## **National Vital Statistics Reports**

From the CENTERS FOR DISEASE CONTROL AND PREVENTION National Center for Health Statistics National Vital Statistics System



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# Births, Marriages, Divorces, and Deaths: Provisional Data for 1998

#### Table 1. 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]

		1	Numbers and ra	ates with corre	ection factors <sup>1</sup> for bi	rths, marriages, and	d divorces				
		Decemb	er		January-December						
-	Nun	nber	Ra	nte	Nun	nber		Rate			
Item	1998	1997	1998	1997	1998	1997	1998	1997	1996		
Live births	332,000	324,000	14.4 65.0	14.2 63.9	3,946,000	3,882,000	14.6 66.0	14.5 65.0	14.7 65.4		
Deaths	194,000 2.400	192,000 2,200	8.4 7.2	8.4 6.6	2,331,000 27,600	2,294,000 27,000	8.6 7.0	8.6 7.0	8.7 7.2		
Natural increase	138,000 170,000 98,000	132,000 165,000 104,000	6.0 7.4 4.3	5.8 7.2 4.5	1,615,000 2,244,000 1,135,000	1,588,000 2,384,000 1,163,000	6.0 8.3 4.2	5.9 8.9 4.3	6.0 8.8 4.3		

Numbers and rates without correction factors<sup>1</sup> for births, marriages, and divorces

	December				January–December					
	Number		Rate		Nur	nber	Rate			
Item	1998	1997	1998	1997	1998	1997	1998	1997	1996	
Live births	321,000	324,000	13.9	14.2	3,943,000	3,882,000	14.6	14.5	14.7	
Fertility rate			62.8	63.9			66.0	65.0	65.4	
Deaths	194,000	192,000	8.4	8.4	2,331,000	2,294,000	8.6	8.6	8.7	
Infant deaths	2,400	2,200	7.2	6.6	27,600	27,000	7.0	7.0	7.2	
Natural increase	127,000	132,000	5.5	5.8	1,612,000	1,588,000	6.0	5.9	6.0	
Marriages	172,000	165,000	7.5	7.2	2,256,000	2,384,000	8.4	8.9	8.8	
Divorces	83,000	104,000	3.6	4.5	955,000	1,163,000	3.5	4.3	4.3	
(in millions)			271.5	268.8			270.0	267.6	265.2	

<sup>...</sup> 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.

#### **Technical notes**

#### Introduction

Effective with Volume 47, Number 1, the *Monthly Vital Statistics Report* (MVSR) has been renamed the *National Vital Statistics Reports* (NVSR). The monthly issue includes Technical notes and two

tables that show provisional vital statistics for the United States. These tables have been expanded for this current issue to show monthly and annual numbers and rates for births, marriages, and divorces with and without corrections for delays in reporting, as explained later. The Current Mortality Sample has been replaced with a detailed biannual report of births and deaths (*Births and Deaths*:



<sup>&</sup>lt;sup>1</sup>For explanation of correction factors, see Technical notes.

Table 2. Provisional number of live births, marriages, divorces, deaths, and infant deaths and rates, by month: United States, January 1997-December 1998

