

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 September 1997

Births

According to provisional reports, an estimated 351,000 births occurred in the United States during September 1997. This was an increase of 2 percent from the provisional number of births reported for September 1996 (345,000). The birth rate, 16.0 live births per 1,000 population, was 1 percent higher than the rate of 15.8 for September 1996. The fertility rate, 71.6 live births per 1,000 women 15–44 years, was 1 percent higher than the comparable rate for September 1996 (70.6). The seasonally adjusted fertility rate (67.4) was also 1 percent higher than the comparable rate for September 1996 (66.5).

During the first three-quarters of 1997, an estimated 2,906,000 births occurred, a 1-percent decrease from the 2,936,000 reported for the first three-quarters of 1996. The birth rate during this period declined by 2 percent from 14.8 in 1996 to 14.5 in 1997.

An estimated 3,869,000 live births occurred in the 12-month period ending with September 1997, nearly the same as the 3,870,000 births reported for the same period a year earlier. The birth rate of 14.5 was 1 percent lower than the rate of 14.6 for the preceding 12-month period. The fertility rate for the most recent 12-month period was 64.8, slightly less than the rate for the 12 months ending with September 1996 (65.0). These slightly lower rates

reflect the recent slowdown in the generally downward trend observed since early 1991.

Natural increase

As a result of natural increase, the excess of births over deaths, an estimated 175,000 people, 8.0 persons per 1,000 population, were added to the population during September 1997.

For the 12-month period ending with September 1997, 1,572,000 persons were added to the population. This represented a rate of natural increase of 5.9, the same as the rate for the preceding 12-month period. The identical rate of natural increase was due to similar decreases in the birth rate and the death rate.

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 are per 1,000 total population. Data are subject to monthly reporting variation; see [Technical notes](#)]

Item	September				January–September				12 months ending with September				
	Number		Rate		Number		Rate		Number		Rate		
	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1995
Live births	351,000	345,000	16.0	15.8	2,906,000	2,936,000	14.5	14.8	3,869,000	3,870,000	14.5	14.6	15.0
Fertility rate . . . . .	...	...	71.6	70.6	...	...	65.1	65.8	...	...	64.8	65.0	66.1
Deaths	176,000	182,000	8.0	8.3	1,718,000	1,732,000	8.6	8.7	2,297,000	2,307,000	8.6	8.7	8.8
Infant deaths	2,300	2,400	6.8	7.1	20,200	21,100	7.0	7.3	27,200	28,300	7.0	7.3	7.6
Natural increase	175,000	163,000	8.0	7.5	1,188,000	1,204,000	5.9	6.1	1,572,000	1,563,000	5.9	5.9	6.2
Marriages	231,000	225,000	10.5	10.3	1,821,000	1,758,000	9.3	9.0	2,408,000	2,326,000	9.0	8.8	8.9
Divorces	96,000	92,000	4.4	4.2	867,000	862,000	4.3	4.3	1,155,000	1,148,000	4.3	4.3	4.5
Population base (in millions) . . . . .	...	...	268.0	265.6	...	...	...	...	...	...	267.0	264.6	262.2

... Category not applicable.

NOTES: Figures include 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.



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



Marriages

Approximately 231,000 couples married in September 1997, 3 percent more than were married in September 1996 (225,000). The marriage rate per 1,000 population for the month of September 1997 was 10.5, 2 percent higher than the rate for September 1996 (10.3).

The number of marriages performed in the first three-quarters of 1997 (1,821,000) was 4 percent higher than the number performed in the same period a year earlier (1,758,000). The marriage rate for the 9-month period was 3 percent higher in 1997 (9.3) than in 1996 (9.0).

The number of marriages performed during the 12 months ending with September 1997 (2,408,000) was 4 percent higher than the number for the comparable period a year earlier (2,326,000). The marriage rate rose 2 percent from 8.8 for the period ending with September 1996 to 9.0 for the period ending with September 1997.

Divorces

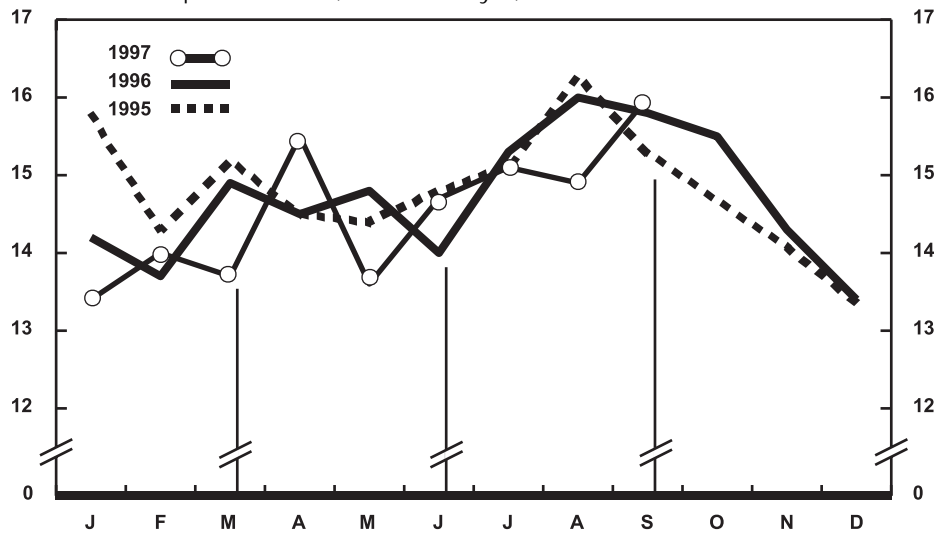
An estimated 96,000 divorces were granted in September 1997, 4 percent more than were granted in September a year earlier (92,000). The divorce rate per 1,000 population for September increased 5 percent, from 4.2 in 1996 to 4.4 in 1997.

The number of divorces for the first three-quarters of 1997 increased 1 percent from 862,000 in 1996 to 867,000 in 1997, while the divorce rate stayed the same (4.3) for both 9-month periods.

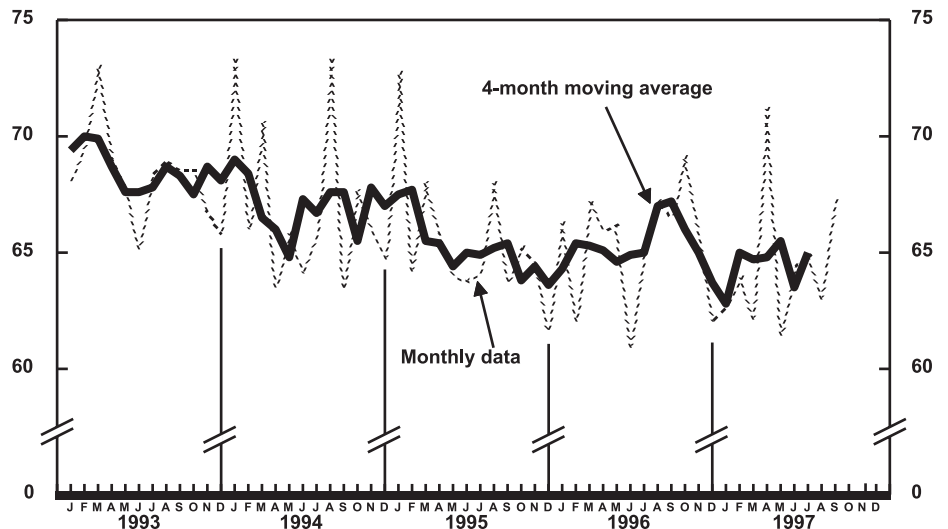
Approximately 1,155,000 couples divorced during the 12-month period ending with September 1997, a 1-percent increase from the number for the same period a year earlier (1,148,000). The divorce rate per 1,000 population for the current 12-month period (4.3) was the same as the rate for the same period ending with September 1996.

Deaths

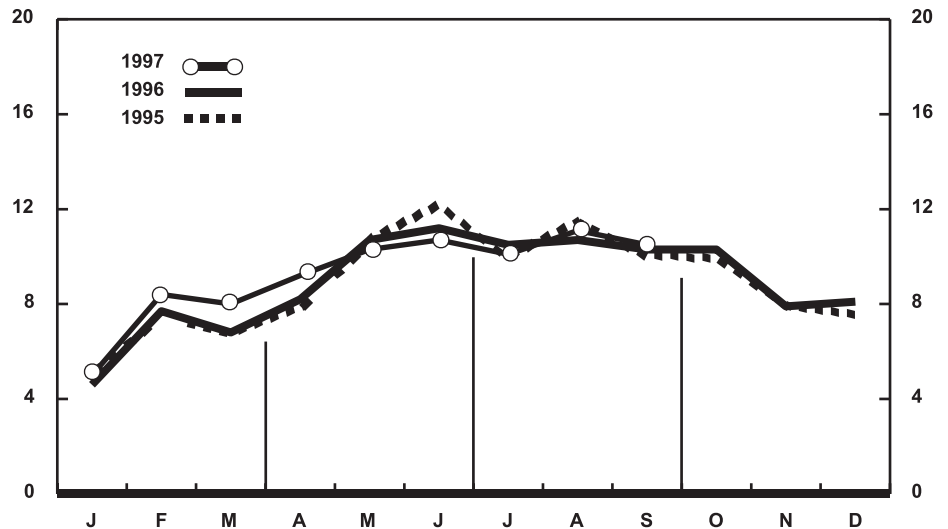
For September 1997 there were an estimated 176,000 deaths in the United States. The death rate was 8.0 deaths per 1,000 population, 4 percent lower than



Provisional birth rates per 1,000 population by month: United States, 1995-97



Provisional seasonally adjusted fertility rates per 1,000 women aged 15-44 years: United States, 1993-97



Provisional marriage rates per 1,000 population by month: United States, 1995-97

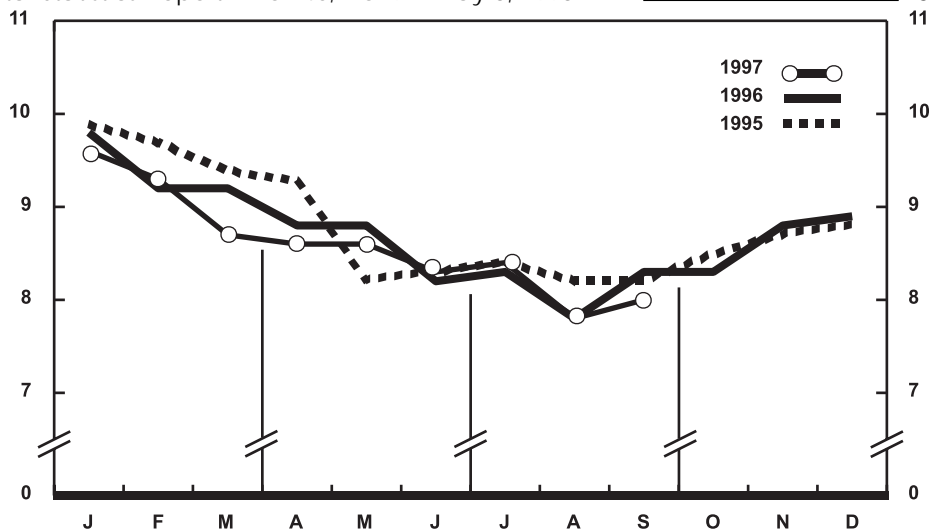
the rate of 8.3 for September a year earlier. Among the 176,000 deaths for September 1997 were 2,300 deaths at ages under 1 year.

