | 4,411               | 3,453  |
| Oklahoma                | 4,057               | 4,392               | 4,508  | 3,118               | 3,050               | 2,934  |
| Texas                   | <sup>2</sup> 31,675 | <sup>2</sup> 25,456 | 31,634 | <sup>2</sup> 14,173 | <sup>2</sup> 13,311 | 14,331 |
| Mountain                | 18,695              | 20,782              | 19,276 | 8,984               | 9,974               | 8,803  |
| Montana                 | 863                 | 937                 | 880    | 676                 | 705                 | 600    |
| Idaho                   | 1,442               | 1,402               | 1,445  | 692                 | 843                 | 727    |
| Wyoming                 | 419                 | 375                 | 370    | 276                 | 281                 | 239    |
| Colorado                | 4,279               | 4,446               | 3,715  | 1,911               | 2,225               | 1,863  |
| New Mexico              | 2,284               | 2,472               | 2,016  | 1,296               | 1,597               | 842    |
| Arizona                 | 5,859               | 5,675               | 5,622  | 2,389               | 2,725               | 2,644  |
| Utah                    | 1,651               | 3,670               | 3,008  | 797                 | 1,105               | 899    |
| Nevada                  | 1,898               | 1,805               | 2,220  | 947                 | 493                 | 989    |
| Pacific                 | 140,796             | 65,586              | 59,115 | 116,867             | 24,648              | 26,228 |
| Washington              | ---                 | 7,137               | 6,868  | ---                 | 3,242               | 3,782  |
| Oregon                  | 3,868               | 3,334               | 3,148  | 2,614               | 2,342               | 2,178  |
| California <sup>2</sup> | 35,135              | 52,152              | 46,205 | 13,517              | 18,250              | 19,457 |
| Alaska                  | 379                 | 1,073               | 1,017  | 101                 | 199                 | 175    |
| Hawaii                  | 1,414               | 1,890               | 1,877  | 635                 | 615                 | 636    |

<sup>1</sup>Excludes figures for State(s) shown below as not available.<sup>2</sup>Figures include adjustments for varying length of reporting periods; see Technical notes.

NOTE: Figures include all revisions received from the States. Cumulative figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published.



**Table 3. Provisional number of marriages and divorces: each division and State, January 1991-93**

[By State of occurrence. Number of events reported; see Technical notes. Divorces include reported annulments]

| Area                                | Marriages           |                     |        | Divorces           |                    |         |
|-------------------------------------|---------------------|---------------------|--------|--------------------|--------------------|---------|
|                                     | January             |                     |        | January            |                    |         |
|                                     | 1993                | 1992                | 1991   | 1993               | 1992               | 1991    |
| New England . . . . .               | 12,996              | 6,467               | 5,419  | 13,560             | 3,551              | 3,974   |
| Maine . . . . .                     | 338                 | 325                 | 494    | 441                | 480                | 355     |
| New Hampshire . . . . .             | 254                 | 424                 | 456    | 311                | 435                | 445     |
| Vermont . . . . .                   | 356                 | 311                 | 392    | 240                | 298                | 236     |
| Massachusetts . . . . .             | 1,797               | 4,469               | 3,070  | 2,250              | 945                | 1,435   |
| Rhode Island . . . . .              | 251                 | 214                 | 243    | 318                | 348                | 327     |
| Connecticut . . . . .               | ---                 | 724                 | 764    | ---                | 1,045              | 1,176   |
| Middle Atlantic . . . . .           | 15,663              | 11,874              | 14,690 | 12,695             | 14,532             | 12,266  |
| New York <sup>2</sup> . . . . .     | ---                 | 8,561               | 8,738  | 7,566              | 9,055              | 6,671   |
| New Jersey . . . . .                | 1,894               | 1,806               | 1,935  | 2,092              | 2,476              | 2,501   |
| Pennsylvania . . . . .              | 3,769               | 1,507               | 4,017  | 3,037              | 3,001              | 3,094   |
| East North Central . . . . .        | 13,662              | 14,552              | 16,632 | 110,828            | 111,241            | 111,608 |
| Ohio . . . . .                      | 4,850               | 4,647               | 6,646  | 3,833              | 3,715              | 4,121   |
| Indiana . . . . .                   | 1,762               | 2,675               | 2,545  | ---                | ---                | ---     |
| Illinois . . . . .                  | 3,714               | 3,706               | 3,855  | 2,901              | 3,415              | 3,359   |
| Michigan . . . . .                  | 1,888               | 1,888               | 1,978  | 2,628              | 2,539              | 2,900   |
| Wisconsin . . . . .                 | 1,448               | 1,636               | 1,608  | 1,466              | 1,572              | 1,228   |
| West North Central . . . . .        | 6,964               | 7,799               | 8,746  | 5,895              | 6,222              | 6,706   |
| Minnesota . . . . .                 | 1,025               | 1,154               | 1,371  | 1,197              | 1,209              | 1,137   |
| Iowa . . . . .                      | 571                 | 1,381               | 1,579  | 592                | 837                | 1,363   |
| Missouri . . . . .                  | 2,841               | 2,450               | 2,737  | 2,191              | 1,717              | 2,136   |
| North Dakota . . . . .              | 218                 | 191                 | 225    | 159                | 189                | 174     |
| South Dakota . . . . .              | 390                 | 358                 | 391    | 227                | 254                | 93      |
| Nebraska . . . . .                  | 600                 | 556                 | 660    | 487                | 592                | 543     |
| Kansas . . . . .                    | 1,319               | 1,709               | 1,783  | 1,042              | 1,424              | 1,260   |
| South Atlantic . . . . .            | 26,806              | 28,885              | 31,592 | 15,301             | 18,951             | 17,710  |
| Delaware . . . . .                  | 261                 | 208                 | 236    | 254                | 185                | 266     |
| Maryland . . . . .                  | 1,266               | 2,564               | 2,480  | 735                | 1,354              | 1,325   |
| District of Columbia . . . . .      | 109                 | 148                 | 259    | 82                 | 158                | 204     |
| Virginia . . . . .                  | 4,044               | 3,915               | 3,851  | 1,994              | 2,359              | 2,230   |
| West Virginia . . . . .             | 1,001               | 565                 | 912    | 737                | 821                | 744     |
| North Carolina . . . . .            | 2,139               | 2,032               | 2,253  | 2,295              | 2,423              | 2,208   |
| South Carolina . . . . .            | 2,821               | 3,230               | 2,541  | 1,002              | 1,200              | 835     |
| Georgia . . . . .                   | 4,360               | 6,013               | 7,809  | 1,702              | 4,015              | 3,603   |
| Florida . . . . .                   | 10,805              | 10,210              | 11,251 | 6,500              | 6,436              | 6,295   |
| East South Central . . . . .        | 12,622              | 12,223              | 13,531 | 6,587              | 7,255              | 7,662   |
| Kentucky . . . . .                  | 3,067               | 4,110               | 3,893  | 1,399              | 1,909              | 1,965   |
| Tennessee . . . . .                 | 5,229               | 4,210               | 5,209  | 2,240              | 2,405              | 2,128   |
| Alabama . . . . .                   | 2,899               | 2,470               | 2,955  | 1,807              | 1,877              | 2,537   |
| Mississippi . . . . .               | 1,427               | 1,433               | 1,474  | 1,141              | 1,064              | 1,032   |
| West South Central . . . . .        | 18,293              | 17,972              | 21,776 | 11,249             | 12,535             | 11,442  |
| Arkansas . . . . .                  | 1,637               | 2,654               | 1,465  | 1,078              | 1,364              | 891     |
| Louisiana . . . . .                 | 499                 | 1,771               | 3,055  | ---                | ---                | ---     |
| Oklahoma . . . . .                  | 1,629               | 1,626               | 1,756  | 1,448              | 1,902              | 1,935   |
| Texas . . . . .                     | <sup>3</sup> 14,528 | <sup>3</sup> 11,921 | 15,500 | <sup>3</sup> 8,723 | <sup>3</sup> 9,269 | 8,616   |
| Mountain . . . . .                  | 17,036              | 17,661              | 18,050 | 16,007             | 16,810             | 16,310  |
| Montana . . . . .                   | 336                 | 399                 | 351    | 314                | 363                | 288     |
| Idaho . . . . .                     | 1,267               | 1,200               | 1,061  | 597                | 596                | 565     |
| Wyoming . . . . .                   | 152                 | 110                 | 159    | 196                | 203                | 222     |
| Colorado . . . . .                  | 1,608               | 1,476               | 1,630  | 1,492              | 1,627              | 1,575   |
| New Mexico <sup>4,5</sup> . . . . . | 559                 | 739                 | 802    | 584                | 848                | 677     |
| Arizona <sup>2</sup> . . . . .      | 3,276               | 3,153               | 3,067  | 2,220              | 2,268              | 2,114   |
| Utah . . . . .                      | 1,472               | 1,822               | 1,381  | 604                | 905                | 869     |
| Nevada . . . . .                    | 8,366               | 8,762               | 9,599  | ---                | ---                | ---     |
| Pacific . . . . .                   | 12,334              | 15,486              | 23,610 | 11,578             | 13,900             | 12,289  |
| Washington . . . . .                | ---                 | 2,918               | 3,520  | ---                | 2,084              | 2,975   |
| Oregon . . . . .                    | 1,027               | 814                 | 979    | 1,165              | 1,244              | 1,201   |
| California . . . . .                | ---                 | ---                 | 17,445 | ---                | ---                | 7,446   |
| Alaska . . . . .                    | 244                 | 472                 | 468    | 96                 | 259                | 307     |
| Hawaii . . . . .                    | 1,063               | 1,282               | 1,198  | 317                | 313                | 360     |

<sup>1</sup>Excludes figures for State(s) shown below as not available.  
<sup>2</sup>Figures for marriages are marriage licenses issued for some counties.  
<sup>3</sup>Figures include adjustments for varying length of reporting periods; see Technical notes.  
<sup>4</sup>Figures for marriages are marriage licenses issued.  
<sup>5</sup>Figures for divorces include estimates for some counties.

