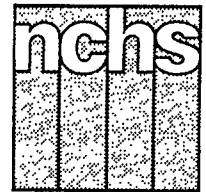


Monthly Vital Statistics Report



Provisional Data From the National Center for Health Statistics

Births, Marriages, Divorces, and Deaths for November 1991

Mortality Surveillance System
pages 5-7

Accidents and adverse effects and Homicide and legal intervention:

Males 25-44 years of age by race

Births

According to provisional reports, an estimated 327,000 births occurred in the United States during November 1991. This was a decrease of 2 percent from the provisional number of births reported for November 1990 (333,000). The birth rate, 15.7 live births per 1,000 population, was also 2 percent lower than the rate for November 1990 (16.1). The fertility rate, 67.6 live births per 1,000 women 15-44 years, was 2 percent lower than the comparable rate for November 1990 (68.8). The seasonally adjusted fertility rate (69.6) was 1 percent

below the rate for the same month in 1990 (70.6).

During the first 11 months of 1991, an estimated 3,773,000 births occurred, a decline of 1 percent from the 3,829,000 reported for the first 11 months of 1990. The January-November birth rate declined by 2 percent from 16.7 in 1990 to 16.3 in 1991. The fertility rate for this period (69.9) also was 2 percent lower than the comparable rate for January-November 1990 (71.2).

An estimated 4,123,000 live births occurred in the 12-month period ending with November 1991. This was a decrease of 1 percent compared

Provisional Vital Statistics for the United States

[Rates for infant deaths are infant mortality rates per 1,000 live births; all other rates per 1,000 population. Data are subject to monthly reporting variation; see Technical notes]

Item	November				January-November				12 months ending with November					
	Number		Rate		Number		Rate		Number		Rate			
	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990	1989	1988		
Live births	327,000	333,000	15.7	16.1	3,773,000	3,829,000	16.3	16.7	4,123,000	4,170,000	16.3	16.6	16.1	15.9
Deaths	177,000	169,000	8.4	8.2	1,974,000	1,977,000	8.5	8.6	2,161,000	2,175,000	8.5	8.7	8.6	8.8
Natural increase	150,000	164,000	7.3	7.9	1,799,000	1,852,000	7.8	8.1	1,962,000	1,995,000	7.8	7.9	7.5	7.1
Marriages	168,000	190,000	8.0	9.2	2,179,000	2,256,000	9.4	9.8	2,370,000	2,464,000	9.4	9.8	9.7	9.7
Divorces	94,000	96,000	4.5	4.6	1,088,000	1,077,000	4.7	4.7	1,186,000	1,184,000	4.7	4.7	4.7	4.8
Infant deaths	2,900	3,000	8.8	8.7	33,500	34,900	8.9	9.2	36,700	38,200	9.0	9.1	9.7	10.0

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.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
National Center for Health Statistics
Manning Feinleib, M.D., Dr. P.H., Director



with the 4,170,000 births reported for the 12 months ending with November 1990. The birth rate of 16.3 was 2 percent lower than the rate of 16.6 for the preceding 12-month period. The fertility rate for the most recent 12-month period was 69.8, a decline of 2 percent from the rate for the comparable period a year earlier (71.0). The 12-month rates, which had been increasing since mid-1987, have been generally decreasing since early 1991.

Natural increase

As a result of natural increase, the excess of births over deaths, an estimated 150,000 people, or 7.3 people per 1,000 population, were added to the population during November 1991.

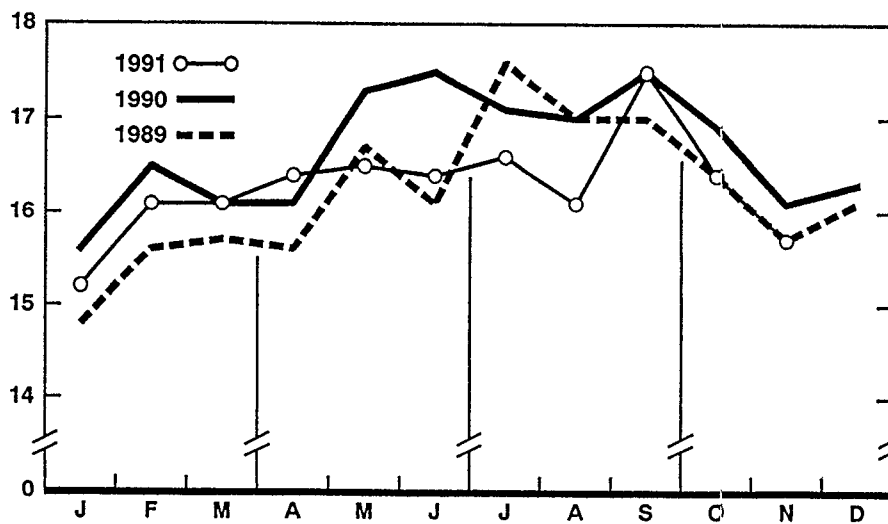
For the 12-month period ending with November 1991, 1,962,000 persons were added to the population. This represents a rate of natural increase of 7.8, 1 percent lower than the rate of 7.9 for the preceding 12-month period. Although both the birth and death rates declined by 2 percent, there was a decrease in the rate of natural increase due to a larger absolute decrease in the birth rate than in the death rate.

Marriages

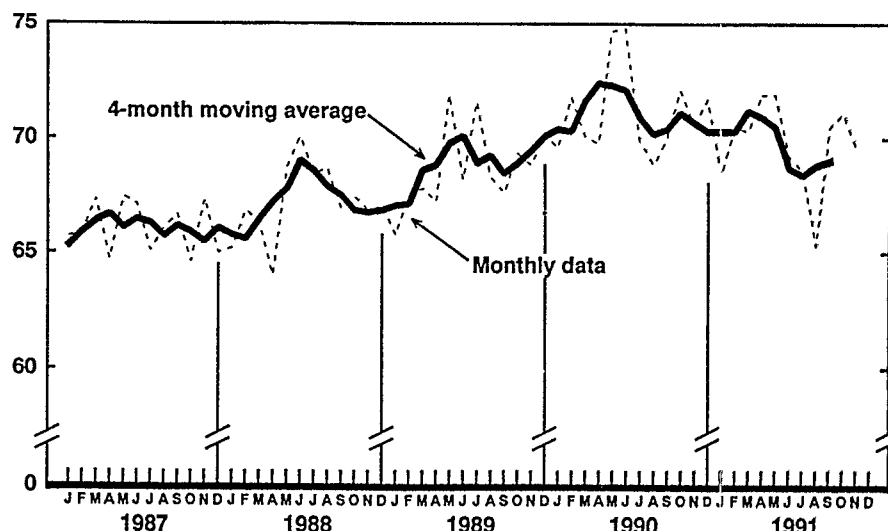
The estimated number of marriages for November 1991 was 168,000, a decline from the number for November 1990 (190,000). The marriage rate for November (per 1,000 population) was also lower in 1991 (8.0) than in 1990 (9.2).

Marriages for January–November 1991 totaled 2,179,000, a 3-percent decline from the number for the same 11-month period of the previous year (2,256,000). The marriage rate for January–November dropped 4 percent, from 9.8 in 1990 to 9.4 in 1991.

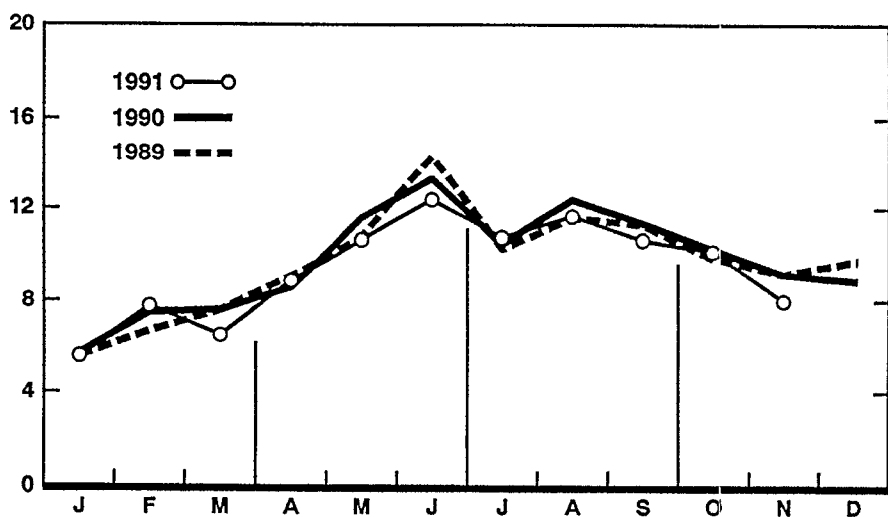
For the 12-month period ending with November 1991, the number of marriages and the marriage rate were both 4 percent lower than for the 12-month period ending with November 1990. The number of marriages dropped from 2,464,000 to 2,370,000 while the marriage rate declined from 9.8 to 9.4.



Provisional birth rates per 1,000 population by month: United States, 1989-91



Provisional seasonally adjusted fertility rates per 1,000 women aged 15-44: United States, 1987-91



Provisional marriage rates per 1,000 population by month: United States, 1989-91

Divorces

The number of divorces and the divorce rate (per 1,000 population) for November 1991 were both 2 percent lower than for November 1990. The number of divorces dropped by 2,000, from 96,000 to 94,000, and the divorce rate dropped from 4.6 to 4.5.

Although the monthly number for November declined from 1990 to 1991, divorces granted during January–November 1991 numbered 1,088,000, 1 percent higher than for the comparable period of 1990 (1,077,000). The divorce rate for the 11-month period, however, was 4.7 for both years.

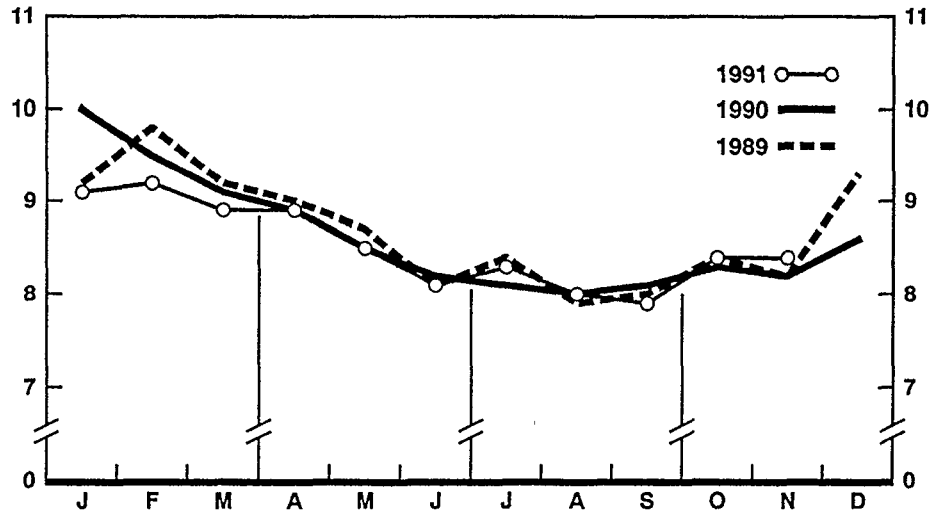
The number of divorces and the divorce rate for the 12-month period ending with November 1991 were very close to or the same as the figures for the comparable period of a year earlier. The number of divorces increased by less than 1 percent, from 1,184,000 in 1990 to 1,186,000 in 1991, and the divorce rate was 4.7 for both years.

