

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 July 1997

Births

According to provisional reports, an estimated 343,000 births occurred in the United States during July 1997. This was the same as the provisional number of births reported for July 1996. The birth rate, 15.1 live births per 1,000 population, was 1 percent lower than the rate of 15.3 for July 1996. The fertility rate, 67.6 live births per 1,000 women 15–44 years, was slightly lower than the comparable rate for July 1996 (67.9). The seasonally adjusted fertility rate (64.9) was also slightly lower than the comparable rate for July 1996 (65.2).

During the first 7 months of 1997, an estimated 2,216,000 births occurred, a

1-percent decrease from the 2,231,000 reported for the first 7 months of 1996. The birth rate declined by 1 percent from 14.5 in 1996 to 14.3 in 1997. The fertility rate for the first 7 months of 1997 was 63.9, 1 percent lower than the rate for the same period of 1996 (64.4).

An estimated 3,884,000 live births occurred in the 12-month period ending with July 1997, an increase of 1 percent from the 3,859,000 births reported for the same period a year earlier. The birth rate of 14.6 was the same as the rate for the preceding 12-month period. The fertility rate for the most recent 12-month period was 65.1, slightly higher than the rate for the 12 months ending with July 1996 (64.8).

Natural increase

As a result of natural increase, the excess of births over deaths, an estimated 151,000 people were added to the population during July 1997 at an annual rate of 6.7 persons per 1,000 population.

For the 12-month period ending with July 1997, 1,583,000 persons were added to the population. This represented a rate of natural increase of 6.0, compared with a rate of 5.9 for the preceding 12-month period. The rise in the rate of natural increase was due to a constant birth rate and a declining 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	July				January–July				12 months ending with July				
	Number		Rate		Number		Rate		Number		Rate		
	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1995
Live births	343,000	343,000	15.1	15.3	2,216,000	2,231,000	14.3	14.5	3,884,000	3,859,000	14.6	14.6	15.1
Fertility rate . . . . .	...	...	67.6	67.9	...	...	63.9	64.4	...	...	65.1	64.8	66.5
Deaths	192,000	187,000	8.4	8.3	1,364,000	1,374,000	8.8	8.9	2,301,000	2,310,000	8.6	8.7	8.8
Infant deaths	2,200	2,300	6.6	6.8	15,400	16,500	6.9	7.4	27,000	28,400	7.0	7.4	7.7
Natural increase	151,000	156,000	6.7	7.0	852,000	857,000	5.5	5.6	1,583,000	1,549,000	6.0	5.9	6.3
Marriages	228,000	235,000	10.1	10.5	1,337,000	1,293,000	8.8	8.5	2,388,000	2,333,000	9.0	8.8	9.0
Divorces	99,000	96,000	4.3	4.3	676,000	670,000	4.4	4.3	1,157,000	1,153,000	4.3	4.4	4.5
Population base . . . . .	...	...	267.6	265.2	...	...	...	...	...	...	266.6	264.2	261.8

... 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 228,000 couples married in July 1997, 3 percent fewer than in July 1996 (235,000). The marriage rate per 1,000 population for July 1997 was 10.1, 4 percent lower than the rate for July 1996 (10.5).

The number and the rate of marriages were higher for the first 7 months of 1997 than for the comparable period in 1996. The number of marriages for the period in 1997 was 1,337,000, 3 percent higher than the number in July 1996 (1,293,000). The marriage rate in July 1997 (8.8) was 4 percent higher than the rate in 1996 (8.5).

The number of marriages performed during the 12 months ending with July 1997 (2,388,000) was 2 percent higher than the number performed during the comparable period a year earlier (2,333,000). The marriage rate for the period ending with July 1997 (9.0) was also 2 percent higher than the rate for the period ending with July 1996 (8.8).

Divorces

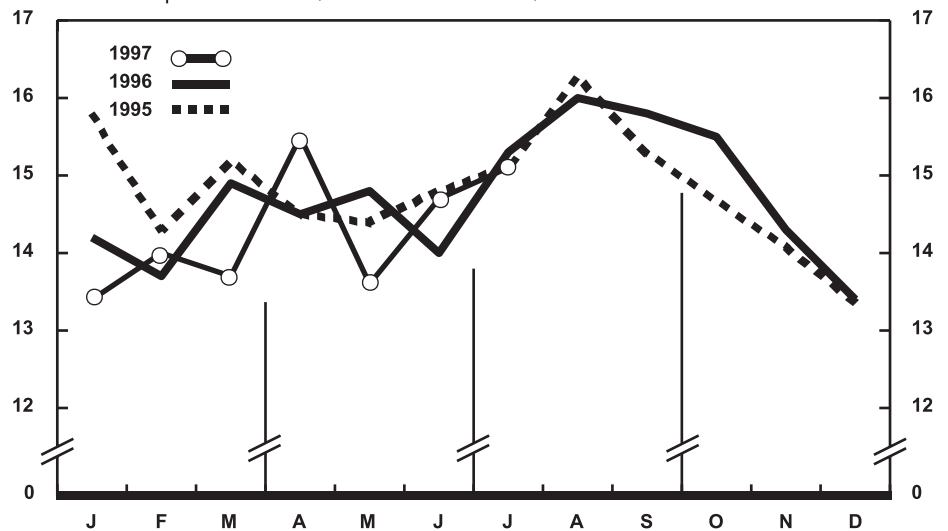
An estimated 99,000 divorces were granted in July 1997, 3 percent more than in July a year earlier (96,000). The divorce rate per 1,000 population for July 1997 was 4.3, the same as the rate for July 1996.

The number of divorces granted in the first 7 months of 1997 (676,000) was 1 percent higher than the number granted for the same period in 1996 (670,000). The divorce rate for the 7-month period in 1997 (4.4) was 2 percent higher than the rate for 1996 (4.3).

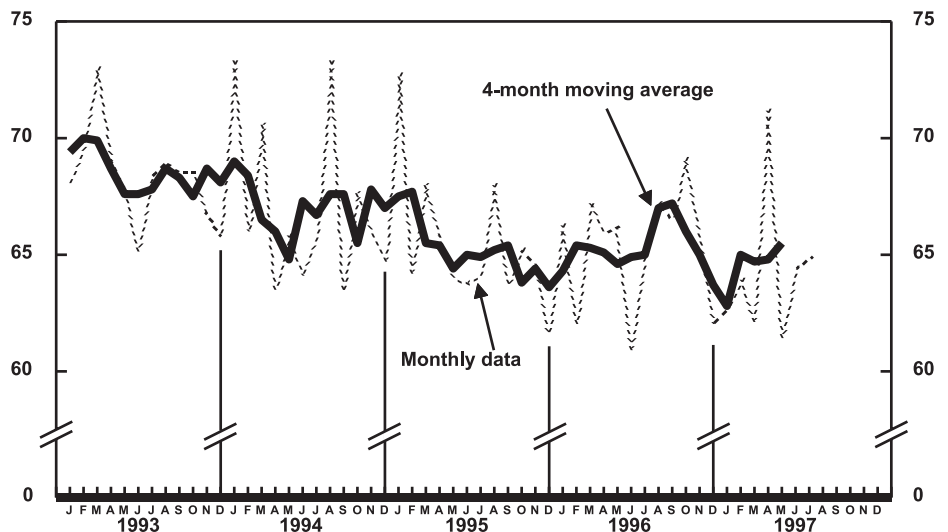
Approximately 1,157,000 couples divorced during the 12-month period ending with July 1997, a slight increase over the number for the same period a year earlier (1,153,000). Despite the increase in the number, the divorce rate for the current 12-month period (4.3) was 2 percent lower than the rate for the period ending with July 1996 (4.4).

Deaths

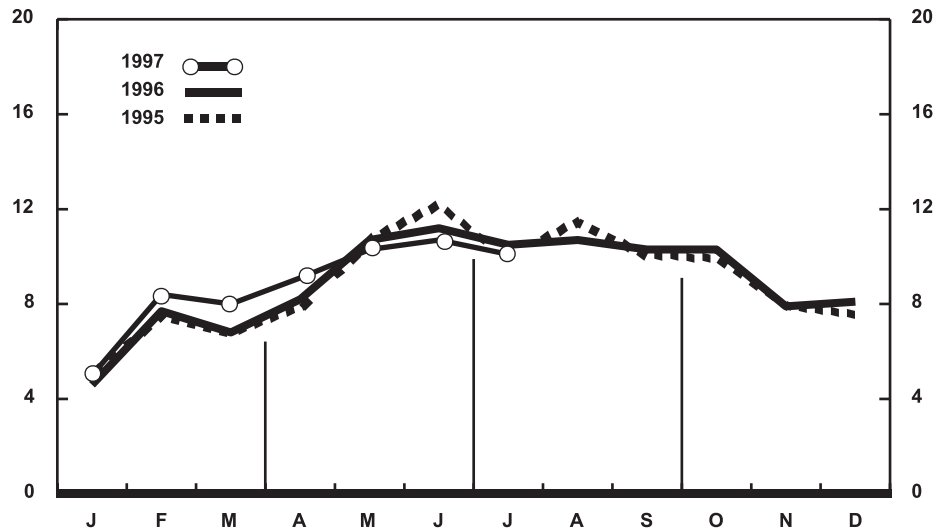
For July 1997 there were an estimated 192,000 deaths in the United States. The death rate was 8.4 deaths per 1,000 population, 1 percent higher than the rate of 8.3 for July a year earlier.