NOTE: Figures include all revisions received from the States. Cumulative figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published.

Table 4. Provisional number of deaths under 1 year and infant mortality rates: each division and State, 12 months ending with January 1992 and 1993

[Data are estimates by State of residence; see Technical notes. Infant mortality rates are deaths under 1 year per 1,000 live births in specified area]

| Area                              | 12 months ending with January |      |        |      |
|-----------------------------------|-------------------------------|------|--------|------|
|                                   | 1993                          |      | 1992   |      |
|                                   | Number                        | Rate | Number | Rate |
| New England . . . . .             | 1,902                         | 16.4 | 1,340  | 7.1  |
| Maine . . . . .                   | 81                            | 5.3  | 103    | 6.1  |
| New Hampshire . . . . .           | 88                            | 5.8  | 97     | 6.1  |
| Vermont . . . . .                 | 48                            | 6.3  | 44     | 5.7  |
| Massachusetts . . . . .           | 568                           | 6.4  | 622    | 7.3  |
| Rhode Island . . . . .            | 117                           | 8.0  | 113    | 7.8  |
| Connecticut . . . . .             | ---                           | ---  | 361    | 7.6  |
| Middle Atlantic . . . . .         | 12,460                        | 18.6 | 5,189  | 9.1  |
| New York . . . . .                | ---                           | ---  | 2,620  | 9.1  |
| New Jersey . . . . .              | 1,030                         | 8.5  | 1,006  | 8.6  |
| Pennsylvania . . . . .            | 1,430                         | 8.6  | 1,563  | 9.4  |
| East North Central . . . . .      | 6,092                         | 9.3  | 6,477  | 9.7  |
| Ohio . . . . .                    | 1,415                         | 8.5  | 1,525  | 9.6  |
| Indiana . . . . .                 | 817                           | 9.9  | 770    | 8.6  |
| Illinois . . . . .                | 1,919                         | 10.0 | 2,078  | 10.7 |
| Michigan . . . . .                | 1,438                         | 10.2 | 1,514  | 9.9  |
| Wisconsin . . . . .               | 503                           | 7.2  | 590    | 8.2  |
| West North Central . . . . .      | 2,047                         | 7.9  | 2,288  | 8.6  |
| Minnesota . . . . .               | 458                           | 7.0  | 502    | 7.5  |
| Iowa . . . . .                    | 280                           | 7.4  | 290    | 7.9  |
| Missouri . . . . .                | 670                           | 8.8  | 786    | 9.9  |
| North Dakota . . . . .            | 68                            | 7.6  | 79     | 8.7  |
| South Dakota . . . . .            | 111                           | 10.0 | 107    | 9.7  |
| Nebraska . . . . .                | 153                           | 6.7  | 183    | 7.6  |
| Kansas . . . . .                  | 307                           | 8.4  | 341    | 9.0  |
| South Atlantic . . . . .          | 15,730                        | 19.6 | 6,841  | 10.0 |
| Delaware . . . . .                | 106                           | 9.8  | 135    | 11.9 |
| Maryland . . . . .                | ---                           | ---  | 680    | 8.3  |
| District of Columbia . . . . .    | ---                           | ---  | 202    | 20.3 |
| Virginia . . . . .                | 851                           | 8.6  | 918    | 9.4  |
| West Virginia . . . . .           | 207                           | 9.1  | 206    | 9.2  |
| North Carolina . . . . .          | 1,089                         | 10.6 | 1,090  | 10.6 |
| South Carolina . . . . .          | 588                           | 10.4 | 616    | 10.7 |
| Georgia . . . . .                 | 1,149                         | 10.4 | 1,312  | 11.8 |
| Florida . . . . .                 | 1,740                         | 9.0  | 1,682  | 8.7  |
| East South Central . . . . .      | 2,337                         | 10.1 | 2,403  | 10.2 |
| Kentucky . . . . .                | 477                           | 9.0  | 454    | 8.3  |
| Tennessee . . . . .               | 694                           | 9.7  | 731    | 9.9  |
| Alabama . . . . .                 | 672                           | 10.7 | 714    | 11.3 |
| Mississippi . . . . .             | 494                           | 11.6 | 504    | 11.6 |
| West South Central . . . . .      | 3,977                         | 8.2  | 3,973  | 8.3  |
| Arkansas . . . . .                | 342                           | 9.8  | 353    | 10.1 |
| Louisiana . . . . .               | 675                           | 9.2  | 730    | 9.8  |
| Oklahoma . . . . .                | 437                           | 9.2  | 470    | 10.0 |
| Texas <sup>2</sup> . . . . .      | 2,523                         | 7.6  | 2,420  | 7.6  |
| Mountain . . . . .                | 1,823                         | 7.5  | 1,965  | 8.0  |
| Montana . . . . .                 | 95                            | 8.3  | 85     | 7.3  |
| Idaho . . . . .                   | 145                           | 8.3  | 137    | 8.0  |
| Wyoming . . . . .                 | 62                            | 9.0  | 52     | 7.6  |
| Colorado . . . . .                | 384                           | 7.1  | 456    | 8.3  |
| New Mexico . . . . .              | 225                           | 8.0  | 262    | 9.2  |
| Arizona . . . . .                 | 546                           | 8.2  | 588    | 8.7  |
| Utah . . . . .                    | 221                           | 6.2  | 218    | 6.1  |
| Nevada . . . . .                  | 145                           | 6.5  | 167    | 7.4  |
| Pacific . . . . .                 | 14,563                        | 16.9 | 5,841  | 7.6  |
| Washington . . . . .              | ---                           | ---  | 559    | 7.4  |
| Oregon . . . . .                  | 306                           | 7.3  | 333    | 7.7  |
| California <sup>2</sup> . . . . . | 4,041                         | 6.9  | 4,704  | 7.6  |
| Alaska . . . . .                  | 94                            | 8.5  | 104    | 9.2  |
| Hawaii . . . . .                  | 122                           | 6.3  | 141    | 7.0  |

<sup>1</sup>Excludes figures for State(s) shown below as not available.

<sup>2</sup>Figures include adjustments for varying length of reporting periods; see Technical notes.

NOTE: Figures include all revisions received from the States. Figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published.



**Table 5. Provisional number of deaths and death rates, by age, race, and sex, and age-adjusted death rates by race and sex: United States, December 1991 and 1992 and cumulative figures, 1991 and 1992**

[Data are provisional, estimated from a 10-percent sample of deaths. Age-specific rates on an annual basis per 100,000 population in specified group; age-adjusted rates per 100,000 U.S. Standard Million Population; see Technical notes. Due to rounding of estimates, figures may not add to totals. For method of computation and information on standard errors of the estimates, see Technical notes]