Deaths

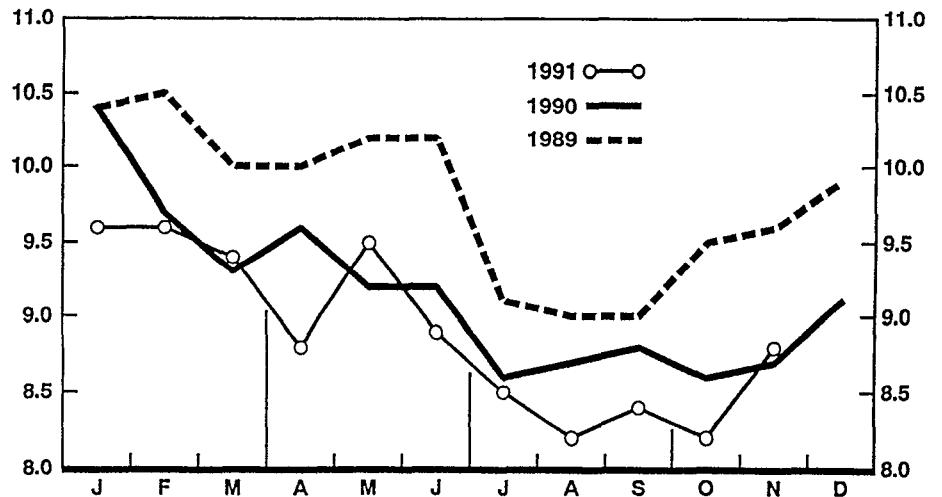
For November 1991 there were an estimated 177,000 deaths in the United States. The death rate was 8.4 deaths per 1,000 population, 2 percent higher than the rate for November a year earlier. Among the 177,000 deaths for November 1991 were 2,900 deaths at ages under 1 year.

According to provisional statistics there were 1,974,000 deaths during the first 11 months of 1991, about the same as estimated for January–November 1990 (1,977,000). The death rate, 8.5 per 1,000 population, was 1 percent lower than the January–November 1990 rate of 8.6. Among the 1,974,000 deaths for the first 11 months of 1991 were 33,500 deaths at ages under 1 year, yielding an infant mortality rate of 8.9 per 1,000 live births. This rate was 3 percent lower than the rate of 9.2 for the first 11 months of 1990.

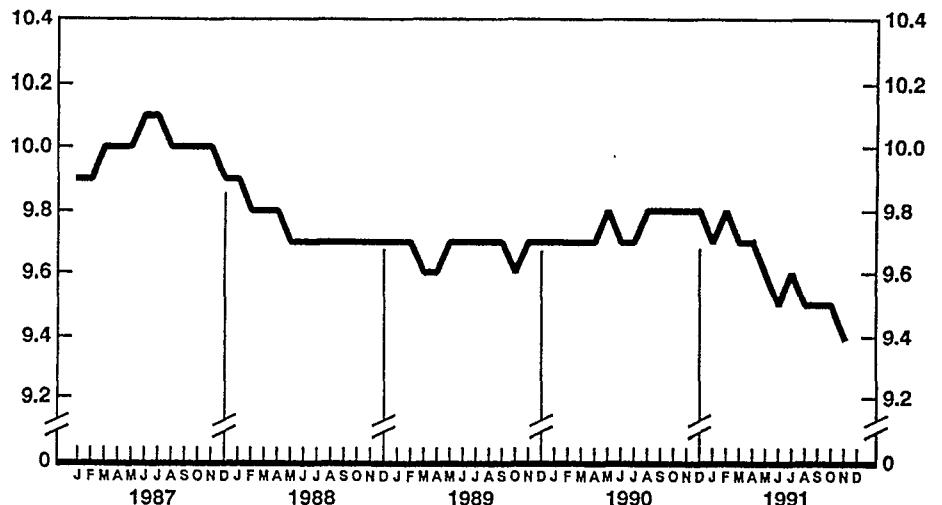
The death rate for the 12 months ending with November 1991 was 8.5 deaths per 1,000 population, 2 percent lower than the rate of 8.7 for the comparable 12-month period a year earlier. The infant mortality rate was



Provisional death rates per 1,000 population by month: United States, 1989–91



Provisional infant mortality rates per 1,000 live births by month: United States, 1989–91



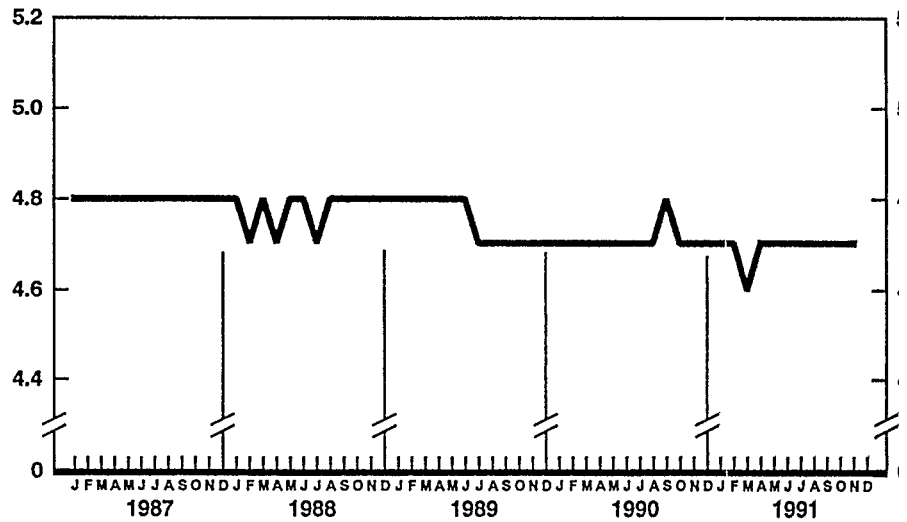
Provisional marriage rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1987–91

9.0 per 1,000 live births, compared with a rate of 9.1 for the 12 months ending with November 1990. The change in the 12-month infant mortality rate was not statistically significant.

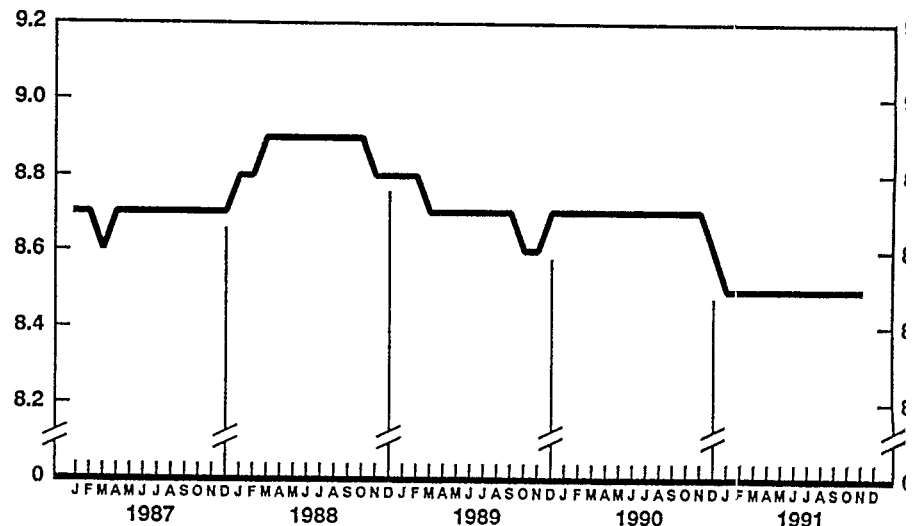
Current Mortality Sample, 12 months ending with October 1991—The provisional death rate for the 12 months ending with October 1991 was 851.3 deaths per 100,000 population, 2 percent lower than the rate of 868.3 for the 12-month period ending October 1990. Age-adjusted death rates control for changes 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. The provisional age-adjusted death rate for the 12-month period ending with October 1991 was 506.2 deaths per 100,000 population, 3 percent lower than the rate of 519.4 for the 12-month period ending with October 1990. Among the race-sex groups the estimated age-adjusted death rates decreased for white males, white females, and black females. By age, the death rate for the total population decreased for the following age groups: under 1 year, 45–54 years, 55–64 years, 65–74 years, 75–84 years, and 85 years and over.

Among the major causes of death the estimated death rate increased between the two successive 12-month periods for Human immunodeficiency virus infection. The death rate decreased between the two successive 12-month periods for Diseases of heart, Cerebrovascular diseases, Accidents and adverse effects, Chronic obstructive pulmonary diseases and allied conditions, Pneumonia and influenza, Suicide, Chronic liver disease and cirrhosis, and Septicemia.

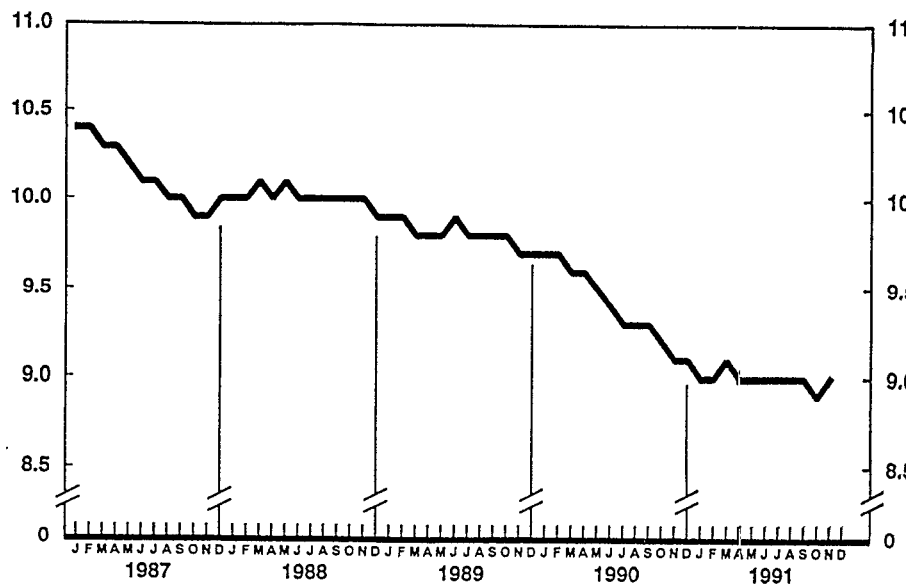
The infant mortality rate for the 12 months ending with October 1991 was 893.9 per 100,000 live births, 3 percent lower than the rate of 921.4 for the same 12-month period a year earlier. For infants under 28 days the rate was 564.2 compared with a rate of 573.1 for the 12-month period a year earlier. The infant mortality rate for



Provisional divorce rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1987-91



Provisional death rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1987-91



Provisional infant mortality rates per 1,000 live births for successive 12-month periods ending with month indicated: United States, 1987-91

compared with a rate of 349.6 for the 12-month period a year earlier. The changes in the mortality rates for infants under 28 days and for those 28 days to 11 months were not statistically significant. Among causes of infant death the infant mortality rate increased between the two successive 12-month periods for Disorders relating to short gestation and unspecified low birthweight. The infant mortality rate decreased between the two successive 12-month periods for Sudden infant death syndrome.

Mortality Surveillance System

Discussed this month are recent trends in death rates for Accidents and

adverse effects (accidents) and Homicide and legal intervention (homicide) for black and white men aged 25–44 years. In this issue, final mortality data are analyzed for data year 1989 and provisional data from January 1982–May 1991.

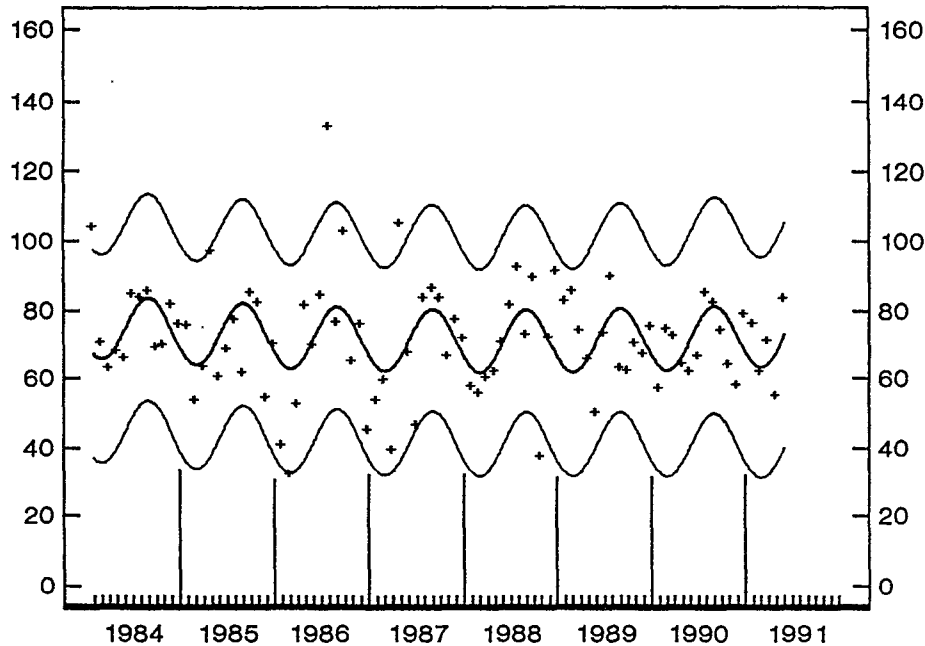
In 1989, the latest year for which final mortality data are available, homicide accounted for 15 percent of all deaths for the black population aged 25–44 years, compared with 5 percent for the white population in this age group. Accidental deaths accounted for 13 percent and 22 percent of all deaths for the respective age-race groups. Homicide was the leading cause of death for the black population in this age group and was

the sixth for the white population. Accidental deaths ranked third and first among all deaths for the black and white populations, respectively, for persons aged 25–44 years.

