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# Vital and Health Statistics

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## Supplements to the Monthly Vital Statistics Report

Series 24:

Compilations of Data on Natality,  
Mortality, Marriage, Divorce, and  
Induced Terminations of Pregnancy  
No. 2

These supplements to the Monthly Vital Statistics Report present data on births of Hispanic parentage, induced terminations of pregnancy, and other selected findings based on data from the National Vital Statistics System. These reports were originally published in 1987 and 1988.

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## **Trends in Marital Status of Mothers at Conception and Birth of First Child: United States, 1964–66, 1972, and 1980**

by Stephanie J. Ventura, A.M., Division of Vital Statistics

### **Introduction**

The purpose of this study is to describe trends in marital status for first-time mothers. An important aspect of the study is analyzing data relating to the likelihood that a woman whose first child was conceived outside marriage would marry before the birth of the child. The data for this study are derived from the 1964–66, 1972, and 1980 National Natality Surveys, conducted by the National Center for Health Statistics.

Over the past several years, public interest has been focused on the rising number and proportion of infants born to unmarried women. This increase has occurred during a period when fertility rates for married women have been very low. However, for teenage mothers in particular, the rise in the proportion of births occurring to unmarried women has been dramatic. Among those giving birth for the first time, fewer have been married prior to the child's birth—only 50 percent in 1980 compared with 60 percent in 1972 and 76 percent in 1964–66.

During the years covered by these surveys, radical shifts have occurred in the proportions of women unmarried at various ages. For example, the proportion of white women unmarried at ages 20–24 years increased from 34 percent in 1965 to 38 percent in 1972 to 51 percent in 1980.<sup>1</sup> The comparable proportions for unmarried white women aged 25–29 years were 12 percent (1965), 16 percent (1972), and 27 percent (1980). The increases were substantial for women of black and other races as well, and the proportions unmarried were considerably higher for these women than for white women, regardless of age. These figures reflect the widespread delay of marriage during the past two decades. It is also apparent that the discovery of a nonmarital conception is no longer the impetus to a quickly arranged marriage that it once was.

Data from earlier studies have shown the health implications associated with nonmarital childbearing<sup>2,3</sup> as well as the lifetime social and economic consequences of a nonmarital or premaritally conceived first birth for a young woman.<sup>4–6</sup> A previous study based on the 1980 National Natality Survey showed, for example, that teenage mothers who were married prior to conception were somewhat more likely to receive early prenatal care than those who were married after conception and that all married teenage mothers were much more likely than unmarried teenage mothers to have begun prenatal care in the first trimester.<sup>7</sup> Moreover, the levels of low birth weight were substantially lower for babies born to married mothers compared with unmarried mothers. Again, infants born to mothers married prior to conception were less likely to be of low birth weight than those born to mothers married within 8 months before the child's birth.

In the following discussion as well as in the tables and figures, the terms “nonmaritally conceived” and “conceived outside marriage” are used interchangeably. “Premaritally conceived” births are births to married women that were conceived prior to marriage. In addition, births to unmarried women are often referred to as “nonmarital” in the text and tables.

### **Sources and limitations of data**

It is not possible to compile data annually on the interval between marriage and birth of the first child in the United States because date of the parents' marriage is not reported on the birth certificate. However, this information can be derived from the National Natality Surveys (NNS) conducted periodically by the National Center for Health Statistics. These sur-

veys collect the dates of the mother's marriage(s) and the first birth from a national probability sample of mothers giving birth in each survey year.

The data in this study are restricted to first births to unmarried and once-married mothers. Mothers married more than once are excluded because it is not possible to measure the interval between the current marriage and first birth for many of these women. The number of first births included in this analysis for 1980 is estimated to be 1,445,000 out of a total of 1,546,000 first births in 1980. The difference between these two figures of about 100,000 is an approximation of the number of first births to mothers married more than once.

For married mothers a distinction is made between those who married before and those who married after conception. The interval "0-7 months" or "less than 8 months" is used as a measure of premaritally conceived births to mothers who married before the child's birth. Information on the sampling procedures, statistical reliability, and other aspects of these surveys is presented in the Technical notes and in earlier reports.<sup>8-10</sup>

### Trends in marital and nonmarital conceptions for all mothers

Of the 1,445,000 first births in 1980, 63 percent were conceived within marriage according to data from the 1980 National Natality Survey (table 1). This was the lowest proportion measured in the three survey periods. Previous natality follow-back surveys had shown an increase in this proportion from 67 percent during 1964-66 to 71 percent in 1972.<sup>11,12</sup> (See figure 1.) First births to women who had been married less than 8 months constituted only 12 percent of the total in 1980 and 10 percent in 1972 compared with 19 percent in 1964-66. This indicates relative stability between 1972 and 1980 in the proportion of first births occurring to married women who were premaritally pregnant in contrast with an earlier decrease between 1964-66 and 1972. Simultaneously, the proportion of first births occurring to unmarried women increased steadily over this entire period, from 15 percent in 1964-66 to 19 percent in 1972 and 25 percent in 1980.

Between the 1964-66 and 1972 surveys the total proportion of first births conceived outside marriage appeared to be relatively stable, although the distribution of these births between those whose parents married before the birth of the child and those whose parents were not married at the time of delivery shifted somewhat (table 2). During the 1964-66 period, more than half of the estimated 386,000 nonmaritally conceived first births occurred to women who married within 8 months prior to the child's birth (218,000). By 1972, only one-third of the estimated 359,000 nonmaritally conceived first births were to mothers who married prior to the birth of the child. Between 1972 and 1980, the relative distribution of births according to whether or not the mother married before the child's birth stayed about the same even though the proportion of first births that were nonmaritally conceived had increased from 29 to 37 percent (tables 1 and 2 and figure 1).