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



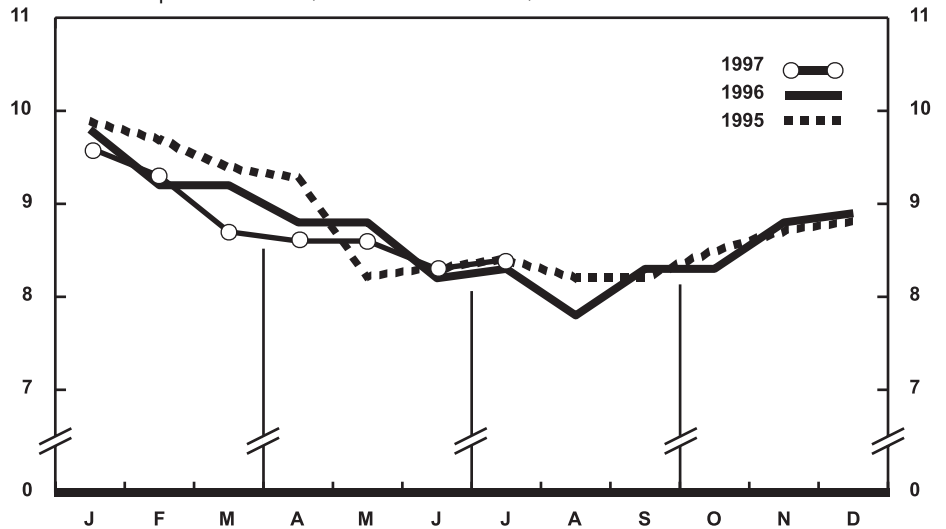
Provisional marriage rates per 1,000 population by month: United States, 1995-97

Among the 192,000 deaths for July 1997 were 2,200 deaths at ages under 1 year.

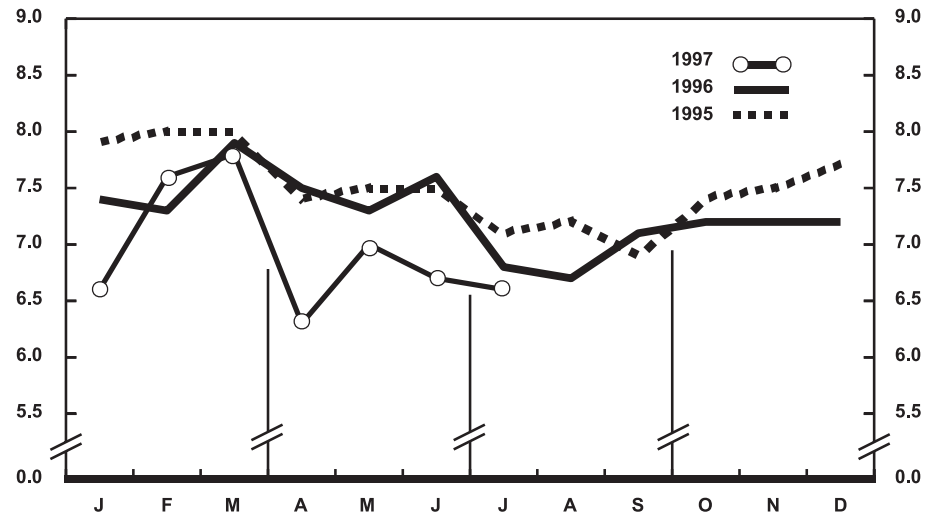
There were 1,364,000 deaths during the first 7 months of 1997, a decrease of 1 percent from the number estimated for the first 7 months of 1996 (1,374,000). The death rate, 8.8 per 1,000 population, was 1 percent lower than the rate for January–July 1996 (8.9). Among the 1,364,000 deaths for the first 7 months of 1997 were 15,400 deaths at ages under 1 year, yielding an infant mortality rate of 6.9 per 1,000 live births. This rate was 7 percent lower than the rate of 7.4 for the first 7 months of 1996.

According to provisional statistics, there were 2,301,000 deaths in the United States during the 12 months ending with July 1997, a slight decrease in the number for the comparable period in 1996 (2,310,000). The death rate for the 12 months ending with July 1997 was 8.6 deaths per 1,000 population, 1 percent lower than the rate for the same 12-month period a year earlier (8.7). The infant mortality rate for this period was 7.0 per 1,000 live births, 5 percent lower than the rate of 7.4 for the 12 months ending with July 1996.

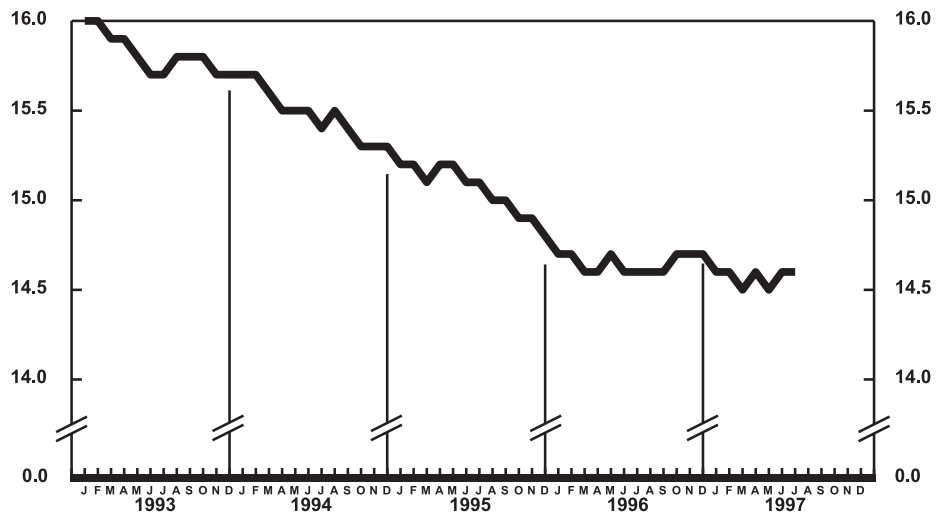
Current Mortality Sample, 12 months ending with June 1997—The provisional death rate for the 12 months ending with June 1997 was 861.7 per 100,000 population, a decrease of 2 percent from the rate of 875.3 for the 12-month period ending with June 1996. The provisional age-adjusted death rate for the 12-month period ending with June 1997 was 481.4 per 100,000 U.S. standard population, 3 percent lower than the rate of 497.6 for the 12-month period ending with June 1996. Age-adjusted death rates control for changes and variations in the age composition of the population; therefore, they are better indicators than crude rates for showing changes in mortality risk over time and for showing differences between race-sex groups within the population. Among the race-sex groups, the estimated age-adjusted death rates decreased for all age groups. By age the death rate for the total population decreased for all age groups except those under 1 year of age, 5–14 years of age, and 85 years of age and over.



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



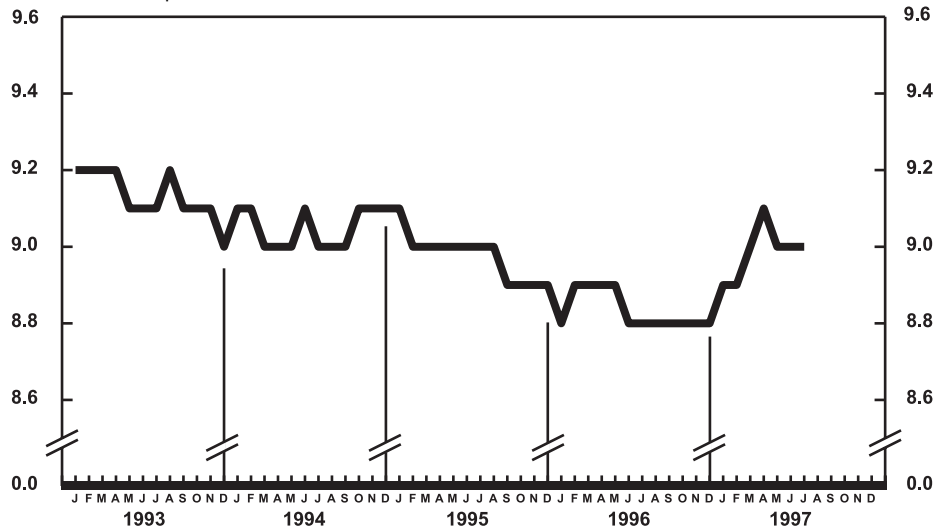
Provisional infant mortality rates per 1,000 live births by month: United States, 1995–97



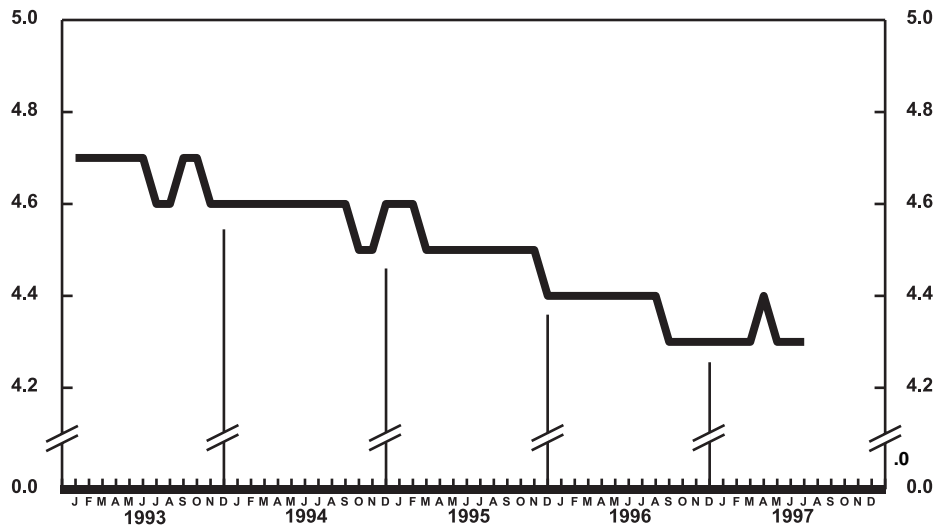
Provisional birth rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1993–97

Among the major causes of death, the estimated death rate decreased between the two successive 12-month periods for Diseases of heart; Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues; Homicide and legal intervention; and Human immunodeficiency virus infection. 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.