Based on 1989 final data, the death rate for accidents for black men aged 25–44 years was 1.5 times the rate for white men aged 25–44 years, while the rate for homicide for black men aged 25–44 years was 8.1 times the rate for white men in the same age group. Trends based on provisional data for these causes and demographic groups are presented in the Mortality Surveillance System charts and accompanying text that follow.

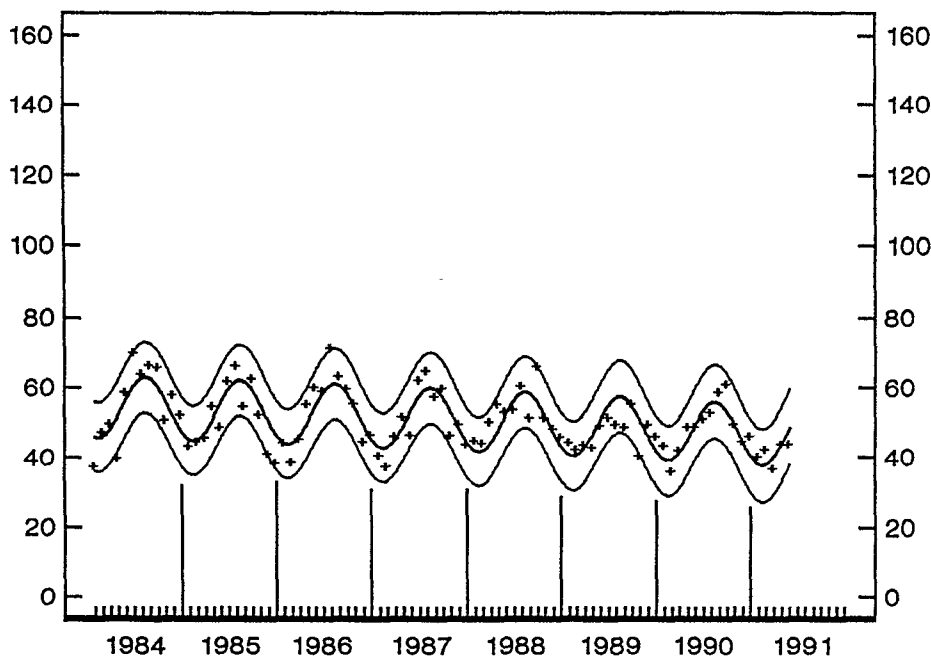
Mortality Surveillance System Charts

[Observed and fitted provisional monthly death rates and 95-percent prediction intervals. Models fitted to provisional data for January 1982–May 1990; see Technical notes]



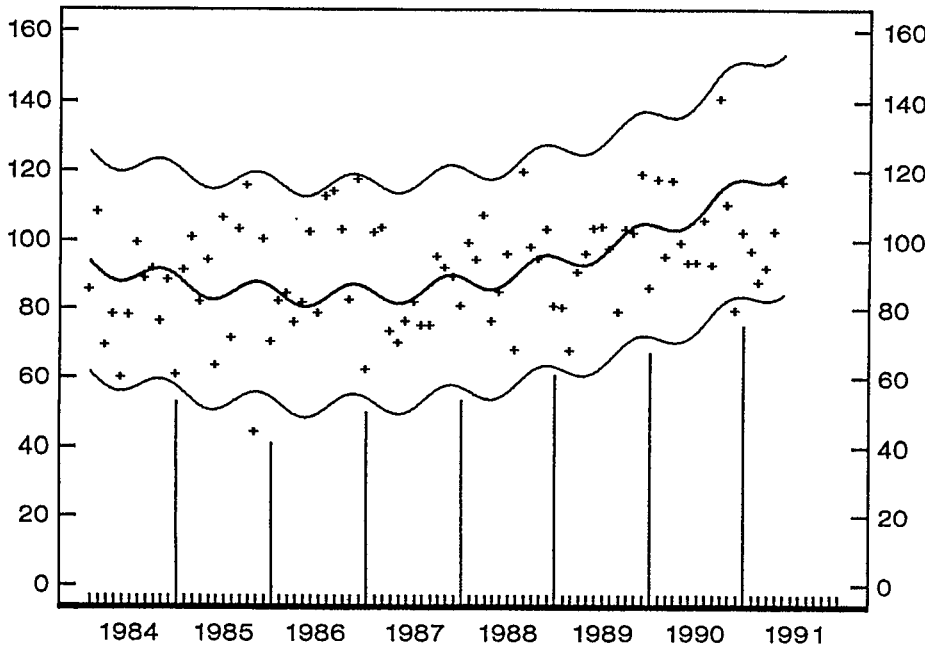
Provisional death rates per 100,000 black males 25–44 years of age for Accidents and adverse effects, by month: United States, 1984–91

In 1989, the latest year for which final mortality data are available, Accidents and adverse effects was the third leading cause of death for black men aged 25–44 years (after Homicide and legal intervention and Human immunodeficiency virus infection) and accounted for 3,476 deaths, or 14 percent of all deaths. For the period shown in the chart through May 1990, provisional death rates for Accidents and adverse effects decreased for black men aged 25–44 years. For the most recent 12-month period, June 1990–May 1991, the observed monthly rates fell within the 95-percent prediction intervals of a model estimated on the basis of provisional monthly death rates for January 1982–May 1990. Provisional death rates for black men in this age group showed a seasonal pattern of mortality with a tendency for rates to be higher in the late summer.



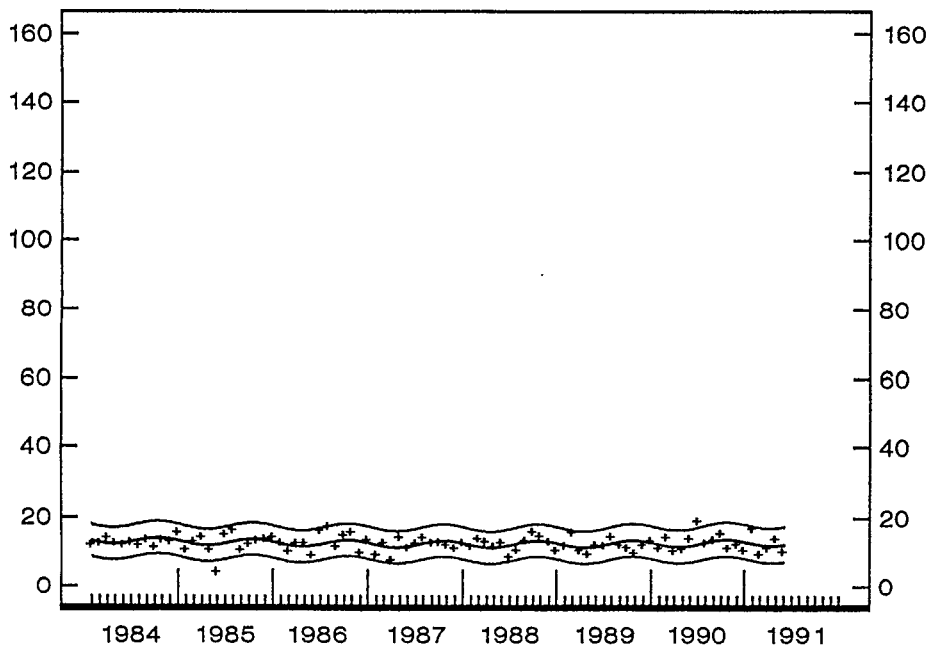
Provisional death rates per 100,000 white males 25–44 years of age for Accidents and adverse effects, by month: United States, 1984–91

According to 1989 final data, Accidents and adverse effects was the leading cause of death for white men aged 25–44 years and accounted for 17,792 deaths, or 24 percent of all deaths for this age-race-sex group. For the period shown in the chart through May 1990, provisional death rates for this cause of death decreased for white men in this age group. For the most recent 12-month period, June 1990–May 1991, the observed monthly rates were within the 95-percent prediction intervals of a model estimated on the basis of provisional monthly death rates for January 1982–May 1990. Provisional death rates for white men in this age group showed a seasonal pattern of mortality with a tendency for rates to be higher in the summer.



Provisional death rates per 100,000 black males 25-44 years of age for Homicide and legal intervention, by month: United States, 1984-91

In 1989, the latest year for which final data are available, Homicide and legal intervention was the leading cause of death for black men aged 25-44 years and accounted for 4,392 deaths, or 18 percent of all deaths for this age-race-sex group. Provisional death rates for this cause for black men aged 25-44 years decreased from January 1982 to the mid-1980's and increased since then through May 1990. For the most recent 12-month period, June 1990-May 1991, the observed monthly rates, except for 1 month, were within the 95-percent prediction intervals of a model estimated on the basis of provisional monthly death rates for January 1982-May 1990. Provisional death rates for black men in this age group showed a seasonal pattern of mortality with a tendency for rates to be higher in the fall.



Provisional death rates per 100,000 white males 25-44 years of age for Homicide and legal intervention, by month: United States, 1984-91

According to 1989 final data, Homicide and legal intervention was the sixth leading cause of death for white men aged 25-44 years and accounted for 4,174 deaths, or 6 percent of all deaths for this age-race-sex group. For these white men, provisional death rates for Homicide and legal intervention decreased from January 1982 to the mid-1980's and, as shown in the chart, have remained stable since then through May 1990. For the most recent 12-month period, June 1990-May 1991, the observed monthly rates, except for 1 month, were within the 95-percent prediction intervals of a model estimated on the basis of provisional monthly death rates for January 1982-May 1990. Provisional death rates for white men in this age group showed a seasonal pattern of mortality with a tendency for rates to be higher in the fall.

Symbols

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

Table 1. Provisional number of live births, marriages, deaths, infant deaths, and rates, by month: United States, January 1990–November 1991

[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 population	Rate per 1,000 women 15–44		Number	Rate per 1,000 population	Number	Rate per 1,000 population	Number	Rate per 1,000 live births
			Unadjusted	Seasonally adjusted ¹						
1990:										
January	330,000	15.6	66.4	69.6	121,000	5.7	213,000	10.0	3,500	10.4
February	316,000	16.5	70.2	71.8	143,000	7.5	182,000	9.5	3,100	9.7
March	342,000	16.1	68.7	70.1	161,000	7.6	193,000	9.1	3,200	9.3
April	330,000	16.1	68.5	69.8	177,000	8.6	182,000	8.9	3,200	9.6
May	368,000	17.3	73.9	74.7	247,000	11.6	180,000	8.5	3,300	9.2
June	361,000	17.5	74.7	74.8	274,000	13.3	169,000	8.2	3,200	9.2
July	364,000	17.1	72.9	69.9	224,000	10.5	173,000	8.1	3,100	8.6
August	362,000	17.0	72.6	68.9	264,000	12.4	170,000	8.0	3,100	8.7
September	362,000	17.5	74.8	70.0	236,000	11.4	168,000	8.1	3,100	8.8
October	361,000	16.9	72.2	72.1	219,000	10.3	178,000	8.3	3,100	8.6
November	333,000	16.1	68.8	70.6	190,000	9.2	169,000	8.2	3,000	8.7
December	350,000	16.3	70.0	71.7	191,000	8.9	185,000	8.6	3,200	9.1
1991:										
January	325,000	15.2	65.0	68.5	120,000	5.6	195,000	9.1	3,300	9.6
February	312,000	16.1	68.9	70.5	151,000	7.8	179,000	9.2	3,100	9.6
March	346,000	16.1	69.0	70.3	140,000	6.5	191,000	8.9	3,200	9.4
April	340,000	16.4	70.2	71.9	186,000	8.9	185,000	8.9	3,000	8.8
May	355,000	16.5	70.9	71.9	229,000	10.7	183,000	8.5	3,300	9.5
June	342,000	16.4	70.4	69.3	257,000	12.4	168,000	8.1	3,000	8.9
July	358,000	16.6	71.4	68.7	232,000	10.8	178,000	8.3	3,000	8.5
August	346,000	16.1	69.1	65.3	253,000	11.7	172,000	8.0	2,800	8.2
September	365,000	17.5	75.3	70.5	223,000	10.7	165,000	7.9	2,900	8.4
October	355,000	16.4	70.9	71.1	220,000	10.2	180,000	8.4	2,900	8.2
November	327,000	15.7	67.6	69.6	168,000	8.0	177,000	8.4	2,900	8.8

¹The 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.