There were increases between 1972 and 1980 in the proportions of first births to mothers aged 15-19 and 20-24 years that were nonmaritally conceived, but the increase was relatively larger for mothers aged 20-24 years. The data also suggest an increase in nonmarital conceptions for mothers aged 25-29, but the difference is not statistically significant. Among mothers in their early twenties, the proportion of first births that were nonmaritally conceived rose from 18 to 28 percent between 1972 and 1980. Almost all of the increase was in the proportion of births to unmarried mothers. The proportion of first births that occurred to mothers marrying prior to delivery was similar in both years.

Nonmaritally conceived first births increased in 1980 to unprecedented proportions of all first births among teenage mothers—76 percent compared with 57 percent in 1964-66 and 59 percent in 1972. In both 1972 and 1980, two-thirds of the nonmaritally conceived births among teenagers were to unmarried mothers and one-third to mothers marrying prior to delivery (table 2). In contrast, in 1964-66 the proportion of nonmaritally conceived first births to unmarried teenage women was somewhat lower (43 percent) and the proportion of nonmaritally conceived first births to mothers married within 8 months of delivery was higher (58 percent).

The overall trends in nonmarital conceptions for white and black women were similar to those for women of all races combined (table 1 and figure 2). There were declines between 1964-66 and 1972 and then increases between 1972 and 1980 to levels close to those in 1964-66. For white women the proportion of first births that were nonmaritally conceived increased from 22 percent in 1972 to 31 percent in 1980, with somewhat greater increases in the proportion of first births to unmarried women (table 1). The rise in nonmaritally conceived first births among black women was from 63 to 74 percent during this period.

### Trends in premarital conceptions for married mothers

The first part of this report described trends in the marital status of all mothers at the time their first child was conceived and born. The analysis in this section is restricted to mothers who were married when their first child was born; there were 1,083,000 first births to married women in 1980. The question here is, was the birth *conceived* before or after marriage? For the three survey years in this study, the trend in premaritally conceived births for married mothers is a slightly V-shaped curve (table 3 and figure 3). For all once-married women there was a sharp decline from 22 percent in 1964-66 to 12 percent in 1972 followed by a rise to 16 percent in 1980. Put another way, although women who became pregnant outside marriage in 1972 and 1980 were about equally likely to marry before the child's birth (table 1), married women who gave birth in 1980 were more likely than their counterparts in 1972 to have been premaritally pregnant (table 3).

This trend (V-shaped curve) for mothers of all ages is also found for mothers aged 15-19 and 20-24 years, with the pro-