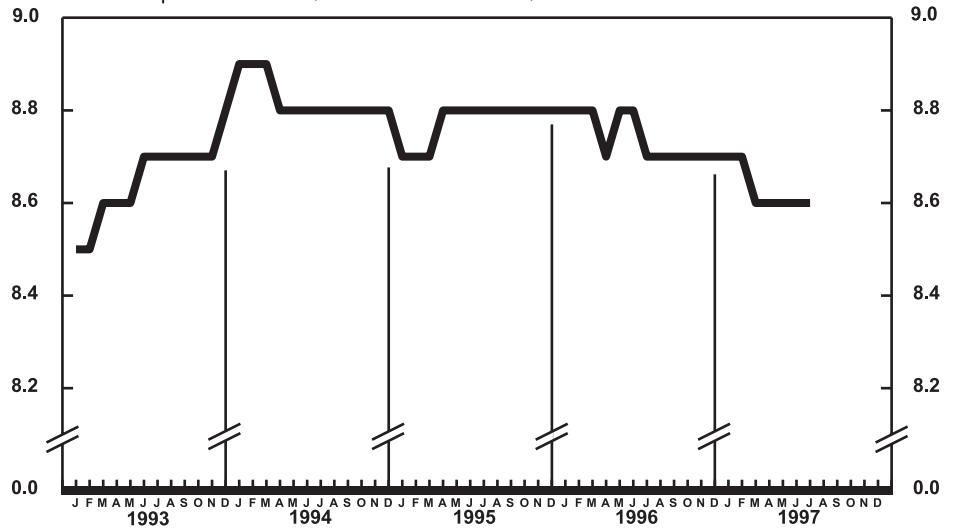
The infant mortality rate for the 12 months ending with June 1997 was 699.8 per 100,000 live births, 6 percent lower than the rate of 742.9 for the same 12-month period a year earlier. For infants under 28 days of age, the 12-month rate ending with June 1997 was 452.3, also 6 percent lower than the rate for the 12-month period a year earlier (481.4). The infant mortality rate for infants aged 28 days–11 months was 247.5 compared with a rate of 261.3 for the 12-month period a year earlier. The change in the mortality rate for infants aged 28 days–11 months of age 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.



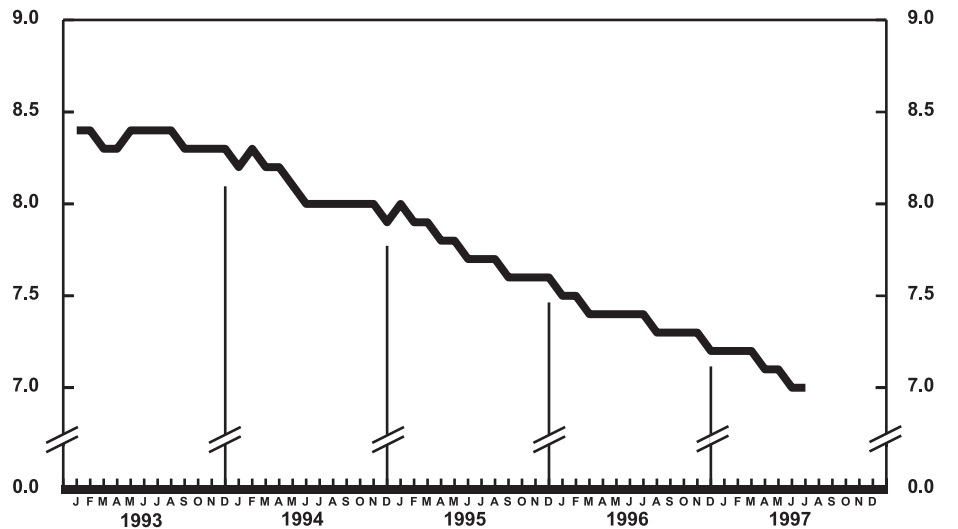
Provisional marriage rates per 1,000 population for successive 12-month periods ending with month indicated: United States, 1993–97



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–July 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	6.6
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	7.8
April	340,000	15.5	69.4	71.2	192,000	9.1	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	2,200	7.0
June	323,000	14.7	65.7	64.4	235,000	10.7	99,000	4.5	182,000	8.3	2,100	6.7
July	343,000	15.1	67.6	64.9	228,000	10.1	99,000	4.3	192,000	8.4	2,200	6.6

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

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

Area	Live births					Deaths				
	July		January–July			July		January–July		
	1997	1996	1997	1996	1995	1997	1996	1997	1996	1995
New England	17,149	15,035	106,705	101,373	110,249	9,086	9,687	70,725	67,508	70,482
Maine	1,298	1,329	8,015	8,070	8,097	859	1,135	6,601	6,562	6,726
New Hampshire	1,360	1,450	8,276	8,184	8,453	790	691	5,765	5,267	5,475
Vermont	721	620	3,925	3,995	3,926	456	367	3,213	3,007	3,091
Massachusetts	8,047	7,820	54,268	52,421	54,259	4,093	4,550	32,689	31,549	32,772
Rhode Island	1,050	1,044	7,054	7,140	7,202	746	715	5,795	5,440	5,659
Connecticut	4,673	2,772	25,167	21,563	28,312	2,142	2,229	16,662	15,683	16,759
Middle Atlantic	46,917	49,795	296,070	306,351	302,853	29,710	29,871	217,285	216,511	222,685
New York	25,478	26,371	151,109	157,629	152,341	14,224	13,845	99,042	98,525	101,701
New Jersey	8,912	9,410	63,027	60,717	60,955	5,670	5,720	41,497	42,456	44,872
Pennsylvania	12,527	14,014	81,934	88,005	89,557	9,816	10,306	76,746	75,530	76,112
East North Central	51,766	55,207	347,848	359,174	356,710	31,674	32,223	228,578	232,850	231,041
Ohio	11,959	12,845	83,468	84,472	86,358	8,769	8,540	62,039	62,357	61,602
Indiana	6,164	6,796	43,263	46,218	44,327	4,275	4,644	30,156	32,375	30,325
Illinois	16,145	17,174	104,071	106,290	107,992	8,166	8,465	59,949	61,819	63,535
Michigan	11,343	12,074	77,916	82,834	78,837	7,007	6,947	49,362	49,495	49,056
Wisconsin	6,155	6,318	39,130	39,360	39,196	3,457	3,627	27,072	26,804	26,523
West North Central	22,166	20,339	148,916	144,296	148,269	12,764	13,624	103,018	99,892	100,822
Minnesota	5,778	5,387	38,171	36,767	36,787	2,874	2,947	21,976	21,585	21,709
Iowa	3,475	3,319	21,270	19,310	19,349	2,092	2,259	16,748	15,740	15,492
Missouri	6,216	5,439	43,093	43,157	43,666	3,680	4,312	32,829	32,228	33,128
North Dakota	747	714	4,934	4,816	5,098	453	432	3,724	3,379	3,554
South Dakota	860	1,052	6,048	5,692	6,345	572	605	4,195	3,707	4,068
Nebraska	1,897	1,956	13,730	13,528	13,487	1,226	1,144	8,944	8,912	8,921
Kansas	3,193	2,472	21,670	21,026	23,537	1,867	1,925	14,602	14,341	13,950
South Atlantic	57,651	56,357	382,291	373,105	381,607	35,550	34,482	263,109	264,716	260,596
Delaware	853	974	5,850	5,946	6,007	582	502	3,866	3,792	3,642
Maryland	6,138	6,622	38,149	40,375	42,429	3,578	3,611	23,475	24,751	24,106
District of Columbia	749	704	4,828	4,750	5,290	468	509	3,527	3,658	3,843
Virginia	7,600	7,427	50,731	49,483	54,309	4,152	4,249	31,336	30,783	31,439
West Virginia	2,002	1,759	12,856	11,209	12,816	1,705	1,607	12,912	11,272	11,878
North Carolina	8,952	8,732	61,909	59,624	60,558	5,230	5,054	39,305	39,781	38,516
South Carolina	5,055	3,942	30,007	28,982	28,568	3,025	2,358	19,373	20,104	19,000
Georgia	10,329	10,225	68,936	66,716	65,154	4,881	4,674	36,608	36,025	34,827
Florida	15,973	15,972	109,025	106,020	106,476	11,929	11,918	92,707	94,550	93,345
East South Central	19,846	20,717	128,453	129,478	127,802	12,972	12,473	96,088	93,922	94,377
Kentucky	4,741	4,885	30,786	30,398	29,091	3,192	3,108	23,309	22,603	23,404
Tennessee	5,480	6,240	40,546	40,441	41,050	4,129	3,731	31,238	29,463	29,823
Alabama	5,811	5,563	34,927	35,600	35,730	3,440	3,442	25,548	25,810	25,272
Mississippi	3,814	4,029	22,194	23,039	21,931	2,211	2,192	15,993	16,046	15,878
West South Central	44,181	44,670	264,081	260,756	281,524	20,286	21,641	136,646	143,431	141,576
Arkansas	3,434	3,416	20,471	20,250	19,447	2,280	2,213	14,443	15,251	14,956
Louisiana	4,587	5,705	36,127	37,908	38,812	2,718	3,410	22,906	25,028	23,667
Oklahoma	4,838	3,102	27,169	25,283	26,680	3,007	2,738	20,200	19,886	19,381
Texas ¹	31,322	32,447	180,314	177,315	196,585	12,281	13,280	79,097	83,266	83,572
Mountain	24,178	24,701	160,566	149,804	144,085	9,883	11,079	70,547	74,019	68,893
Montana	999	978	6,087	6,343	6,491	658	624	4,558	4,508	4,465
Idaho	1,731	1,860	10,146	11,129	10,196	724	801	5,312	5,043	4,944
Wyoming	642	666	3,777	3,678	3,811	297	331	2,167	2,057	2,183
Colorado	5,070	4,253	33,581	28,440	30,072	2,192	1,917	15,165	15,106	14,862
New Mexico	2,431	2,893	15,431	15,795	15,629	1,044	968	8,047	7,735	7,464
Arizona	8,406	7,095	53,434	48,080	43,851	3,268	4,340	21,110	25,030	21,326
Utah	2,063	4,768	23,311	23,520	22,733	718	1,001	6,574	6,622	6,286
Nevada	2,836	2,188	14,799	12,819	11,302	982	1,097	7,614	7,918	7,363
Pacific	57,911	54,720	375,716	399,432	410,751	29,948	21,964	178,314	181,101	180,685
Washington	6,889	6,669	44,780	45,769	44,225	4,212	4,040	26,394	23,956	22,898
Oregon	3,582	3,848	26,545	26,667	26,100	1,991	1,982	17,435	16,401	16,862
California ¹	44,929	41,940	288,768	310,586	323,710	22,821	15,071	128,550	134,631	135,138
Alaska	1,028	726	5,746	5,697	6,149	284	233	1,341	1,421	1,308
Hawaii	1,483	1,537	9,877	10,713	10,567	640	638	4,594	4,692	4,479
Puerto Rico ²	5,167	4,781	36,963	33,471	34,257	2,310	1,952	16,669	15,341	17,039