Table 2. Provisional number of live births and deaths: each division and State, November 1990 and 1991, and cumulative figures, 1989-91

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

Area	Live births					Deaths				
	November		January–November			November		January–November		
	1991	1990	1991	1990	1989	1991	1990	1991	1990	1989
New England	14,341	16,507	161,226	187,528	183,180	19,262	9,411	192,994	105,523	105,711
Maine	---	970	---	15,573	15,745	---	946	---	10,172	9,611
New Hampshire	1,119	1,249	14,844	15,928	16,661	720	698	7,743	7,774	7,711
Vermont	640	640	7,247	7,648	7,570	363	386	4,202	4,263	4,111
Massachusetts	6,834	7,666	81,309	87,049	85,522	4,964	4,587	47,378	50,312	50,311
Rhode Island	1,129	1,254	13,410	13,784	13,367	782	651	8,449	8,526	8,411
Connecticut	4,619	4,728	44,416	47,546	44,315	2,433	2,143	25,222	24,476	25,411
Middle Atlantic	45,387	48,433	529,626	548,116	531,574	29,544	28,541	328,522	331,234	333,111
New York	22,445	24,108	271,488	280,140	269,163	13,152	13,034	152,755	154,916	156,111
New Jersey	9,478	10,676	101,612	109,625	106,623	6,087	5,593	63,742	64,049	64,111
Pennsylvania	13,464	13,649	156,526	158,351	155,788	10,305	9,914	112,025	112,269	112,111
East North Central	136,973	53,260	1,430,096	619,964	596,139	121,780	30,905	1,245,561	341,684	339,211
Ohio	12,814	13,145	144,348	150,424	147,054	8,212	8,238	89,106	90,562	89,511
Indiana	7,217	7,262	78,427	78,682	76,228	3,861	4,153	45,115	45,707	44,411
Illinois	---	15,849	---	178,125	175,043	---	8,432	---	94,509	95,011
Michigan	11,424	11,922	141,649	146,325	131,760	6,124	6,687	72,288	72,704	72,511
Wisconsin	5,518	5,082	65,672	66,408	66,054	3,583	3,395	39,052	38,202	38,011
West North Central	20,636	22,036	239,872	251,144	243,470	14,064	13,040	147,712	149,093	148,411
Minnesota	5,094	5,073	61,501	63,109	60,888	3,024	2,885	32,003	31,778	31,211
Iowa	3,742	3,006	32,668	35,180	35,722	2,564	2,257	23,719	25,305	23,511
Missouri	6,227	6,990	70,883	74,614	71,836	4,347	3,910	47,052	46,865	49,511
North Dakota	680	745	8,367	8,769	9,168	505	427	5,105	5,192	4,811
South Dakota	872	862	10,229	10,185	10,247	560	477	6,049	5,920	6,011
Nebraska	1,998	1,991	22,151	22,080	22,117	1,378	1,325	13,298	13,315	13,411
Kansas	2,023	3,369	34,073	37,207	33,492	1,686	1,759	20,486	20,718	20,011
South Atlantic	144,116	55,394	1,552,459	645,716	620,960	127,908	31,724	1,326,513	359,691	356,011
Delaware	693	1,027	10,289	10,469	10,252	459	514	5,316	5,304	5,311
Maryland	---	6,553	---	74,994	68,348	---	2,976	---	34,708	35,211
District of Columbia	593	866	9,317	10,059	10,351	302	616	6,009	6,881	7,111
Virginia	7,251	7,922	89,131	92,294	89,025	4,201	3,949	44,501	44,193	42,511
West Virginia	1,406	1,560	20,720	20,551	20,167	1,456	1,485	18,134	18,094	17,711
North Carolina	8,134	7,932	93,566	95,787	93,921	4,907	4,574	53,417	52,378	52,011
South Carolina	4,021	4,694	52,302	53,972	52,829	2,236	2,386	27,018	27,121	27,011
Georgia	6,506	7,922	100,235	103,201	100,618	3,445	4,331	48,236	48,623	49,111
Florida	15,512	16,918	176,899	184,389	175,449	10,902	10,893	123,882	122,369	119,611
East South Central	18,867	18,300	212,917	219,778	212,977	12,037	11,065	131,193	133,698	129,511
Kentucky	4,217	3,998	50,493	53,132	50,302	2,802	2,911	31,956	32,781	32,211
Tennessee	5,589	5,229	66,231	66,522	67,014	3,688	3,191	41,287	41,436	40,511
Alabama	5,441	5,279	56,067	59,704	56,202	3,234	2,909	34,588	36,327	34,011
Mississippi	3,620	3,794	40,126	40,420	39,459	2,313	2,054	23,362	23,154	22,611
West South Central	39,722	41,306	440,125	440,407	407,897	18,043	16,370	204,052	201,252	194,411
Arkansas	2,729	2,976	31,778	33,215	32,937	2,028	1,944	21,978	22,745	22,511
Louisiana	6,915	5,545	68,991	67,091	62,074	2,707	2,282	34,721	33,881	32,111
Oklahoma	3,630	4,136	43,675	43,580	43,927	2,407	2,493	27,710	27,907	27,011
Texas ²	26,448	28,649	295,681	296,521	268,959	10,901	9,651	119,643	116,719	112,511
Mountain	17,917	20,099	223,303	223,828	216,429	7,510	8,000	90,950	88,822	86,811
Montana	944	952	10,687	10,747	10,756	548	581	6,499	6,370	6,111
Idaho	1,272	1,378	15,998	15,448	14,521	602	649	7,127	7,028	6,911
Wyoming	488	578	6,204	6,355	6,351	267	259	2,872	2,960	2,911
Colorado	4,113	3,835	50,095	48,353	47,419	1,681	1,761	20,419	19,478	19,511
New Mexico	2,678	2,164	25,981	26,392	26,456	969	1,002	10,386	9,993	9,711
Arizona	5,293	6,041	62,285	63,482	62,327	2,331	2,315	26,876	26,275	25,711
Utah	2,244	2,948	32,228	33,533	32,575	635	698	8,384	8,527	8,111
Nevada	885	2,203	19,825	19,518	16,024	477	735	8,387	8,191	7,611
Pacific	65,096	65,638	693,347	706,239	649,360	23,132	19,867	268,243	263,254	261,111
Washington	7,068	5,427	70,468	73,304	68,216	3,203	3,037	34,173	33,970	33,511
Oregon	3,131	3,299	39,068	40,589	37,863	2,073	2,136	22,785	23,447	23,611
California ³	52,468	54,152	555,450	563,001	514,880	17,072	13,973	203,144	197,640	196,311
Alaska	916	1,026	10,184	10,553	10,569	190	180	1,984	2,005	1,811
Hawaii	1,513	1,734	18,177	18,792	17,832	594	541	6,157	6,192	5,711

¹Excludes figures for State(s) shown below as not available.

²Beginning with data for February 1991, figures include adjustments for varying length of reporting period, see Technical notes.

³Figures for all years include adjustments for varying length of reporting period, see Technical notes.

Data for all years are provisional estimates by State of residence rather than by State of occurrence and, therefore, figures for 1989 and 1990 differ from those published previously.

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, November 1990 and 1991, and cumulative figures, 1989-91

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

Area	Marriages					Divorces				
	November		January–November			November		January–November		
	1991	1990	1991	1990	1989	1991	1990	1991	1990	1989
New England	15,820	8,304	160,068	104,326	107,370	12,337	3,758	12,443	4,604	4,115
Maine	---	887	---	10,967	11,574	---	529	---	327	396
New Hampshire	730	937	9,138	9,914	10,408	349	450	445	399	736
Vermont	576	525	5,710	5,777	5,736	360	325	236	396	400
Massachusetts	3,936	3,673	38,103	43,692	46,733	1,380	1,683	1,435	2,067	1,158
Rhode Island	578	535	7,117	7,676	7,756	248	251	327	376	335
Connecticut	---	1,747	---	26,300	25,163	---	520	---	1,039	1,090
Middle Atlantic	11,570	26,032	125,332	287,243	283,437	8,389	8,347	21,511	24,952	23,420
New York ²	---	15,344	---	153,410	150,516	4,743	4,579	6,671	9,931	8,854
New Jersey	4,543	4,737	51,852	53,907	56,018	1,096	1,666	1,917	2,640	2,652
Pennsylvania	7,027	5,951	73,480	79,926	76,903	2,550	2,102	12,923	12,381	11,914
East North Central	10,783	121,333	1151,877	1250,138	330,702	14,297	19,198	152,880	1100,102	1137,968
Ohio	---	10,056	---	88,881	91,536	---	5,040	---	46,869	44,486
Indiana	4,067	3,649	47,027	50,082	50,463	---	---	---	---	---
Illinois	---	---	---	---	77,745	---	---	---	---	41,230
Michigan	4,855	5,921	68,975	72,192	72,512	2,944	2,709	36,079	36,958	36,281
Wisconsin	1,861	1,707	35,875	38,983	38,446	1,353	1,449	16,801	16,275	15,971
West North Central	10,179	11,389	139,387	145,194	145,554	5,379	6,402	71,653	70,675	68,778
Minnesota	1,777	2,127	30,924	31,905	32,620	1,103	1,219	13,978	13,891	14,191
Iowa	2,048	1,902	22,253	23,274	22,607	948	963	11,159	10,166	9,227
Missouri	3,188	3,982	42,560	45,309	47,590	2,231	1,661	24,103	23,758	24,406
North Dakota	253	333	4,363	4,462	4,559	168	172	1,993	2,142	2,059
South Dakota	355	502	6,901	7,228	6,698	230	213	2,509	2,429	2,408
Nebraska	770	846	11,770	11,610	11,886	535	595	5,883	5,978	5,801
Kansas	1,788	1,697	20,616	21,406	19,594	164	1,579	12,028	12,311	10,686
South Atlantic	33,464	33,607	410,973	419,983	407,878	17,209	17,129	20,421	19,766	19,201
Delaware	453	432	5,016	5,236	5,571	218	304	266	231	350
Maryland	3,156	3,899	40,994	42,629	44,404	1,143	1,047	1,325	1,360	1,238
District of Columbia	420	308	4,385	4,405	4,505	228	242	204	229	189
Virginia	5,025	5,386	63,109	65,549	63,535	2,208	2,226	2,230	2,010	1,990
West Virginia	735	1,155	11,443	12,301	12,139	847	806	3,455	3,054	3,184
North Carolina	3,656	3,530	45,124	47,610	46,669	2,513	2,703	2,208	2,475	2,242
South Carolina	4,558	4,179	48,978	51,006	48,941	1,133	1,143	835	964	951
Georgia	4,907	3,810	66,640	61,520	55,581	2,912	1,923	3,603	3,508	2,396
Florida	10,554	10,908	125,284	129,727	126,533	6,007	6,735	6,295	5,935	6,661
East South Central	12,861	14,559	166,486	169,181	167,093	7,574	6,905	86,224	86,713	83,503
Kentucky	2,766	3,931	43,774	47,148	47,361	2,012	1,727	19,945	20,173	19,688
Tennessee	5,378	5,702	63,103	60,109	58,609	2,701	2,676	29,829	29,660	28,669
Alabama	2,999	2,954	38,523	39,852	39,135	1,802	1,983	24,515	23,703	23,260
Mississippi	1,718	1,972	21,086	22,072	21,988	1,059	519	11,935	13,177	11,886
West South Central	16,355	24,745	1235,109	266,531	256,129	11,667	10,986	140,093	125,370	123,294
Arkansas	2,467	3,136	34,860	32,881	31,670	1,360	1,617	17,173	15,739	15,096
Louisiana	---	4,054	---	36,703	34,681	---	---	---	---	---
Oklahoma	2,168	2,613	29,586	30,174	30,018	1,756	1,921	21,733	23,253	21,377
Texas ³	11,720	14,942	170,663	166,773	159,760	8,551	7,448	101,187	86,378	86,821
Mountain	16,546	19,348	187,603	233,264	223,271	14,638	6,822	150,891	80,263	77,185
Montana	323	397	6,675	6,496	6,323	385	319	4,005	3,782	3,789
Idaho	1,290	856	13,411	13,767	11,752	543	473	5,933	6,091	5,566
Wyoming	214	274	4,368	4,407	4,172	233	248	2,965	2,834	2,787
Colorado	---	2,071	---	29,662	29,667	---	1,492	---	17,057	17,137
New Mexico ^{4,5}	868	961	11,994	12,037	11,601	615	659	7,727	7,137	7,070
Arizona ²	2,697	3,331	33,616	34,100	33,318	2,179	1,915	22,605	23,167	21,272
Utah	1,154	1,564	17,539	17,674	17,142	683	608	7,656	8,046	7,412
Nevada	---	9,894	---	115,121	109,296	---	1,108	---	12,149	12,152
Pacific	16,232	23,891	190,904	305,938	288,930	14,217	17,108	148,959	163,360	153,449
Washington	3,092	2,466	46,982	45,388	39,788	2,340	1,940	26,861	26,066	24,586
Oregon	1,385	2,254	21,976	23,211	21,504	1,252	1,772	14,388	14,742	13,850
California	---	17,245	---	215,250	205,825	---	12,755	---	115,148	106,957
Alaska	417	416	5,577	5,318	5,253	135	185	3,005	2,691	3,002
Hawaii	1,338	1,510	16,369	16,771	16,560	490	456	4,705	4,713	5,054