According to provisional statistics, there were 1,718,000 deaths during the first 9 months of 1997, a decrease of 1 percent from the number estimated for January–September 1996 (1,732,000). The death rate, 8.6 per 1,000 population, was 1 percent lower than the rate for January–September 1996 (8.7). Among the 1,718,000 deaths for January–September 1997 were 20,200 deaths at ages under 1 year, yielding an infant mortality rate of 7.0 per 1,000 live births. This rate was 4 percent lower than the rate of 7.3 for the first 9 months of 1996.

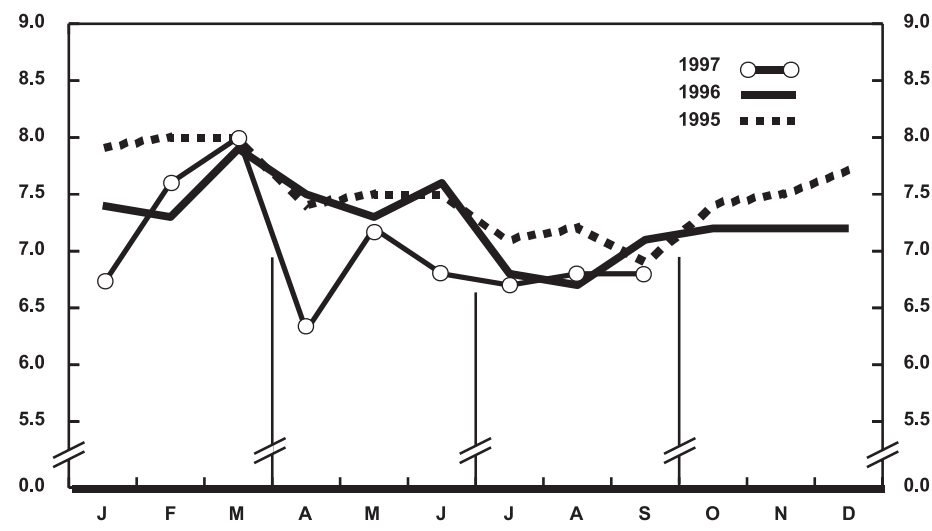
The death rate for the 12 months ending with September 1997 was 8.6 deaths per 1,000 population, 1 percent lower than the rate of 8.7 for the comparable 12-month period a year earlier. The infant mortality rate for this 12-month period was 7.0 per 1,000 live births, 4 percent lower than the rate of 7.3 for the 12 months ending with September 1996.

Current Mortality Sample, 12 months ending with August 1997—The provisional death rate for the 12 months ending with August 1997 was 863.1 per 100,000 population, a decrease of 1 percent from the rate of 871.0 for the 12-month period ending with August 1996. The provisional age-adjusted death rate for the 12-month period ending with August 1997 was 481.2 per 100,000 U.S. standard population, 3 percent lower than the rate of 494.5 for the 12-month period ending with August 1996. The 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 four race-sex groups, the estimated age-adjusted death rate decreased for white males, white females, and black males. By age the death rate for the total population decreased for the age groups 1–4 years, 15–24 years through 35–44 years, and 55–64 years through 75–84 years of age.

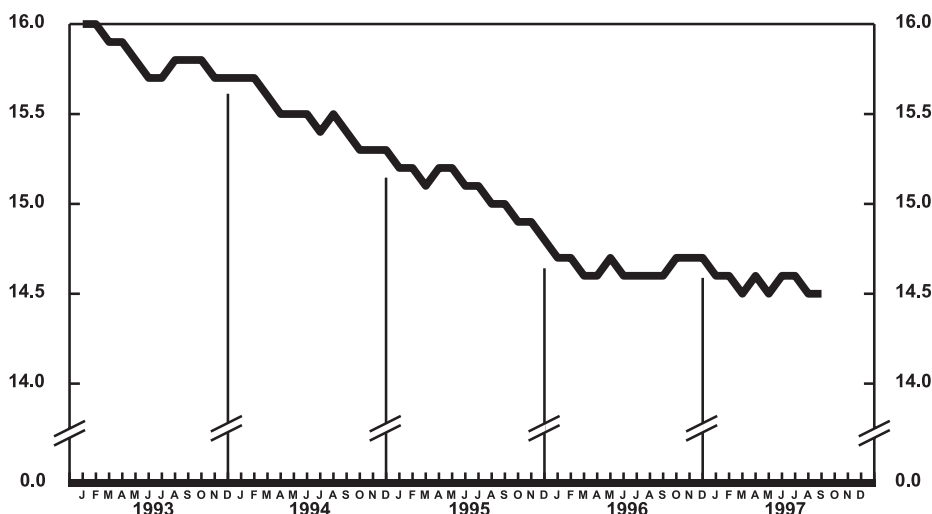
Among the major causes of death, the estimated death rate decreased between



Provisional death rates per 1,000 population by month: United States, 1995-97



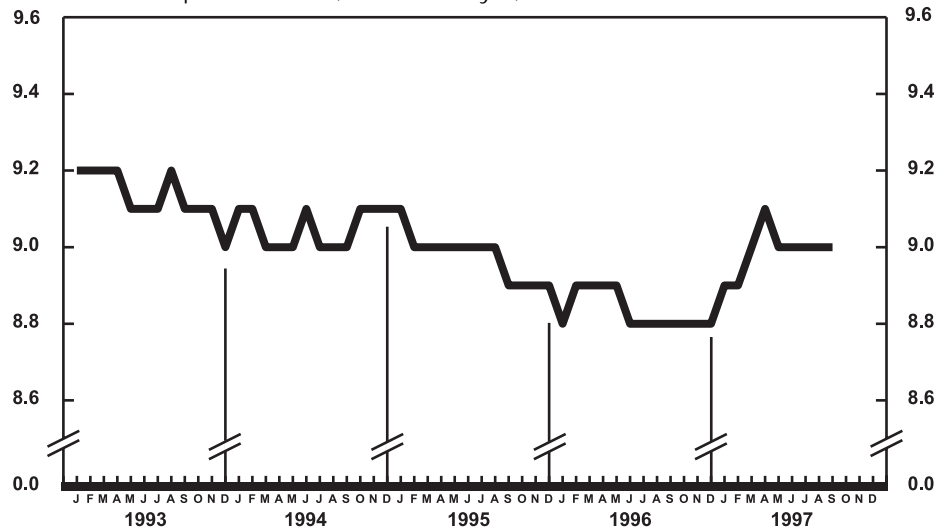
Provisional infant mortality rates per 1,000 live births by month: United States, 1995-97



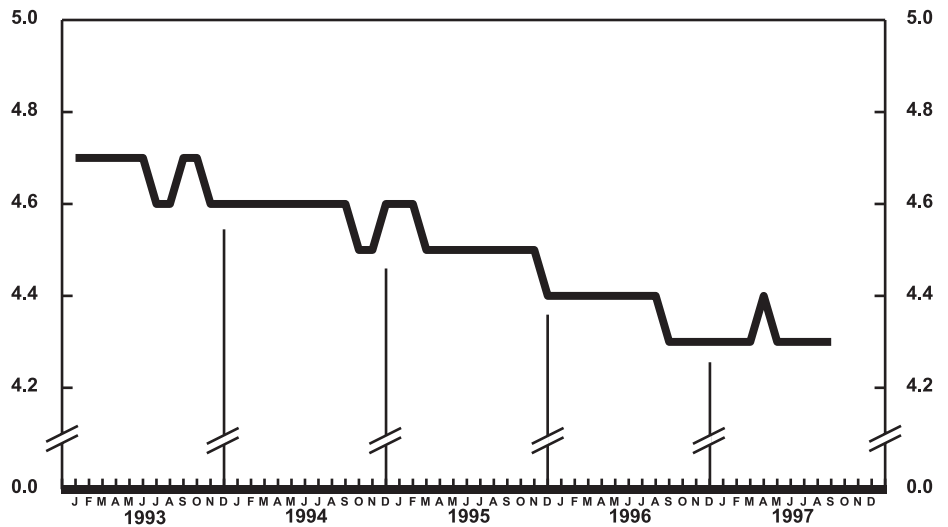
Provisional birth rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1993-97

the two successive 12-month periods for Diseases of heart, Human immunodeficiency virus infection, and Homicide and legal intervention. The decrease for Homicide and legal intervention was largely due to the decline in the rate for homicide by firearms. The death rate increased between the two successive 12-month periods for Pneumonia and influenza.