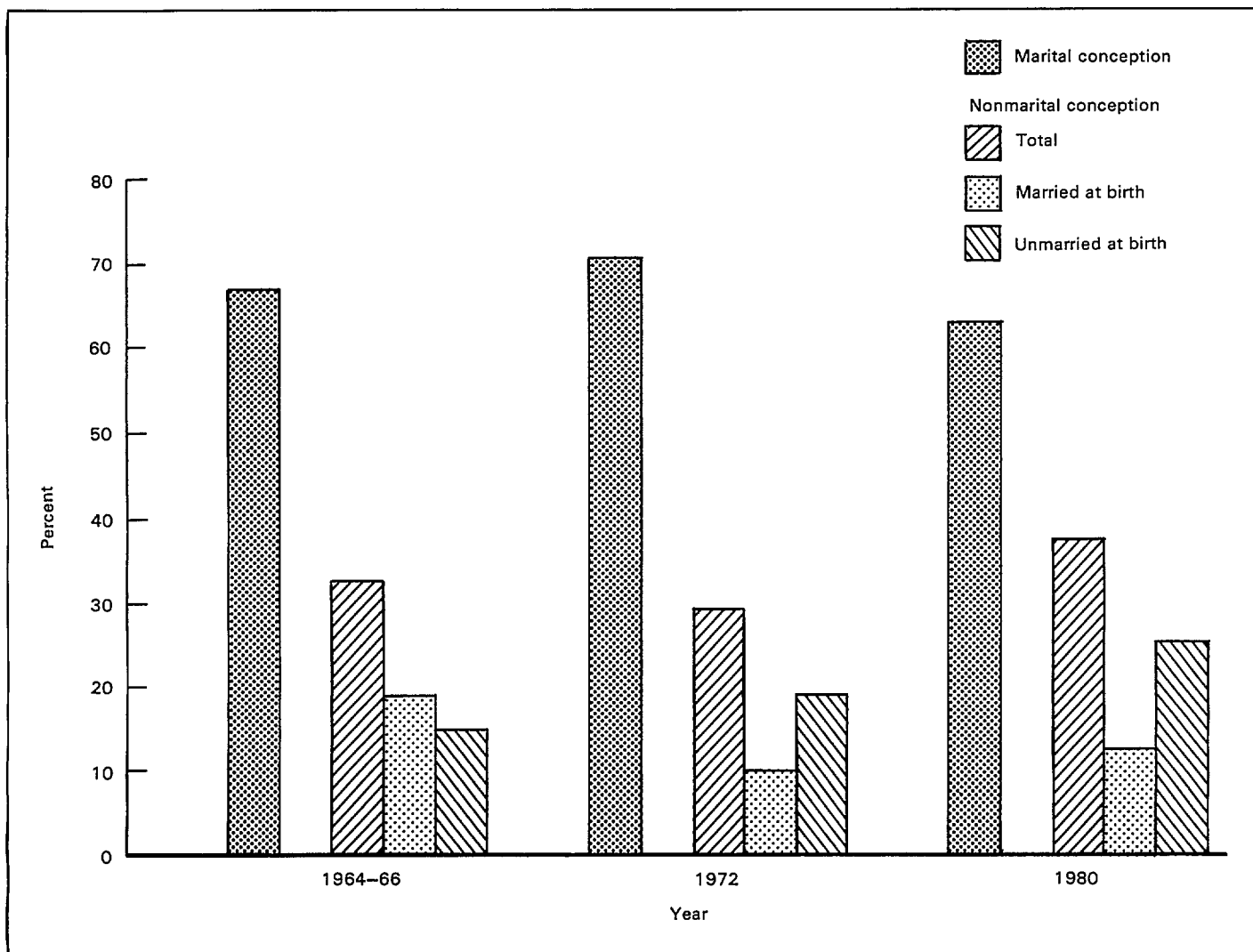


Figure 1. Percent distribution of first live births by mother's marital status at conception and birth of child: United States, 1964-66, 1972, and 1980

portion of premarital conceptions for teenage mothers three to five times as high as for mothers in their early twenties. Although the overall trends are the same, the proportion of premarital conceptions among married teenagers was higher in 1980 than in 1964-66 (52 percent compared with 43 percent), whereas among married women aged 20-24 years, the proportion of premarital conceptions in 1980 was lower than in 1964-66 (11 percent compared with 15 percent). Even though the figures are not statistically reliable for mothers aged 25 years and older because of small samples, they suggest the same pattern as for the younger mothers. White and black married women giving birth to their first child in 1980 were about equally likely to have conceived prior to marriage, 17 percent for white and 14 percent for black women (table 4).

An examination of mother's educational attainment indicates that there was an increase between 1964-66 and 1980 in the proportion of births to married mothers who had not completed high school that were premaritally conceived, from 30 to 37 percent (table 5). In contrast, for mothers with at least

a high school diploma there were declines in premarital conceptions. For example, for mothers with at least some college, the proportion with premarital conceptions declined from 19 to 11 percent. The overall proportion of premaritally conceived first births to once-married mothers declined from 22 to 16 percent during this period.

One would expect that if increases in premarital conceptions are confined to women with limited educational attainment, the increases might be restricted to teenagers. Data are shown in table 5 for married mothers aged 15-19 years compared with those aged 20-44 years. Because of sampling variability, many of the differences are not statistically significant. However, the rise in premarital conceptions was particularly noticeable for teenage women with less than 12 years of schooling. Among married mothers aged 20 years and older, there were apparently declines in the proportions of first births that were premaritally conceived in all educational-attainment groups. This would suggest that married mothers giving birth as teenagers in 1980 were substantially more likely than their