¹Excludes figures for State(s) shown below as not available.

²Figures for marriages are marriage licenses issued for some counties.

³Beginning with data for February 1991, figures include adjustments for varying length of reporting period. see Technical notes.

⁴Figures for marriages are marriage licenses issued.

⁵Figures for divorces include estimates for some counties.

Data are provisional estimates by State of occurrence rather than by State of residence and should be interpreted accordingly.

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 November 1990 and 1991

[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 November			
	1991		1990	
	Number	Rate	Number	Rate
New England	1,978	15.1	1,503	7.3
Maine	102	6.2	110	6.3
New Hampshire	99	6.1	124	7.1
Vermont	46	5.8	56	6.8
Massachusetts	634	7.2	692	7.2
Rhode Island	97	6.6	108	7.2
Connecticut	---	---	413	8.1
Middle Atlantic	12,591	14.5	5,689	9.5
New York	---	---	2,887	9.6
New Jersey	1,022	8.8	1,119	9.1
Pennsylvania	1,569	9.3	1,683	9.8
East North Central	14,401	16.6	6,859	10.1
Ohio	1,507	9.5	1,580	9.6
Indiana	769	9.1	830	9.7
Illinois	---	---	2,153	11.0
Michigan	1,549	10.0	1,665	10.5
Wisconsin	576	8.0	631	8.7
West North Central	2,274	8.7	2,205	8.1
Minnesota	488	7.3	516	7.5
Iowa	281	7.7	346	9.1
Missouri	806	10.4	670	8.3
North Dakota	82	9.0	68	7.1
South Dakota	93	8.5	108	9.8
Nebraska	183	7.6	182	7.6
Kansas	341	9.2	315	7.8
South Atlantic	16,317	19.2	7,367	10.5
Delaware	145	13.1	110	9.7
Maryland	---	---	739	9.1
District of Columbia	166	16.3	207	19.0
Virginia	953	9.8	1,036	10.3
West Virginia	204	9.1	210	9.3
North Carolina	1,138	11.1	1,158	11.1
South Carolina	589	10.3	712	12.1
Georgia	1,331	12.1	1,273	11.5
Florida	1,791	9.3	1,922	9.5
East South Central	2,375	10.1	2,406	10.2
Kentucky	465	8.4	484	8.6
Tennessee	721	10.0	746	10.5
Alabama	690	10.7	640	9.8
Mississippi	499	11.5	536	12.2
West South Central	4,105	8.5	4,129	8.6
Arkansas	369	10.6	354	9.9
Louisiana	744	10.1	752	10.2
Oklahoma	470	9.9	460	9.7
Texas ²	2,522	7.8	2,563	7.9
Mountain	1,937	8.0	2,079	8.5
Montana	91	7.8	105	9.0
Idaho	153	8.9	148	8.9
Wyoming	49	7.2	60	8.6
Colorado	456	8.3	424	7.9
New Mexico	242	8.6	247	8.9
Arizona	571	8.5	636	9.2
Utah	214	6.1	274	7.6
Nevada	161	7.5	185	8.5
Pacific	5,838	7.7	6,058	7.9
Washington	562	7.5	611	7.7
Oregon	317	7.4	335	7.4
California ³	4,735	7.8	4,843	7.9
Alaska	93	8.2	121	10.4
Hawaii	131	6.6	148	7.2

¹Excludes figures for State shown below as not available.²Beginning with data for February 1991, figures include adjustments for varying length of reporting period, see Technical notes.³Figures for all years include adjustments for varying length of reporting period, see Technical notes.

Data for all years are provisional estimates by State of residence rather than by State of occurrence and, therefore, differ from those published previously.

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, October 1990 and 1991, cumulative figures 1990 and 1991, and 12 months ending with October 1990 and 1991

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population in specified group. 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	October				January–October				12 months ending with October			
	1991		1990		1991		1990		1991		1990	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
All races, both sexes¹												
All ages	180,000	835.6	178,000	831.4	1,797,000	852.5	1,808,000	866.4	2,153,000	851.3	2,174,000	868.3
Under 1 year					30,600	² 897.3	31,900	² 944.2	36,800	² 905.9	38,380	² 955.9
1–4 years	4,240	89.2	4,230	90.4	6,290	49.5	5,710	45.6	7,260	47.6	6,750	45.1
5–14 years					7,230	23.9	7,190	24.2	8,600	23.7	8,620	24.2
15–24 years	3,190	106.1	2,740	90.1	31,390	106.3	31,190	104.0	37,090	104.6	37,260	103.5
25–34 years	5,130	139.6	5,050	136.2	50,050	138.5	51,370	141.0	59,580	137.2	61,860	141.4
35–44 years	7,890	235.0	7,110	218.9	72,750	223.1	69,710	222.0	87,000	222.5	83,650	222.2
45–54 years	10,280	456.6	10,150	465.5	99,150	456.6	99,120	467.7	118,230	454.7	119,460	470.0
55–64 years	20,490	1,132.5	20,390	1,121.9	206,240	1,160.6	210,340	1,177.5	247,610	1,160.5	253,280	1,181.0
65–74 years	39,320	2,476.0	40,200	2,558.4	399,370	2,574.9	403,650	2,633.1	476,600	2,560.4	483,690	2,629.2
75–84 years	49,210	5,649.4	49,560	5,813.2	500,930	5,916.9	506,490	6,112.0	601,630	5,922.7	609,070	6,127.5
85 years and over	40,640	14,317.9	38,140	14,055.3	392,530	14,365.8	389,730	14,889.8	470,390	14,354.3	470,490	14,998.1
Not stated	80	...	100	...	760	...	1,280	...	940	...	1,500	...
Age-adjusted rate . . . . .	...	496.4	...	496.8	...	507.7	...	518.4	...	506.2	...	519.4
All races, male¹												
All ages	94,370	895.7	91,820	881.1	931,330	905.9	938,640	922.7	1,114,290	903.7	1,127,270	923.5
Under 1 year					17,630	² 1,011.0	18,190	² 1,051.8	21,080	² 1,014.9	21,720	² 1,056.9
1–4 years	2,560	105.2	2,510	104.7	3,340	51.2	3,180	49.8	3,920	50.2	3,720	48.5
5–14 years					4,480	28.9	4,520	29.7	5,250	28.3	5,370	29.4
15–24 years	2,370	155.7	2,080	135.2	23,790	159.0	23,610	155.7	28,090	156.7	28,120	154.3
25–34 years	3,750	203.7	3,540	190.7	36,690	202.8	37,770	207.0	43,720	201.3	45,430	207.4
35–44 years	5,690	342.2	4,730	294.5	50,220	311.4	47,700	307.3	59,930	309.8	56,890	305.8
45–54 years	6,210	566.7	6,370	600.6	62,570	592.1	62,800	609.3	74,370	587.9	75,540	610.9
55–64 years	12,730	1,483.4	12,230	1,421.2	126,980	1,507.5	127,970	1,514.2	151,810	1,501.1	154,190	1,519.7
65–74 years	22,890	3,223.0	22,900	3,264.3	228,930	3,303.4	232,190	3,395.4	273,240	3,285.3	279,080	3,401.3
75–84 years	24,400	7,312.0	24,710	7,614.2	246,410	7,618.4	251,310	7,983.9	296,670	7,648.1	301,020	7,976.2
85 years and over	13,730	17,308.3	12,700	16,801.4	129,860	17,030.8	128,570	17,617.6	155,640	17,009.8	155,220	17,759.7
Not stated	40	...	50	...	440	...	840	...	560	...	970	...
Age-adjusted rate . . . . .	...	648.6	...	640.5	...	658.6	...	673.8	...	656.2	...	674.5
All races, female¹												
All ages	86,100	778.6	85,860	784.2	865,920	801.8	869,090	812.9	1,037,410	800.4	1,046,820	815.9
Under 1 year					12,940	² 778.5	13,770	² 834.9	15,680	² 791.5	16,710	² 852.6
1–4 years	1,680	72.4	1,720	75.3	2,950	47.5	2,530	41.5	3,340	44.9	3,040	41.6
5–14 years					2,750	18.7	2,670	18.4	3,350	18.9	3,260	18.8
15–24 years	820	55.2	660	43.9	7,600	52.0	7,580	51.1	9,000	51.3	9,140	51.4
25–34 years	1,390	75.8	1,500	81.0	13,370	74.0	13,600	74.7	15,850	73.1	16,430	75.2
35–44 years	2,200	129.8	2,380	145.0	22,530	136.9	22,000	138.5	27,060	137.0	26,760	140.6
45–54 years	4,060	351.3	3,780	337.6	36,580	328.1	36,320	333.6	43,870	328.6	43,920	336.4
55–64 years	7,760	815.8	8,170	853.7	79,270	848.1	82,380	875.2	95,800	853.5	99,090	876.7
65–74 years	16,430	1,871.4	17,290	1,987.8	170,440	1,986.9	171,460	2,019.2	203,360	1,974.8	204,610	2,007.6
75–84 years	24,810	4,617.0	24,860	4,708.2	254,520	4,865.1	255,190	4,966.3	304,960	4,856.8	308,050	4,996.8
85 years and over	26,910	13,157.9	25,440	13,000.7	262,670	13,333.6	261,160	13,834.8	314,750	13,325.6	315,270	13,931.5
Not stated	40	...	50	...	310	...	440	...	380	...	540	...
Age-adjusted rate . . . . .	...	370.2	...	379.5	...	382.8	...	390.9	...	382.3	...	392.4
White												
All ages	155,830	862.1	154,250	860.2	1,551,980	878.7	1,568,470	895.0	1,861,680	878.4	1,885,260	896.4
Under 1 year					19,890	² 738.7	21,820	² 811.8	24,340	² 759.0	26,130	² 817.8
1–4 years	2,690	71.1	3,070	82.1	4,310	42.7	4,110	41.0	5,030	41.4	4,890	40.8
5–14 years					5,290	21.9	5,410	22.7	6,410	22.1	6,490	22.8
15–24 years	2,330	96.0	2,150	87.3	22,770	95.3	23,250	95.6	26,880	93.8	27,780	95.1
25–34 years	3,660	119.8	3,660	118.4	35,870	119.2	37,290	122.6	42,530	117.7	44,670	122.3
35–44 years	5,740	201.4	5,260	190.2	53,230	192.1	51,360	191.9	64,080	192.7	61,900	192.9
45–54 years	7,840	404.9	7,990	426.0	77,560	415.4	78,260	429.0	92,760	414.9	94,210	430.5
55–64 years	17,050	1,086.1	16,860	1,065.5	170,580	1,104.9	174,910	1,123.1	205,630	1,109.1	210,420	1,125.3
65–74 years	34,360	2,437.3	35,350	2,528.0	347,530	2,521.9	353,630	2,589.9	415,300	2,510.4	423,470	2,584.0
75–84 years	44,490	5,655.7	44,610	5,786.6	452,340	5,913.3	457,650	6,105.3	543,570	5,922.5	549,980	6,116.3
85 years and over	37,580	14,632.1	35,220	14,324.2	361,950	14,633.7	360,040	15,171.8	434,370	14,645.0	434,380	15,273.6
Not stated	70	...	80	...	650	...	750	...	780	...	930	...
Age-adjusted rate . . . . .	...	472.2	...	477.4	...	483.8	...	496.7	...	483.6	...	497.4

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, October 1990 and 1991, cumulative figures 1990 and 1991, and 12 months ending with October 1990 and 1991—Con.