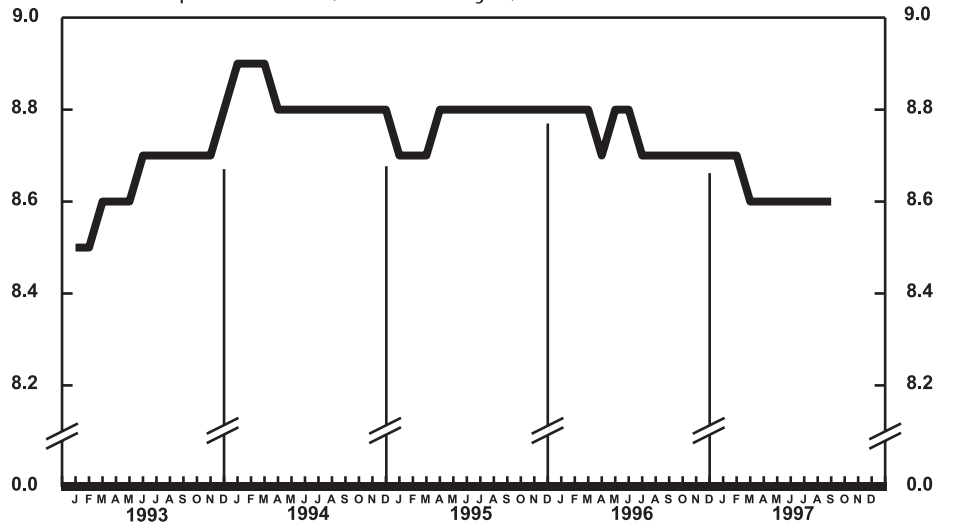
The infant mortality rate for the 12 months ending with August 1997 was 706.6 per 100,000 live births, 4 percent lower than the rate of 734.2 for the same 12-month period a year earlier. For infants under 28 days of age, the 12-month rate ending August 1997 was 453.1, 6 percent lower than the rate for the 12-month period a year earlier (484.1). The infant mortality rate for infants aged 28 days–11 months was 253.4 compared with a rate of 250.1 for the 12-month period a year earlier. The change in the mortality rate for infants 28 days–11 months was not statistically significant. Among causes of infant death, the infant mortality rate decreased between the two successive 12-month periods for Birth trauma and Sudden infant death syndrome.



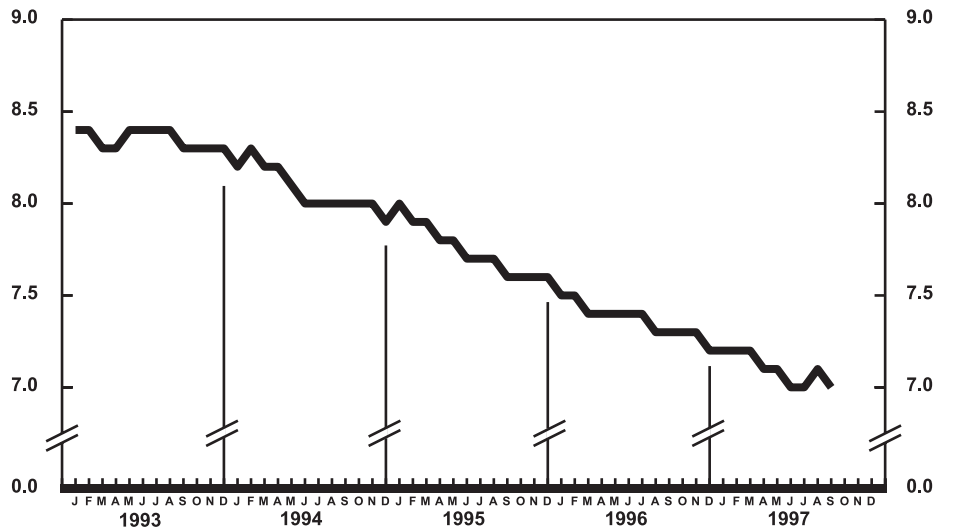
Provisional marriage rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1993–97



Provisional divorce rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1993–97



Provisional death rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1993-97



Provisional infant mortality rates per 1,000 live births for successive 12-month periods ending with month indicated: United States, 1993-97

Table 1. Provisional number of live births, marriages, divorces, deaths, and infant deaths and rates, by month: United States, January 1996–September 1997

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

Period	Live births				Marriages		Divorces		Deaths		Infant deaths	
	Number	Rate per 1,000 population	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 population	Number	Rate per 1,000 live births
			Unadjusted	Seasonally adjusted ¹								
1996:												
January	318,000	14.2	63.2	66.3	100,000	4.6	94,000	4.2	220,000	9.8	2,400	7.4
February	286,000	13.7	60.7	62.0	155,000	7.7	85,000	4.1	193,000	9.2	2,200	7.3
March	334,000	14.9	66.3	67.3	147,000	6.8	93,000	4.2	206,000	9.2	2,600	7.9
April	314,000	14.5	64.3	65.9	172,000	8.2	95,000	4.4	192,000	8.8	2,300	7.5
May	332,000	14.8	65.7	66.2	241,000	10.7	103,000	4.6	198,000	8.8	2,400	7.3
June	304,000	14.0	62.2	61.0	242,000	11.2	103,000	4.8	179,000	8.2	2,300	7.6
July	343,000	15.3	67.9	65.2	235,000	10.5	96,000	4.3	187,000	8.3	2,300	6.8
August	360,000	16.0	71.3	67.3	239,000	10.7	101,000	4.5	176,000	7.8	2,200	6.7
September	345,000	15.8	70.6	66.5	225,000	10.3	92,000	4.2	182,000	8.3	2,400	7.1
October	348,000	15.5	68.9	69.2	231,000	10.3	99,000	4.4	188,000	8.3	2,500	7.2
November	313,000	14.3	63.9	66.0	171,000	7.9	94,000	4.3	191,000	8.8	2,300	7.2
December	302,000	13.4	59.8	62.1	184,000	8.1	94,000	4.2	200,000	8.9	2,300	7.2
1997:												
January	303,000	13.4	59.8	62.7	109,000	5.0	93,000	4.1	218,000	9.6	2,100	6.7
February	287,000	14.0	62.7	63.9	165,000	8.4	87,000	4.2	191,000	9.3	2,200	7.6
March	311,000	13.7	61.4	62.2	174,000	8.0	94,000	4.2	197,000	8.7	2,500	8.0
April	340,000	15.5	69.4	71.2	193,000	9.2	106,000	4.8	189,000	8.6	2,100	6.3
May	309,000	13.6	61.0	61.4	234,000	10.3	98,000	4.3	195,000	8.6	2,300	7.2
June	323,000	14.7	65.7	64.4	235,000	10.7	100,000	4.5	182,000	8.3	2,200	6.8
July	343,000	15.1	67.6	64.9	228,000	10.1	99,000	4.3	192,000	8.4	2,300	6.7
August	339,000	14.9	66.9	63.1	252,000	11.1	93,000	4.1	178,000	7.8	2,200	6.8
September	351,000	16.0	71.6	67.4	231,000	10.5	96,000	4.4	176,000	8.0	2,300	6.8

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, September 1996 and 1997, and cumulative figures, 1995–97

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

Area	Live births					Deaths				
	September		January–September			September		January–September		
	1997	1996	1997	1996	1995	1997	1996	1997	1996	1995
New England	13,593	16,101	134,772	134,307	141,786	9,851	10,968	88,839	87,837	89,634
Maine	1,108	1,128	10,268	10,399	10,766	959	790	8,457	8,364	8,935
New Hampshire	1,161	1,125	10,789	10,537	11,234	698	755	7,173	6,762	6,923
Vermont	658	547	5,220	5,080	5,141	381	340	3,951	3,713	3,852
Massachusetts	6,254	6,975	67,114	67,267	69,462	4,650	5,797	40,353	40,940	41,509
Rhode Island	1,125	1,150	9,187	9,513	9,502	701	712	7,197	6,885	7,141
Connecticut	3,287	5,176	32,194	31,511	35,681	2,462	2,574	21,708	21,173	21,274
Middle Atlantic	53,117	47,196	395,360	397,826	406,963	26,376	28,163	270,303	271,631	278,627
New York	32,050	21,689	208,132	202,196	197,588	11,776	12,393	122,150	122,575	126,535
New Jersey	8,179	10,536	80,687	80,615	93,960	5,141	5,580	52,080	53,757	56,177
Pennsylvania	12,888	14,971	106,541	115,015	115,415	9,459	10,190	96,073	95,299	95,915
East North Central	52,126	53,649	451,910	468,039	468,002	29,773	30,824	288,157	292,664	294,598
Ohio	13,580	13,423	110,856	111,518	115,476	8,197	8,514	79,263	77,922	78,916
Indiana	4,535	7,943	52,928	62,251	59,666	3,246	4,111	36,683	40,648	38,449
Illinois	16,051	15,663	135,410	138,151	140,548	8,003	8,260	75,958	77,929	81,226
Michigan	12,030	11,248	102,221	105,436	101,168	6,645	6,376	62,269	62,401	62,487
Wisconsin	5,930	5,372	50,495	50,683	51,144	3,682	3,563	33,984	33,764	33,520
West North Central	21,504	23,448	194,118	191,849	191,114	12,725	13,832	129,263	126,306	126,813
Minnesota	5,561	5,586	49,329	48,200	47,753	2,863	2,990	27,742	27,292	27,585
Iowa	2,910	2,799	27,641	25,603	25,998	2,293	2,144	20,935	20,028	19,714
Missouri	6,368	7,818	56,355	56,639	55,924	3,567	4,696	41,231	40,619	40,921
North Dakota	728	773	6,345	6,342	6,605	487	454	4,596	4,318	4,531
South Dakota	900	786	7,761	7,361	8,373	545	493	5,214	4,670	5,168
Nebraska	1,760	2,091	17,931	17,765	17,629	1,184	1,236	11,370	11,349	11,189
Kansas	3,277	3,595	28,756	29,939	28,832	1,786	1,819	18,175	18,030	17,705
South Atlantic	60,482	56,321	498,493	488,368	495,426	34,136	33,424	331,667	332,625	328,818
Delaware	922	944	7,601	7,730	7,571	495	441	4,788	4,750	4,584
Maryland	5,913	6,849	49,834	54,260	55,580	3,165	3,062	29,856	31,166	30,601
District of Columbia	702	697	6,254	6,171	6,834	440	491	4,435	4,665	4,912
Virginia	8,808	8,099	66,957	66,205	68,735	4,244	4,290	39,886	39,126	39,568
West Virginia	1,285	1,671	16,039	15,010	16,525	1,273	1,428	16,022	14,206	14,978
North Carolina	11,069	6,475	82,448	75,734	77,795	5,057	5,062	49,634	49,896	48,626
South Carolina	4,399	4,324	38,403	38,322	37,704	2,450	2,481	24,134	25,565	24,387
Georgia	10,413	10,294	87,992	85,477	86,836	4,789	4,251	45,861	44,864	43,996
Florida	16,971	16,968	142,965	139,459	137,846	11,923	11,918	117,051	118,387	117,166
East South Central	19,489	20,091	169,735	169,222	167,689	12,171	11,933	121,581	118,713	119,350
Kentucky	4,866	4,905	39,935	39,879	38,890	3,101	2,914	29,123	28,340	29,224
Tennessee	5,856	6,168	54,786	53,555	53,965	3,483	3,778	39,841	37,772	38,138
Alabama	5,630	5,268	46,110	45,987	46,267	3,479	3,259	32,392	32,498	31,736
Mississippi	3,137	3,750	28,904	29,801	28,567	2,108	1,982	20,225	20,103	20,252
West South Central	40,215	40,016	347,981	348,058	363,165	17,428	18,289	172,800	180,094	178,691
Arkansas	3,536	3,201	27,663	27,214	25,289	2,116	2,128	18,553	19,376	18,888
Louisiana	6,212	6,210	47,388	50,382	50,696	3,198	3,297	29,110	31,291	29,808
Oklahoma	3,865	3,968	34,794	33,919	34,785	2,464	2,496	25,019	24,930	24,547
Texas ¹	26,602	26,637	238,136	236,543	252,395	9,650	10,368	100,118	104,497	105,448
Mountain	23,568	19,875	204,504	192,438	185,407	10,065	8,628	91,297	91,751	85,360
Montana	979	845	7,960	8,209	8,488	620	599	5,828	5,757	5,683
Idaho	1,479	1,587	13,282	14,405	13,188	689	685	6,697	6,446	6,306
Wyoming	512	519	4,988	4,650	4,767	296	296	2,800	2,639	2,781
Colorado	4,760	4,054	40,261	36,531	38,252	1,974	1,886	19,028	18,892	18,651
New Mexico	1,199	2,171	18,803	20,271	20,547	803	783	9,801	9,394	9,362
Arizona	7,506	4,022	66,479	59,553	54,670	3,531	2,363	29,082	30,429	25,491
Utah	4,523	4,547	32,221	31,612	29,379	1,165	884	8,458	8,300	8,010
Nevada	2,610	2,130	20,510	17,207	16,116	987	1,132	9,603	9,894	9,076
Pacific	66,138	67,186	488,153	521,581	533,916	23,154	25,535	223,893	230,114	230,204
Washington	7,549	6,963	59,345	60,687	59,890	3,518	4,041	32,886	30,446	29,769
Oregon	3,818	3,554	34,301	34,104	33,375	2,489	2,477	22,164	21,108	21,321
California ¹	52,260	54,211	374,169	405,356	418,864	16,251	18,229	161,182	170,778	171,575
Alaska	893	879	7,445	7,564	8,017	264	194	1,825	1,811	1,845
Hawaii	1,618	1,579	12,893	13,870	13,770	632	594	5,836	5,971	5,694
Puerto Rico ²	6,123	5,445	48,654	44,361	44,377	2,211	2,063	20,499	20,132	21,663