| Age, race, and sex                       | December |          |         |          | January–December |          |           |          |
|--|----------|----------|---------|----------|------------------|----------|-----------|----------|
|  | 1992     |          | 1991    |          | 1992             |          | 1991      |          |
|  | Number   | Rate     | Number  | Rate     | Number           | Rate     | Number    | Rate     |
| <b>All races, both sexes<sup>1</sup></b> |          |          |         |          |                  |          |           |          |
| All ages . . . . .                       | 186,000  | 858.3    | 191,000 | 883.9    | 2,177,000        | 853.3    | 2,165,000 | 853.9    |
| Under 1 year . . . . .                   |          |          |         |          | 34,400           | 2834.3   | 36,500    | 2901.8   |
| 1–4 years . . . . .                      | 3,860    | 80.1     | 4,200   | 88.1     | 6,880            | 44.2     | 7,240     | 47.3     |
| 5–14 years . . . . .                     |          |          |         |          | 8,200            | 22.2     | 8,710     | 24.0     |
| 15–24 years . . . . .                    |          |          |         |          | 2,650            | 88.7     | 3,050     | 101.5    |
| 25–34 years . . . . .                    | 4,520    | 125.4    | 4,780   | 130.3    | 57,450           | 134.1    | 59,530    | 137.1    |
| 35–44 years . . . . .                    | 8,150    | 238.5    | 7,780   | 231.2    | 93,280           | 233.4    | 87,910    | 223.3    |
| 45–54 years . . . . .                    | 10,820   | 452.1    | 10,540  | 463.4    | 124,350          | 448.6    | 119,790   | 459.0    |
| 55–64 years . . . . .                    | 20,580   | 1,144.9  | 22,010  | 1,217.5  | 242,910          | 1,144.3  | 248,010   | 1,163.1  |
| 65–74 years . . . . .                    | 39,790   | 2,487.3  | 41,850  | 2,631.1  | 475,890          | 2,528.2  | 479,110   | 2,568.8  |
| 75–84 years . . . . .                    | 52,380   | 5,871.8  | 54,460  | 6,227.3  | 611,550          | 5,867.3  | 604,610   | 5,930.5  |
| 85 years and over . . . . .              | 43,520   | 14,522.8 | 42,460  | 14,821.6 | 485,780          | 14,052.1 | 474,910   | 14,395.6 |
| Not stated . . . . .                     | 80       | ...      | 140     | ...      | 800              | ...      | 990       | ...      |
| Age-adjusted rate <sup>3</sup> . . . . . | ...      | 494.7    | ...     | 519.8    | ...              | 499.4    | ...       | 507.8    |
| <b>All races, male<sup>1</sup></b>       |          |          |         |          |                  |          |           |          |
| All ages . . . . .                       | 95,000   | 891.8    | 100,230 | 949.3    | 1,122,380        | 896.9    | 1,123,370 | 908.6    |
| Under 1 year . . . . .                   |          |          |         |          | 18,730           | 2886.4   | 20,850    | 21,007.2 |
| 1–4 years . . . . .                      | 1,990    | 80.6     | 2,250   | 92.2     | 3,890            | 48.8     | 3,860     | 49.3     |
| 5–14 years . . . . .                     |          |          |         |          | 5,130            | 27.2     | 5,310     | 28.5     |
| 15–24 years . . . . .                    |          |          |         |          | 1,840            | 121.3    | 2,220     | 145.9    |
| 25–34 years . . . . .                    | 3,430    | 189.8    | 3,480   | 189.4    | 42,450           | 197.8    | 43,470    | 200.0    |
| 35–44 years . . . . .                    | 5,670    | 334.5    | 5,520   | 331.0    | 64,370           | 324.9    | 60,730    | 311.6    |
| 45–54 years . . . . .                    | 6,910    | 592.6    | 6,890   | 622.3    | 78,790           | 583.5    | 76,020    | 598.6    |
| 55–64 years . . . . .                    | 12,140   | 1,421.5  | 13,360  | 1,557.6  | 146,900          | 1,457.2  | 152,020   | 1,503.8  |
| 65–74 years . . . . .                    | 22,640   | 3,156.9  | 24,290  | 3,413.2  | 272,650          | 3,234.3  | 275,670   | 3,307.0  |
| 75–84 years . . . . .                    | 25,880   | 7,509.2  | 27,420  | 8,177.5  | 301,730          | 7,522.6  | 298,510   | 7,660.0  |
| 85 years and over . . . . .              | 14,480   | 17,181.6 | 14,690  | 18,341.8 | 160,600          | 16,556.7 | 158,020   | 17,157.4 |
| Not stated . . . . .                     | 40       | ...      | 110     | ...      | 540              | ...      | 600       | ...      |
| Age-adjusted rate <sup>3</sup> . . . . . | ...      | 631.4    | ...     | 679.7    | ...              | 644.1    | ...       | 659.5    |
| <b>All races, female<sup>1</sup></b>     |          |          |         |          |                  |          |           |          |
| All ages . . . . .                       | 91,350   | 818.5    | 91,040  | 821.8    | 1,054,260        | 803.7    | 1,041,340 | 802.0    |
| Under 1 year . . . . .                   |          |          |         |          | 15,710           | 2779.7   | 15,620    | 2790.5   |
| 1–4 years . . . . .                      | 1,870    | 79.5     | 1,950   | 83.9     | 2,990            | 39.3     | 3,390     | 45.4     |
| 5–14 years . . . . .                     |          |          |         |          | 3,080            | 17.1     | 3,400     | 19.2     |
| 15–24 years . . . . .                    |          |          |         |          | 810              | 55.0     | 830       | 56.0     |
| 25–34 years . . . . .                    | 1,090    | 60.6     | 1,300   | 71.0     | 14,990           | 70.1     | 16,060    | 74.1     |
| 35–44 years . . . . .                    | 2,490    | 144.6    | 2,260   | 133.1    | 28,910           | 143.4    | 27,180    | 136.7    |
| 45–54 years . . . . .                    | 3,910    | 318.6    | 3,640   | 311.9    | 45,560           | 320.4    | 43,760    | 326.5    |
| 55–64 years . . . . .                    | 8,450    | 895.5    | 8,650   | 910.4    | 96,010           | 861.2    | 95,990    | 856.0    |
| 65–74 years . . . . .                    | 17,150   | 1,943.2  | 17,560  | 1,997.6  | 203,250          | 1,955.6  | 203,440   | 1,972.3  |
| 75–84 years . . . . .                    | 26,500   | 4,841.0  | 27,040  | 5,016.1  | 309,820          | 4,833.4  | 306,110   | 4,861.2  |
| 85 years and over . . . . .              | 29,040   | 13,482.5 | 27,780  | 13,460.4 | 325,180          | 13,069.9 | 316,900   | 13,326.3 |
| Not stated . . . . .                     | 40       | ...      | 30      | ...      | 260              | ...      | 380       | ...      |
| Age-adjusted rate <sup>3</sup> . . . . . | ...      | 382.2    | ...     | 389.3    | ...              | 379.1    | ...       | 382.6    |
| <b>White</b>                             |          |          |         |          |                  |          |           |          |
| All ages . . . . .                       | 160,480  | 881.8    | 164,100 | 906.5    | 1,871,760        | 874.3    | 1,868,340 | 880.0    |
| Under 1 year . . . . .                   |          |          |         |          | 22,060           | 2680.9   | 23,830    | 2746.3   |
| 1–4 years . . . . .                      | 2,660    | 69.6     | 2,830   | 74.6     | 4,800            | 39.0     | 4,970     | 40.8     |
| 5–14 years . . . . .                     |          |          |         |          | 6,050            | 20.6     | 6,310     | 21.7     |
| 15–24 years . . . . .                    |          |          |         |          | 1,850            | 77.1     | 2,180     | 90.0     |
| 25–34 years . . . . .                    | 3,200    | 107.2    | 3,220   | 105.7    | 40,470           | 114.0    | 42,380    | 117.4    |
| 35–44 years . . . . .                    | 5,840    | 202.3    | 5,660   | 198.3    | 67,640           | 200.0    | 64,230    | 192.0    |
| 45–54 years . . . . .                    | 8,250    | 400.6    | 7,990   | 408.4    | 96,770           | 405.5    | 93,630    | 417.3    |
| 55–64 years . . . . .                    | 16,900   | 1,087.8  | 18,080  | 1,153.2  | 199,060          | 1,083.4  | 204,760   | 1,105.7  |
| 65–74 years . . . . .                    | 34,540   | 2,440.3  | 36,050  | 2,554.4  | 413,480          | 2,479.5  | 416,320   | 2,512.9  |
| 75–84 years . . . . .                    | 47,240   | 5,869.1  | 48,900  | 6,193.6  | 550,070          | 5,848.1  | 545,900   | 5,927.3  |
| 85 years and over . . . . .              | 39,930   | 14,746.1 | 39,100  | 15,089.2 | 446,190          | 14,278.1 | 437,970   | 14,672.4 |
| Not stated . . . . .                     | 70       | ...      | 100     | ...      | 580              | ...      | 810       | ...      |
| Age-adjusted rate <sup>3</sup> . . . . . | ...      | 470.1    | ...     | 491.1    | ...              | 474.1    | ...       | 483.7    |

See footnotes at end of table.

**Table 5. Provisional number of deaths and death rates, by age, race, and sex, and age-adjusted death rates by race and sex: United States, December 1991 and 1992 and cumulative figures, 1991 and 1992—Con.**

[Data are provisional, estimated from a 10-percent sample of deaths. Age-specific rates on an annual basis per 100,000 population in specified group; age-adjusted rate per 100,000 U.S. Standard Million Population; see Technical notes. Due to rounding of estimates, figures may not add to totals. For method of computation and information on standard errors of the estimates, see Technical notes]