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population in specified group. 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	October				January–October				12 months ending with October			
	1991		1990		1991		1990		1991		1990	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
White male												
All ages	80,580	910.2	79,070	900.8	796,580	921.2	807,800	941.8	954,890	920.5	969,700	942.1
Under 1 year					11,550	² 837.1	12,560	² 909.0	14,050	² 854.1	14,970	² 913.4
1–4 years	1,670	86.0	1,840	95.9	2,360	45.5	2,270	44.3	2,810	45.1	2,690	43.8
5–14 years					3,290	26.6	3,360	27.5	3,940	26.5	4,020	27.5
15–24 years	1,730	140.4	1,620	129.7	17,110	141.2	17,450	141.6	20,130	138.5	20,780	140.2
25–34 years	2,790	180.7	2,640	169.0	26,590	174.9	27,820	181.1	31,630	173.3	33,370	180.8
35–44 years	4,190	293.5	3,550	256.6	37,170	268.0	35,560	265.5	44,510	267.5	42,580	265.4
45–54 years	4,840	508.0	5,050	547.6	49,290	536.8	49,870	556.1	58,500	532.1	59,900	556.8
55–64 years	10,630	1,417.1	10,310	1,366.4	105,960	1,437.4	107,960	1,454.8	127,430	1,439.6	129,920	1,458.5
65–74 years	20,070	3,171.5	20,170	3,218.8	200,720	3,247.4	205,150	3,355.5	239,640	3,230.1	246,260	3,356.9
75–84 years	22,160	7,356.0	22,250	7,589.1	223,240	7,644.0	227,580	8,003.3	269,020	7,679.7	272,440	7,989.4
85 years and over	12,450	17,576.6	11,610	17,173.2	118,950	17,463.6	117,720	18,036.9	142,790	17,477.4	142,170	18,180.3
Not stated	30	...	40	...	360	...	500	...	430	...	600	...
Age-adjusted rate . . . . .	...	618.3	...	616.6	...	628.2	...	646.8	...	627.0	...	647.1
White female												
All ages	75,250	816.0	75,180	821.3	755,390	837.9	760,670	850.1	906,790	838.0	915,550	852.5
Under 1 year					8,340	² 636.6	9,270	² 709.5	10,280	² 658.1	11,160	² 717.2
1–4 years	1,020	55.3	1,230	67.5	1,950	39.5	1,840	37.6	2,230	37.7	2,200	37.6
5–14 years					2,000	17.1	2,050	17.7	2,470	17.5	2,470	17.8
15–24 years	600	50.2	530	43.7	5,670	48.2	5,800	48.3	6,750	47.8	7,000	48.7
25–34 years	870	57.6	1,020	66.7	9,280	62.2	9,470	62.8	10,890	60.9	11,300	62.5
35–44 years	1,550	109.0	1,710	123.7	16,070	116.2	15,790	117.9	19,570	117.8	19,320	120.4
45–54 years	3,000	305.0	2,950	309.4	28,270	297.9	28,390	306.0	34,260	301.6	34,310	308.4
55–64 years	6,410	781.9	6,550	791.2	64,620	800.9	66,950	821.1	78,200	807.1	80,500	822.2
65–74 years	14,290	1,839.2	15,180	1,967.1	146,810	1,931.6	148,470	1,968.7	175,670	1,925.4	177,210	1,957.7
75–84 years	22,330	4,600.5	22,360	4,680.4	229,100	4,845.2	230,070	4,945.4	274,550	4,837.9	277,540	4,972.1
85 years and over	25,130	13,510.7	23,610	13,243.9	243,010	13,557.8	242,320	14,087.1	291,580	13,568.2	292,210	14,171.2
Not stated	40	...	40	...	280	...	240	...	350	...	320	...
Age-adjusted rate . . . . .	...	350.8	...	363.6	...	364.6	...	373.6	...	365.3	...	374.7
Black												
All ages	21,660	800.8	21,080	792.5	219,070	832.0	214,920	829.6	259,840	823.0	259,700	835.6
Under 1 year					9,760	² 1,745.7	9,340	² 1,720.6	11,400	² 1,709.1	11,330	² 1,756.6
1–4 years	1,410	188.0	1,040	141.8	1,760	87.9	1,370	70.9	1,960	81.6	1,600	69.0
5–14 years					1,640	34.5	1,520	32.8	1,850	32.6	1,810	32.5
15–24 years	770	170.8	530	116.9	7,670	173.3	7,110	159.1	9,060	171.1	8,460	157.8
25–34 years	1,300	272.3	1,220	255.8	12,730	272.2	12,840	275.0	15,320	273.2	15,640	279.0
35–44 years	1,960	518.8	1,660	461.3	17,740	486.8	16,670	481.5	20,870	478.2	19,830	477.8
45–54 years	2,160	920.8	1,960	856.3	19,470	855.9	18,750	842.1	23,030	845.8	22,800	853.6
55–64 years	3,190	1,719.0	3,200	1,737.9	32,150	1,771.9	32,260	1,791.8	38,070	1,747.9	38,840	1,797.3
65–74 years	4,120	2,932.9	4,370	3,176.1	46,200	3,383.2	44,790	3,348.9	54,840	3,348.0	54,070	3,370.9
75–84 years	3,980	6,023.3	4,450	6,885.0	42,950	6,692.6	43,510	6,917.3	51,480	6,685.7	52,710	6,990.7
85 years and over	2,760	12,498.8	2,630	12,436.2	26,900	12,624.6	26,390	12,954.3	31,810	12,474.5	32,180	13,134.7
Not stated	10	...	20	...	100	...	360	...	140	...	410	...
Age-adjusted rate . . . . .	...	714.7	...	704.3	...	739.4	...	737.9	...	731.4	...	742.8
Black male												
All ages	12,030	936.4	11,450	906.8	119,360	955.0	116,870	950.6	141,710	946.1	140,740	954.2
Under 1 year					5,580	² 1,964.5	5,190	² 1,887.1	6,440	² 1,905.3	6,180	² 1,889.9
1–4 years	800	209.6	580	155.5	890	85.4	760	77.4	990	80.9	850	72.0
5–14 years					1,040	42.8	990	42.0	1,150	39.8	1,150	40.7
15–24 years	570	255.3	400	178.2	5,980	273.6	5,570	251.3	7,110	271.8	6,610	249.2
25–34 years	880	389.8	780	346.0	8,990	406.7	9,090	412.1	10,810	408.7	10,990	415.0
35–44 years	1,340	774.5	1,070	651.1	11,870	712.7	11,020	696.0	14,060	705.1	13,030	688.0
45–54 years	1,230	1,175.5	1,230	1,203.8	12,020	1,185.7	11,800	1,186.5	14,370	1,182.7	14,330	1,201.2
55–64 years	1,980	2,350.1	1,780	2,129.9	19,040	2,312.0	18,210	2,229.7	22,220	2,249.0	21,960	2,238.5
65–74 years	2,250	3,700.0	2,450	4,126.9	24,830	4,205.3	24,010	4,171.5	29,750	4,202.0	29,250	4,239.1
75–84 years	1,820	7,338.7	2,200	9,088.8	19,900	8,260.0	20,770	8,824.3	23,860	8,256.1	25,000	8,865.2
85 years and over	1,150	17,584.8	940	14,757.0	9,140	14,369.0	9,230	15,051.2	10,850	14,276.3	11,130	15,040.5
Not stated	10	...	10	...	80	...	230	...	120	...	260	...
Age-adjusted rate . . . . .	...	943.5	...	923.1	...	969.5	...	965.7	...	960.8	...	970.5

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, October 1990 and 1991, cumulative figures 1990 and 1991, and 12 months ending with October 1990 and 1991—Con.

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population in specified group. 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	October				January–October				12 months ending with October							
	1991		1990		1991		1990		1991		1990					
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate				
Black female																
All ages	9,620	677.5	9,630	689.3	99,700	720.9	98,050	720.3	118,130	711.9	118,960	728.5				
Under 1 year	610	165.6	450	124.9	4,180	² 1,520.2	4,150	² 1,549.6	4,960	² 1,507.6	5,160	² 1,622.6				
1–4 years					870	88.5	610	64.2	980	83.1	750	65.8				
5–14 years					600	25.8	530	23.3	700	25.1	660	24.1				
15–24 years					200	87.9	130	56.8	1,690	75.2	1,540	68.3	1,950	72.8	1,850	68.3
25–34 years					420	166.9	440	174.9	3,740	151.9	3,750	152.2	4,510	152.2	4,660	157.5
35–44 years	620	302.8	580	296.7	5,870	296.9	5,650	299.7	6,810	287.3	6,800	301.4				
45–54 years	930	715.7	720	568.2	7,450	591.9	6,950	562.6	8,660	574.3	8,480	573.7				
55–64 years	1,210	1,194.2	1,420	1,412.1	13,110	1,323.1	14,040	1,429.0	15,860	1,332.8	16,880	1,430.5				
65–74 years	1,870	2,347.3	1,930	2,467.3	21,370	2,756.2	20,780	2,728.4	25,090	2,697.8	24,820	2,715.5				
75–84 years	2,160	5,233.0	2,260	5,590.3	23,050	5,741.8	22,740	5,780.9	27,620	5,742.2	27,710	5,870.8				
85 years and over	1,610	10,358.7	1,690	11,435.8	17,750	11,876.2	17,160	12,037.4	20,960	11,709.5	21,060	12,315.8				
Not stated	—	...	10	...	20	...	130	...	20	...	150	...				
Age-adjusted rate . . . . .	...	533.4	...	533.5	...	554.8	...	557.2	...	547.8	...	562.8			

¹Includes races other than white and black.

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

NOTE: Figures include all revisions received from the States. Cumulative and 12-month figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published. Data include adjustments for Maryland and Oregon, which are not included in the sample for October 1991.