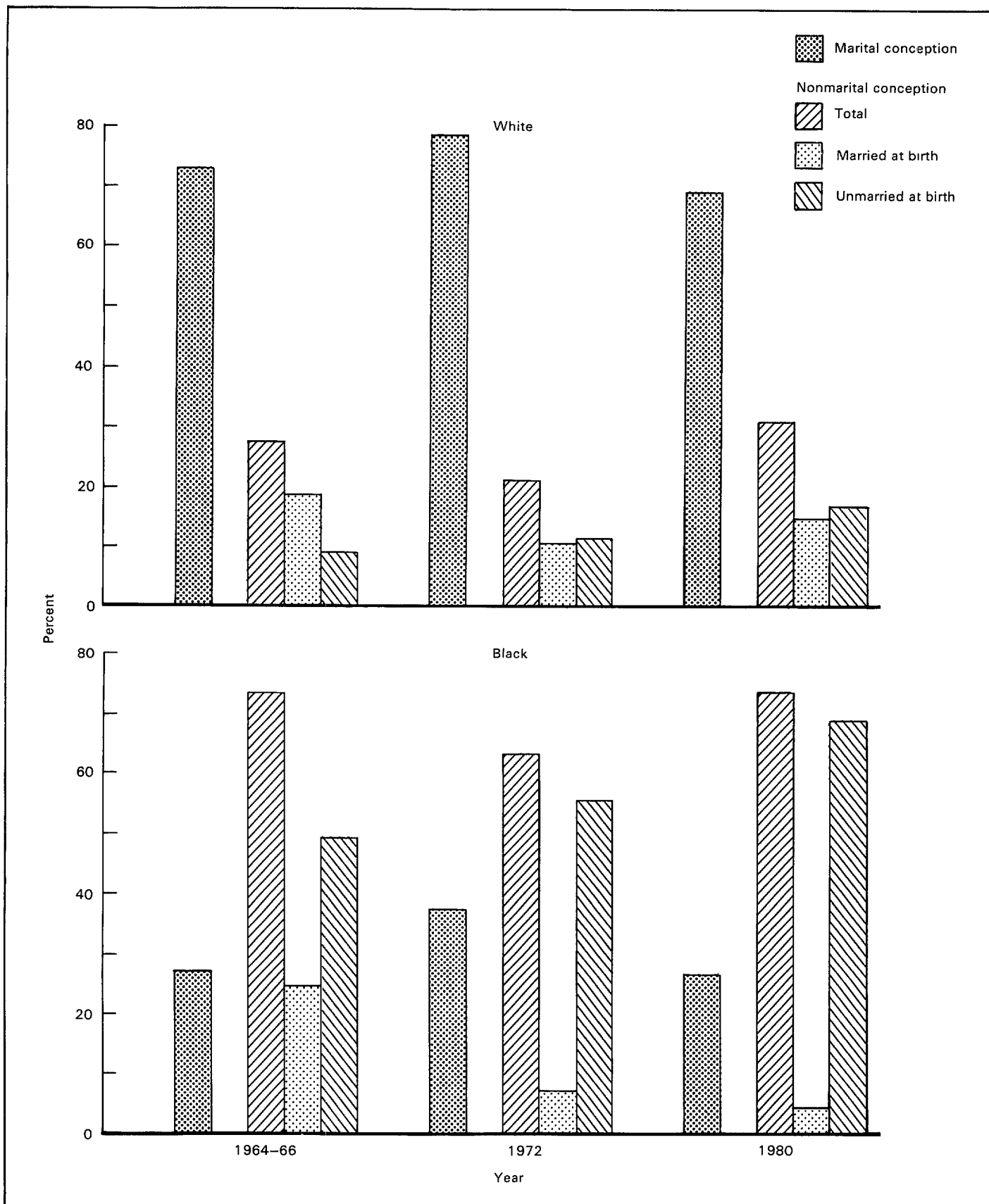


Figure 2. Percent distribution of first live births by mother's marital status at conception and birth, according to race: United States, 1964-66, 1972, and 1980



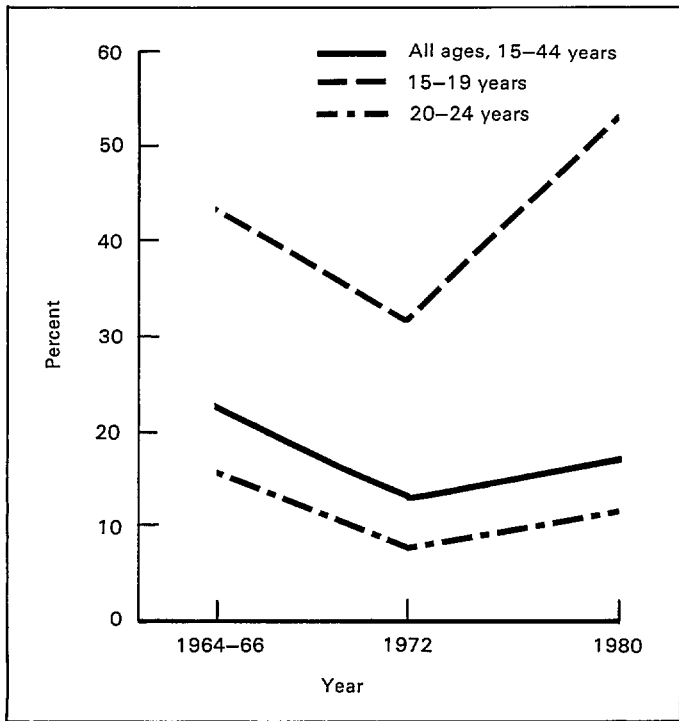


Figure 3. Percent of first births to once-married mothers that were premaritally conceived, by age of mother: United States, 1964-66, 1972, and 1980

counterparts in 1964-66 to have married because they were already pregnant. In other words, although relatively few teenagers were married in 1980, a larger fraction of them had evidently married in response to a premarital conception. This is consistent with the finding that about half of the married teenage mothers had less than a high school education in 1980, compared with only about 7 percent of older mothers. A premarital conception for a teenager can therefore have a much more critical impact on her educational attainment compared with the impact on a woman in her twenties.

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### Symbols

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

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**Table 1. Number of first live births and percent distribution by mother's marital status at conception and birth of child, according to race and age of mother: United States, 1964-66, 1972, and 1980 National Natality Surveys and birth-registration data**

[Refers only to first births to once-married or unmarried mothers. Due to rounding figures may not add to totals]

Race and marital status of mother	1980				1972				1964-66 <sup>1</sup>			
	15-44 years	15-19 years	20-24 years	25-29 years	15-44 years	15-19 years	20-24 years	25-29 years	15-44 years	15-19 years	20-24 years	25-29 years
All races <sup>2</sup>												
	Number in thousands											
First births .....	1,445	417	589	336	1,234	418	535	224	1,154	434	526	139
	Percent distribution											
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married at conception .....	62.6	23.7	71.8	86.6	70.9	40.9	82.2	94.6	66.6	42.9	77.2	91.4
Unmarried at conception .....	37.4	76.3	28.0	13.1	29.1	59.1	17.8	*5.4	33.4	56.9	22.8	*8.6
Married 0-7 months before birth .....	12.3	26.1	8.7	*4.8	10.0	19.1	6.9	*1.8	18.9	32.7	13.5	*2.9
Unmarried at birth .....	25.1	50.1	19.4	*8.3	19.0	40.0	10.8	*3.6	14.6	24.2	9.3	*5.8
White												
	Number in thousands											
First births .....	1,180	305	495	294	993	294	455	197	985	340	467	128
	Percent distribution											
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married at conception .....	69.1	30.5	77.2	89.1	78.3	52.0	85.9	95.4	72.6	50.3	81.4	93.0
Unmarried at conception .....	30.9	69.5	22.8	10.9	21.8	48.0	13.8	*4.6	27.3	49.4	18.6	*6.3
Married 0-7 months before birth .....	14.2	33.4	9.9	*5.1	10.8	23.5	7.0	*2.0	18.2	34.4	12.2	*3.1
Unmarried at birth .....	16.8	36.1	12.9	5.8	11.0	24.5	6.8	*2.5	9.1	15.0	6.4	*3.1
Black												
	Number in thousands											
First births .....	222	104	76	31	220	116	74	22	158	93	52	9
	Percent distribution											
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married at conception .....	26.1	*4.8	*36.8	*64.5	37.3	12.1	59.5	*86.4	26.6	15.1	*36.5	*66.7
Unmarried at conception .....	73.9	95.2	64.5	*35.5	63.2	87.9	41.9	*13.6	73.4	83.9	63.5	*33.3
Married 0-7 months before birth .....	4.5	*5.8	*3.9	*3.2	*7.3	*8.6	*6.8	-	24.1	25.8	*26.9	-
Unmarried at birth .....	69.4	89.4	60.5	*32.3	55.9	79.3	35.1	*13.6	49.4	58.1	*36.5	*33.3