| Age, race, and sex                       | December |          |        |          | January–December |                      |         |                      |        |       |        |       |
|--|----------|----------|--------|----------|------------------|----------------------|---------|----------------------|--------|-------|--------|-------|
|  | 1992     |          | 1991   |          | 1992             |                      | 1991    |                      |        |       |        |       |
|  | Number   | Rate     | Number | Rate     | Number           | Rate                 | Number  | Rate                 |        |       |        |       |
| <b>White male</b>                        |          |          |        |          |                  |                      |         |                      |        |       |        |       |
| All ages . . . . .                       | 81,130   | 909.3    | 85,060 | 959.2    | 955,960          | 911.1                | 960,400 | 923.8                |        |       |        |       |
| Under 1 year . . . . .                   | 1,380    | 70.4     | 1,570  | 80.7     | 12,120           | <sup>2</sup> 2729.2  | 13,780  | <sup>2</sup> 841.3   |        |       |        |       |
| 1–4 years . . . . .                      |          |          |        |          | 2,770            | 43.9                 | 2,710   | 43.4                 |        |       |        |       |
| 5–14 years . . . . .                     |          |          |        |          | 3,790            | 25.2                 | 3,870   | 26.0                 |        |       |        |       |
| 15–24 years . . . . .                    |          |          |        |          | 1,240            | 101.6                | 1,600   | 130.0                | 18,440 | 127.7 | 20,430 | 140.7 |
| 25–34 years . . . . .                    |          |          |        |          | 2,450            | 162.3                | 2,310   | 150.0                | 30,520 | 170.0 | 31,150 | 170.7 |
| 35–44 years . . . . .                    | 4,150    | 286.5    | 4,080  | 285.2    | 47,840           | 282.1                | 44,990  | 268.5                |        |       |        |       |
| 45–54 years . . . . .                    | 5,370    | 529.2    | 5,230  | 543.2    | 61,830           | 526.1                | 59,790  | 541.8                |        |       |        |       |
| 55–64 years . . . . .                    | 10,010   | 1,345.9  | 11,070 | 1,477.3  | 121,830          | 1,385.8              | 126,580 | 1,431.3              |        |       |        |       |
| 65–74 years . . . . .                    | 19,650   | 3,084.6  | 21,050 | 3,321.4  | 238,150          | 3,176.6              | 241,290 | 3,246.6              |        |       |        |       |
| 75–84 years . . . . .                    | 23,680   | 7,609.6  | 24,720 | 8,166.6  | 271,870          | 7,508.1              | 270,440 | 7,685.1              |        |       |        |       |
| 85 years and over . . . . .              | 13,180   | 17,523.5 | 13,340 | 18,654.1 | 146,420          | 16,927.2             | 144,890 | 17,626.5             |        |       |        |       |
| Not stated . . . . .                     | 30       | ...      | 90     | ...      | 380              | ...                  | 490     | ...                  |        |       |        |       |
| Age-adjusted rate <sup>3</sup> . . . . . | ...      | 600.2    | ...    | 642.1    | ...              | 612.2                | ...     | 628.5                |        |       |        |       |
| <b>White female</b>                      |          |          |        |          |                  |                      |         |                      |        |       |        |       |
| All ages . . . . .                       | 79,350   | 855.4    | 79,040 | 855.9    | 915,800          | 838.9                | 907,940 | 838.0                |        |       |        |       |
| Under 1 year . . . . .                   | 1,290    | 69.3     | 1,260  | 68.2     | 9,940            | <sup>2</sup> 629.9   | 10,050  | <sup>2</sup> 646.3   |        |       |        |       |
| 1–4 years . . . . .                      |          |          |        |          | 2,030            | 33.8                 | 2,260   | 38.1                 |        |       |        |       |
| 5–14 years . . . . .                     |          |          |        |          | 2,260            | 15.8                 | 2,450   | 17.3                 |        |       |        |       |
| 15–24 years . . . . .                    |          |          |        |          | 600              | 50.9                 | 580     | 48.6                 | 6,150  | 44.1  | 6,780  | 48.1  |
| 25–34 years . . . . .                    |          |          |        |          | 750              | 50.9                 | 910     | 60.4                 | 9,940  | 56.6  | 11,230 | 62.9  |
| 35–44 years . . . . .                    | 1,680    | 116.8    | 1,580  | 110.9    | 19,810           | 117.5                | 19,240  | 115.2                |        |       |        |       |
| 45–54 years . . . . .                    | 2,890    | 276.6    | 2,760  | 277.8    | 34,930           | 288.4                | 33,850  | 296.9                |        |       |        |       |
| 55–64 years . . . . .                    | 6,890    | 850.8    | 7,010  | 856.5    | 77,230           | 806.0                | 78,180  | 808.1                |        |       |        |       |
| 65–74 years . . . . .                    | 14,890   | 1,912.9  | 15,000 | 1,929.1  | 175,340          | 1,910.2              | 175,030 | 1,916.0              |        |       |        |       |
| 75–84 years . . . . .                    | 23,560   | 4,772.0  | 24,180 | 4,966.8  | 278,200          | 4,809.0              | 275,460 | 4,840.3              |        |       |        |       |
| 85 years and over . . . . .              | 26,750   | 13,677.9 | 25,760 | 13,730.3 | 299,770          | 13,264.2             | 293,080 | 13,549.7             |        |       |        |       |
| Not stated . . . . .                     | 40       | ...      | 10     | ...      | 200              | ...                  | 320     | ...                  |        |       |        |       |
| Age-adjusted rate <sup>3</sup> . . . . . | ...      | 363.1    | ...    | 368.1    | ...              | 359.2                | ...     | 364.2                |        |       |        |       |
| <b>Black</b>                             |          |          |        |          |                  |                      |         |                      |        |       |        |       |
| All ages . . . . .                       | 22,830   | 828.7    | 24,180 | 891.2    | 270,670          | 838.6                | 264,880 | 835.8                |        |       |        |       |
| Under 1 year . . . . .                   | 1,040    | 135.3    | 1,200  | 159.4    | 11,110           | <sup>2</sup> 1,600.9 | 11,540  | <sup>2</sup> 1,732.7 |        |       |        |       |
| 1–4 years . . . . .                      |          |          |        |          | 1,710            | 68.5                 | 1,990   | 82.3                 |        |       |        |       |
| 5–14 years . . . . .                     |          |          |        |          | 1,860            | 32.1                 | 2,040   | 35.8                 |        |       |        |       |
| 15–24 years . . . . .                    |          |          |        |          | 630              | 139.2                | 790     | 175.1                | 9,090  | 170.6 | 9,150  | 172.6 |
| 25–34 years . . . . .                    |          |          |        |          | 1,200            | 253.4                | 1,360   | 285.0                | 15,300 | 273.1 | 15,330 | 272.6 |
| 35–44 years . . . . .                    | 2,030    | 516.2    | 1,910  | 502.2    | 23,030           | 503.4                | 21,520  | 488.5                |        |       |        |       |
| 45–54 years . . . . .                    | 2,320    | 943.2    | 2,280  | 964.6    | 24,620           | 863.0                | 23,550  | 862.6                |        |       |        |       |
| 55–64 years . . . . .                    | 3,270    | 1,746.9  | 3,390  | 1,823.4  | 39,170           | 1,782.1              | 38,850  | 1,781.3              |        |       |        |       |
| 65–74 years . . . . .                    | 4,570    | 3,183.2  | 5,170  | 3,667.0  | 55,370           | 3,295.8              | 56,110  | 3,410.9              |        |       |        |       |
| 75–84 years . . . . .                    | 4,610    | 6,854.9  | 5,030  | 7,592.8  | 54,350           | 6,897.2              | 52,110  | 6,741.3              |        |       |        |       |
| 85 years and over . . . . .              | 3,140    | 13,480.8 | 3,010  | 13,526.8 | 34,850           | 12,907.4             | 32,530  | 12,608.5             |        |       |        |       |
| Not stated . . . . .                     | 10       | ...      | 40     | ...      | 210              | ...                  | 150     | ...                  |        |       |        |       |
| Age-adjusted rate <sup>3</sup> . . . . . | ...      | 728.3    | ...    | 788.5    | ...              | 739.3                | ...     | 743.0                |        |       |        |       |
| <b>Black male</b>                        |          |          |        |          |                  |                      |         |                      |        |       |        |       |
| All ages . . . . .                       | 12,190   | 930.1    | 13,460 | 1,044.1  | 146,920          | 957.3                | 144,610 | 961.1                |        |       |        |       |
| Under 1 year . . . . .                   | 550      | 140.5    | 590    | 154.0    | 5,990            | <sup>2</sup> 1,701.7 | 6,480   | <sup>2</sup> 1,917.2 |        |       |        |       |
| 1–4 years . . . . .                      |          |          |        |          | 900              | 70.8                 | 1,010   | 82.1                 |        |       |        |       |
| 5–14 years . . . . .                     |          |          |        |          | 1,150            | 39.0                 | 1,260   | 43.5                 |        |       |        |       |
| 15–24 years . . . . .                    |          |          |        |          | 500              | 222.2                | 570     | 254.9                | 7,140  | 269.6 | 7,080  | 269.8 |
| 25–34 years . . . . .                    |          |          |        |          | 900              | 401.0                | 1,010   | 447.4                | 10,760 | 405.6 | 10,930 | 411.2 |
| 35–44 years . . . . .                    | 1,320    | 731.0    | 1,320  | 757.4    | 14,950           | 712.2                | 14,330  | 711.2                |        |       |        |       |
| 45–54 years . . . . .                    | 1,390    | 1,266.3  | 1,510  | 1,431.5  | 15,080           | 1,184.6              | 14,670  | 1,204.4              |        |       |        |       |
| 55–64 years . . . . .                    | 1,860    | 2,191.6  | 2,000  | 2,371.4  | 22,360           | 2,242.7              | 23,010  | 2,324.2              |        |       |        |       |
| 65–74 years . . . . .                    | 2,620    | 4,197.1  | 2,880  | 4,716.2  | 30,620           | 4,200.3              | 30,430  | 4,279.9              |        |       |        |       |
| 75–84 years . . . . .                    | 1,950    | 7,699.8  | 2,380  | 9,564.0  | 25,900           | 8,750.0              | 24,250  | 8,362.1              |        |       |        |       |
| 85 years and over . . . . .              | 1,090    | 15,887.7 | 1,190  | 17,963.2 | 11,920           | 14,900.0             | 11,050  | 14,350.6             |        |       |        |       |
| Not stated . . . . .                     | 10       | ...      | 20     | ...      | 150              | ...                  | 110     | ...                  |        |       |        |       |
| Age-adjusted rate <sup>3</sup> . . . . . | ...      | 942.7    | ...    | 1,060.1  | ...              | 966.9                | ...     | 977.0                |        |       |        |       |

See footnotes at end of table.