¹Figures include adjustments for varying lengths of reporting periods; see [Technical notes](#).

²Data for Puerto Rico are not included in U.S. total figures.

NOTES: 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, September 1996 and 1997, and cumulative figures, 1995–97

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

Area	Marriages					Divorces				
	September		January–September			September		January–September		
	1997	1996	1997	1996	1995	1997	1996	1997	1996	1995
New England	11,268	11,610	166,546	68,413	71,851	3,857	3,671	33,175	28,489	30,232
Maine	---	1,416	---	7,988	8,440	494	558	3,008	3,677	3,958
New Hampshire	1,409	1,192	7,327	6,782	6,632	510	335	4,328	3,430	3,631
Vermont	962	844	4,394	4,202	4,289	236	124	2,079	1,939	2,132
Massachusetts	5,190	4,206	31,058	28,478	30,640	900	1,496	12,685	9,165	10,398
Rhode Island	914	1,058	6,265	5,918	5,532	255	283	2,323	2,454	2,825
Connecticut	2,793	2,894	17,502	15,045	16,318	1,462	875	8,752	7,824	7,288
Middle Atlantic	28,478	31,999	223,127	192,275	194,846	11,467	11,351	96,628	93,984	90,064
New York ²	13,883	18,698	126,432	104,717	102,495	6,450	6,186	48,413	46,568	41,785
New Jersey	5,190	4,594	41,955	35,242	37,326	2,115	1,900	19,435	18,903	18,494
Pennsylvania	9,405	8,707	54,740	52,316	55,025	2,902	3,265	28,780	28,513	29,785
East North Central	35,723	39,134	236,857	244,100	248,324	¹ 13,187	¹ 11,260	¹ 105,834	¹ 104,491	¹ 108,459
Ohio	10,284	9,118	62,910	61,102	68,292	4,083	3,274	34,501	32,427	36,881
Indiana	2,835	4,987	23,651	36,909	37,680	---	---	---	---	---
Illinois	10,738	10,312	72,539	66,498	60,775	3,774	3,159	29,254	29,987	28,733
Michigan	7,009	10,065	50,083	51,802	53,639	3,624	3,359	29,130	29,246	29,785
Wisconsin	4,857	4,652	27,674	27,789	27,938	1,706	1,468	12,949	12,831	13,060
West North Central	16,690	14,589	108,681	111,587	112,535	6,106	6,633	54,146	55,642	56,779
Minnesota	3,949	4,473	23,854	26,043	25,772	1,447	1,194	11,174	11,286	11,699
Iowa	2,878	2,425	17,248	17,302	16,817	848	928	7,291	7,469	7,818
Missouri	4,965	4,450	33,096	35,278	34,391	1,999	1,765	18,545	19,632	20,278
North Dakota	570	597	3,302	3,937	3,645	190	190	1,503	1,740	1,650
South Dakota	815	584	5,664	5,387	5,855	242	225	2,045	2,045	2,138
Nebraska	1,086	1,157	9,916	9,865	9,694	470	520	4,804	4,539	4,702
Kansas	2,427	903	15,601	13,775	16,361	910	1,811	8,784	8,931	8,494
South Atlantic	40,209	38,800	354,128	332,051	337,102	19,622	20,276	176,796	168,127	171,560
Delaware	621	578	4,131	3,930	4,032	138	268	2,212	2,580	2,822
Maryland	4,658	4,834	32,276	30,981	32,359	1,077	955	11,487	11,558	11,559
District of Columbia	141	157	2,479	1,644	1,492	146	52	779	816	1,104
Virginia	6,137	5,647	51,339	48,474	51,491	2,443	2,221	23,555	20,743	21,036
West Virginia	1,306	1,401	8,146	8,347	8,412	838	993	7,165	5,630	6,690
North Carolina	5,819	6,171	49,793	46,121	47,302	2,951	3,399	28,337	27,363	28,476
South Carolina	3,331	3,510	32,934	33,027	34,758	1,328	1,650	11,571	11,625	11,109
Georgia	5,682	5,187	47,627	45,634	46,952	3,695	2,981	28,250	27,352	28,009
Florida	12,514	11,315	125,403	113,893	110,304	7,006	7,757	63,440	60,460	60,755
East South Central	16,942	18,096	147,654	145,328	147,395	6,836	7,767	62,908	75,273	72,275
Kentucky	3,999	3,587	34,890	32,624	35,474	2,121	2,126	16,553	16,498	17,108
Tennessee	7,432	8,055	59,229	59,813	65,321	1,534	2,707	17,673	26,081	25,758
Alabama	3,817	4,673	36,338	36,452	30,507	1,839	2,776	17,873	20,392	19,566
Mississippi	1,694	1,781	17,197	16,439	16,093	1,342	158	10,809	12,302	9,843
West South Central	25,859	23,658	217,398	215,220	240,862	¹ 3,407	¹ 5,098	¹ 25,326	¹ 90,627	¹ 104,067
Arkansas	3,744	2,500	25,740	26,499	27,437	1,801	1,200	11,100	11,400	11,878
Louisiana	5,649	3,278	27,001	27,013	30,942	---	---	---	---	---
Oklahoma	2,210	1,785	21,659	20,553	22,012	1,606	1,290	14,226	14,733	16,435
Texas ³	14,256	16,095	142,998	141,155	160,471	---	2,608	---	64,494	75,754
Mountain	26,930	26,799	193,967	217,491	210,246	¹ 5,180	¹ 6,352	¹ 45,762	¹ 55,827	¹ 56,471
Montana	789	669	5,449	5,442	5,494	333	361	2,968	3,188	3,116
Idaho	1,631	1,702	11,615	11,624	12,001	539	606	5,429	5,275	5,057
Wyoming	441	526	3,985	3,940	4,003	268	208	2,164	2,322	2,381
Colorado	3,700	3,413	26,903	27,378	27,577	---	---	---	---	---
New Mexico ^{4,5}	1,349	1,228	12,593	12,417	11,608	781	923	7,038	8,366	8,712
Arizona ²	2,378	3,209	30,752	30,356	29,365	2,442	2,255	21,434	19,380	20,668
Utah	2,695	3,207	16,771	17,860	17,242	817	946	6,729	6,655	6,754
Nevada	13,947	12,845	85,899	108,474	102,956	---	1,053	---	10,641	9,783
Pacific	34,910	27,498	248,982	230,438	211,125	¹ 5,381	¹ 3,537	¹ 38,094	¹ 36,929	¹ 39,278
Washington	4,219	3,241	34,137	29,650	33,946	3,014	1,730	21,329	20,419	21,664
Oregon	3,836	2,695	21,392	18,629	20,873	1,601	1,228	10,941	10,793	11,250
California	24,434	19,560	174,297	163,176	137,825	---	---	---	---	---
Alaska	489	286	4,153	4,085	4,338	248	100	2,295	2,047	2,291
Hawaii	1,932	1,716	15,003	14,898	14,143	518	479	3,529	3,670	4,073
Puerto Rico ⁶	1,652	1,879	21,356	21,747	23,273	---	---	---	---	---

--- Data not available.

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

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

³Figures include adjustments for varying lengths of reporting periods; see [Technical notes](#).

⁴Figures for marriages are marriage licenses issued.

⁵Figures for divorces include estimates for some counties.

⁶Data for Puerto Rico are not included in U.S. total figures.