Table 6. Provisional number of deaths and death rates for 72 selected causes and Human immunodeficiency virus infection: United States, October 1990 and 1991, cumulative figures 1990 and 1991, and 12 months ending with October 1990 and 1991

[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)	October		January–October		12 months ending with October								
	1991		1990		1991		1990		1991		1990		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
All causes	180,000	835.6	178,000	831.4	1,797,000	852.5	1,808,000	866.4	2,153,000	851.3	2,174,000	868.3	
Shigellosis and amebiasis . . . . .	.004,006	—	*	*	20	*	—	*	20	*	—	*	
Certain other intestinal infections . . . . .	.007–009	40	*	30	*	540	0.2	360	0.2	610	0.2	440	0.2
Tuberculosis . . . . .	.010–018	140	0.6	160	0.7	1,380	0.7	1,470	0.7	1,580	0.6	1,750	0.7
Tuberculosis of respiratory system . . . . .	.010–012	120	0.6	120	0.6	1,040	0.5	1,130	0.5	1,190	0.5	1,350	0.5
Other tuberculosis . . . . .	.013–018	20	*	40	*	340	0.2	340	0.2	390	0.2	400	0.2
Whooping cough . . . . .	.033	—	*	—	*	—	*	20	*	—	*	20	*
Streptococcal sore throat, scarlatina, and erysipelas . . . . .	.034–035	—	*	—	*	10	*	10	*	10	*	10	*
Meningococcal infection . . . . .	.036	30	*	10	*	240	0.1	110	0.0	310	0.1	150	0.1
Septicemia . . . . .	.038	1,730	8.0	1,660	7.8	15,970	7.6	16,600	8.0	19,090	7.5	20,150	8.0
Acute poliomyelitis . . . . .	.045	—	*	—	*	10	*	—	*	10	*	—	*
Measles . . . . .	.055	—	*	—	*	20	*	70	*	20	*	80	*
Viral hepatitis . . . . .	.070	130	0.6	160	0.7	1,610	0.8	1,430	0.7	1,830	0.7	1,790	0.7
Syphilis . . . . .	.090–097	20	*	10	*	120	0.0	80	*	150	0.1	120	0.0
All other infectious and parasitic diseases ¹ . . . . .	.001–003,005,020 032,037,039–041,*042–*044,046–054,056–066,071–088,098–139	3,570	16.5	2,670	12.5	29,210	13.9	26,120	12.5	34,290	13.6	30,980	12.4
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues. . . . .	.140–208	43,920	203.4	44,210	206.9	429,690	203.8	424,400	203.4	512,380	202.6	507,610	202.7
Malignant neoplasms of lip, oral cavity, and pharynx . . . . .	.140–149	650	3.0	660	3.1	6,300	3.0	6,690	3.2	7,470	3.0	8,030	3.2
Malignant neoplasms of digestive organs and peritoneum . . . . .	.150–159	9,980	46.2	10,660	49.9	99,820	47.3	100,840	48.3	120,200	47.5	120,800	48.2
Malignant neoplasms of respiratory and intrathoracic organs . . . . .	.160–165	12,700	58.8	12,270	57.4	122,870	58.3	120,140	57.6	146,390	57.9	143,320	57.2
Malignant neoplasm of breast . . . . .	.174–175	4,050	18.7	3,830	17.9	37,630	17.8	37,440	17.9	45,220	17.9	44,570	17.8
Malignant neoplasms of genital organs . . . . .	.179–187	5,200	24.1	5,440	25.5	49,650	23.6	48,880	23.4	58,740	23.2	58,130	23.2
Malignant neoplasms of urinary organs . . . . .	.188–189	1,620	7.5	1,820	8.5	17,480	8.3	16,980	8.1	20,840	8.2	20,500	8.2
Malignant neoplasms of all other and unspecified sites . . . . .	.170–173,190–199	5,540	25.6	5,400	25.3	53,800	25.5	52,710	25.3	63,450	25.1	63,850	25.5
Leukemia . . . . .	.204–208	1,610	7.5	1,700	7.9	16,230	7.7	15,750	7.5	19,130	7.6	18,740	7.5
Other malignant neoplasms of lymphatic and hematopoietic tissues . . . . .	.200–203	2,570	11.9	2,440	11.4	25,920	12.3	24,960	12.0	30,950	12.2	29,680	11.9
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature . . . . .	.210–239	600	2.8	640	3.0	6,500	3.1	6,670	3.2	7,660	3.0	7,940	3.2
Diabetes mellitus . . . . .	.250	3,930	18.2	3,860	18.1	40,990	19.4	39,180	18.8	49,580	19.6	47,210	18.9
Nutritional deficiencies . . . . .	.260–269	230	1.1	250	1.2	2,530	1.2	2,570	1.2	3,030	1.2	3,120	1.2
Anemias . . . . .	.280–285	480	2.2	300	1.4	3,440	1.6	3,450	1.6	4,200	1.7	4,170	1.7
Meningitis . . . . .	.320–322	50	*	100	*	580	0.3	1,000	0.5	730	0.3	1,150	0.5
Major cardiovascular diseases . . . . .	.390–448	75,700	350.5	75,050	351.2	754,390	357.9	766,300	367.3	906,860	358.6	925,390	369.6
Diseases of heart . . . . .	.390–398,402,404–429	59,530	275.7	58,710	274.7	594,000	281.8	604,080	289.5	713,820	282.2	728,690	291.0
Rheumatic fever and rheumatic heart disease . . . . .	.390–398	340	1.6	490	2.3	5,030	2.4	5,180	2.5	6,130	2.4	6,110	2.4
Hypertensive heart disease . . . . .	.402	1,900	8.8	1,770	8.3	18,000	8.5	17,840	8.5	21,310	8.4	21,290	8.5
Hypertensive heart and renal disease . . . . .	.404	130	0.6	150	0.7	1,690	0.8	1,490	0.7	2,050	0.8	1,980	0.8
Ischemic heart disease . . . . .	.410–414	40,300	186.6	39,850	186.5	397,110	188.4	408,280	195.7	477,800	188.9	493,860	197.2
Acute myocardial infarction . . . . .	.410	19,660	91.0	19,190	89.8	193,560	91.8	201,970	96.8	233,540	92.3	244,970	97.8
Other acute and subacute forms of ischemic heart disease . . . . .	.411	330	1.5	210	1.0	2,550	1.2	2,700	1.3	3,170	1.3	3,260	1.3
Angina pectoris . . . . .	.413	70	*	50	*	770	0.4	650	0.3	860	0.3	750	0.3
Old myocardial infarction and other forms of chronic ischemic heart disease . . . . .	.412,414	20,240	93.7	20,400	95.5	200,240	95.0	202,960	97.3	240,240	95.0	244,880	97.8
Other diseases of endocardium . . . . .	.424	1,070	4.9	1,160	5.4	11,210	5.3	10,350	5.0	13,130	5.2	12,250	4.9
All other forms of heart disease . . . . .	.415–423,425–429	15,790	73.1	15,290	71.5	160,960	76.4	160,940	77.1	193,400	76.5	193,200	77.2
Hypertension with or without renal disease . . . . .	.401,403	780	3.6	660	3.1	7,080	3.4	6,880	3.3	8,810	3.5	8,380	3.3
Cerebrovascular diseases . . . . .	.430–438	11,870	55.0	12,180	57.0	118,590	56.2	120,620	57.8	142,160	56.2	146,050	58.3
Intracerebral and other intracranial hemorrhage . . . . .	.431–432	1,820	8.4	1,620	7.6	16,800	8.0	16,970	8.1	20,210	8.0	20,620	8.2
Cerebral thrombosis and unspecified occlusion of cerebral arteries . . . . .	.434,0,434.9	1,360	6.3	1,670	7.8	14,690	7.0	15,320	7.3	17,240	6.8	18,770	7.5
Cerebral embolism . . . . .	.434.1	50	*	60	*	590	0.3	510	0.2	730	0.3	630	0.3
All other and late effects of cerebrovascular diseases . . . . .	.430,433,435–438	8,640	40.0	8,840	41.4	86,510	41.0	87,820	42.1	103,980	41.1	106,020	42.3

Atherosclerosis . . . . .	.440	1,480	6.9	1,300	6.1	14,230	6.8	14,830	7.1	17,080	6.8	17,980	7.2
Other diseases of arteries, arterioles, and capillaries . . . . .	.441-448	2,040	9.4	2,200	10.3	20,490	9.7	19,890	9.5	24,990	9.9	24,290	9.7
Acute bronchitis and bronchiolitis . . . . .	.466	70	*	40	*	500	0.2	520	0.2	530	0.2	620	0.2
Pneumonia and influenza . . . . .	.480-487	5,540	25.6	5,700	26.7	61,990	29.4	66,370	31.8	74,320	29.4	79,220	31.6
Pneumonia . . . . .	.480-486	5,530	25.6	5,690	26.6	61,440	29.1	64,520	30.9	73,680	29.1	77,170	30.8
Influenza . . . . .	.487	10	*	10	*	560	0.3	1,850	0.9	640	0.3	2,050	0.8
Chronic obstructive pulmonary disease and allied conditions . . . . .	.490-496	6,340	29.4	5,970	27.9	73,890	35.1	75,220	36.1	87,460	34.6	89,190	35.6
Bronchitis, chronic and unspecified . . . . .	.490-491	210	1.0	200	0.9	3,090	1.5	2,600	1.2	3,600	1.4	3,240	1.3
Emphysema . . . . .	.492	1,070	4.9	910	4.3	13,370	6.3	14,160	6.8	15,710	6.2	16,590	6.6
Asthma . . . . .	.493	240	1.1	230	1.1	3,660	1.7	3,950	1.9	4,310	1.7	4,960	2.0
Other chronic obstructive pulmonary diseases and allied conditions . . . . .	.494-496	4,820	22.3	4,620	21.6	53,780	25.5	54,510	26.1	63,840	25.2	64,400	25.7
Ulcer of stomach and duodenum . . . . .	.531-533	450	2.1	440	2.0	5,130	2.4	4,910	2.3	6,050	2.4	6,070	2.4
Appendicitis . . . . .	.540-543	40	*	80	*	420	0.2	390	0.2	460	0.2	480	0.2
Hernia of abdominal cavity and intestinal obstruction without mention of hernia . . . . .	.550-553,560	460	2.1	480	2.2	4,830	2.3	4,700	2.2	5,710	2.3	5,530	2.2
Chronic liver disease and cirrhosis . . . . .	.571	2,080	9.6	1,940	9.1	20,510	9.7	21,170	10.1	24,890	9.8	26,030	10.4
Cholelithiasis and other disorders of gallbladder . . . . .	.574-575	240	1.1	320	1.5	2,580	1.2	2,490	1.2	3,110	1.2	3,010	1.2
Nephritis and nephrotic syndrome, and nephrosis . . . . .	.580-589	1,960	9.1	1,920	9.0	18,590	8.8	17,920	8.6	22,110	8.7	21,980	8.8
Acute glomerulonephritis and nephrotic syndrome . . . . .	.580-581	-	*	50	*	230	0.1	300	0.1	260	0.1	320	0.1
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified . . . . .	.582-583,587	100	*	100	*	1,130	0.5	1,140	0.5	1,380	0.5	1,430	0.6
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause . . . . .	.584-586,588-589	1,860	8.6	1,770	8.3	17,230	8.2	16,480	7.9	20,470	8.1	20,220	8.1
Infections of kidney . . . . .	.590	70	*	80	*	1,040	0.5	970	0.5	1,160	0.5	1,170	0.5
Hyperplasia of prostate . . . . .	.600	20	*	20	*	300	0.1	260	0.1	340	0.1	330	0.1
Complications of pregnancy, childbirth, and the puerperium . . . . .	.630-676	30	*	30	*	230	0.1	270	0.1	290	0.1	320	0.1
Pregnancy with abortive outcome . . . . .	.630-638	-	*	10	*	60	*	80	*	60	*	80	*
Other complications of pregnancy, childbirth, and the puerperium . . . . .	.640-676	30	*	20	*	170	0.1	190	0.1	230	0.1	240	0.1
Congenital anomalies . . . . .	.740-759	920	4.3	1,190	5.6	9,910	4.7	11,160	5.3	12,040	4.8	13,010	5.2
Certain conditions originating in the perinatal period . . . . .	.760-779	1,370	6.3	1,420	6.6	14,130	6.7	14,410	6.9	17,040	6.7	17,420	7.0
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .	.767-769	300	1.4	320	1.5	2,920	1.4	2,860	1.4	3,550	1.4	3,520	1.4
Other conditions originating in the perinatal period . . . . .	.760-766,770-779	1,070	4.9	1,100	5.1	11,220	5.3	11,550	5.5	13,500	5.3	13,900	5.6
Symptoms, signs, and ill-defined conditions . . . . .	.780-799	3,070	14.2	2,710	12.7	28,490	13.5	30,020	14.4	34,310	13.6	37,040	14.8
All other diseases . . . . .	.Residual	14,450	66.9	14,230	66.6	144,760	68.7	142,400	68.2	173,950	68.8	171,600	68.5
Accidents and adverse effects . . . . .	.E800-E949	8,050	37.3	7,520	35.2	74,890	35.5	76,760	36.8	89,590	35.4	92,200	36.8
Motor vehicle accidents . . . . .	.E810-E825	4,190	19.4	4,100	19.2	37,130	17.6	38,850	18.6	44,910	17.8	46,830	18.7
All other accidents and adverse effects . . . . .	.E800-E807,E826-E949	3,860	17.9	3,420	16.0	37,760	17.9	37,910	18.2	44,690	17.7	45,370	18.1
Suicide . . . . .	.E950-E959	2,280	10.5	2,310	10.8	24,410	11.6	25,550	12.2	28,510	11.3	30,180	12.1
Homicide and legal intervention . . . . .	.E960-E978	2,280	10.5	1,970	9.2	21,800	10.3	20,860	10.0	25,490	10.1	24,670	9.9
All other external causes . . . . .	.E980-E999	180	0.8	190	0.9	1,590	0.8	1,540	0.7	1,970	0.8	1,950	0.8
Human immunodeficiency virus infection ² . . . . .	.*042-044	2,950	13.7	2,110	9.9	24,050	11.4	19,850	9.5	28,260	11.2	23,570	9.4

¹Includes data for deaths due to Human immunodeficiency virus infection (category numbers *042-044) shown separately below; see Technical notes.
²Included in All other infectious and parasitic diseases shown above.