**Table 5. Provisional number of deaths and death rates, by age, race, and sex, and age-adjusted death rates by race and sex: United States, December 1991 and 1992 and cumulative figures, 1991 and 1992 – Con.**

[Data are provisional, estimated from a 10-percent sample of deaths. Age-specific rates on an annual basis per 100,000 population in specified group; age-adjusted rate per 100,000 U.S. Standard Million Population; see Technical notes. Due to rounding of estimates, figures may not add to totals. For method of computation and information on standard errors of the estimates, see Technical notes]

| Age, race, and sex                     | December |          |        |          | January–December |                      |         |                      |       |       |       |       |
|--|----------|----------|--------|----------|------------------|----------------------|---------|----------------------|-------|-------|-------|-------|
|  | 1992     |          | 1991   |          | 1992             |                      | 1991    |                      |       |       |       |       |
|  | Number   | Rate     | Number | Rate     | Number           | Rate                 | Number  | Rate                 |       |       |       |       |
| <b>Black female</b>                    |          |          |        |          |                  |                      |         |                      |       |       |       |       |
| All ages . . . . .                     | 10,640   | 736.7    | 10,720 | 752.8    | 123,750          | 731.0                | 120,270 | 722.6                |       |       |       |       |
| Under 1 year . . . . .                 |          |          |        |          | 5,120            | <sup>2</sup> 1,497.1 | 5,060   | <sup>2</sup> 1,542.7 |       |       |       |       |
| 1–4 years . . . . .                    | } 500    | 132.6    | 610    | 165.0    | 810              | 66.1                 | 530     | 82.6                 |       |       |       |       |
| 5–14 years . . . . .                   |          |          |        |          | 700              | 24.6                 | 790     | 28.3                 |       |       |       |       |
| 15–24 years . . . . .                  |          |          |        |          | 170              | 57.2                 | 220     | 96.6                 | 1,950 | 72.8  | 2,070 | 77.3  |
| 25–34 years . . . . .                  |          |          |        |          | 300              | 120.4                | 350     | 139.2                | 4,550 | 154.3 | 4,400 | 148.3 |
| 35–44 years . . . . .                  | 700      | 329.1    | 590    | 286.3    | 8,080            | 326.3                | 7,180   | 300.4                |       |       |       |       |
| 45–54 years . . . . .                  | 920      | 675.5    | 780    | 596.0    | 9,540            | 603.8                | 8,880   | 587.3                |       |       |       |       |
| 55–64 years . . . . .                  | 1,410    | 1,378.1  | 1,400  | 1,378.2  | 16,810           | 1,399.7              | 15,850  | 1,330.8              |       |       |       |       |
| 65–74 years . . . . .                  | 1,960    | 2,415.5  | 2,280  | 2,852.8  | 24,750           | 2,602.5              | 25,680  | 2,749.5              |       |       |       |       |
| 75–84 years . . . . .                  | 2,670    | 6,368.3  | 2,640  | 6,382.7  | 28,450           | 5,782.5              | 27,860  | 5,768.1              |       |       |       |       |
| 85 years and over . . . .              | 2,050    | 12,475.9 | 1,830  | 11,710.2 | 22,930           | 12,068.4             | 21,480  | 11,867.4             |       |       |       |       |
| Not stated . . . . .                   | –        | ...      | 20     | ...      | 60               | ...                  | 40      | ...                  |       |       |       |       |
| Age-adjusted rate <sup>3</sup> . . . . | ...      | 555.5    | ...    | 576.9    | ...              | 558.1                | ...     | 555.6                |       |       |       |       |

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

<sup>2</sup>Death rates under 1 year (based on population estimates) differ from infant mortality rates (based on live births); see table 8 for infant mortality rates.

<sup>3</sup>For method of computation, see Technical notes.

NOTE: Figures include all revisions received from the States. Cumulative figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published.

**Table 6. Provisional number of deaths and death rates for 72 selected causes and Human immunodeficiency virus infection: United States, December 1991 and 1992, and cumulative figures, 1991 and 1992**

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population. Due to rounding of estimates, figures may not add to totals. For method of computation and information on standard errors of the estimates, see Technical notes. For explanation of the asterisk preceding cause-of-death codes, see Technical notes]

| Cause of death (Ninth Revision International Classification of Diseases, 1975)                               | December |       |         |       | January–December |       |           |       |
|--|----------|-------|---------|-------|------------------|-------|-----------|-------|
|  | 1992     |       | 1991    |       | 1992             |       | 1991      |       |
|  | Number   | Rate  | Number  | Rate  | Number           | Rate  | Number    | Rate  |
| All causes . . . . .   | 186,000  | 858.3 | 191,000 | 883.9 | 2,177,000        | 853.3 | 2,165,000 | 853.9 |
| Shigellosis and amebiasis . . . . .  | —        | *     | —       | *     | —                | *     | 20        | *     |
| Certain other intestinal infections . . . . .  | 50       | *     | 50      | *     | 760              | 0.3   | 660       | 0.3   |
| Tuberculosis . . . . .   | 90       | *     | 140     | 0.6   | 1,360            | 0.5   | 1,630     | 0.6   |
| Tuberculosis of respiratory system . . . . .   | 60       | *     | 100     | *     | 1,060            | 0.4   | 1,210     | 0.5   |
| Other tuberculosis . . . . .   | 30       | *     | 40      | *     | 300              | 0.1   | 420       | 0.2   |
| Whooping cough . . . . .   | —        | *     | —       | *     | 10               | *     | —         | *     |
| Streptococcal sore throat, scarlatina, and erysipelas . . . . .  | —        | *     | —       | *     | —                | *     | 10        | *     |
| Meningococcal infection . . . . .  | 10       | *     | 10      | *     | 230              | 0.1   | 260       | 0.1   |
| Septicemia . . . . .   | 1,780    | 8.2   | 1,840   | 8.5   | 19,920           | 7.8   | 19,420    | 7.7   |
| Acute poliomyelitis . . . . .  | —        | *     | —       | *     | —                | *     | 10        | *     |
| Measles . . . . .  | —        | *     | —       | *     | —                | *     | 20        | *     |
| Viral hepatitis . . . . .  | 250      | 1.1   | 230     | 1.1   | 1,940            | 0.8   | 1,920     | 0.8   |
| Syphilis . . . . .   | —        | *     | —       | *     | 70               | *     | 130       | 0.1   |
| All other infectious and parasitic diseases <sup>1</sup> . . . . .   | 3,760    | 17.2  | 3,090   | 14.3  | 38,960           | 15.2  | 35,020    | 13.8  |
| Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues . . . . .                    | 44,080   | 202.1 | 43,560  | 201.3 | 520,520          | 203.1 | 516,240   | 203.7 |
| Malignant neoplasms of lip, oral cavity, and pharynx . . . . .   | 730      | 3.3   | 670     | 3.1   | 8,020            | 3.1   | 7,530     | 3.0   |
| Malignant neoplasms of digestive organs and peritoneum . . . . .   | 10,390   | 47.6  | 10,250  | 47.4  | 121,620          | 47.5  | 120,160   | 47.4  |
| Malignant neoplasms of respiratory and intrathoracic organs . . . . .  | 12,890   | 59.1  | 12,940  | 59.8  | 151,440          | 59.1  | 148,540   | 58.6  |
| Malignant neoplasm of breast . . . . .   | 3,600    | 16.5  | 3,460   | 16.0  | 44,190           | 17.2  | 44,370    | 17.5  |
| Malignant neoplasms of genital organs . . . . .  | 4,650    | 21.3  | 4,790   | 22.1  | 58,720           | 22.9  | 59,270    | 23.4  |
| Malignant neoplasms of urinary organs . . . . .  | 1,750    | 8.0   | 1,820   | 8.4   | 22,220           | 8.7   | 20,920    | 8.3   |
| Malignant neoplasms of all other and unspecified sites . . . . .   | 5,640    | 25.8  | 5,440   | 25.1  | 63,130           | 24.6  | 64,320    | 25.4  |
| Leukemia . . . . .   | 1,550    | 7.1   | 1,460   | 6.7   | 19,230           | 7.5   | 19,590    | 7.7   |
| Other malignant neoplasms of lymphatic and hematopoietic tissues . . . . .                                   | 2,880    | 13.2  | 2,740   | 12.7  | 31,960           | 12.5  | 31,530    | 12.4  |
| Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature . . . . . | 610      | 2.8   | 760     | 3.5   | 7,430            | 2.9   | 7,870     | 3.1   |
| Diabetes mellitus . . . . .  | 4,230    | 19.4  | 4,640   | 21.4  | 50,220           | 19.6  | 49,860    | 19.7  |
| Nutritional deficiencies . . . . .   | 290      | 1.3   | 310     | 1.4   | 3,110            | 1.2   | 3,150     | 1.2   |
| Anemias . . . . .  | 350      | 1.6   | 400     | 1.8   | 3,970            | 1.5   | 4,140     | 1.6   |
| Meningitis . . . . .   | 60       | *     | 60      | *     | 730              | 0.3   | 730       | 0.3   |
| Major cardiovascular diseases . . . . .  | 79,540   | 364.6 | 80,830  | 373.6 | 912,120          | 355.9 | 908,790   | 358.5 |
| Diseases of heart . . . . .  | 62,740   | 287.6 | 64,030  | 295.9 | 718,970          | 280.5 | 715,540   | 282.3 |
| Rheumatic fever and rheumatic heart disease . . . . .  | 590      | 2.7   | 520     | 2.4   | 5,970            | 2.3   | 6,010     | 2.4   |
| Hypertensive heart disease . . . . .   | 2,410    | 11.0  | 1,930   | 8.9   | 22,350           | 8.7   | 21,420    | 8.5   |
| Hypertensive heart and renal disease . . . . .   | 200      | 0.9   | 170     | 0.8   | 2,300            | 0.9   | 2,040     | 0.8   |
| Ischemic heart disease . . . . .   | 41,180   | 188.8 | 42,460  | 196.2 | 477,910          | 186.5 | 477,690   | 188.5 |
| Acute myocardial infarction . . . . .  | 19,910   | 91.3  | 20,640  | 95.4  | 229,310          | 89.5  | 233,230   | 92.0  |
| Other acute and subacute forms of ischemic heart disease . . . . .   | 220      | 1.0   | 240     | 1.1   | 2,840            | 1.1   | 3,050     | 1.2   |
| Angina pectoris . . . . .  | 90       | *     | 90      | *     | 1,020            | 0.4   | 890       | 0.4   |
| Old myocardial infarction and other forms of chronic ischemic heart disease . . . . .                        | 20,960   | 96.1  | 21,490  | 99.3  | 244,740          | 95.5  | 240,520   | 94.9  |
| Other diseases of endocardium . . . . .  | 1,320    | 6.0   | 1,080   | 5.0   | 14,940           | 5.8   | 13,510    | 5.3   |
| All other forms of heart disease . . . . .   | 17,030   | 78.1  | 17,870  | 82.6  | 195,510          | 76.3  | 194,860   | 76.9  |
| Hypertension with or without renal disease . . . . .   | 850      | 3.9   | 850     | 3.9   | 9,640            | 3.8   | 8,560     | 3.4   |
| Cerebrovascular diseases . . . . .   | 12,540   | 57.5  | 12,260  | 56.7  | 143,320          | 55.9  | 142,790   | 56.3  |
| Intracerebral and other intracranial hemorrhage . . . . .  | 1,970    | 9.0   | 1,860   | 8.6   | 21,020           | 8.2   | 20,420    | 8.1   |
| Cerebral thrombosis and unspecified occlusion of cerebral arteries . . . . .                                 | 1,380    | 6.3   | 1,440   | 6.7   | 15,330           | 6.0   | 17,440    | 6.9   |
| Cerebral embolism . . . . .  | 70       | *     | 50      | *     | 680              | 0.3   | 690       | 0.3   |
| All other and late effects of cerebrovascular diseases . . . . .   | 9,120    | 41.8  | 8,920   | 41.2  | 106,290          | 41.5  | 104,230   | 41.1  |