<sup>1</sup>Figures are annual averages.

<sup>2</sup>Includes races other than white and black.

**Table 2. Number of nonmaritally conceived first live births and percent distribution by mother's marital status at birth of child, according to age and race of mother: United States, 1964-66, 1972, and 1980 National Natality Surveys and birth-registration data**

[Refers only to first births to once-married or unmarried mothers]

Race and marital status of mother	1980			1972			1964-66 <sup>1</sup>		
	15-44 years	15-19 years	20-24 years	15-44 years	15-19 years	20-24 years	15-44 years	15-19 years	20-24 years
All races <sup>2</sup>			Number in thousands						
Unmarried at conception of first child . . . . .	540	318	165	359	247	95	386	247	120
Total . . . . .			Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married at birth . . . . .	33.0	34.3	30.9	34.5	32.4	38.9	56.5	57.5	59.2
Unmarried at birth . . . . .	67.0	65.7	69.1	65.5	67.6	61.1	43.5	42.5	40.8
White			Number in thousands						
Unmarried at conception of first child . . . . .	365	212	113	216	141	63	269	168	87
Total . . . . .			Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married at birth . . . . .	45.8	48.1	43.4	49.5	48.9	50.8	66.5	69.6	65.5
Unmarried at birth . . . . .	54.2	51.9	56.6	50.5	51.1	49.2	33.5	30.4	34.5
Black			Number in thousands						
Unmarried at conception of first child . . . . .	164	99	49	139	102	31	116	78	33
Total . . . . .			Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married at birth . . . . .	6.1	*6.1	*6.1	*11.5	*9.8	*16.1	32.8	30.8	*42.4
Unmarried at birth . . . . .	93.9	93.9	93.9	88.5	90.2	83.9	67.2	69.2	*57.6

<sup>1</sup>Figures are annual averages.<sup>2</sup>Includes races other than white and black.

**Table 3. Number of first live births to once-married mothers and percent distribution by interval from first marriage to first birth, according to age of mother: United States, 1964-66, 1972, and 1980 National Natality Surveys**

[Due to rounding figures may not add to totals]

Interval from first marriage to first birth	Age of mother at first birth											
	15-44 years			15-19 years			20-24 years			25-29 years		
	1980	1972	1964-66 <sup>1</sup>	1980	1972	1964-66 <sup>1</sup>	1980	1972	1964-66 <sup>1</sup>	1980	1972	1964-66 <sup>1</sup>
	Number in thousands											
First births .....	1,083	999	986	208	251	329	475	477	477	308	216	131
	Percent distribution											
All intervals .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 8 months .....	16.4	12.4	22.1	52.4	31.9	43.3	10.8	7.8	14.8	5.3	*1.7	*3.3
8 months or more .....	83.6	87.6	77.9	47.6	68.1	56.7	89.2	92.2	85.2	94.7	98.3	96.7
8-11 months .....	9.0	20.0	22.1	15.3	35.0	27.5	11.0	19.8	21.5	*3.1	5.5	*14.4
12-23 months .....	24.3	22.3	29.3	27.0	27.0	25.4	31.5	24.5	35.6	15.5	14.4	20.8
24-35 months .....	15.7	16.7	11.5	*4.6	5.1	*2.9	21.1	24.1	16.8	17.5	16.1	*15.1
36-47 months .....	11.4	11.4	5.8	*0.6	*0.4	*0.7	13.5	12.9	7.7	15.8	23.0	*11.0
48-59 months .....	7.3	7.5	2.8	*0.1	*0.2	*0.1	6.8	7.2	1.9	12.1	15.6	*11.8
60 months or more .....	15.9	9.7	6.5	-	*0.4	*0.2	5.4	3.7	1.6	30.7	23.8	23.6

<sup>1</sup>Figures are annual averages.