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, July 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				
	July		January–July			July		January–July		
	1997	1996	1997	1996	1995	1997	1996	1997	1996	1995
New England	19,842	10,590	145,496	46,518	48,518	14,462	3,617	123,210	20,824	23,129
Maine	---	2,336	---	5,366	5,213	---	630	---	2,490	2,899
New Hampshire	1,207	1,315	4,717	4,501	4,219	468	320	3,314	2,782	2,870
Vermont	799	814	2,710	2,680	2,620	226	265	1,643	1,593	1,745
Massachusetts	4,612	3,154	21,791	19,494	22,042	2,400	1,211	10,085	6,079	7,829
Rhode Island	738	733	4,322	3,955	3,559	345	195	1,822	1,810	2,175
Connecticut	2,486	2,238	11,956	10,522	10,865	1,023	996	6,346	6,070	5,611
Middle Atlantic	19,637	27,973	159,756	132,588	142,369	11,179	10,140	74,978	71,624	67,686
New York ²	8,459	15,288	91,321	69,826	75,850	5,320	5,420	36,792	34,679	29,859
New Jersey	4,254	4,683	31,056	25,874	27,050	1,900	1,804	15,732	15,254	14,757
Pennsylvania	8,624	8,002	37,379	36,888	39,469	3,959	2,916	22,454	21,691	23,070
East North Central	34,475	35,699	167,582	170,746	176,599	113,162	111,704	181,758	180,795	185,277
Ohio	8,480	8,837	43,717	42,919	47,963	4,733	3,954	26,721	25,110	28,986
Indiana	2,789	5,632	17,895	26,620	28,035	---	---	---	---	---
Illinois	9,907	9,913	52,691	47,561	44,775	3,169	3,551	22,212	23,413	22,786
Michigan	9,368	6,991	34,740	34,830	36,684	3,768	2,560	22,809	22,231	23,136
Wisconsin	3,931	4,326	18,539	18,816	19,142	1,492	1,639	10,016	10,041	10,369
West North Central	15,734	15,195	76,884	80,362	79,065	5,607	6,069	41,995	43,837	44,014
Minnesota	2,392	3,729	15,493	17,103	17,017	1,258	1,425	8,534	8,798	8,942
Iowa	2,846	2,584	11,833	12,293	11,881	653	695	5,656	5,719	6,217
Missouri	4,694	4,175	24,838	26,880	25,888	1,855	2,247	14,459	15,612	16,113
North Dakota	704	683	2,091	2,664	2,542	177	186	1,148	1,368	1,264
South Dakota	970	936	3,840	3,772	4,001	232	260	1,583	1,600	1,633
Nebraska	1,497	1,444	7,329	7,376	7,213	403	575	3,642	3,620	3,737
Kansas	2,631	1,644	11,460	10,274	10,523	1,029	681	6,973	7,120	6,108
South Atlantic	48,407	42,933	270,483	254,248	255,708	19,592	20,836	137,349	127,939	132,879
Delaware	435	410	2,914	2,815	2,856	178	261	1,791	1,968	2,228
Maryland	3,710	3,735	23,107	22,167	22,630	1,627	1,349	8,940	8,982	8,850
District of Columbia	314	156	1,354	1,040	1,065	91	114	527	641	852
Virginia	6,415	6,320	37,595	35,350	38,147	2,515	2,694	18,811	16,158	16,093
West Virginia	1,688	1,436	5,689	6,150	6,134	931	691	5,657	4,267	5,442
North Carolina	5,702	7,208	37,792	35,047	35,670	3,044	2,815	22,221	20,689	22,355
South Carolina	4,387	4,236	25,570	25,835	26,660	1,628	1,117	8,948	8,808	8,236
Georgia	10,736	5,907	36,200	35,487	35,490	2,565	2,132	21,538	19,739	21,582
Florida	15,020	13,525	100,262	90,357	87,056	7,013	9,663	48,916	46,687	47,241
East South Central	23,814	21,235	112,149	108,323	111,839	8,677	9,446	49,863	60,663	56,864
Kentucky	4,556	5,460	26,015	24,523	27,371	1,709	2,182	12,311	12,785	13,259
Tennessee	11,233	8,031	45,032	43,682	49,149	2,493	2,923	15,066	20,780	20,058
Alabama	5,571	5,251	27,545	27,274	23,050	3,011	2,190	13,926	15,464	15,685
Mississippi	2,454	2,493	13,557	12,844	12,269	1,464	2,151	8,560	11,634	7,862
West South Central	30,022	29,476	165,037	165,600	181,984	13,588	16,666	119,336	173,812	181,657
Arkansas	4,750	4,013	20,000	19,760	20,255	1,800	1,183	8,400	8,079	8,755
Louisiana	4,372	2,971	15,432	21,174	23,692	---	---	---	---	---
Oklahoma	2,768	2,510	16,838	16,236	17,016	1,788	1,441	10,936	11,637	12,646
Texas ³	18,132	19,982	112,767	108,430	121,021	---	4,042	---	54,096	60,256
Mountain	14,699	28,543	180,985	163,844	159,496	15,278	16,334	135,459	143,366	143,054
Montana	1,113	1,034	3,674	3,692	3,734	340	337	2,298	2,529	2,357
Idaho	1,512	1,644	8,081	7,939	8,413	564	616	4,246	4,156	3,886
Wyoming	683	632	2,782	2,660	2,832	234	221	1,697	1,833	1,899
Colorado	4,015	3,864	19,362	19,395	19,595	---	---	---	---	---
New Mexico ^{4,5}	1,583	1,644	9,740	9,755	8,765	661	819	5,590	6,557	6,734
Arizona ²	3,566	2,986	25,001	24,001	23,583	2,479	1,946	16,224	14,762	15,566
Utah	2,227	2,892	12,345	12,417	12,226	1,000	736	5,404	5,096	5,227
Nevada	---	13,847	---	83,985	80,348	---	1,659	---	8,433	7,385
Pacific	30,448	34,082	181,199	174,424	146,377	14,583	14,136	127,236	128,830	131,214
Washington	4,778	6,267	23,421	23,508	23,234	2,641	2,592	16,084	16,203	17,429
Oregon	2,708	2,465	10,819	12,281	14,788	1,008	851	6,677	8,202	8,850
California	20,410	22,957	132,363	124,240	94,546	---	---	---	---	---
Alaska	860	714	3,040	2,990	3,042	530	271	1,728	1,594	1,803
Hawaii	1,692	1,679	11,556	11,405	10,767	404	422	2,747	2,831	3,132
Puerto Rico ⁶	3,152	2,964	17,668	17,085	18,283	---	---	---	---	---