NOTES: 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 September 1996 and 1997

[Data are estimates by State of residence. Figures should be interpreted with caution because of conversion of place of occurrence to place 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 September			
	1997		1996	
	Number	Rate	Number	Rate
New England	886	5.2	937	5.5
Maine	50	3.7	61	4.5
New Hampshire	68	4.7	71	4.9
Vermont	46	6.7	54	8.0
Massachusetts	340	4.2	421	5.1
Rhode Island	78	6.4	71	5.6
Connecticut	304	6.8	259	6.3
Middle Atlantic	3,650	6.9	3,774	7.2
New York	1,897	6.8	1,797	6.7
New Jersey	724	6.4	815	8.0
Pennsylvania	1,029	7.3	1,162	7.7
East North Central	4,596	7.6	5,006	8.0
Ohio	1,112	7.3	1,210	8.0
Indiana	519	7.0	676	7.8
Illinois	1,428	7.9	1,530	8.4
Michigan	1,086	8.1	1,079	7.9
Wisconsin	451	6.8	511	7.7
West North Central	1,760	6.9	1,826	7.2
Minnesota	398	6.1	406	6.4
Iowa	183	5.0	223	6.2
Missouri	573	7.9	578	7.6
North Dakota	57	6.8	33	3.9
South Dakota	63	6.0	55	5.8
Nebraska	194	8.2	204	8.8
Kansas	292	7.5	327	8.5
South Atlantic	5,307	7.9	5,528	8.5
Delaware	70	7.0	81	8.0
Maryland	579	8.7	598	8.4
District of Columbia	95	11.4	132	15.9
Virginia	644	7.2	671	7.7
West Virginia	167	8.1	158	8.1
North Carolina	1,002	8.9	946	9.5
South Carolina	432	8.5	403	8.0
Georgia	952	8.1	1,092	9.8
Florida	1,366	7.1	1,447	7.6
East South Central	2,128	9.3	2,083	9.3
Kentucky	420	8.0	408	7.8
Tennessee	681	9.1	647	8.8
Alabama	566	9.2	639	10.5
Mississippi	461	11.4	389	10.1
West South Central	3,199	6.9	3,312	7.2
Arkansas	327	9.0	319	8.8
Louisiana	596	9.4	558	8.3
Oklahoma	386	8.4	407	9.0
Texas ¹	1,890	6.0	2,028	6.5
Mountain	2,135	8.0	1,717	6.9
Montana	77	7.3	88	8.0
Idaho	131	7.4	122	6.4
Wyoming	34	5.2	43	7.0
Colorado	392	7.6	341	7.1
New Mexico	177	6.9	161	6.0
Arizona	932	10.8	592	8.1
Utah	241	5.8	225	5.5
Nevada	151	5.6	145	6.5
Pacific	3,820	5.8	4,141	5.9
Washington	402	5.1	394	5.0
Oregon	278	6.3	225	5.2
California ¹	2,978	5.8	3,345	6.1
Alaska	65	6.5	71	7.4
Hawaii	97	5.6	106	5.7
Puerto Rico ²	579	8.8	599	9.8

¹Figures include adjustments for varying lengths of reporting periods; see [Technical notes](#).

²Data for Puerto Rico are not included in U.S. total figures.

NOTES: 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, August 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with August 1996 and 1997

[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 population; see [Technical notes](#). Because of 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	August				January–August				12 months ending with August			
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
All races, both sexes¹												
All ages	178,000	781.8	176,000	783.8	1,542,000	867.3	1,551,000	878.8	2,303,000	863.1	2,303,000	871.0
Under 1 year					17,900	² 718.3	18,700	² 728.4	27,200	² 729.2	28,200	² 731.0
1–4 years	} 3,410	69.4	3,570	72.5	3,660	35.9	4,190	40.2	5,320	34.6	6,160	39.4
5–14 years					5,770	22.3	6,080	23.7	8,480	21.9	8,970	23.3
15–24 years	2,980	95.8	2,900	95.2	21,470	88.4	22,390	93.5	32,720	89.9	34,120	95.1
25–34 years	3,880	115.4	4,350	127.3	31,060	117.2	35,540	131.6	47,750	119.7	54,450	134.3
35–44 years	7,440	198.9	7,770	211.8	59,890	204.9	64,940	225.9	91,380	208.4	99,310	230.7
45–54 years	11,550	403.1	11,570	421.1	96,210	432.9	94,530	441.7	144,480	435.7	141,090	441.4
55–64 years	18,390	990.1	18,330	1,012.6	154,450	1,069.2	157,160	1,107.5	231,720	1,067.1	234,640	1,104.1
65–74 years	36,340	2,315.2	36,730	2,322.5	307,730	2,494.6	320,960	2,573.6	463,890	2,501.0	474,360	2,534.5
75–84 years	50,610	5,084.4	48,760	5,024.3	447,680	5,771.3	442,800	5,846.0	663,610	5,710.4	653,580	5,773.2
85 years and over	43,150	13,077.4	42,050	13,249.6	395,640	15,463.4	382,490	15,464.5	585,240	15,296.4	564,940	15,289.3
Not stated	60	...	140	...	710	...	720	...	940	...	1,000	...
Age-adjusted rate ³ . . . . .	...	443.9	...	451.8	...	481.1	...	497.2	...	481.2	...	494.5
All races, male¹												
All ages	90,370	811.5	89,340	813.5	771,700	886.5	783,870	909.6	1,153,010	882.9	1,165,670	902.8
Under 1 year					10,210	² 802.6	10,050	² 764.3	15,650	² 819.8	15,460	² 782.4
1–4 years	} 1,960	77.9	1,960	77.8	1,980	37.9	2,360	44.5	2,860	36.3	3,500	43.8
5–14 years					3,340	25.4	3,620	27.5	4,870	24.6	5,420	27.5
15–24 years	2,270	141.9	2,150	138.2	15,940	127.6	16,800	137.5	24,480	130.8	25,850	141.0
25–34 years	2,780	165.4	3,300	193.4	21,980	165.9	25,310	187.8	33,700	168.9	39,020	192.6
35–44 years	5,070	272.4	5,420	297.7	40,270	276.9	44,470	311.7	61,120	280.3	67,960	318.2
45–54 years	7,390	527.0	7,290	543.0	60,810	559.2	59,890	572.8	91,210	562.2	89,850	575.4
55–64 years	11,210	1,266.6	11,120	1,290.9	92,890	1,350.0	94,230	1,395.7	139,920	1,352.7	140,290	1,387.8
65–74 years	20,970	2,987.7	20,620	2,924.3	175,720	3,188.5	181,700	3,270.2	262,820	3,172.6	270,060	3,240.1
75–84 years	24,300	6,167.5	23,550	6,181.5	217,170	7,089.6	217,770	7,344.6	322,710	7,038.4	320,560	7,241.0
85 years and over	14,340	15,061.7	13,850	15,440.9	130,860	17,811.5	127,150	18,254.9	193,010	17,594.3	187,030	18,001.0
Not stated	50	...	80	...	530	...	500	...	660	...	680	...
Age-adjusted rate ³ . . . . .	...	566.4	...	575.5	...	608.4	...	633.7	...	608.3	...	632.0
All races, female¹												
All ages	87,440	753.3	86,850	755.3	770,420	848.8	766,650	849.4	1,149,750	844.2	1,135,170	839.4
Under 1 year					7,640	² 628.6	8,670	² 691.5	11,570	² 634.3	12,750	² 676.8
1–4 years	} 1,440	60.1	1,620	67.5	1,680	33.5	1,830	35.8	2,460	32.8	2,660	34.9
5–14 years					2,430	19.3	2,460	19.6	3,610	19.1	3,550	18.9
15–24 years	710	47.0	750	50.3	5,530	46.9	5,590	47.7	8,250	46.7	8,270	47.1
25–34 years	1,100	65.5	1,060	62.0	9,080	68.5	10,220	75.7	14,050	70.4	15,430	76.1
35–44 years	2,360	125.5	2,350	127.1	19,620	133.5	20,470	141.3	30,260	137.3	31,340	144.5
45–54 years	4,160	284.4	4,280	304.5	35,390	311.9	34,630	316.3	53,280	314.7	51,240	313.4
55–64 years	7,170	737.4	7,210	760.0	61,570	813.6	62,930	845.8	91,800	807.3	94,350	846.7
65–74 years	15,370	1,771.1	16,110	1,838.2	132,010	1,934.2	139,260	2,013.8	201,070	1,958.8	204,300	1,968.0
75–84 years	26,310	4,374.8	25,210	4,276.4	230,510	4,911.6	225,030	4,882.2	340,900	4,845.1	333,020	4,830.6
85 years and over	28,810	12,277.0	28,200	12,386.2	264,780	14,521.7	255,340	14,372.1	392,230	14,377.9	377,910	14,228.5
Not stated	10	...	60	...	180	...	220	...	270	...	320	...
Age-adjusted rate ³ . . . . .	...	339.3	...	347.2	...	374.3	...	383.9	...	374.5	...	380.1
White												
All ages	152,500	811.0	151,030	811.2	1,331,930	905.6	1,334,900	913.0	1,984,470	899.1	1,979,710	903.5
Under 1 year					11,910	² 603.9	12,190	² 608.8	17,820	² 602.4	18,650	² 619.2
1–4 years	} 2,320	59.7	2,330	59.9	2,700	33.3	2,810	34.3	3,830	31.4	4,210	34.2
5–14 years					4,350	21.4	4,240	20.8	6,440	21.1	6,480	21.3
15–24 years	2,050	82.8	1,980	81.6	15,050	77.9	15,590	81.6	23,110	79.8	24,210	84.7
25–34 years	2,640	97.1	3,090	111.2	22,420	104.5	24,940	113.4	34,060	105.3	37,850	114.6
35–44 years	5,500	177.2	5,840	191.3	43,620	179.8	46,930	196.1	66,510	182.7	71,600	199.8
45–54 years	8,720	357.8	8,810	375.9	74,020	391.4	71,900	393.6	110,800	392.7	107,710	394.7
55–64 years	15,050	941.4	15,120	968.3	124,800	1,003.2	127,880	1,044.1	187,270	1,000.9	190,700	1,039.5
65–74 years	31,180	2,253.4	31,530	2,253.5	266,060	2,444.6	278,730	2,524.2	400,490	2,446.2	411,560	2,482.4
75–84 years	45,500	5,052.6	43,910	4,989.6	403,380	5,746.9	397,900	5,793.6	596,300	5,669.9	587,360	5,721.4
85 years and over	39,510	13,242.2	38,300	13,268.4	363,190	15,687.4	351,260	15,609.3	537,250	15,514.0	518,620	15,425.9
Not stated	30	...	120	...	440	...	530	...	600	...	760	...
Age-adjusted rate ³ . . . . .	...	420.9	...	428.1	...	459.1	...	471.5	...	458.0	...	469.0