**Table 4. Number of first live births to once-married mothers and percent distribution by interval from first marriage to first birth, according to race of mother: United States, 1980 National Natality Survey**

[Due to rounding figures may not add to totals]

<i>Interval from first marriage to first birth</i>	<i>All races<sup>1</sup></i>	<i>White</i>	<i>Black</i>
	Number in thousands		
First births .....	1,083	982	68
	Percent distribution		
All intervals .....	100.0	100.0	100.0
Less than 8 months .....	16.4	17.0	14.3
8 months or more .....	83.6	83.0	85.7
8-11 months .....	9.0	9.1	*8.2
12-23 months .....	24.3	23.8	31.8
24-35 months .....	15.7	14.8	24.3
36-47 months .....	11.4	11.7	*6.1
48-59 months .....	7.3	7.6	*0.2
60 months or more .....	15.9	16.0	15.2

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

**Table 5. Number of first live births to once-married mothers and percent distribution by interval from first marriage to first birth, according to educational attainment and age of mother: United States, 1964-66 and 1980 National Natality Surveys**

[Due to rounding figures may not add to totals]

Age of mother and interval from first marriage to first birth	1980					1964-66 <sup>1</sup>				
	Total	Years of school completed by mother				Total	Years of school completed by mother			
		0-11 years	12 years	13-15 years	16 years or more		0-11 years	12 years	13-15 years	16 years or more
15-44 years										
First births .....	1,083	159	493	228	203	986	276	485	135	90
Number in thousands										
Percent distribution										
All intervals .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 8 months .....	16.4	37.4	17.8	10.6	*3.2	22.1	30.4	21.1	18.6	7.7
8 months or more .....	83.6	62.6	82.2	89.4	96.8	77.9	69.6	78.9	81.4	92.3
8-11 months .....	9.0	13.2	9.3	8.8	*5.3	22.1	23.2	22.2	21.6	18.9
12-23 months .....	24.3	26.7	25.7	25.0	18.2	29.3	27.5	29.8	31.4	28.3
24-35 months .....	15.7	9.7	15.6	18.7	17.3	11.5	7.2	12.2	12.2	19.9
36-47 months .....	11.4	*3.7	11.7	12.0	16.1	5.8	4.0	6.2	5.3	9.7
48 months or more .....	23.1	9.3	19.9	24.9	40.0	9.3	7.6	8.6	10.9	15.5
15-19 years										
First births .....	208	103	95	*9	*2	329	184	132	13	*
Number in thousands										
Percent distribution										
All intervals .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 8 months .....	52.4	54.0	48.7	*78.1	*26.4	43.3	41.3	45.9	*46.2	*
8 months or more .....	47.6	46.0	51.3	*21.9	*73.6	56.7	58.7	54.1	53.8	*
20-44 years										
First births .....	875	57	398	220	201	658	92	353	122	90
Number in thousands										
Percent distribution										
All intervals .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 8 months .....	7.9	*7.3	10.4	7.9	*3.0	11.6	8.9	11.8	15.7	7.7
8 months or more .....	92.1	92.7	89.6	92.1	97.0	88.4	91.1	88.2	84.3	92.3

<sup>1</sup> Figures are annual averages.

## Technical notes

### Sources of data

The data presented in this report are based on the 1964–66, 1972, and 1980 National Natality Surveys conducted by the National Center for Health Statistics. A detailed description of the methods and procedures of these surveys can be found in “Methods and response characteristics: 1980 National Natality and Fetal Mortality Surveys,”<sup>8</sup> and other reports for the earlier surveys.<sup>9,10</sup> The following notes briefly describe survey procedures relevant to this report.

The National Natality Survey (NNS) is based on a probability sample of registered live births in the United States for the years 1964–66, 1972, and 1980. The 1980 NNS sample consisted of 9,941 live births, or approximately 1 in every 363 live births. The sample for the 1972 NNS included 6,505 births or 1 in every 500 births. The 1964–66 sample included a total of 11,331 births, or approximately 1 in every 1,000 births. Demographic and socioeconomic information beyond that available from the certificate of live birth was sought from the mother in a mailed questionnaire. To ensure their privacy, mothers who were not married were not contacted in any survey year; data shown in this report for unmarried mothers, therefore, are based on registration information from the birth certificates. The NNS data have been weighted to provide estimates for the appropriate populations of live births in the United States in 1964–66, 1972, and 1980.

### Sampling error

Because NNS estimates are based on a sample, they may differ from the figures that would have been obtained had all live births been surveyed. The use of probability sampling techniques makes it possible to approximate sampling errors for these estimates.

The standard error is a measure of the variability that occurs by chance because a sample rather than the entire population is surveyed. Although the standard errors calculated for this report reflect some of the random variation inherent in the measurement process, they do not measure any systematic error, or bias, that may be present in the data.

The chances are about 68 out of 100 that an estimate from the sample differs by less than one standard error from the figure that would be obtained from a complete census of all births; the chances are about 95 out of 100 that the estimate differs by less than two standard errors. The relative standard error of an estimate is obtained by dividing the standard error of an estimate by the estimate itself and can be expressed as a percent. In this report an estimate is considered unreliable if it is based on fewer than 30 sample cases in 1980, or fewer than 20 cases in 1964–66 and 1972, or if its relative standard error

is 25 percent or greater. For purposes of this report, standard errors for the 1980 NNS were estimated using a balanced repeated replication technique. This technique produces highly reliable, unbiased estimates of sampling errors. Its application to the NNS is described elsewhere.<sup>8</sup> Standard errors for the 1964–66 NNS and 1972 NNS were estimated by interpolation from tables showing approximate standard errors for those survey years.

Standard errors for the percents shown in table 1 of the text are presented in table I of these notes. Approximate standard errors for the percents shown in tables 2–5 are shown in tables II–IV of these notes.