--- 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 July 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 July			
	1997		1996	
	Number	Rate	Number	Rate
New England	944	5.3	868	5.1
Maine	52	3.8	61	4.4
New Hampshire	69	4.9	66	4.5
Vermont	42	6.3	58	8.5
Massachusetts	399	4.9	392	4.7
Rhode Island	75	6.0	84	6.6
Connecticut	307	6.4	207	5.4
Middle Atlantic	3,488	6.6	3,832	7.2
New York	1,654	6.2	1,893	7.0
New Jersey	786	6.8	795	6.9
Pennsylvania	1,048	7.3	1,144	7.6
East North Central	4,592	7.5	5,130	8.2
Ohio	1,060	7.0	1,249	8.1
Indiana	558	6.9	697	8.1
Illinois	1,429	7.8	1,584	8.6
Michigan	1,077	8.1	1,097	8.0
Wisconsin	468	7.0	503	7.5
West North Central	1,787	6.9	1,764	7.1
Minnesota	401	6.2	391	6.2
Iowa	189	5.1	209	5.7
Missouri	596	8.2	557	7.5
North Dakota	55	6.5	37	4.4
South Dakota	57	5.5	64	6.5
Nebraska	197	8.4	185	8.0
Kansas	292	7.1	321	9.3
South Atlantic	5,318	8.0	5,537	8.6
Delaware	75	7.5	70	7.0
Maryland	594	8.6	591	8.4
District of Columbia	104	12.5	144	17.1
Virginia	630	7.0	676	7.9
West Virginia	159	7.5	167	8.6
North Carolina	1,019	9.4	942	9.3
South Carolina	430	8.3	419	8.3
Georgia	968	8.3	1,086	9.5
Florida	1,339	7.0	1,442	7.7
East South Central	2,092	9.2	2,095	9.3
Kentucky	442	8.4	411	7.9
Tennessee	642	8.7	657	9.0
Alabama	564	9.3	626	10.3
Mississippi	444	10.9	401	10.5
West South Central	3,171	6.8	3,310	7.3
Arkansas	303	8.4	313	8.9
Louisiana	584	9.1	559	8.4
Oklahoma	386	8.2	412	9.3
Texas ¹	1,898	6.0	2,026	6.6
Mountain	1,935	7.3	1,705	6.9
Montana	78	7.4	83	7.5
Idaho	134	7.5	124	6.6
Wyoming	32	5.1	50	8.1
Colorado	394	7.5	341	7.1
New Mexico	176	6.6	170	6.2
Arizona	767	9.0	573	7.9
Utah	220	5.4	226	5.7
Nevada	134	5.3	138	6.0
Pacific	3,900	5.8	4,191	6.0
Washington	418	5.3	380	4.8
Oregon	265	6.1	232	5.3
California ¹	3,059	5.9	3,397	6.2
Alaska	62	6.1	76	7.9
Hawaii	96	5.5	106	5.7
Puerto Rico ²	57	11.0	42	8.8

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, June 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with June 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	June				January–June				12 months ending with June							
	1997		1996		1997		1996		1997		1996					
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate				
All races, both sexes¹																
All ages	182,000	830.2	179,000	822.5	1,172,000	885.9	1,187,000	902.8	2,296,000	861.7	2,311,000	875.3				
Under 1 year	} 3,310	69.6	3,550	74.6	13,200	² 712.9	14,200	² 739.7	27,100	² 723.9	28,500	² 740.8				
1–4 years					2,700	35.4	3,220	41.3	5,330	34.6	6,080	38.9				
5–14 years					4,080	21.2	4,240	22.2	8,630	22.3	8,640	22.5				
15–24 years					2,710	90.3	2,820	95.8	15,270	84.5	16,230	90.9	32,680	89.9	34,460	95.9
25–34 years					3,840	117.7	4,170	125.8	22,920	115.9	26,830	133.1	48,310	120.7	56,150	138.4
35–44 years	7,570	209.4	7,450	210.4	44,180	203.2	49,250	230.0	91,350	208.8	101,190	235.7				
45–54 years	12,330	446.9	10,680	404.3	72,180	437.3	70,850	445.1	144,140	436.3	142,210	446.8				
55–64 years	18,270	1,023.4	18,600	1,064.5	116,370	1,083.9	119,880	1,133.7	230,920	1,072.0	235,270	1,108.4				
65–74 years	36,750	2,416.4	37,300	2,434.6	232,380	2,527.3	244,720	2,629.6	464,770	2,501.0	474,270	2,529.7				
75–84 years	52,420	5,459.5	50,560	5,410.8	341,940	5,927.7	341,230	6,052.5	659,460	5,689.9	656,440	5,813.8				
85 years and over	45,190	14,251.2	43,430	14,224.1	306,650	16,133.2	296,140	16,090.6	582,600	15,247.3	564,990	15,328.0				
Not stated	50	...	70	...	580	...	510	...	1,010	...	970	...				
Age-adjusted rate ³ . . . . .	...	467.3	...	468.8	...	487.5	...	508.0	...	481.4	...	497.6			
All races, male¹																
All ages	93,000	864.4	91,690	864.3	584,080	901.5	599,960	934.0	1,149,300	881.1	1,172,600	909.3				
Under 1 year	} 1,960	80.5	2,070	85.0	7,630	² 806.2	7,620	² 776.4	15,500	² 809.8	15,650	² 794.0				
1–4 years					1,430	36.7	1,840	46.6	2,840	36.0	3,480	43.5				
5–14 years					2,310	23.5	2,470	25.2	4,980	25.2	5,190	26.4				
15–24 years					2,120	137.3	2,200	146.4	11,150	120.0	12,250	134.5	24,240	129.7	26,230	143.0
25–34 years					2,740	167.9	3,090	186.6	16,290	164.7	19,110	189.8	34,210	170.9	40,270	198.6
35–44 years	4,950	275.2	5,280	300.5	29,500	272.8	33,740	317.4	61,080	280.7	69,540	326.5				
45–54 years	7,850	581.4	6,810	527.8	45,470	563.0	45,050	579.3	90,710	561.0	90,560	582.4				
55–64 years	11,010	1,294.6	11,230	1,350.7	70,220	1,372.9	72,000	1,431.3	139,490	1,359.9	141,320	1,399.6				
65–74 years	21,200	3,119.3	20,510	3,004.2	132,710	3,231.6	138,340	3,337.3	263,160	3,171.7	270,280	3,237.7				
75–84 years	25,960	6,839.5	25,520	6,966.7	165,590	7,273.5	168,950	7,660.2	319,960	7,004.4	323,360	7,332.4				
85 years and over	15,170	16,642.8	14,920	17,319.1	101,360	18,591.2	98,190	18,960.6	192,470	17,593.2	186,010	17,954.6				
Not stated	30	...	60	...	420	...	390	...	660	...	690	...				
Age-adjusted rate ³ . . . . .	...	598.0	...	603.6	...	615.6	...	648.4	...	608.2	...	637.5			
All races, female¹																
All ages	89,430	797.3	86,950	782.7	588,350	870.9	587,330	873.1	1,147,000	843.1	1,136,580	841.5				
Under 1 year	} 1,350	58.2	1,490	64.2	5,570	² 615.2	6,570	² 702.2	11,590	² 634.0	12,850	² 683.9				
1–4 years					1,260	33.9	1,380	36.4	2,490	33.1	2,600	34.0				
5–14 years					1,770	18.9	1,760	18.8	3,650	19.4	3,450	18.4				
15–24 years					590	40.5	620	43.0	4,120	47.0	3,980	45.5	8,440	47.8	8,230	46.8
25–34 years					1,100	67.4	1,080	65.1	6,630	67.1	7,720	76.6	14,100	70.5	15,880	78.2
35–44 years	2,610	143.6	2,170	121.6	14,680	134.2	15,520	143.8	30,270	137.6	31,640	146.3				
45–54 years	4,470	317.3	3,870	286.4	26,720	316.8	25,790	316.8	53,440	316.8	51,660	317.4				
55–64 years	7,250	775.7	7,370	804.6	46,140	820.5	47,880	863.6	91,430	810.2	93,940	844.0				
65–74 years	15,560	1,849.7	16,790	1,976.8	99,670	1,959.0	106,380	2,061.0	201,610	1,960.0	203,990	1,961.4				
75–84 years	26,450	4,555.6	25,040	4,407.6	176,350	5,050.7	172,280	5,019.6	339,500	4,835.5	333,080	4,840.6				
85 years and over	30,030	13,300.5	28,520	13,017.0	205,290	15,147.8	197,940	14,968.8	390,130	14,306.2	378,980	14,301.1				
Not stated	20	...	10	...	160	...	130	...	350	...	280	...				
Age-adjusted rate ³ . . . . .	...	357.2	...	356.9	...	380.4	...	391.8	...	375.0	...	380.9			
White																
All ages	156,340	860.3	153,910	855.4	1,015,280	927.3	1,023,790	939.3	1,978,940	897.3	1,986,160	907.3				
Under 1 year	} 2,110	56.1	2,290	60.9	8,680	² 591.3	9,370	² 627.1	17,410	² 587.0	19,030	² 633.1				
1–4 years					2,000	32.9	2,200	36.1	3,740	30.6	4,230	34.3				
5–14 years					3,020	20.0	2,940	19.3	6,410	21.0	6,280	20.7				
15–24 years					1,920	80.3	2,070	88.3	10,790	75.0	11,470	80.6	22,970	79.4	24,650	86.1
25–34 years					2,810	106.4	2,900	107.5	16,700	104.2	18,670	113.7	34,610	106.6	38,920	117.7
35–44 years	5,490	183.0	5,370	182.2	32,130	177.8	35,420	198.7	66,520	183.0	72,810	203.7				
45–54 years	9,340	397.8	8,160	362.0	55,760	397.0	53,820	396.1	110,630	393.2	108,720	399.9				
55–64 years	14,650	953.3	15,360	1,018.7	93,750	1,013.9	97,600	1,069.3	186,510	1,005.0	191,160	1,043.2				
65–74 years	31,630	2,358.2	32,400	2,389.3	201,370	2,481.5	212,880	2,582.7	401,660	2,447.8	411,200	2,475.2				
75–84 years	47,190	5,431.8	45,630	5,385.4	308,840	5,915.8	306,750	6,000.8	592,900	5,651.5	589,510	5,758.1				
85 years and over	41,180	14,356.0	39,680	14,284.3	281,870	16,386.1	272,300	16,260.4	534,900	15,464.0	518,910	15,466.8				
Not stated	30	...	40	...	370	...	370	...	690	...	730	...				
Age-adjusted rate ³ . . . . .	...	442.3	...	446.3	...	466.0	...	482.4	...	457.9	...	471.7			

See footnotes at end of table.