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

	Live births				N	1arriages	[	Divorces	Deaths		Infant deaths	
			Rate per 1,000 womer aged 15–44 years									
Period	Number	Rate per 1,000 population	Unadjusted	Seasonally adjusted <sup>1</sup>	Number	Rate per 1,000 population	Number	Rate per 1,000 population	Number	Rate per 1,000 population	Number	Rate per 1,000 population
1997:												
January		13.5	60.2	63.2	105,000	4.9	94,000	4.1	218,000	9.6	2,100	6.7
	289,000 313,000	14.1 13.8	63.1 61.7	64.4 62.6	163,000 191,000	8.3 8.8	87,000 95,000	4.3 4.2	191,000 198,000	9.3 8.7	2,200 2,500	7.5 7.9
April	342 000	15.6	69.8	71.6	191,000	9.2	106,000	4.2	189,000	8.6	2,300	6.4
May	311,000	13.7	61.5	61.9	234,000	10.3	99,000	4.3	195,000	8.6	2,300	7.2
June		14.8	66.1	64.7	233,000	10.6	100,000	4.6	182,000	8.3	2,200	6.8
	345,000	15.2	68.1	65.3	229,000	10.1	99,000	4.4	192,000	8.4	2,300	6.7
	341,000 353,000	15.0 16.0	67.3 71.9	63.6 67.7	252,000 232,000	11.1 10.5	93,000 96,000	4.1 4.4	178,000 176,000	7.8 8.0	2,200 2,300	6.8 6.8
September October	329,000	14.4	64.9	65.1	235,000	10.3	102,000	4.5	193,000	8.5	2,600	7.7
November		13.8	61.9	63.9	151,000	6.9	87,000	4.0	189,000	8.6	2,000	6.6
December	324,000	14.2	63.9	66.5	165,000	7.2	104,000	4.5	192,000	8.4	2,200	6.6
				Number ar	nd rates w	rith correction fac	tors <sup>2</sup> for	births, marriages	s, and dive	orces		
1998:												
	290,000	12.7	57.2	60.2	104,000	4.8	85,000	3.7	225,000	9.8	2,400	7.4
February	309,000	15.0 14.2	67.5 64.0	68.5	141,000 144,000	7.2	80,000 96,000	3.9 4.2	209,000 219,000	10.1	2,300 2,400	7.5 7.3
	342,000	15.4	69.6	64.6 71.0	164,000	6.6 7.8	96,000	4.2	191,000	9.6 8.6	2,400	6.9
	324,000	14.1	63.8	64.5	209,000	9.1	100,000	4.4	188,000	8.2	2,200	6.8
	343,000	15.5	69.8	68.7	241,000	10.9	107,000	4.8	184,000	8.3	2,300	7.1
July	359,000	15.6	70.6	68.2	230,000	10.0	100,000	4.4	187,000	8.2	2,400	6.9
August September	329,000	14.3 15.2	64.8 68.7	61.8 65.1	237,000 215,000	10.3 9.6	93,000 98,000	4.1 4.4	191,000 175,000	8.3 7.9	2,300 2,300	6.7 6.9
	342,000	14.9	67.4	68.0	213,000	9.3	92,000	4.0	189,000	8.2	2,300	6.7
November		14.2	64.2	66.0	177,000	7.9	89,000	4.0	178,000	8.0	2,100	6.7
December	332,000	14.4	65.0	66.4	170,000	7.4	98,000	4.3	194,000	8.4	2,400	7.2
				Number and	rates wit	hout correction fa	actors <sup>2</sup> fo	r births, marriage	es, and di	vorces		
1998:												
January	308,000	13.5 15.0	60.8 67.8	64.0 68.8	135,000 135,000	6.2 6.9	72,000 67,000	3.1 3.3	225,000 209,000	9.8 10.1	2,400 2,300	7.4 7.5
February	332,000	14.5	65.4	66.0	155,000	6.9 7.2	80,000	3.5 3.5	219,000	9.6	2,300	7.5 7.3
April		15.2	68.6	70.0	157,000	7.5	81,000	3.6	191,000	8.6	2,300	6.9
May	318,000	13.9	62.7	63.3	191,000	8.3	85,000	3.7	188,000	8.2	2,200	6.8
	326,000	14.7	66.4	65.2	229,000	10.3	90,000	4.0	184,000	8.3	2,300	7.1
July	357,000	15.6 14.7	70.4 66.4	68.0 63.3	239,000 226,000	10.4 9.8	85,000 79,000	3.7 3.4	187,000 191,000	8.2 8.3	2,400 2,300	6.9 6.7
	330,000	14.7	67.1	63.7	220,000	9.8 9.9	82,000	3.4 3.7	175,000	8.3 7.9	2,300	6.9
October	356,000	15.5	70.1	70.7	209,000	9.1	78,000	3.4	189,000	8.2	2,300	6.7
November		14.0	63.3	65.0	186,000	8.3	75,000	3.4	178,000	8.0	2,100	6.7
December	321,000	13.9	62.8	64.2	172,000	7.5	83,000	3.6	194,000	8.4	2,400	7.2

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

NOTE: Figures include all revisions received from the States, and therefore, may differ from those previously published

United States) based on preliminary data. Tables previously published in the MVSR that show provisional data by State are now available on the NCHS home page on the Internet at www.cdc.gov/nchswww/ datawh/statab/unpubd/nvsrtabl.htm.

#### Nature and sources of data

Data shown here are provisional and include only events occurring within the United States (50 States and the District of Columbia). Mortality data exclude fetal deaths. Delay in the receipt of certificates in a registration office may result in a low figure for a given month followed by a high figure for the month(s) in which the delayed records were received. 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. Divorce figures include reported annulments.

#### Corrections

Until 1998 provisional totals for births, marriages, and divorces for the entire United States included corrections for observed differences between provisional and final figures. These corrections served to compensate for delays in reporting. For example, the monthly national estimate for births was obtained by multiplying the reported total by the ratio that had been observed between the most recent 3-year average of final monthly totals and the corresponding 3-year average of provisional monthly totals for the United States. The vast majority of birth certificates are now electronically recorded and

<sup>&</sup>lt;sup>2</sup>For explanation of correction factors, see Technical notes.

transmitted from hospitals to state vital registration offices, producing a more consistent flow of records. For this reason, beginning in 1998, these monthly corrections for births were dropped.

Beginning with the 1994 data year, National Center Health Statistics stopped requesting final marriage and divorce totals from the States (though collection and publication of monthly provisional counts was continued) and consequently recent final data are no longer available to calculate current correction factors for marriage and divorce. Therefore, correction factors for monthly provisional marriage and divorce totals were also dropped in 1998. This step produced an error in the monthly and cumulative divorce totals in 1998, because estimates for three nonreporting States (California, Indiana, and Louisiana) were inadvertently omitted when the correction factors were dropped. It should therefore be noted that the monthly uncorrected counts for divorces previously published for 1998 are erroneous and should not be used.

To enable data users to judge the effect of deleting monthly correction factors for provisional data, tables 1 and 2 in this report present uncorrected and corrected counts and rates for births, marriages, and divorces for 1998 (death statistics have never been corrected). The corrected figures use the most recent correction factors

available. Although the absolute levels of births by month based on corrected numbers differ from the uncorrected data, the month-to-month trends are generally the same for both series. The corrected monthly and annual divorce totals for 1998 include estimates for California, Indiana, and Louisiana.

For the monthly and cumulative provisional estimates of births and marriages in 1999, NCHS will continue the practice of *not* employing correction factors. However, further consideration must be given to certain options for publishing 1999 provisional divorce totals.

#### Rates

The populations used for computing rates are furnished by the U.S. Bureau of the Census. 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. Because monthly infant mortality rates are based on relatively few events, they are highly variable, and comparisons of monthly infant mortality rates should be interpreted cautiously.

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