### Testing differences

The determination of statistical significance for this study is based on a two-tailed *t* test, with a significance level of 5 percent. Terms in the text relating to differences such as “higher” or “less” indicate that the differences are statistically significant unless otherwise noted. Terms such as “similar” or “equally likely” mean that no statistically significant difference exists between the estimates being compared. No inference about statistical significance should be made about any differences not discussed in the text; they may or may not be significant.

### Definitions of terms

*Age of mother*—Age of mother refers to age at last birthday and is recorded or derived from entries on the birth certificate.

*Educational attainment of mother*—Educational attainment refers to the highest grade of regular school completed. Regular school consists of elementary and high school and college or university and does not include trade or business schools. Data are derived from responses on the questionnaire concerning the highest grade of school attended and completed by the mother.

*First births*—Live-birth order is derived from an item on the birth certificate asking for the number of previous live births. If there were no previous live births, this was a first birth.

*Interval from first marriage to first birth*—This is the difference in months between the date of first marriage as reported on the questionnaire and the date of first birth as recorded on the birth certificate.

*Race of mother*—Race is recorded or derived from entries on the birth certificate. The category “white” includes all mothers reported in the race item as white or as Mexican, Puerto Rican, or Cuban.



Table 1. Standard errors for estimated percent distributions of first live births, expressed in percentage points, by mother's age, race, and marital status at conception and birth of child: United States, 1964-66, 1972, and 1980 National Natality Surveys and birth-registration data

Race and marital status of mother at conception and birth of first child	1980				1972				1964-66 <sup>1</sup>			
	15-44 years	15-19 years	20-24 years	25-29 years	15-44 years	15-19 years	20-24 years	25-29 years	15-44 years	15-19 years	20-24 years	25-29 years
All races <sup>2</sup>												
Married at conception . . . . .	0.38	1.02	0.94	1.14	0.69	1.31	0.93	0.94	0.80	1.43	0.90	1.44
Unmarried at conception . . . . .	0.52	1.46	0.74	0.91	0.54	1.50	0.66	0.48	0.80	1.43	1.04	1.44
Married 0-7 months before birth . . . . .	0.47	1.20	0.69	0.88	0.43	1.01	0.55	<sup>3</sup> 0.45	0.65	1.36	0.85	<sup>3</sup> 0.86
Unmarried at birth . . . . .	0.15	0.52	0.16	0.12	0.20	0.72	0.21	0.12	0.57	1.22	0.76	1.23
White												
Married at conception . . . . .	0.49	1.45	1.16	1.22	0.72	1.59	0.89	0.88	0.81	1.62	1.03	1.36
Unmarried at conception . . . . .	0.62	1.88	0.76	0.94	0.59	1.83	0.69	0.54	0.81	1.62	1.03	1.31
Married 0-7 months before birth . . . . .	0.57	1.60	0.72	0.91	0.50	1.30	0.60	<sup>3</sup> 0.50	0.67	1.56	0.89	<sup>3</sup> 0.91
Unmarried at birth . . . . .	0.12	0.46	0.13	0.11	0.14	0.60	0.15	0.09	0.49	1.16	0.69	<sup>3</sup> 0.91
Black												
Married at conception . . . . .	2.07	1.32	3.22	6.63	1.88	1.56	3.50	4.86	2.18	2.13	3.85	( <sup>4</sup> )
Unmarried at conception . . . . .	1.66	2.28	2.89	3.48	1.68	2.31	2.50	1.33	2.18	2.19	3.85	( <sup>4</sup> )
Married 0-7 months before birth . . . . .	0.68	1.73	1.81	2.55	0.87	1.36	1.50	-	2.12	2.66	3.53	-
Unmarried at birth . . . . .	1.43	1.44	2.28	2.57	1.26	1.68	1.66	1.33	2.47	2.99	3.85	( <sup>4</sup> )

<sup>1</sup>Figures are annual averages.

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>The number of unweighted births in numerator of percent was fewer than 20 in 1964-66 and 1972 National Natality Surveys.

<sup>4</sup>Appropriate formulas were not available for calculating the standard errors of these estimates based on fewer than 20 unweighted births.

Table II. Approximate standard errors for percentages expressed in percentage points: 1964-66 National Natality Survey

Base of percentage	Estimated percentage							
	2 or 98	5 or 95	10 or 90	20 or 80	25 or 75	30 or 70	40 or 60	50
30,000	1.5	2.3	3.2	4.2	4.6	4.8	5.2	5.3
50,000	1.1	1.8	2.4	3.3	3.5	3.7	4.0	4.1
100,000	0.8	1.3	1.7	2.3	2.5	2.6	2.8	2.9
250,000	0.5	0.8	1.1	1.5	1.6	1.7	1.8	1.8
500,000	0.4	0.6	0.8	1.0	1.1	1.2	1.3	1.3
1,000,000	0.3	0.4	0.5	0.7	0.8	0.8	0.9	0.9
2,000,000	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6

Table III. Approximate standard errors for estimated percentages expressed in percentage points: 1972 National Natality Survey

Base of percentage	Estimated percentage							
	2 or 98	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50	
10,000	2.2	3.5	4.8	6.4	7.3	7.8	8.0	
30,000	1.3	2.0	2.8	3.7	4.2	4.5	4.6	
50,000	1.0	1.6	2.1	2.9	3.3	3.5	3.6	
70,000	0.8	1.3	1.8	2.4	2.8	3.0	3.0	
100,000	0.7	1.1	1.5	2.0	2.3	2.5	2.5	
200,000	0.5	0.8	1.1	1.4	1.6	1.8	1.8	
500,000	0.3	0.5	0.7	0.9	1.0	1.1	1.1	
700,000	0.3	0.4	0.6	0.8	0.9	0.9	1.0	
1,000,000	0.2	0.3	0.5	0.6	0.7	0.8	0.6	
2,000,000	0.2	0.2	0.3	0.4	0.5	0.6	0.6	