|  |                      |        |      |        |      |         |      |         |      |
|--|----------------------|--------|------|--------|------|---------|------|---------|------|
| Atherosclerosis . . . . .  | .440                 | 1,320  | 6.0  | 1,520  | 7.0  | 16,120  | 6.3  | 17,040  | 6.7  |
| Other diseases of arteries, arterioles, and capillaries . . . . .  | .441-448             | 2,090  | 9.6  | 2,180  | 10.1 | 24,060  | 9.4  | 24,850  | 9.8  |
| Acute bronchitis and bronchiolitis . . . . .   | .466                 | 50     | *    | 40     | *    | 500     | 0.2  | 580     | 0.2  |
| Pneumonia and influenza . . . . .  | .480-487             | 5,900  | 27.0 | 7,270  | 33.6 | 75,860  | 29.6 | 74,920  | 29.6 |
| Pneumonia . . . . .  | .480-486             | 5,880  | 27.0 | 6,900  | 31.9 | 74,710  | 29.1 | 73,930  | 29.2 |
| Influenza . . . . .  | .487                 | 20     | *    | 370    | 1.7  | 1,140   | 0.4  | 980     | 0.4  |
| Chronic obstructive pulmonary diseases and allied conditions . . . . .   | .490-496             | 7,740  | 35.5 | 8,380  | 38.7 | 91,080  | 35.5 | 88,760  | 35.0 |
| Bronchitis, chronic and unspecified . . . . .  | .490-491             | 350    | 1.6  | 400    | 1.8  | 3,870   | 1.5  | 3,740   | 1.5  |
| Emphysema . . . . .  | .492                 | 1,490  | 6.8  | 1,770  | 8.2  | 16,640  | 6.5  | 16,520  | 6.5  |
| Asthma . . . . .   | .493                 | 370    | 1.7  | 520    | 2.4  | 4,650   | 1.8  | 4,510   | 1.8  |
| Other chronic obstructive pulmonary diseases and allied conditions . . . . .   | .494-496             | 5,530  | 25.3 | 5,700  | 26.3 | 65,920  | 25.7 | 63,990  | 25.2 |
| Ulcer of stomach and duodenum . . . . .  | .531-533             | 400    | 1.8  | 580    | 2.7  | 5,770   | 2.3  | 6,120   | 2.4  |
| Appendicitis . . . . .   | .540-543             | 20     | *    | 10     | *    | 300     | 0.1  | 470     | 0.2  |
| Hernia of abdominal cavity and intestinal obstruction without mention of hernia . . . . .  | .550-553,560         | 550    | 2.5  | 550    | 2.5  | 5,880   | 2.3  | 5,790   | 2.3  |
| Chronic liver disease and cirrhosis . . . . .  | .571                 | 2,220  | 10.2 | 2,240  | 10.3 | 24,860  | 9.7  | 24,690  | 9.7  |
| Cholelithiasis and other disorders of gallbladder . . . . .  | .574-575             | 220    | 1.0  | 260    | 1.2  | 3,000   | 1.2  | 3,020   | 1.2  |
| Nephritis and nephrotic syndrome, and nephrosis . . . . .  | .580-589             | 2,170  | 9.9  | 2,170  | 10.0 | 22,940  | 9.0  | 22,880  | 9.0  |
| Acute glomerulonephritis and nephrotic syndrome . . . . .  | .580-581             | 10     | *    | 40     | *    | 270     | 0.1  | 300     | 0.1  |
| Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified . . . . . | .582-583,587         | 160    | 0.7  | 170    | 0.8  | 1,500   | 0.6  | 1,460   | 0.6  |
| Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause . . . . .                         | .584-586,588-589     | 2,000  | 9.2  | 1,960  | 9.1  | 21,180  | 8.3  | 21,120  | 8.3  |
| Infections of kidney . . . . .   | .590                 | 70     | *    | 120    | 0.6  | 1,060   | 0.4  | 1,250   | 0.5  |
| Hyperplasia of prostate . . . . .  | .600                 | -      | *    | 10     | *    | 320     | 0.1  | 340     | 0.1  |
| Complications of pregnancy, childbirth, and the puerperium . . . . .   | .630-676             | 50     | *    | 50     | *    | 270     | 0.1  | 300     | 0.1  |
| Pregnancy with abortive outcome . . . . .  | .630-638             | -      | *    | -      | *    | 30      | *    | 60      | *    |
| Other complications of pregnancy, childbirth, and the puerperium . . . . .   | .640-676             | 50     | *    | 50     | *    | 240     | 0.1  | 240     | 0.1  |
| Congenital anomalies . . . . .   | .740-759             | 1,020  | 4.7  | 960    | 4.4  | 12,430  | 4.8  | 11,780  | 4.6  |
| Certain conditions originating in the perinatal period . . . . .   | .760-779             | 1,140  | 5.2  | 1,150  | 5.3  | 15,620  | 6.1  | 16,540  | 6.5  |
| Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .                                      | .767-769             | 220    | 1.0  | 100    | *    | 3,160   | 1.2  | 3,250   | 1.3  |
| Other conditions originating in the perinatal period . . . . .   | .760-766,770-779     | 910    | 4.2  | 1,040  | 4.8  | 12,450  | 4.9  | 13,290  | 5.2  |
| Symptoms, signs, and ill-defined conditions . . . . .  | .780-799             | 3,160  | 14.5 | 3,540  | 16.4 | 35,560  | 13.9 | 35,080  | 13.8 |
| All other diseases . . . . .   | .Residual            | 15,990 | 73.3 | 16,590 | 76.7 | 178,880 | 69.8 | 176,190 | 69.5 |
| Accidents and adverse effects . . . . .  | .E800-E949           | 6,150  | 28.2 | 6,960  | 32.2 | 84,360  | 32.9 | 88,890  | 35.1 |
| Motor vehicle accidents . . . . .  | .E810-E825           | 2,920  | 13.4 | 3,400  | 15.7 | 41,040  | 16.0 | 43,980  | 17.4 |
| All other accidents and adverse effects . . . . .  | .E800-E807,E826-E949 | 3,230  | 14.8 | 3,560  | 16.4 | 43,330  | 16.9 | 44,910  | 17.7 |
| Suicide . . . . .  | .E950-E959           | 2,310  | 10.6 | 2,230  | 10.3 | 28,710  | 11.2 | 29,090  | 11.5 |
| Homicide and legal intervention . . . . .  | .E960-E978           | 1,930  | 8.8  | 2,030  | 9.4  | 25,790  | 10.1 | 26,210  | 10.3 |
| All other external causes . . . . .  | .E980-E999           | 170    | 0.8  | 190    | 0.9  | 2,110   | 0.8  | 1,910   | 0.8  |
| Human immunodeficiency virus infection <sup>2</sup> . . . . .  | *042-*044            | 3,200  | 14.7 | 2,630  | 12.2 | 32,300  | 12.6 | 28,820  | 11.4 |

<sup>1</sup>Includes data for deaths due to Human immunodeficiency virus infection (category numbers \*042-\*044) shown separately below; see Technical notes.

<sup>2</sup>Included in All other infectious and parasitic diseases shown above.

NOTE: Figures include all revisions received from the States. Cumulative figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published.