Table 5. Provisional number of deaths and death rates, by age, race, and sex, and age-adjusted death rates by race and sex: United States, June 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with June 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	June				January–June				12 months ending with June			
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
White male												
All ages	78,780	881.0	78,460	888.4	500,780	929.7	511,950	957.0	980,770	904.1	998,040	929.0
Under 1 year	} 1,280	66.3	1,390	72.0	5,070	² 673.7	5,060	² 657.7	10,030	² 659.9	10,610	² 687.6
1–4 years					1,030	32.9	1,290	41.4	2,030	32.4	2,530	40.0
5–14 years					1,710	21.7	1,690	21.7	3,710	23.7	3,760	24.1
15–24 years	1,470	119.0	1,640	136.3	7,720	103.8	8,550	117.1	16,650	111.3	18,500	125.9
25–34 years	1,990	149.0	2,180	160.1	12,000	148.4	13,610	164.2	24,800	151.1	28,580	171.1
35–44 years	3,620	240.0	3,850	260.4	21,690	238.9	24,620	275.3	44,990	246.3	50,730	283.0
45–54 years	5,950	512.1	5,240	470.7	35,280	507.4	34,420	512.9	70,120	503.7	69,710	519.1
55–64 years	9,090	1,227.5	9,450	1,302.6	57,550	1,291.5	58,840	1,340.3	114,060	1,276.1	115,650	1,312.1
65–74 years	18,290	3,026.8	18,000	2,956.4	115,780	3,169.1	121,190	3,276.0	228,880	3,099.7	235,650	3,162.2
75–84 years	23,460	6,804.0	23,210	6,962.4	150,350	7,268.7	152,490	7,597.4	289,520	6,974.7	292,040	7,277.3
85 years and over	13,610	16,642.0	13,490	17,324.0	92,270	18,872.2	89,900	19,200.1	175,480	17,887.9	169,720	18,113.1
Not stated	30	...	30	...	320	...	290	...	500	...	550	...
Age-adjusted rate ³	...	564.6	...	575.9	...	587.3	...	614.0	...	577.4	...	603.0
White female												
All ages	77,570	840.3	75,440	823.4	514,510	925.0	511,840	922.1	998,170	890.8	988,120	886.3
Under 1 year	} 830	45.3	900	49.2	3,610	² 504.5	4,310	² 593.3	7,390	² 511.1	8,430	² 576.2
1–4 years					970	33.0	910	30.5	1,710	28.8	1,690	28.1
5–14 years					1,310	17.7	1,250	17.1	2,710	18.2	2,520	17.0
15–24 years	450	39.0	430	37.7	3,060	44.4	2,920	42.0	6,320	45.3	6,140	44.1
25–34 years	820	62.8	720	53.9	4,700	59.3	5,060	62.1	9,810	61.1	10,340	63.1
35–44 years	1,870	125.3	1,530	104.2	10,430	116.1	10,810	121.7	21,530	119.1	22,080	123.9
45–54 years	3,390	285.9	2,930	256.8	20,490	288.6	19,400	282.1	40,500	284.9	39,010	283.5
55–64 years	5,560	698.2	5,920	756.7	36,210	755.6	38,760	818.3	72,450	753.0	75,510	793.9
65–74 years	13,340	1,810.0	14,400	1,927.2	85,590	1,918.5	91,690	2,018.0	172,770	1,914.3	175,550	1,916.3
75–84 years	23,730	4,528.9	22,420	4,362.4	158,490	5,027.4	154,260	4,968.9	303,380	4,785.2	297,470	4,778.6
85 years and over	27,570	13,444.3	26,190	13,100.4	189,610	15,399.0	182,400	15,119.2	359,420	14,504.4	349,190	14,441.3
Not stated	—	...	10	...	50	...	80	...	190	...	180	...
Age-adjusted rate ³	...	338.8	...	337.9	...	364.0	...	373.1	...	357.2	...	361.7
Black												
All ages	22,750	816.7	21,790	791.7	136,600	814.7	144,260	866.5	276,590	819.9	285,340	854.6
Under 1 year	} 1,050	142.5	1,150	154.3	4,150	² 1,484.7	4,400	² 1,405.2	8,750	² 1,554.2	8,700	² 1,389.8
1–4 years					610	52.6	870	71.9	1,380	58.5	1,590	64.5
5–14 years					870	28.6	1,110	37.7	1,730	28.6	1,960	33.0
15–24 years	700	153.4	660	147.1	3,810	139.1	4,090	150.4	8,360	151.4	8,310	151.9
25–34 years	980	221.7	1,160	261.4	5,550	208.1	7,390	274.2	12,090	223.8	15,580	288.1
35–44 years	1,840	412.2	1,830	421.6	10,940	407.9	12,600	480.1	22,470	417.2	25,860	492.4
45–54 years	2,750	938.5	2,150	772.6	14,550	829.6	15,060	899.6	29,490	842.8	29,920	896.1
55–64 years	3,130	1,728.6	2,810	1,592.3	19,990	1,840.9	19,700	1,845.8	39,410	1,812.0	38,990	1,818.6
65–74 years	4,440	3,285.9	4,180	3,126.7	26,560	3,262.7	27,800	3,435.3	54,830	3,345.3	55,150	3,391.8
75–84 years	4,310	6,083.3	4,450	6,440.1	28,130	6,604.8	30,130	7,225.2	56,930	6,658.5	58,480	6,986.9
85 years and over	3,520	14,717.1	3,360	14,536.2	21,260	14,760.1	20,950	15,053.5	40,870	14,093.1	40,560	14,485.7
Not stated	20	...	30	...	190	...	150	...	300	...	230	...
Age-adjusted rate ³	...	711.0	...	685.8	...	705.6	...	758.5	...	715.4	...	750.8
Black male												
All ages	12,450	941.4	11,560	885.2	71,830	902.4	77,270	978.2	145,840	910.5	153,400	968.3
Under 1 year	} 590	157.8	620	164.0	2,320	² 1,638.7	2,330	² 1,473.1	4,880	² 1,712.3	4,580	² 1,444.8
1–4 years					370	62.9	470	75.7	740	61.8	820	65.6
5–14 years					510	33.4	650	43.8	1,010	32.9	1,200	39.8
15–24 years	590	257.7	480	213.8	2,970	217.0	3,230	237.3	6,620	238.9	6,590	240.7
25–34 years	700	334.0	860	409.4	3,770	297.6	5,040	395.5	8,210	320.7	10,700	418.0
35–44 years	1,200	574.1	1,240	611.7	7,080	564.1	8,220	670.6	14,600	579.4	17,090	697.3
45–54 years	1,760	1,325.9	1,400	1,110.5	9,070	1,140.6	9,590	1,264.2	18,290	1,153.2	18,860	1,246.5
55–64 years	1,640	2,087.2	1,560	2,033.3	11,180	2,371.5	11,630	2,505.6	22,510	2,384.5	22,740	2,439.9
65–74 years	2,510	4,438.7	2,090	3,744.2	14,410	4,238.1	14,860	4,400.8	29,700	4,335.8	29,950	4,417.4
75–84 years	2,090	7,996.3	2,060	8,133.3	12,620	8,050.2	14,180	9,282.5	25,430	8,073.0	27,040	8,836.6
85 years and over	1,360	19,466.7	1,210	18,224.7	7,430	17,603.5	6,970	17,394.1	13,710	16,129.4	13,710	16,925.9
Not stated	—	...	30	...	90	...	100	...	150	...	130	...
Age-adjusted rate ³	...	951.4	...	896.2	...	919.2	...	1,007.6	...	933.6	...	998.2

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, June 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with June 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	June				January–June				12 months ending with June							
	1997		1996		1997		1996		1997		1996					
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate				
Black female																
All ages	10,300	704.1	10,230	707.4	64,770	735.5	66,990	765.7	130,750	737.9	131,940	751.9				
Under 1 year	} 460	126.7	520	141.6	1,830	² 1,319.3	2,070	² 1,348.6	3,870	² 1,392.1	4,120	² 1,333.3				
1–4 years					240	41.9	410	67.9	640	55.1	770	63.3				
5–14 years					360	24.3	450	31.4	710	23.9	770	26.3				
15–24 years					110	48.4	180	80.3	840	60.7	850	64.0	1,740	63.2	1,720	62.9
25–34 years					270	116.2	310	132.7	1,780	126.7	2,350	165.8	3,880	136.6	4,880	171.3
35–44 years	640	269.6	590	255.1	3,860	271.3	4,380	313.3	7,870	274.6	8,770	313.1				
45–54 years	990	617.7	750	492.7	5,480	571.9	5,470	597.5	11,200	585.5	11,060	605.7				
55–64 years	1,490	1,453.7	1,250	1,253.1	8,800	1,430.9	8,080	1,338.5	16,890	1,372.1	16,250	1,340.8				
65–74 years	1,940	2,469.0	2,090	2,684.0	12,150	2,565.7	12,940	2,741.9	25,130	2,634.2	25,200	2,658.2				
75–84 years	2,220	4,965.1	2,390	5,460.3	15,510	5,762.2	15,950	6,035.2	31,500	5,833.3	31,440	5,920.9				
85 years and over	2,160	12,757.3	2,150	13,049.7	13,830	13,583.2	13,980	14,105.8	27,160	13,248.8	26,860	13,497.5				
Not stated	20	...	–	...	100	...	50	...	150	...	100	...				
Age-adjusted rate ³ . . . . .	...	526.5	...	524.1	...	540.3	...	566.7	...	545.2	...	559.4			