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, August 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with August 1996 and 1997—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 rates per 100,000 U.S. standard population; see [Technical notes](#). Because of 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	August				January–August				12 months ending with August			
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
White male												
All ages	77,010	832.2	75,590	827.2	660,080	912.2	667,700	930.5	984,310	906.5	992,360	922.8
Under 1 year	} 1,400	70.2	1,340	67.2	6,950	² 689.1	6,630	² 644.6	10,340	² 682.1	10,410	² 673.4
1–4 years					1,410	33.4	1,670	39.9	2,020	32.3	2,520	39.9
5–14 years					2,510	23.9	2,510	24.0	3,690	23.5	3,900	24.9
15–24 years					1,530	119.5	1,370	110.1	10,930	109.2	11,450	117.0	16,950	113.1	17,930	122.2
25–34 years	1,880	136.8	2,310	164.7	15,990	147.4	18,110	163.2	24,290	148.6	27,660	165.9
35–44 years	3,900	249.9	4,170	272.4	29,950	245.4	32,530	271.0	45,330	247.8	49,620	276.1
45–54 years	5,510	456.8	5,570	481.1	46,780	499.8	45,880	508.5	70,170	502.6	69,160	513.1
55–64 years	9,230	1,197.8	9,190	1,223.0	76,130	1,270.2	76,980	1,306.6	114,500	1,270.1	114,830	1,301.3
65–74 years	18,260	2,927.1	17,630	2,804.8	153,090	3,123.2	158,840	3,204.4	228,530	3,100.8	235,510	3,166.3
75–84 years	22,150	6,190.3	21,360	6,158.4	196,920	7,076.3	196,530	7,282.9	292,050	7,012.0	289,650	7,189.1
85 years and over	13,110	15,374.5	12,570	15,507.5	119,030	18,070.8	116,190	18,451.1	175,960	17,882.1	170,640	18,172.5
Not stated	30	...	70	...	390	...	380	...	480	...	540	...
Age-adjusted rate ³ . . . . .	...	537.1	...	541.0	...	579.3	...	599.1	...	577.9	...	597.7
White female												
All ages	75,490	790.5	75,450	796.0	671,860	899.2	667,200	896.1	1,000,160	891.9	987,360	884.9
Under 1 year	} 920	48.6	990	52.3	4,950	² 515.4	5,570	² 572.1	7,480	² 518.7	8,250	² 562.8
1–4 years					1,300	32.7	1,140	28.5	1,810	30.5	1,690	28.1
5–14 years					1,840	18.5	1,730	17.6	2,750	18.5	2,580	17.4
15–24 years					520	43.5	610	51.7	4,120	44.4	4,130	44.5	6,160	44.0	6,280	45.1
25–34 years	750	55.8	780	56.6	6,430	60.6	6,830	62.6	9,770	61.1	10,190	62.3
35–44 years	1,600	103.7	1,670	109.8	13,670	113.3	14,400	120.7	21,180	117.0	21,980	123.1
45–54 years	3,210	260.8	3,230	272.3	27,230	285.0	26,020	281.4	40,630	285.0	38,550	279.1
55–64 years	5,830	704.0	5,930	732.0	48,660	754.9	50,900	800.9	72,770	750.6	75,870	796.9
65–74 years	12,920	1,700.3	13,890	1,802.5	112,970	1,888.5	119,890	1,969.7	171,960	1,910.2	176,050	1,925.9
75–84 years	23,350	4,302.5	22,560	4,231.2	206,460	4,873.1	201,370	4,830.1	304,240	4,789.7	297,710	4,773.3
85 years and over	26,400	12,388.9	25,730	12,394.1	244,160	14,739.2	235,070	14,505.5	361,290	14,574.0	347,990	14,361.9
Not stated	—	...	50	...	50	...	150	...	120	...	220	...
Age-adjusted rate ³ . . . . .	...	321.4	...	332.1	...	357.6	...	365.3	...	356.9	...	361.3
Black												
All ages	22,270	772.1	22,320	782.9	182,540	810.1	190,070	850.6	276,720	818.9	283,700	848.0
Under 1 year	} 870	114.3	1,060	137.4	5,370	² 1,434.1	5,880	² 1,401.1	8,500	² 1,509.8	8,730	² 1,390.1
1–4 years					810	51.5	1,180	72.5	1,260	53.8	1,710	69.5
5–14 years					1,110	27.2	1,460	36.8	1,620	26.8	1,990	33.4
15–24 years					790	167.1	810	174.3	5,390	145.8	5,930	162.8	8,090	146.3	8,540	156.2
25–34 years	1,030	225.8	1,140	248.9	7,570	211.5	9,540	263.9	11,970	222.1	15,020	277.4
35–44 years	1,730	374.2	1,790	397.5	14,660	406.3	16,420	466.0	22,370	414.0	25,250	479.1
45–54 years	2,610	855.8	2,530	872.1	19,740	835.9	20,010	888.3	29,740	843.7	29,700	883.4
55–64 years	2,870	1,523.5	2,840	1,553.0	26,060	1,783.5	25,890	1,807.2	39,300	1,792.1	38,790	1,807.5
65–74 years	4,590	3,283.3	4,680	3,381.5	35,890	3,281.0	37,040	3,410.8	54,920	3,344.7	55,040	3,385.0
75–84 years	4,520	6,152.5	4,210	5,882.3	37,780	6,595.7	39,250	7,008.5	57,470	6,698.1	58,060	6,928.4
85 years and over	3,220	12,895.5	3,240	13,516.9	27,900	14,397.7	27,290	14,583.6	41,170	14,196.6	40,640	14,566.3
Not stated	30	...	20	...	250	...	190	...	320	...	240	...
Age-adjusted rate ³ . . . . .	...	671.6	...	689.3	...	701.9	...	746.3	...	711.9	...	744.9
Black male												
All ages	11,570	844.8	12,240	904.7	95,860	896.1	102,060	962.7	145,070	904.3	152,710	962.0
Under 1 year	} 430	111.3	530	135.4	2,890	² 1,521.0	3,060	² 1,447.3	4,710	² 1,652.6	4,590	² 1,443.4
1–4 years					490	62.2	600	72.1	720	60.6	870	69.8
5–14 years					670	32.7	870	43.0	960	31.2	1,190	39.3
15–24 years					650	273.9	670	288.2	4,260	231.1	4,710	257.9	6,430	231.7	6,860	250.7
25–34 years	770	355.9	910	419.7	5,220	306.5	6,540	383.5	8,150	318.9	10,380	405.0
35–44 years	1,080	498.7	1,160	551.6	9,320	552.7	10,800	656.3	14,260	563.9	16,680	677.8
45–54 years	1,740	1,259.2	1,600	1,217.2	12,530	1,169.8	12,610	1,235.5	18,730	1,172.8	18,680	1,225.7
55–64 years	1,660	2,029.6	1,710	2,152.3	14,600	2,300.7	15,260	2,449.8	22,290	2,341.4	22,550	2,416.9
65–74 years	2,340	3,998.8	2,770	4,788.3	19,330	4,230.2	20,060	4,426.8	29,410	4,280.9	30,200	4,454.3
75–84 years	1,810	6,659.8	1,870	7,121.9	16,780	7,947.7	18,320	8,930.6	25,450	8,053.8	26,830	8,739.4
85 years and over	1,060	14,512.4	1,020	14,867.4	9,630	16,972.0	9,110	16,937.3	13,780	16,211.8	13,760	17,200.0
Not stated	20	...	10	...	130	...	120	...	170	...	140	...
Age-adjusted rate ³ . . . . .	...	864.2	...	941.2	...	913.5	...	992.6	...	924.6	...	991.9

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, August 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with August 1996 and 1997—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 rates per 100,000 U.S. standard population; see [Technical notes](#). Because of 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	August				January–August				12 months ending with August							
	1997		1996		1997		1996		1997		1996					
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate				
Black female																
All ages	10,700	706.4	10,090	673.5	86,680	732.4	88,010	749.5	131,650	741.8	131,000	745.1				
Under 1 year	} 450	120.0	530	139.4	2,490	² 1,339.5	2,810	² 1,368.2	3,790	² 1,363.3	4,140	² 1,335.5				
1–4 years					310	40.4	580	71.7	530	45.9	840	69.3				
5–14 years					440	22.1	590	30.0	660	22.1	800	27.2				
15–24 years					140	59.5	140	60.3	1,120	60.4	1,230	68.0	1,650	59.9	1,690	61.9
25–34 years					250	104.3	230	95.4	2,360	124.7	2,990	157.4	3,820	134.8	4,640	162.7
35–44 years	650	264.4	630	262.5	5,340	278.4	5,620	299.4	8,110	282.2	8,580	305.4				
45–54 years	870	521.6	940	592.5	7,210	559.3	7,400	600.6	11,010	571.1	11,020	599.6				
55–64 years	1,210	1,135.2	1,130	1,092.7	11,460	1,384.6	10,630	1,311.9	17,010	1,370.7	16,250	1,339.7				
65–74 years	2,250	2,768.2	1,910	2,371.2	16,560	2,603.2	16,980	2,681.2	25,510	2,671.2	24,850	2,621.3				
75–84 years	2,710	5,854.7	2,340	5,163.9	21,000	5,806.5	20,930	5,896.5	32,020	5,907.7	31,220	5,879.5				
85 years and over	2,160	12,227.0	2,230	13,033.8	18,270	13,331.8	18,180	13,647.8	27,400	13,365.9	26,880	13,507.5				
Not stated	10	...	10	...	120	...	70	...	150	...	100	...				
Age-adjusted rate ³ . . . . .	...	515.8	...	492.9	...	537.4	...	556.1	...	545.6	...	554.0			

... Category not applicable.

– Quantity zero.

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 9](#) for infant mortality rates.

³For method of computation, see [Technical notes](#).

NOTES: 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.