**Table 7. Provisional number of deaths and death rates for 16 selected subcategories of Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues: United States, December 1991 and 1992, and cumulative figures, 1991 and 1992**

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population. Due to rounding of estimates, figures may not add to totals. For method of computation and information on standard errors of the estimates, see Technical notes]

| Cause of death (Ninth Revision International Classification of Diseases, 1975)                                | December |       |        |       | January–December |       |         |       |
|---|----------|-------|--------|-------|------------------|-------|---------|-------|
|   | 1992     |       | 1991   |       | 1992             |       | 1991    |       |
|   | Number   | Rate  | Number | Rate  | Number           | Rate  | Number  | Rate  |
| Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues <sup>1</sup> . . . . .140–208 | 44,080   | 202.1 | 43,560 | 201.3 | 520,520          | 203.1 | 516,240 | 203.7 |
| Malignant neoplasm of esophagus . . . . .150  | 890      | 4.1   | 780    | 3.6   | 10,600           | 4.1   | 9,850   | 3.9   |
| Malignant neoplasm of stomach . . . . .151  | 1,090    | 5.0   | 1,150  | 5.3   | 12,960           | 5.1   | 14,400  | 5.7   |
| Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus . . . . .153,154                        | 4,900    | 22.5  | 4,790  | 22.1  | 57,180           | 22.3  | 55,650  | 22.0  |
| Malignant neoplasm of pancreas . . . . .157   | 2,150    | 9.8   | 2,170  | 10.0  | 25,850           | 10.1  | 25,460  | 10.0  |
| Malignant neoplasms of trachea, bronchus, and lung . . . . .162   | 12,500   | 57.3  | 12,440 | 57.5  | 146,520          | 57.2  | 143,290 | 56.5  |
| Malignant melanoma of skin . . . . .172   | 410      | 1.9   | 540    | 2.5   | 6,750            | 2.6   | 7,060   | 2.8   |
| Malignant neoplasm of cervix uteri . . . . .180   | 320      | 1.5   | 360    | 1.7   | 4,270            | 1.7   | 4,650   | 1.8   |
| Malignant neoplasms of body of uterus and of uterus, part unspecified . . . . .179,182                        | 350      | 1.6   | 390    | 1.8   | 6,380            | 2.5   | 5,700   | 2.2   |
| Malignant neoplasm of ovary . . . . .183.0  | 1,180    | 5.4   | 1,050  | 4.9   | 12,700           | 5.0   | 13,090  | 5.2   |
| Malignant neoplasm of prostate . . . . .185   | 2,680    | 12.3  | 2,880  | 13.3  | 33,580           | 13.1  | 33,920  | 13.4  |
| Malignant neoplasm of bladder . . . . .188  | 940      | 4.3   | 930    | 4.3   | 11,010           | 4.3   | 10,310  | 4.1   |
| Malignant neoplasms of kidney and other and unspecified urinary organs . . . . .189                           | 800      | 3.7   | 890    | 4.1   | 11,210           | 4.4   | 10,610  | 4.2   |
| Malignant neoplasms of brain and other and unspecified parts of nervous system . . . . .191,192               | 860      | 3.9   | 1,000  | 4.6   | 10,600           | 4.1   | 11,500  | 4.5   |
| Hodgkin's disease . . . . .201  | 150      | 0.7   | 160    | 0.7   | 1,630            | 0.6   | 1,750   | 0.7   |
| Malignant lymphoma other than Hodgkin's disease . . . . .200,202  | 1,870    | 8.6   | 1,700  | 7.9   | 20,740           | 8.1   | 20,380  | 8.0   |
| Multiple myeloma and other immunoproliferative neoplasms . . . . .203   | 860      | 3.9   | 890    | 4.1   | 9,590            | 3.7   | 9,410   | 3.7   |

<sup>1</sup>Includes figures for subcategories not shown below.

NOTE: Figures include all revisions received from the States. Cumulative figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published.

**Table 8. Provisional number of deaths under 1 year and infant mortality rates, by age and for 10 selected causes: United States, December 1991 and 1992, and cumulative figures, 1991 and 1992**

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 live births. Due to rounding of estimates, figures may not add to totals. For method of computation and information on standard errors of the estimates, see Technical notes]

| Age and cause of death (Ninth Revision International Classification of Diseases, 1975) | December |       |        |       | January–December |       |        |       |
|--|----------|-------|--------|-------|------------------|-------|--------|-------|
|  | 1992     |       | 1991   |       | 1992             |       | 1991   |       |
|  | Number   | Rate  | Number | Rate  | Number           | Rate  | Number | Rate  |
| Total, under 1 year . . . . .  | 2,900    | 883.0 | 2,900  | 858.5 | 34,400           | 848.7 | 36,500 | 892.8 |
| Under 28 days . . . . .  | 1,730    | 522.1 | 1,610  | 470.1 | 21,800           | 537.2 | 22,670 | 555.0 |
| 28 days to 11 months . . . . .   | 1,200    | 362.1 | 1,330  | 388.4 | 12,650           | 311.7 | 13,800 | 337.8 |
| Certain gastrointestinal diseases . . . . .008–009,535,555–558                         | 20       | *     | 20     | *     | 330              | 8.1   | 320    | 7.8   |
| Pneumonia and influenza . . . . .480–487   | 30       | *     | 40     | *     | 620              | 15.3  | 620    | 15.2  |
| Congenital anomalies . . . . .740–759  | 660      | 199.2 | 570    | 166.4 | 7,490            | 184.6 | 7,580  | 185.6 |
| Disorders relating to short gestation and unspecified low birthweight . . . . .765     | 330      | 99.6  | 320    | 93.4  | 3,780            | 93.1  | 4,480  | 109.7 |
| Birth trauma . . . . .767  | –        | *     | 30     | *     | 160              | 3.9   | 160    | 3.9   |
| Intrauterine hypoxia and birth asphyxia . . . . .768                                   | 80       | *     | 10     | *     | 690              | 17.0  | 720    | 17.6  |
| Respiratory distress syndrome . . . . .769   | 140      | 42.2  | 70     | *     | 2,250            | 55.4  | 2,310  | 56.5  |
| Other conditions originating in the perinatal period . . . . .760–764,766,770–779      | 590      | 178.0 | 680    | 198.6 | 8,510            | 209.7 | 8,680  | 212.5 |
| Sudden infant death syndrome . . . . .798.0  | 460      | 138.8 | 510    | 148.9 | 4,190            | 103.2 | 4,420  | 108.2 |
| All other causes . . . . .Residual   | 620      | 187.1 | 700    | 204.4 | 6,410            | 157.9 | 7,180  | 175.8 |

NOTE: Figures include all revisions received from the States. Cumulative figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published.

## Technical notes

### Nature and sources of data

Data in this report are provisional unless otherwise specified and include only events occurring within the United States. Mortality data exclude fetal deaths.

Birth, death, and infant death figures shown in tables 2 and 4 for each State are estimates by State of residence. These estimates are derived by applying adjustment ratios to the actual counts of certificates for all events occurring in the State and received in registration offices during a 1-month period, regardless of date of the event. The adjustment ratios for each data year represent the observed relationship between final State occurrence and residence figures for the 3 most recent years for which final data were available, expressed as a single ratio for each State. As in previous years, monthly State marriage and divorce figures represent the actual count of all events occurring in the State (State of occurrence) that were received in the registration offices during the 1-month period. Delay in the receipt of certificates in a registration office may result in a low State figure for a given month followed by a high figure for the month(s) in which the delayed records are received. Data for previous months and cumulative data include revised figures received from the States.

Figures for births, deaths, and infant deaths for California shown in tables 2 and 4 contain adjustments for varying length of State reporting periods. Beginning with data for February 1991, figures for Texas for all events shown in tables 2-4 also are adjusted for varying length of State reporting periods. Before February 1991, data for Texas were reported for monthly periods. The figures for both States are adjusted by the ratio between the number of days in the data month and the number of days in the State reporting period. The adjusted figures are included in the U.S. totals.

Beginning with data for January 1991, U.S. totals for births, deaths, and

infant deaths are based on the State estimates by State of residence and, therefore, in effect, exclude events to nonresidents of the United States. Events to nonresidents of the United States are included in all marriage and divorce figures. The effect of excluding events to nonresidents from the U.S. totals is small.

Provisional totals for the United States include estimates for State data shown as not available. Provisional totals for births and marriages for the entire United States include adjustments for observed differences between provisional and final monthly figures.

Divorce figures include reported annulments. The monthly national divorce estimate is obtained by multiplying the total for the reporting areas by the ratio observed between the most recent final annual divorce total for the United States and the provisional total for the reporting areas combined.

*Random variation*—Although the counts in this report are not subject to sampling variability (except the Current Mortality Sample), they may be affected by random variation. 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. For this distribution a simple approximation may be used to estimate the random variation as follows:

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

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

covers the "true" number of events.

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

covers the "true" rate.

If the rate  $R_1$ , corresponding to  $N_1$  events is compared with the rate  $R_2$  corresponding to  $N_2$  events, the difference between the two rates may be

regarded as statistically significant at the 0.05 level if it exceeds

$$2 \sqrt{\frac{R_1^2}{N_1} + \frac{R_2^2}{N_2}}$$

Additional information on random variation in numbers of events, rates, and ratios may be found in the technical appendixes of *Vital Statistics of the United States, 1988*, Volumes I and II.