... 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, June 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with June 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>)	June		June		January–June		January–June		12 months ending with June		12 months ending with June	
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
All causes	182,000	830.2	179,000	822.5	1,172,000	885.9	1,187,000	902.8	2,296,000	861.7	2,311,000	875.3
Shigellosis and amebiasis	—	*	—	*	—	*	—	*	—	*	—	*
Certain other intestinal infections	70	*	50	*	420	0.3	410	0.3	830	0.3	720	0.3
Tuberculosis	40	*	50	*	540	0.4	490	0.4	1,050	0.4	1,150	0.4
Tuberculosis of respiratory system	40	*	50	*	440	0.3	410	0.3	830	0.3	950	0.4
Other tuberculosis	—	*	—	*	100	*	90	*	220	0.1	200	0.1
Whooping cough	10	*	—	*	20	*	10	*	20	*	20	*
Streptococcal sore throat, scarlatina, and erysipelas	—	*	—	*	—	*	—	*	—	*	—	*
Meningococcal infection	10	*	40	*	190	0.1	170	0.1	290	0.1	240	0.1
Septicemia	1,650	7.5	1,610	7.4	11,210	8.5	11,270	8.6	21,610	8.1	21,260	8.1
Acute poliomyelitis	—	*	—	*	—	*	—	*	—	*	—	*
Measles	—	*	—	*	10	*	—	*	10	*	—	*
Viral hepatitis	440	2.0	350	1.6	2,040	1.5	1,870	1.4	3,990	1.5	3,670	1.4
Syphilis	—	*	—	*	40	*	—	*	70	*	30	*
All other infectious and parasitic diseases ¹	1,860	8.5	3,150	14.5	11,870	9.0	21,230	16.1	28,580	10.7	45,220	17.1
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues	44,360	201.9	42,460	195.5	263,030	198.7	269,880	205.2	535,480	200.9	538,710	204.0
Malignant neoplasms of lip, oral cavity, and pharynx	590	2.7	590	2.7	3,720	2.8	3,860	2.9	7,710	2.9	7,670	2.9
Malignant neoplasms of digestive organs and peritoneum	10,220	46.5	10,000	46.0	61,610	46.5	63,030	47.9	125,410	47.1	126,110	47.8
Malignant neoplasms of respiratory and intrathoracic organs	12,560	57.1	12,420	57.2	77,080	58.2	79,490	60.4	156,640	58.8	157,380	59.6
Malignant neoplasm of breast	3,560	16.2	3,550	16.3	20,180	15.2	21,910	16.6	41,800	15.7	43,960	16.7
Malignant neoplasms of genital organs	5,160	23.5	4,750	21.9	29,380	22.2	29,900	22.7	59,720	22.4	60,330	22.9
Malignant neoplasms of urinary organs	2,010	9.1	1,510	6.9	12,030	9.1	11,310	8.6	23,750	8.9	22,530	8.5
Malignant neoplasms of all other and unspecified sites	5,380	24.5	5,210	24.0	31,130	23.5	32,750	24.9	64,640	24.3	65,850	24.9
Leukemia	1,800	8.2	1,790	8.2	10,170	7.7	10,510	8.0	20,000	7.5	20,300	7.7
Other malignant neoplasms of lymphatic and hematopoietic tissues	3,070	14.0	2,630	12.1	17,730	13.4	17,120	13.0	35,810	13.4	34,580	13.1
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature	700	3.2	740	3.4	3,930	3.0	4,120	3.1	7,460	2.8	7,830	3.0
Diabetes mellitus	4,980	22.7	4,800	22.1	30,890	23.3	31,250	23.8	61,110	22.9	59,130	22.4
Nutritional deficiencies	280	1.3	260	1.2	1,830	1.4	2,000	1.5	3,630	1.4	3,980	1.5
Anemias	210	0.9	330	1.5	2,070	1.6	1,930	1.5	4,110	1.5	3,970	1.5
Meningitis	80	*	30	*	370	0.3	350	0.3	610	0.2	670	0.3
Major cardiovascular diseases	73,700	335.4	72,810	335.2	482,770	364.8	489,050	371.9	935,350	351.0	942,460	357.0
Diseases of heart	57,120	259.9	57,170	263.2	371,300	280.5	380,210	289.1	720,230	270.3	731,620	277.1
Rheumatic fever and rheumatic heart disease	320	1.4	310	1.4	2,390	1.8	2,590	2.0	4,660	1.7	4,930	1.9
Hypertensive heart disease	2,340	10.6	2,150	9.9	13,480	10.2	13,500	10.3	25,990	9.8	25,570	9.7
Hypertensive heart and renal disease	200	0.9	140	0.6	1,160	0.9	1,110	0.8	2,270	0.9	2,160	0.8
Ischemic heart disease	36,390	165.6	36,840	169.6	239,200	180.7	245,650	186.8	466,550	175.1	474,130	179.6
Acute myocardial infarction	16,140	73.4	16,650	76.7	107,020	80.9	111,500	84.8	209,410	78.6	215,230	81.5
Other acute and subacute forms of ischemic heart disease	230	1.0	170	0.8	1,540	1.2	1,300	1.0	2,930	1.1	2,570	1.0
Angina pectoris	60	*	100	*	330	0.2	420	0.3	600	0.2	790	0.3
Old myocardial infarction and other forms of chronic ischemic heart disease	19,960	90.8	19,920	91.7	130,300	98.4	132,440	100.7	253,610	95.2	255,550	96.8
Other diseases of endocardium	1,550	7.0	1,310	6.0	8,820	6.7	8,610	6.5	16,690	6.3	15,990	6.1
All other forms of heart disease	16,330	74.3	16,430	75.6	106,260	80.3	108,750	82.7	204,080	76.6	208,830	79.1
Hypertension with or without renal disease	1,070	4.9	940	4.3	6,800	5.1	6,390	4.9	12,600	4.7	12,280	4.7
Cerebrovascular diseases	12,150	55.3	11,510	53.0	81,970	61.9	81,360	61.9	159,160	59.7	157,210	59.5
Intracerebral and other intracranial hemorrhage	1,880	8.6	1,610	7.4	12,560	9.5	11,670	8.9	24,390	9.2	22,260	8.4
Cerebral thrombosis and unspecified occlusion of cerebral arteries	900	4.1	740	3.4	6,200	4.7	6,110	4.6	12,550	4.7	12,400	4.7
Cerebral embolism	40	*	30	*	230	0.2	320	0.2	720	0.3	670	0.3
All other and late effects of cerebrovascular diseases	9,330	42.4	9,130	42.0	62,970	47.6	63,270	48.1	121,490	45.6	121,870	46.2