Table 6. Provisional number of deaths and death rates for 72 selected causes, Human immunodeficiency virus infection, and Alzheimer's disease: United States, August 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with August 1996 and 1997

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population. Because of 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 asterisks preceding cause-of-death categories, see [Technical notes](#)]

Cause of death (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i>)	August				January–August				12 months ending with August			
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
All causes	178,000	781.8	176,000	783.8	1,542,000	867.3	1,551,000	878.8	2,303,000	863.1	2,303,000	871.0
Shigellosis and amebiasis	—	*	—	*	—	*	—	*	—	*	—	*
Certain other intestinal infections	70	*	80	*	550	0.3	580	0.3	780	0.3	760	0.3
Tuberculosis	70	*	60	*	690	0.4	610	0.3	1,090	0.4	1,060	0.4
Tuberculosis of respiratory system	60	*	40	*	550	0.3	480	0.3	870	0.3	870	0.3
Other tuberculosis	10	*	20	*	140	0.1	130	0.1	220	0.1	200	0.1
Whooping cough	—	*	—	*	20	*	10	*	20	*	20	*
Streptococcal sore throat, scarlatina, and erysipelas	—	*	—	*	—	*	—	*	—	*	—	*
Meningococcal infection	20	*	—	*	230	0.1	190	0.1	310	0.1	210	0.1
Septicemia	1,640	7.2	1,610	7.2	14,770	8.3	14,600	8.3	21,840	8.2	21,190	8.0
Acute poliomyelitis	—	*	—	*	—	*	—	*	—	*	—	*
Measles	—	*	—	*	10	*	—	*	10	*	—	*
Viral hepatitis	320	1.4	330	1.5	2,760	1.6	2,450	1.4	4,130	1.5	3,690	1.4
Syphilis	—	*	10	*	40	*	10	*	60	*	40	*
All other infectious and parasitic diseases ¹	1,440	6.3	2,850	12.7	15,190	8.5	26,950	15.3	26,180	9.8	42,750	16.2
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues	45,120	198.4	44,610	198.4	355,340	199.8	359,930	204.0	537,740	201.6	537,860	203.5
Malignant neoplasms of lip, oral cavity, and pharynx	680	3.0	560	2.5	5,220	2.9	5,140	2.9	7,920	3.0	7,790	2.9
Malignant neoplasms of digestive organs and peritoneum	10,460	46.0	10,210	45.4	82,660	46.5	83,590	47.4	125,920	47.2	125,130	47.3
Malignant neoplasms of respiratory and intrathoracic organs	13,130	57.7	12,930	57.5	103,870	58.4	105,110	59.6	157,820	59.2	156,840	59.3
Malignant neoplasm of breast	3,470	15.2	3,870	17.2	27,180	15.3	29,570	16.7	41,150	15.4	44,230	16.7
Malignant neoplasms of genital organs	4,710	20.7	4,970	22.1	39,850	22.4	39,990	22.7	60,090	22.5	60,110	22.7
Malignant neoplasms of urinary organs	1,890	8.3	1,950	8.7	15,970	9.0	15,200	8.6	23,800	8.9	22,660	8.6
Malignant neoplasms of all other and unspecified sites	6,020	26.5	5,730	25.5	42,980	24.2	44,180	25.0	65,060	24.4	65,850	24.9
Leukemia	1,540	6.8	1,630	7.2	13,640	7.7	13,910	7.9	20,060	7.5	20,110	7.6
Other malignant neoplasms of lymphatic and hematopoietic tissues	3,220	14.2	2,760	12.3	23,980	13.5	23,240	13.2	35,930	13.5	35,140	13.3
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature	660	2.9	570	2.5	5,160	2.9	5,330	3.0	7,480	2.8	7,840	3.0
Diabetes mellitus	4,910	21.6	4,480	19.9	41,290	23.2	41,010	23.2	61,750	23.1	59,740	22.6
Nutritional deficiencies	290	1.3	250	1.1	2,370	1.3	2,640	1.5	3,530	1.3	3,970	1.5
Anemias	380	1.7	300	1.3	2,830	1.6	2,570	1.4	4,230	1.6	4,070	1.5
Meningitis	10	*	50	*	400	0.2	400	0.2	590	0.2	570	0.2
Major cardiovascular diseases	68,640	301.8	69,110	307.4	627,870	353.1	632,880	358.7	936,620	351.1	938,400	355.0
Diseases of heart	51,930	228.3	53,400	237.5	482,680	271.5	491,930	278.8	719,880	269.8	728,130	275.4
Rheumatic fever and rheumatic heart disease	400	1.8	460	2.0	3,080	1.7	3,480	2.0	4,460	1.7	4,900	1.9
Hypertensive heart disease	2,130	9.4	1,900	8.4	17,870	10.0	17,710	10.0	26,180	9.8	25,570	9.7
Hypertensive heart and renal disease	140	0.6	170	0.8	1,470	0.8	1,490	0.8	2,190	0.8	2,220	0.8
Ischemic heart disease	33,030	145.2	35,010	155.7	309,900	174.3	318,440	180.5	464,470	174.1	472,180	178.6
Acute myocardial infarction	14,990	65.9	15,600	69.4	138,790	78.1	144,200	81.7	208,480	78.1	214,130	81.0
Other acute and subacute forms of ischemic heart disease	220	1.0	210	0.9	1,970	1.1	1,800	1.0	2,870	1.1	2,650	1.0
Angina pectoris	30	*	30	*	420	0.2	510	0.3	590	0.2	770	0.3
Old myocardial infarction and other forms of chronic ischemic heart disease	17,780	78.2	19,160	85.2	168,710	94.9	171,930	97.4	252,520	94.7	254,630	96.3
Other diseases of endocardium	1,220	5.4	1,010	4.5	11,260	6.3	10,990	6.2	16,750	6.3	16,040	6.1
All other forms of heart disease	15,010	66.0	14,860	66.1	139,110	78.2	139,840	79.3	205,840	77.2	207,220	78.4
Hypertension with or without renal disease	800	3.5	750	3.3	8,810	4.9	7,910	4.5	13,080	4.9	11,850	4.5
Cerebrovascular diseases	12,550	55.2	11,830	52.6	106,820	60.1	105,500	59.8	159,870	59.9	156,740	59.3
Intracerebral and other intracranial hemorrhage	2,240	9.8	1,810	8.0	16,850	9.5	15,250	8.6	25,110	9.4	22,140	8.4
Cerebral thrombosis and unspecified occlusion of cerebral arteries	920	4.0	1,000	4.4	8,140	4.6	8,030	4.5	12,570	4.7	12,340	4.7
Cerebral embolism	70	*	20	*	360	0.2	400	0.2	760	0.3	640	0.2
All other and late effects of cerebrovascular diseases	9,320	41.0	9,000	40.0	81,470	45.8	81,820	46.4	121,430	45.5	121,620	46.0

See footnotes at end of table.

Table 6. Provisional number of deaths and death rates for 72 selected causes, Human immunodeficiency virus infection, and Alzheimer's disease: United States, August 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with August 1996 and 1997—Con.

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population. Because of 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 asterisks preceding cause-of-death categories, see [Technical notes](#)]

Cause of death (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i>)	August				January–August				12 months ending with August				
	1997		1996		1997		1996		1997		1996		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Atherosclerosis	440	1,180	5.2	1,070	4.8	10,830	6.1	10,350	5.9	16,050	6.0	15,640	5.9
Other diseases of arteries, arterioles, and capillaries . . . . .	.441–.448	2,180	9.6	2,060	9.2	18,740	10.5	17,180	9.7	27,740	10.4	26,040	9.9
Acute bronchitis and bronchiolitis . . . . .	.466	30	*	50	*	400	0.2	340	0.2	460	0.2	460	0.2
Pneumonia and influenza . . . . .	.480–.487	5,060	22.2	4,930	21.9	58,310	32.8	55,500	31.5	84,370	31.6	80,230	30.4
Pneumonia . . . . .	.480–.486	5,060	22.2	4,930	21.9	57,540	32.4	55,050	31.2	83,390	31.3	79,700	30.1
Influenza . . . . .	.487	—	*	—	*	770	0.4	450	0.3	980	0.4	530	0.2
Chronic obstructive pulmonary diseases and allied conditions . . . . .	.490–.496	7,530	33.1	7,380	32.8	74,660	42.0	72,990	41.4	107,130	40.2	103,910	39.3
Bronchitis, chronic and unspecified . . . . .	.490–.491	180	0.8	120	0.5	2,140	1.2	2,200	1.2	2,890	1.1	3,020	1.1
Emphysema . . . . .	.492	1,320	5.8	1,130	5.0	12,350	6.9	11,700	6.6	17,440	6.5	16,710	6.3
Asthma . . . . .	.493	390	1.7	550	2.4	3,640	2.1	3,450	1.9	5,340	2.0	5,110	1.9
Other chronic obstructive pulmonary diseases and allied conditions . . . . .	.494–.496	5,630	24.7	5,580	24.8	56,530	31.8	55,640	31.5	81,460	30.5	79,070	29.9
Ulcer of stomach and duodenum . . . . .	.531–.533	330	1.4	390	1.7	3,390	1.9	3,340	1.9	4,830	1.8	5,190	2.0
Appendicitis . . . . .	.540–.543	40	*	40	*	250	0.1	320	0.2	400	0.1	420	0.2
Hernia of abdominal cavity and intestinal obstruction without mention of hernia . . . . .	.550–.553,560	560	2.5	450	2.0	4,160	2.3	4,230	2.4	6,380	2.4	5,970	2.3
Chronic liver disease and cirrhosis . . . . .	.571	1,980	8.7	1,870	8.3	16,800	9.4	16,200	9.2	25,070	9.4	24,240	9.2
Cholelithiasis and other disorders of gallbladder . . . . .	.574–.575	190	0.8	240	1.1	1,800	1.0	1,820	1.0	2,660	1.0	2,710	1.0
Nephritis and nephrotic syndrome, and nephrosis . . . . .	.580–.589	2,180	9.6	1,920	8.5	17,830	10.0	17,900	10.1	26,910	10.1	26,020	9.8
Acute glomerulonephritis and nephrotic syndrome . . . . .	.580–.581	40	*	—	*	210	0.1	120	0.1	310	0.1	190	0.1
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified . . . . .	.582–.583,587	90	*	110	0.5	1,070	0.6	1,120	0.6	1,750	0.7	1,640	0.6
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause . . . . .	.584–.586,588–.589	2,050	9.0	1,810	8.0	16,550	9.3	16,660	9.4	24,860	9.3	24,190	9.2
Infections of kidney . . . . .	.590	80	*	30	*	490	0.3	640	0.4	750	0.3	810	0.3
Hyperplasia of prostate . . . . .	.600	30	*	20	*	280	0.2	280	0.2	410	0.2	430	0.2
Complications of pregnancy, childbirth, and the puerperium . . . . .	.630–.676	30	*	10	*	170	0.1	190	0.1	260	0.1	330	0.1
Pregnancy with abortive outcome . . . . .	.630–.638	—	*	—	*	40	*	20	*	40	*	30	*
Other complications of pregnancy, childbirth, and the puerperium . . . . .	.640–.676	30	*	10	*	130	0.1	170	0.1	220	0.1	300	0.1
Congenital anomalies . . . . .	.740–.759	910	4.0	960	4.3	7,770	4.4	7,660	4.3	11,580	4.3	11,690	4.4
Certain conditions originating in the perinatal period . . . . .	.760–.779	1,080	4.7	1,040	4.6	8,090	4.5	8,610	4.9	12,380	4.6	12,850	4.9
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .	.767–.769	170	0.7	180	0.8	1,290	0.7	1,370	0.8	2,070	0.8	1,980	0.7
Other conditions originating in the perinatal period . . . . .	.760–.766,770–.779	910	4.0	870	3.9	6,800	3.8	7,240	4.1	10,300	3.9	10,870	4.1
Symptoms, signs, and ill-defined conditions . . . . .	.780–.799	4,230	18.6	3,330	14.8	31,390	17.6	27,950	15.8	45,210	16.9	42,110	15.9
All other diseases . . . . .	.Residual	17,630	77.5	16,560	73.7	154,840	87.1	146,630	83.1	227,250	85.2	217,050	82.1
Accidents and adverse effects . . . . .	.E800–E949	7,920	34.8	7,940	35.3	59,050	33.2	60,280	34.2	89,530	33.6	91,060	34.4
Motor vehicle accidents . . . . .	.E810–E825	3,770	16.6	3,710	16.5	28,160	15.8	28,390	16.1	43,470	16.3	44,140	16.7
All other accidents and adverse effects . . . . .	.E800–E807,E826–E949	4,150	18.2	4,230	18.8	30,890	17.4	31,890	18.1	46,060	17.3	46,910	17.7
Suicide . . . . .	.E950–E959	2,380	10.5	2,760	12.3	18,840	10.6	20,150	11.4	28,860	10.8	29,650	11.2
Homicide and legal intervention . . . . .	.E960–E978	1,880	8.3	1,730	7.7	12,600	7.1	13,790	7.8	19,700	7.4	21,290	8.1
All other external causes . . . . .	.E980–E999	160	0.7	220	1.0	1,500	0.8	1,580	0.9	2,240	0.8	2,240	0.8
Human immunodeficiency virus infection ²	*042–*044	970	4.3	2,340	10.4	11,320	6.4	22,780	12.9	19,780	7.4	36,410	13.8
Alzheimer's disease . . . . .	.331.0	1,700	7.5	1,620	7.2	15,480	8.7	14,600	8.3	22,820	8.6	21,670	8.2