NOTE: Figures include all revisions received from the States. Cumulative and 12-month figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published. Data include adjustments for Maryland and Oregon, which are not included in the sample for October 1991.

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, October 1990 and 1991, cumulative figures 1990 and 1991, and 12 months ending with October 1990 and 1991

[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)	October		January–October				12 months ending with October						
	1991		1990		1991		1990		1991		1990		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues ¹	140–208	43,920	203.4	44,210	3.1	429,690	3.0	424,400	3.2	512,380	3.0	507,610	3.2
Malignant neoplasm of esophagus . . . . .	.150	640	3.0	810	3.8	8,310	3.9	8,210	3.9	9,790	3.9	9,760	3.9
Malignant neoplasm of stomach . . . . .	.151	1,230	5.7	1,480	6.9	12,050	5.7	12,270	5.9	14,270	5.6	14,740	5.9
Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus . . . . .	.153,154	4,850	22.5	4,730	22.1	46,070	21.8	47,540	22.8	55,630	22.0	57,010	22.8
Malignant neoplasm of pancreas . . . . .	.157	1,960	9.1	2,380	11.1	21,230	10.1	20,250	9.7	25,530	10.1	24,380	9.7
Malignant neoplasms of trachea, bronchus, and lung . . . . .	.162	12,230	56.6	11,840	55.4	118,540	56.2	115,900	55.5	141,290	55.9	138,130	55.2
Malignant melanoma of skin . . . . .	.172	610	2.8	530	2.5	5,980	2.8	5,350	2.5	6,850	2.7	6,350	2.5
Malignant neoplasm of cervix uteri . . . . .	.180	390	1.8	500	2.3	3,930	1.9	4,280	2.0	4,680	1.9	4,990	2.0
Malignant neoplasms of body of uterus and of uterus, part unspecified . . . . .	.179,182	510	2.4	590	2.8	4,860	2.3	5,010	2.4	5,720	2.3	5,930	2.4
Malignant neoplasm of ovary . . . . .	.183.0	1,210	5.6	1,090	5.1	11,080	5.2	10,330	4.9	12,940	5.1	12,220	4.9
Malignant neoplasm of prostate . . . . .	.185	2,920	13.5	3,160	14.8	28,200	13.4	27,690	13.3	33,630	13.3	33,140	13.2
Malignant neoplasm of bladder . . . . .	.188	810	3.7	1,030	4.8	8,580	4.1	8,490	4.1	10,250	4.1	10,200	4.1
Malignant neoplasms of kidney and other and unspecified urinary organs . . . . .	.189	810	3.7	780	3.6	8,900	4.2	8,490	4.1	10,590	4.2	10,300	4.1
Malignant neoplasms of brain and other and unspecified parts of nervous system . . . . .	.191,192	930	4.3	890	4.2	9,340	4.4	9,560	4.6	11,040	4.4	11,460	4.6
Hodgkin's disease . . . . .	.201	180	0.8	120	0.6	1,410	0.7	1,370	0.6	1,680	0.7	1,650	0.7
Malignant lymphoma other than Hodgkin's disease . . . . .	.200,202	1,640	7.6	1,570	7.3	16,790	8.0	15,740	7.5	20,080	7.9	18,810	7.5
Multiple myeloma and other immunoproliferative neoplasms . . . . .	.203	760	3.5	740	3.5	7,710	3.6	7,850	3.8	9,180	3.6	9,220	3.7

¹Includes figures for subcategories not shown below.

NOTE: Figures include all revisions received from the States. Cumulative and 12-month figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published. Data include adjustments for Maryland and Oregon, which are not included in the sample for October 1991.

Table 8. Provisional number of deaths under 1 year and infant mortality rates, by age and for 10 selected causes: United States, October 1990 and 1991, cumulative figures 1990 and 1991, and 12 months ending with October 1990 and 1991

[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)	October				January–October				12 months ending with October			
	1991		1990		1991		1990		1991		1990	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Total, under 1 year	2,900	820.0	3,100	859.6	30,600	889.9	31,900	920.3	36,800	893.9	38,400	921.4
Under 28 days	1,870	522.6	1,930	530.0	19,250	560.5	19,960	575.9	23,200	564.2	23,870	573.1
28 days to 11 months	1,070	299.0	1,200	329.6	11,320	329.6	12,000	346.2	13,560	329.8	14,560	349.6
Certain gastrointestinal diseases008–009,535,555–558	10	*	20	*	270	7.9	170	4.9	300	7.3	230	5.5
Pneumonia and influenza480–487	10	*	20	*	520	15.1	460	13.3	640	15.6	540	13.0
Congenital anomalies740–759	570	159.3	840	230.7	6,450	187.8	7,140	206.0	7,820	190.2	8,300	199.3
Disorders relating to short gestation and unspecified low birthweight765	400	111.8	360	98.9	3,920	114.1	3,230	93.2	4,610	112.1	3,940	94.6
Birth trauma767	10	*	30	*	120	3.5	140	4.0	150	3.6	170	4.1
Intrauterine hypoxia and birth asphyxia768	70	*	100	*	660	19.2	700	20.2	740	18.0	830	19.9
Respiratory distress syndrome769	210	58.7	190	52.2	2,090	60.8	1,960	56.5	2,600	63.2	2,470	59.3
Other conditions originating in the perinatal period760–764,766,770–779	670	187.3	710	195.0	7,220	210.2	8,150	235.1	8,690	211.3	9,780	234.8
Sudden infant death syndrome798.0	420	117.4	370	101.6	3,520	102.5	4,100	118.3	4,400	107.0	5,060	121.5
All other causesResidual	560	156.5	480	131.8	5,810	169.2	5,900	170.2	6,820	165.9	7,120	171.0

NOTE: Figures include all revisions received from the States. Cumulative and 12-month figures for the current year reflect revisions received for previous months, and figures for earlier years may differ from those previously published. Data include adjustments for Maryland and Oregon, which are not included in the sample for October 1991.

Technical notes

Nature and sources of data

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

Beginning with the January 1991 issue birth, death, and infant death figures for all years 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. Prior to the January 1991 issue, provisional data for all events were by State of occurrence. 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 all years 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 are also adjusted for varying length of State reporting periods. Prior to 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 for California and Texas shown in tables 2-4 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 (described above) 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 for all years and in the U.S. birth, death, and infant death figures for 1990 and previous years. 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, see below), 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 estimates are based on the 1980 Census of Population and do not reflect the results of the 1990 census enumeration. Monthly rates are based on populations estimated for the specific month. Year-to-date rates are averages of the monthly rates weighted by the number of days in each respective month. 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 infant deaths for the specified period (monthly, year-to-date, 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 in section on Nature and sources of data. Because monthly infant mortality rates are based on relatively few events, they are highly variable. Therefore, comparisons between monthly infant

mortality rates should be interpreted cautiously; see section on Random variation.

The age-adjusted rates presented in this report are computed by the direct method, that is, by applying the age-specific death rates for age groups shown in the specific table to the standard population distributed by age. The total population as enumerated in 1940 was selected as the standard. It is important not to compare age-adjusted death 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 by age, race, sex, and cause are 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 is sometimes 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, NCHS introduced category numbers *042–*044 for classifying and coding human immunodeficiency virus infection (HIV infection), formerly referred to as human T-cell lymphotropic virus-III/lymphadenopathy-associated virus (HTLV-III/LAV) infection. The asterisk before the category numbers indicates that these codes are not part of the Ninth Revision of the International Classification of Diseases (ICD-9). Deaths classified to these categories are included in All other infectious and parasitic diseases

in the List of 72 Selected Causes of Death as well as shown separately at the bottom of table 6. For 1986 and earlier years these deaths were classified to a number of other causes. Therefore, beginning with 1987, cause-of-death data are not strictly comparable with data for earlier years.

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 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 will be between the two.

The chances are about 2 out of 3 that the percent difference between an estimate and the result of a complete count is less than the percent shown. The chances are about 19 out of 20 that the percent difference is less than twice the percent shown. Figures based on 100 or fewer estimated deaths have relative standard errors of 30 percent or more and are, therefore, considered unreliable. Rates based on 100 or fewer estimated deaths are indicated by an “*”.

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

Estimated number of deaths	Relative standard error of estimate (as percent)	
	170,000 estimated deaths each month	2,000,000 estimated deaths each year
10	94.9	94.9
20	67.1	67.1
50	42.4	42.4
100	30.0	30.0
200	21.2	21.2
500	13.4	13.4
1,000	9.5	9.5
2,000	6.7	6.7
5,000	4.2	4.2
10,000	2.9	3.0
20,000	2.0	2.1
50,000	1.1	1.3
100,000	0.6	0.9
200,000	...	0.6
500,000	...	0.4
1,000,000	...	0.2

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 this level.

Mortality Surveillance System—The Mortality Surveillance System charts are based entirely on monthly provisional data from the Current Mortality Sample (CMS). Where sample size permits, age-race-sex comparisons are made for the causes 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 at time t
 t = month number

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

A_1 = coefficient of t

A_2 = coefficient of t^2

C, S = coefficients of the harmonic terms

ϵ_t = error terms, assumed to be independent and normally distributed with means 0 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 1982 through the month that is 12 months prior to the latest month shown in the chart. The graph of the estimated equation and 95-percent prediction intervals is shown from January 1984 through the month that is 12 months prior to the latest month shown in the chart; the graph for the subsequent 12 months is projected (1). Symbols in each chart represent actual monthly death rates based on the CMS. In some cases the data are transformed by the natural logarithm before fitting

the model. For graphical purposes the data are transformed back to rates by the inverse of the natural logarithm. This procedure has the advantage of avoiding negative prediction intervals for the model. The models, parameter estimates, and statistical tests for lack of fit are available upon request for the charts published in the Mortality Surveillance System. Time series

regression models have previously been used to describe trends in mortality data (2-4). A list of cause-of-death topics is presented in the table on the back of this report.

1. Ostle B. Statistics in research. Second edition. The Iowa State University Press. Ames, Iowa, 159-221. 1963.

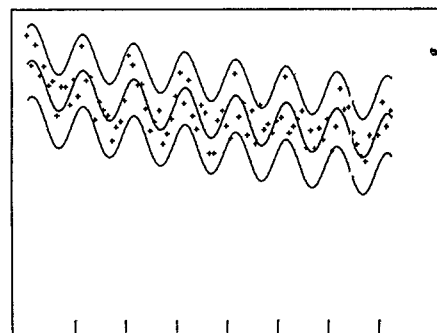
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Mortality Surveillance System chart topics

<i>MVSR issue</i>	<i>Cause-of-death chart topics</i>
Vol. 39 No. 12	Motor vehicle accidents, Homicide and legal intervention, and Suicide
Vol. 40 No. 1	Human immunodeficiency virus infection; Symptoms, signs, and ill-defined conditions; and Septicemia
Vol. 40 No. 2	Cerebrovascular diseases
Vol. 40 No. 3	Chronic obstructive pulmonary diseases and allied conditions
Vol. 40 No. 4	Diabetes mellitus
Vol. 40 No. 5	Diseases of heart
Vol. 40 No. 6	Malignant neoplasms including neoplasms of lymphatic and hematopoietic tissues
Vol. 40 No. 7	Malignant neoplasms of trachea, bronchus, and lung
Vol. 40 No. 8	Malignant neoplasm of prostate, Malignant neoplasm of breast
Vol. 40 No. 9	Malignant neoplasms of digestive organs and peritoneum
Vol. 40 No. 10	Suicide
Vol. 40 No. 11	Accidents and adverse effects, Homicide and legal intervention



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