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, June 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with June 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>)	June		June		January–June				12 months ending with June				
	1997		1996		1997		1996		1997		1996		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Major cardiovascular diseases—Con.													
Atherosclerosis	440	1,250	5.7	1,110	5.1	8,530	6.4	7,940	6.0	16,170	6.1	15,490	5.9
Other diseases of arteries, arterioles, and capillaries . . . . .	.441–448	2,100	9.6	2,080	9.6	14,170	10.7	13,160	10.0	27,200	10.2	25,870	9.8
Acute bronchitis and bronchiolitis . . . . .	.466	–	*	40	*	340	0.3	290	0.2	460	0.2	460	0.2
Pneumonia and influenza . . . . .	.480–487	5,760	26.2	5,860	27.0	47,880	36.2	45,270	34.4	84,160	31.6	80,310	30.4
Pneumonia . . . . .	.480–486	5,740	26.1	5,860	27.0	47,120	35.6	44,820	34.1	83,190	31.2	79,780	30.2
Influenza . . . . .	.487	20	*	–	*	760	0.6	450	0.3	970	0.4	530	0.2
Chronic obstructive pulmonary diseases and allied conditions . . . . .	.490–496	8,140	37.0	8,090	37.2	58,570	44.2	57,410	43.7	106,620	40.0	103,930	39.4
Bronchitis, chronic and unspecified . . . . .	.490–491	220	1.0	230	1.0	1,770	1.3	1,870	1.4	2,860	1.1	3,130	1.2
Emphysema . . . . .	.492	1,270	5.8	1,220	5.6	9,750	7.4	9,350	7.1	17,190	6.5	16,820	6.4
Asthma . . . . .	.493	330	1.5	430	2.0	2,850	2.2	2,510	1.9	5,500	2.1	5,010	1.9
Other chronic obstructive pulmonary diseases and allied conditions . . . . .	.494–496	6,310	28.7	6,200	28.5	44,200	33.4	43,690	33.2	81,080	30.4	78,970	29.9
Ulcer of stomach and duodenum . . . . .	.531–533	370	1.7	310	1.4	2,610	2.0	2,670	2.0	4,730	1.8	5,500	2.1
Appendicitis . . . . .	.540–543	50	*	50	*	160	0.1	250	0.2	390	0.1	420	0.2
Hernia of abdominal cavity and intestinal obstruction without mention of hernia . . . . .	.550–553,560	520	2.4	560	2.6	3,170	2.4	3,280	2.5	6,340	2.4	5,930	2.2
Chronic liver disease and cirrhosis . . . . .	.571	2,340	10.6	1,950	9.0	12,600	9.5	12,320	9.4	24,740	9.3	24,440	9.3
Cholelithiasis and other disorders of gallbladder . . . . .	.574–575	190	0.9	190	0.9	1,380	1.0	1,270	1.0	2,780	1.0	2,600	1.0
Nephritis and nephrotic syndrome, and nephrosis . . . . .	.580–589	2,190	10.0	2,040	9.4	13,580	10.3	13,880	10.5	26,680	10.0	26,130	9.9
Acute glomerulonephritis and nephrotic syndrome . . . . .	.580–581	40	*	10	*	140	0.1	100	*	260	0.1	250	0.1
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified . . . . .	.582–583,587	120	0.5	160	0.7	820	0.6	890	0.7	1,720	0.6	1,620	0.6
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause . . . . .	.584–586,588–589	2,040	9.3	1,870	8.6	12,630	9.5	12,880	9.8	24,700	9.3	24,260	9.2
Infections of kidney . . . . .	.590	60	*	80	*	360	0.3	510	0.4	750	0.3	850	0.3
Hyperplasia of prostate . . . . .	.600	–	*	20	*	230	0.2	240	0.2	400	0.2	470	0.2
Complications of pregnancy, childbirth, and the puerperium . . . . .	.630–676	20	*	20	*	100	*	160	0.1	220	0.1	370	0.1
Pregnancy with abortive outcome . . . . .	.630–638	10	*	–	*	30	*	10	*	40	*	30	*
Other complications of pregnancy, childbirth, and the puerperium . . . . .	.640–676	10	*	20	*	70	*	150	0.1	180	0.1	340	0.1
Congenital anomalies . . . . .	.740–759	870	4.0	1,090	5.0	5,730	4.3	5,900	4.5	11,300	4.2	11,590	4.4
Certain conditions originating in the perinatal period . . . . .	.760–779	1,030	4.7	1,070	4.9	5,930	4.5	6,400	4.9	12,420	4.7	13,140	5.0
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome . . . . .	.767–769	160	0.7	160	0.7	1,010	0.8	980	0.7	2,180	0.8	2,020	0.8
Other conditions originating in the perinatal period . . . . .	.760–766,770–779	870	4.0	910	4.2	4,920	3.7	5,420	4.1	10,250	3.8	11,120	4.2
Symptoms, signs, and ill-defined conditions . . . . .	.780–799	3,920	17.8	3,020	13.9	23,180	17.5	20,930	15.9	44,020	16.5	42,190	16.0
All other diseases . . . . .	.Residual	17,290	78.7	15,590	71.8	119,260	90.1	112,080	85.2	226,210	84.9	216,540	82.0
Accidents and adverse effects . . . . .	.E800–E949	7,240	32.9	7,590	34.9	42,230	31.9	44,100	33.5	88,880	33.4	91,940	34.8
Motor vehicle accidents . . . . .	.E810–E825	3,570	16.2	3,740	17.2	20,080	15.2	20,990	16.0	42,780	16.1	45,100	17.1
All other accidents and adverse effects . . . . .	.E800–E807,E826–E949	3,670	16.7	3,860	17.8	22,150	16.7	23,110	17.6	46,110	17.3	46,840	17.7
Suicide . . . . .	.E950–E959	2,400	10.9	2,660	12.2	13,940	10.5	14,790	11.2	29,320	11.0	29,330	11.1
Homicide and legal intervention . . . . .	.E960–E978	1,500	6.8	1,570	7.2	8,920	6.7	10,320	7.8	19,490	7.3	21,620	8.2
All other external causes . . . . .	.E980–E999	160	0.7	190	0.9	1,030	0.8	1,190	0.9	2,170	0.8	2,390	0.9
Human immunodeficiency virus infection ²	*042–*044	1,370	6.2	2,580	11.9	8,940	6.8	18,140	13.8	22,040	8.3	38,960	14.8
Alzheimer's disease . . . . .	.331.0	1,690	7.7	1,470	6.8	12,200	9.2	11,250	8.6	22,880	8.6	21,370	8.1

– 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, June 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with June 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>)	June				January–June				12 months ending with June			
	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	44,360	201.9	42,460	195.5	263,030	198.7	269,880	205.2	535,480	200.9	538,710	204.0
Malignant neoplasm of esophagus150	870	4.0	940	4.3	5,380	4.1	5,670	4.3	10,860	4.1	10,760	4.1
Malignant neoplasm of stomach151	1,190	5.4	1,090	5.0	6,390	4.8	6,500	4.9	13,280	5.0	13,450	5.1
Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus153,154	4,430	20.1	4,430	20.4	27,290	20.6	28,260	21.5	56,280	21.1	56,030	21.2
Malignant neoplasm of pancreas157	2,270	10.3	2,160	9.9	13,470	10.2	13,900	10.6	27,170	10.2	27,620	10.5
Malignant neoplasms of trachea, bronchus, and lung162	12,080	55.0	12,000	55.2	74,650	56.4	76,870	58.5	151,520	56.9	152,120	57.6
Malignant melanoma of skin172	640	2.9	690	3.2	3,550	2.7	3,390	2.6	7,200	2.7	6,710	2.5
Malignant neoplasm of cervix uteri180	330	1.5	320	1.5	2,160	1.6	2,090	1.6	4,550	1.7	4,720	1.8
Malignant neoplasms of body of uterus and of uterus, part unspecified179,182	470	2.1	400	1.8	2,890	2.2	2,890	2.2	5,790	2.2	6,120	2.3
Malignant neoplasm of ovary183.0	1,210	5.5	1,170	5.4	6,930	5.2	6,740	5.1	13,690	5.1	13,450	5.1
Malignant neoplasm of prostate185	3,000	13.7	2,680	12.3	16,600	12.5	17,230	13.1	33,860	12.7	34,210	13.0
Malignant neoplasm of bladder188	1,010	4.6	700	3.2	5,910	4.5	5,640	4.3	11,530	4.3	11,100	4.2
Malignant neoplasms of kidney and other and unspecified urinary organs189	1,000	4.6	810	3.7	6,130	4.6	5,670	4.3	12,230	4.6	11,430	4.3
Malignant neoplasms of brain and other and unspecified parts of nervous system191,192	1,000	4.6	840	3.9	5,390	4.1	5,780	4.4	11,210	4.2	11,850	4.5
Hodgkin's disease201	100	*	100	*	680	0.5	790	0.6	1,350	0.5	1,570	0.6
Malignant lymphoma other than Hodgkin's disease200,202	2,150	9.8	1,760	8.1	11,990	9.1	11,010	8.4	24,160	9.1	22,700	8.6
Multiple myeloma and other immunoproliferative neoplasms203	820	3.7	770	3.5	5,050	3.8	5,320	4.0	10,300	3.9	10,310	3.9

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

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, June 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with June 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>)	June				January–June				12 months ending with June			
	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	2,570	11.7	2,750	12.7	15,450	11.7	17,250	13.1	32,660	12.3	35,060	13.3
Accident caused by firearm missileE922	110	0.5	70	*	550	0.4	590	0.5	1,290	0.5	1,350	0.5
Suicide by firearmsE955.0–E955.4	1,460	6.6	1,530	7.0	8,390	6.3	9,250	7.0	17,480	6.6	18,080	6.8
Homicide and legal intervention by firearmsE965.0–E965.4,E970	1,000	4.6	1,130	5.2	6,420	4.9	7,280	5.5	13,710	5.1	15,380	5.8
Injury by firearms, undetermined whether accidentally or purposely inflictedE985.0–E985.4	10	*	20	*	100	*	130	0.1	180	0.1	240	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, June 1996 and 1997, cumulative figures 1996 and 1997, and 12 months ending with June 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>)	June				January–June				12 months ending with June			
	1997		1996		1997		1996		1997		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Total, under 1 year	2,100	666.4	2,300	758.5	13,200	700.1	14,200	748.2	27,100	699.8	28,500	742.9
Under 28 days	1,460	455.1	1,640	533.4	8,200	435.0	9,160	482.9	17,510	452.3	18,480	481.4
28 days–11 months	680	212.0	690	224.4	5,000	265.2	5,030	265.2	9,580	247.5	10,030	261.3
Certain gastrointestinal diseases008–009,535,555–558	40	*	20	*	110	5.8	100	*	220	5.7	170	4.4
Pneumonia and influenza480–487	40	*	20	*	140	7.4	190	10.0	280	7.2	340	8.9
Congenital anomalies740–759	490	152.7	570	185.4	3,020	160.2	3,230	170.3	6,300	162.7	6,200	161.5
Disorders relating to short gestation and unspecified low birthweight765	280	87.3	370	120.3	1,500	79.6	1,990	104.9	3,080	79.6	3,670	95.6
Birth trauma767	10	*	20	*	40	*	110	5.8	100	*	240	6.3
Intrauterine hypoxia and birth asphyxia768	60	*	40	*	270	14.3	280	14.8	510	13.2	500	13.0
Respiratory distress syndrome769	80	*	100	*	640	33.9	570	30.1	1,460	37.7	1,200	31.3
Other conditions originating in the perinatal period760–764,766,770–779	560	174.5	550	178.9	3,320	176.1	3,390	178.7	7,030	181.6	7,380	192.2
Sudden infant death syndrome798.0	140	43.6	240	78.1	1,000	53.0	1,520	80.1	2,090	54.0	2,740	71.4
All other causesResidual	440	137.1	420	136.6	3,170	168.1	2,810	148.1	6,020	155.5	6,060	157.9

* 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.

References

1. Feinleib M, Zarate AO, eds. Reconsidering age adjustment procedures: Workshop proceedings. National Center for Health Statistics. Vital Health Stat 4(29). 1992.
2. Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Public Health Service. Washington: National Center for Health Statistics. 1968.

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