### Rates

Rates are on an annual basis and, except for infant mortality rates, are per 1,000 or 100,000 estimated population residing in the United States. The populations used for computing these rates are furnished by the U.S. Bureau of the Census. The population bases used to compute rates for 1992 and 1993 were based on the 1990 Census enumeration (not adjusted for undercount) comparable to those used for 1990 and 1991 final data. Population bases were *not* the same as those used for the Monthly Vital Statistics Report for each month from January–December 1992; therefore, the rates may not be the same as those published previously. Monthly rates are based on populations estimated for the specific month. Year-to-date rates are averages of monthly rates that have been weighted by the number of days in the corresponding months. Rates for 12-month periods are the sum of events for the period per population estimated at the midpoint of the period.

Infant mortality rates are deaths under 1 year of age for the specified period (monthly, year-to-date, or 12-month period) per 1,000 or 100,000 live births. Births used for computing monthly and year-to-date infant mortality rates are adjusted for monthly variation in the number of births. Births used to compute 12-month rates do not contain this adjustment. Births used for computing infant mortality rates are not corrected for observed differences between provisional and final monthly figures as described earlier in *Nature and sources of data*. Because monthly infant mortality rates are based on relatively few events, they

are highly variable. Therefore, comparisons of monthly infant mortality rates should be interpreted cautiously; see *Random variation*.

Age-adjusted death rates are used to compare relative mortality risks across groups and over time. However, they should be viewed as constructs or indexes rather than as direct or actual measures of mortality risk. Statistically, they are weighted averages of the age-specific death rates, where the weights represent the fixed population proportions by age. See chapter 5 of an earlier report (2). The age-adjusted death rates presented in this report were computed by the direct method, that is, by applying age-specific death rates to the U.S. Standard Million Population (3). See also chapter 10 of an earlier report (2). Age groups shown in table 5 of this report were used to compute the age-adjusted rates shown in that table. The age-adjusted death rates on which the State maps are based and which are shown with the State maps were computed from average annual age-specific death rates in 10-year age groups for the specified 3-year period. The average annual age-specific death rates were computed by dividing the number of deaths in an age group for the 3-year period by three times the population in that age group estimated at the midpoint of the period (4). It is important not to compare age-adjusted rates with crude rates.

### Current Mortality Sample

The Current Mortality Sample (CMS) is a 10-percent systematic sample of death certificates drawn each month after the certificates are counted in the State registration offices. Deaths and death rates for the United States by age, race, sex, and cause are estimated based on the sample. Because of the additional time required to select and process the certificates, data based on the CMS are published 1 month after publication of the U.S. and State counts. Complete information concerning the underlying cause of death sometimes is not available when the sample is drawn. As a result, estimates based on sample counts for certain causes are biased.

Correction for bias is shown in the annual summary (issue No. 13 in this series) for each year.

Estimated numbers of deaths and death rates based on the sample were proportionately adjusted to be consistent with estimates based on the count of death certificates received in State registration offices.

*HIV infection*—Beginning with data for 1987, the National Center for Health Statistics introduced category numbers \*042–\*044 for classifying and coding human immunodeficiency virus (HIV) infection. The asterisk before the category numbers indicates that these codes are not part of the Ninth Revision of the International Classification of Diseases. Deaths classified to these categories are included in All other infectious and parasitic diseases in the List of 72 Selected Causes of Death and are also shown separately at the bottom of table 6.

*Sampling variability*—Because the estimates of deaths and death rates presented in this report (with the exception of total deaths and deaths under 1 year) are based on a sample of death certificates, they are subject to sampling variability. The estimated relative standard error shown in the following table is a measure of the sampling error of the estimated number of deaths (or of the estimated death rate) expressed as a percent of the estimate. The first column refers to monthly estimates; the second to annual; cumulative year-to-date totals fall between the two.

The chances are about 2 in 3 that the percent difference between an estimate and the result of a complete count is less than the percent shown. The chances are about 19 in 20 that the percent difference is less than twice the percent shown. A figure based on 100 or fewer estimated deaths has a relative standard error of 30 percent or more and is, therefore, considered unreliable. A rate based on 100 or fewer estimated deaths has been replaced by an asterisk.

Unless otherwise specified, comparisons made in the text between death rates based on the CMS were statistically significant at the 0.05 level of significance. Lack of comment in the text about any two rates does not

mean that the difference was tested and found not to be significant at level.

*Mortality Surveillance System*—Mortality Surveillance System (MSS) charts are based entirely on monthly provisional data from the CMS. When sample size permits, age-race-sex comparisons are made for the cause of death. Where sample size is too small, only age-sex comparisons are made. A time series regression model of the following form was used:

$$Y(t) = A_0 + A_1 t + A_2 t^2 + C \cos(2\pi t/12) + S \sin(2\pi t/12) + \epsilon_t$$

where

$Y(t)$  = monthly death rate  
time  $t$

$t$  = month number

$A_0$  = coefficient, which, together with  $C$  determines  $Y$ -intercept

$A_1$  = coefficient of  $t$

$A_2$  = coefficient of  $t^2$

$C, S$  = coefficients of the 12-month terms

$\epsilon_t$  = error terms, assumed to be independent and normally distributed with mean zero and constant variances.

and  $\cos(2\pi t/12)$  and  $\sin(2\pi t/12)$  are 12-month period harmonic functions.

The coefficients of this model were estimated using provisional monthly death rates from January 1984 through the month that is 12 months prior to the latest month shown in the chart. The graph of the estimated equal and 95-percent prediction interval shown from January 1985 through the latest month shown in the chart; graph for the subsequent 12 months projected (5). Symbols in each chart represent actual monthly death rates based on the CMS. In some cases, data are converted by the natural logarithm before fitting the model. For graphical purposes, the data are converted back to rates by the inverse of the natural logarithm. This procedure has the advantage of avoiding negative prediction intervals for the model. Statistical tests for lack of fit are available on request for the charts published



the MSS. Time series regression models have been used previously to describe trends in mortality data (6-8). A list of MSS cause-of-death topics is presented on the back of this report.

### State maps

Unlike other data presented in this report, the State maps are based on final data instead of provisional data. The age-adjusted death rates used to produce the State maps were computed by using a 3-year total number of deaths for 1987-89 and the 1988 population estimated as of July 1, 1988 (4). Assigning the States into the given categories on the maps was carried out in two steps: a) determining whether the State age-adjusted death rate differed significantly from the corresponding U.S. rate at the 0.05 level of significance; b) then grouping the State rates found to be significantly different from the U.S. rate into the four categories: 10 highest State rates of those significantly greater than the U.S. rate, remaining State rates significantly greater than the U.S. rate, 10 lowest State rates of those significantly lower than the U.S. rate, and remaining State rates significantly lower than the U.S. rate. Age-adjusted death rates and the corresponding 95-percent confidence intervals are shown in the tables. The symbols "†" and "††" shown in the tables are used to denote State rates that differ significantly from the U.S. rate at the 0.05 and 0.01 levels of significance, respectively. Different procedures were used to determine tests of statistical significance and confidence intervals, depending on the number of deaths.

For 50 deaths or more, the standard normal Z statistic was used to perform the significance test:

$$Z = (R'_s - R'_{us}) / \sqrt{S^2(R'_s) + S^2(R'_{us})}$$

where

$R'_s$  = age-adjusted rate for 1987-89 for the given State per 100,000 standard population

$R'_{us}$  = age-adjusted rate for 1987-89 for the United States per 100,000 standard population

$S^2(R'_s)$  = estimated variance of the age-adjusted death rate for 1987-89 for the State

$S^2(R'_{us})$  = estimated variance of the age-adjusted death rate for 1987-89 for the United States

The variance of the age-adjusted death rate was computed in terms of the variances of age-specific death rates (9) under the assumption that the age-specific death rates are binomial proportions (10). The 95-percent confidence limits were estimated as follows:

$$\text{Lower limit} = R'_s - 1.96 \bullet S(R'_s)$$

and

$$\text{Upper limit} = R'_s + 1.96 \bullet S(R'_s)$$

For 1-49 deaths, the lower and upper 95-percent confidence limits were estimated as described elsewhere (11). The difference between the State and U.S. age-adjusted rates was determined to be statistically significant at the 0.05 or 0.01 level if the rates' respective 95-percent or 99-percent confidence limits did not overlap.

For zero deaths, the following test statistic ( $\lambda$ ) was used to perform the significance test:

$$\lambda = [\sum_{x=1}^n M_{x(us)} * P_{x(s)}] / 100,000$$

where

$M_{x(us)}$  = age-specific death rate per 100,000 population in the  $x^{\text{th}}$  age group for the United States

$P_{x(s)}$  = population in the  $x^{\text{th}}$  age group for the given State

$n$  = number of age groups = 11.

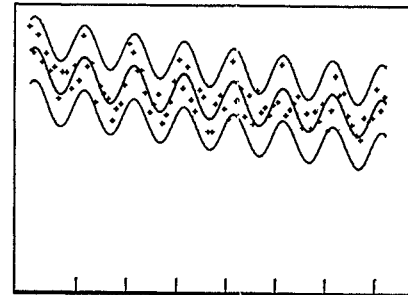
The difference between the State and U.S. age-adjusted rates was determined to be statistically significant at 0.05 level if  $3.00 \leq \lambda < 4.61$ . The difference between the State and U.S. age-adjusted rates was determined to be statistically significant at 0.01 level if  $\lambda \geq 4.61$  (12). For zero deaths, confidence limits for the age-adjusted death rates are not applicable.

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## Mortality Surveillance System chart topics

| <i>MVSR issue</i> | <i>Cause-of-death chart topics</i>   |
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| Vol. 41 No. 3     | Chronic obstructive pulmonary diseases and allied conditions                                   |
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| Vol. 42 No. 1     | Human immunodeficiency virus infection   |



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