– Quantity zero. * Figure does not meet standards of reliability or precision; see [Technical notes](#).

¹Includes data for deaths due to Human immunodeficiency virus infection (categories *042–*044) shown separately below; see [Technical notes](#).

²Included in All other infectious and parasitic diseases shown above.

NOTES: 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.

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, August 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with August 1996 and 1997

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population. Because of 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 (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i>)	August				January–August				12 months ending with August			
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues ¹140–208	45,120	198.4	44,610	198.4	355,340	199.8	359,930	204.0	537,740	201.6	537,860	203.5
Malignant neoplasm of esophagus150	930	4.1	950	4.2	7,260	4.1	7,350	4.2	11,050	4.1	10,640	4.0
Malignant neoplasm of stomach151	1,250	5.5	800	3.6	8,660	4.9	8,530	4.8	13,520	5.1	13,080	4.9
Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus153,154	4,330	19.0	4,820	21.4	36,410	20.5	37,930	21.5	55,730	20.9	56,170	21.2
Malignant neoplasm of pancreas157	2,350	10.3	2,240	10.0	18,150	10.2	18,280	10.4	27,470	10.3	27,400	10.4
Malignant neoplasms of trachea, bronchus, and lung162	12,710	55.9	12,590	56.0	100,780	56.7	101,660	57.6	152,880	57.3	151,590	57.3
Malignant melanoma of skin172	710	3.1	630	2.8	4,890	2.7	4,730	2.7	7,200	2.7	6,860	2.6
Malignant neoplasm of cervix uteri180	330	1.4	360	1.6	2,960	1.7	2,850	1.6	4,580	1.7	4,550	1.7
Malignant neoplasms of body of uterus and of uterus, part unspecified179,182	490	2.1	540	2.4	4,200	2.4	3,900	2.2	6,090	2.3	5,940	2.2
Malignant neoplasm of ovary183,0	1,140	5.0	1,120	5.0	9,230	5.2	9,040	5.1	13,690	5.1	13,650	5.2
Malignant neoplasm of prostate185	2,550	11.2	2,780	12.4	22,210	12.5	22,940	13.0	33,770	12.7	34,060	12.9
Malignant neoplasm of bladder188	1,010	4.4	1,030	4.6	8,070	4.5	7,560	4.3	11,770	4.4	11,320	4.3
Malignant neoplasms of kidney and other and unspecified urinary organs189	890	3.9	930	4.1	7,900	4.4	7,640	4.3	12,020	4.5	11,340	4.3
Malignant neoplasms of brain and other and unspecified parts of nervous system191,192	1,070	4.7	880	3.9	7,330	4.1	7,640	4.3	11,280	4.2	11,650	4.4
Hodgkin's disease201	130	0.6	120	0.5	980	0.5	1,050	0.6	1,390	0.5	1,520	0.6
Malignant lymphoma other than Hodgkin's disease200,202	2,030	8.9	1,940	8.6	16,060	9.0	15,250	8.6	23,980	9.0	23,230	8.8
Multiple myeloma and other immunoproliferative neoplasms203	1,060	4.7	690	3.1	6,940	3.9	6,940	3.9	10,560	4.0	10,400	3.9

¹Includes figures for subcategories not shown below.

NOTES: 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.

Table 8. Provisional number of deaths and death rates for firearm mortality: United States, August 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with August 1996 and 1997

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 estimated population. Because of 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 (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i>)	August				January–August				12 months ending with August			
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Injury by firearmsE922,E955.0–E955.4,E965.0–965.4,E970,E985.0–E985.4	2,850	12.5	2,940	13.1	21,130	11.9	22,960	13.0	32,630	12.2	34,890	13.2
Accident caused by firearm missileE922	80	*	120	0.5	720	0.4	820	0.5	1,230	0.5	1,380	0.5
Suicide by firearmsE955.0–E955.4	1,380	6.1	1,600	7.1	11,260	6.3	12,340	7.0	17,270	6.5	18,130	6.9
Homicide and legal intervention by firearmsE965.0–E965.4,E970	1,350	5.9	1,200	5.3	8,990	5.1	9,650	5.5	13,910	5.2	15,160	5.7
Injury by firearms, undetermined whether accidentally or purposely inflictedE985.0–E985.4	40	*	20	*	160	0.1	150	0.1	220	0.1	220	0.1

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

NOTES: 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.

Table 9. Provisional number of deaths under 1 year and infant mortality rates, by age and for 10 selected causes: United States, August 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with August 1996 and 1997

[Data are provisional, estimated from a 10-percent sample of deaths. Rates on an annual basis per 100,000 live births. Because of 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 (Based on the <i>Ninth Revision, International Classification of Diseases, 1975</i>)	August				January–August				12 months ending with August			
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Total, under 1 year	2,200	684.5	2,200	665.6	17,900	701.0	18,700	729.1	27,200	706.6	28,200	734.2
Under 28 days	1,520	467.4	1,620	480.9	11,420	448.4	12,440	484.5	17,450	453.1	18,600	484.1
28 days–11 months	710	218.3	620	184.1	6,440	252.9	6,280	244.6	9,760	253.4	9,610	250.1
Certain gastrointestinal diseases008–009,535,555–558	–	*	20	*	130	5.1	160	6.2	190	4.9	210	5.5
Pneumonia and influenza480–487	–	*	20	*	150	5.9	230	9.0	250	6.5	330	8.6
Congenital anomalies740–759	530	163.0	530	157.3	4,250	166.9	4,210	164.0	6,560	170.3	6,300	164.0
Disorders relating to short gestation and unspecified low birthweight765	250	76.9	270	80.2	2,090	82.1	2,550	99.3	3,110	80.7	3,470	90.3
Birth trauma767	20	*	10	*	60	*	140	5.5	90	*	240	6.2
Intrauterine hypoxia and birth asphyxia768	50	*	30	*	330	13.0	390	15.2	460	11.9	500	13.0
Respiratory distress syndrome769	100	*	140	41.6	830	32.6	810	31.5	1,410	36.6	1,140	29.7
Other conditions originating in the perinatal period760–764,766,770–779	660	203.0	590	175.1	4,610	181.0	4,640	180.7	7,070	183.6	7,330	190.8
Sudden infant death syndrome798.0	180	55.4	160	47.5	1,290	50.7	1,800	70.1	2,100	54.5	2,730	71.0
All other causesResidual	430	132.2	480	142.5	4,110	161.4	3,800	148.0	5,970	155.0	5,960	155.1

– Quantity zero.

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

NOTES: 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.

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 (50 States and the District of Columbia). Mortality data exclude fetal deaths. Data for the Commonwealth of Puerto Rico are not included in the U.S. totals.

Birth, death, and infant death figures 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 figures and final State residence figures for the three most recent years for which final data were available and are 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 in [tables 2](#) and [4](#) contain adjustments for varying lengths of State reporting periods. Figures for Texas for all events shown in [tables 2–4](#) also are adjusted for varying lengths of State reporting 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 shown elsewhere in this report.

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, 1992, 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. Rates shown in this report beginning with 1992 were computed using populations based on the 1990 Census enumeration comparable to those used for final data. 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 (1). 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 (2). See also chapter 10 of an earlier report (1). Age groups in [table 5](#) were used to compute the age-adjusted

rates shown in that table. 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 not made in this report.

Estimated numbers of deaths 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 categories *042–*044 for classifying and coding Human immunodeficiency virus (HIV) infection. The asterisks before the categories indicate that these codes are not part of the

Ninth Revision, 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 in the following table is a measure of the

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

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 this level.

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