**Table IV. Approximate standard errors for estimated percentages expressed in percentage points, by race of mother: 1980 National Natality Survey**

<i>Race of mother and base of percentage</i>	<i>Estimated percentage</i>						
	<i>2 or 98</i>	<i>5 or 95</i>	<i>10 or 90</i>	<i>20 or 80</i>	<i>30 or 70</i>	<i>40 or 60</i>	<i>50</i>
All races and white							
10,000 .....	2.7	4.2	5.8	7.8	8.9	9.5	9.7
30,000 .....	1.6	2.4	3.4	4.5	5.1	5.5	5.6
50,000 .....	1.2	1.9	2.6	3.5	4.0	4.3	4.3
70,000 .....	1.0	1.6	2.2	2.9	3.4	3.6	3.7
100,000 .....	0.9	1.3	1.8	2.5	2.8	3.0	3.1
200,000 .....	0.6	0.9	1.3	1.7	2.0	2.1	2.2
500,000 .....	0.4	0.6	0.8	1.1	1.3	1.3	1.4
700,000 .....	0.3	0.5	0.7	0.9	1.1	1.1	1.2
1,000,000 .....	0.3	0.4	0.6	0.8	0.9	1.0	1.0
2,000,000 .....	0.2	0.3	0.4	0.5	0.6	0.7	0.7
Black							
10,000 .....	2.8	4.3	5.9	7.9	9.1	9.7	9.9
30,000 .....	1.6	2.5	3.4	4.6	5.2	5.6	5.7
50,000 .....	1.2	1.9	2.6	3.5	4.0	4.3	4.4
70,000 .....	1.0	1.6	2.2	3.0	3.4	3.7	3.7
100,000 .....	0.9	1.4	1.9	2.5	2.9	3.1	3.1
200,000 .....	0.6	1.0	1.3	1.8	2.0	2.2	2.2

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## Characteristics of American Indian and Alaska Native Births: United States, 1984

by Selma M. Taffel, Division of Vital Statistics

### Introduction

In 1984, Indian births represented only 1 percent of all births in the United States. But the number of these births has grown rapidly in recent years, from 25,864 in 1970 to 41,451 in 1984 (table 1). Between 1970 and 1975, Indian births increased by 7 percent, between 1975 and 1980 by 34 percent, and between 1980 and 1984 by an additional 13 percent. These large increases are in sharp contrast to a 16 percent decline in births for all races combined in the 1970–75 period and an increase of only 2 percent in the 1980–84 period. A substantial increase in the Indian population also occurred in the 1970–80 period.<sup>1</sup> However, a preliminary evaluation of the 1970 and 1980 Censuses of Population suggests that some of this increase may have been due to a greater frequency of individuals of mixed Indian and non-Indian descent reporting their race as Indian.<sup>1</sup> This may also account for some of the large increase in the number of Indian births.

Treaties dating from 1784 and laws enacted by Congress establish the Federal Government's responsibility for Indians and Alaska Natives. Since 1955, the Indian Health Service has provided a comprehensive health care delivery system for Indian members of tribal organizations recognized by the Federal Government who reside in counties with Indian reservations or in contiguous counties. The Indian Health Service also funds ambulatory care for Indians living in urban areas.

In this report, information derived from live-birth certificates is used to compare the demographic profile of Indian mothers with those of white and black mothers and also to compare birth outcomes (period of gestation, birth weight, and Apgar scores). Racial designation is that of the child, and it is determined from the race of both parents as entered on the birth certificate (see Technical notes). For convenience in the

ensuing discussion, the terms Indian mother, American Indian mother, and Alaska Native mother are occasionally used, regardless of the mother's actual reported race, because almost three-fourths of Indian babies have mothers who are the same race.

It was not possible to distinguish Eskimo and Aleut births from other Indian births. Eskimos, Aleuts, and other Indians residing in Alaska are referred to as "Alaska Natives"; those residing in other States are referred to as "American Indians." The composite group of American Indians and Alaska Natives is referred to as "Indian." According to the 1980 Census of Population, two-thirds of the Alaska Natives are Eskimos and Aleuts and one-third are other Indians.<sup>1</sup>

In this report, a distinction is made between American Indians and Alaska Natives because there are differences between these two groups with respect to their demographic profiles, health care, and birth outcomes. Comparisons are also drawn between Indians living in reservation and nonreservation areas.

### Geographic distribution of Indian births

In 1984, more than half (55 percent) of the American Indian mothers were residents of the West, 22 percent were residents of the South, 19 percent were Midwest residents, and only 4 percent were Northeast residents (table 2). Slightly more than half of all American Indian mothers were residents of four States: Arizona and California, 15 percent each; Oklahoma, 13 percent; and New Mexico, 9 percent. Minnesota, Montana, North Carolina, South Dakota, and Washington each accounted for 4 to 5 percent of American Indian births. Births to Alaska Natives represented 6 percent of all Indian births.

### Age of mother and live-birth order

The age distribution of American Indian mothers in 1984 was fairly similar to that of Alaska Native mothers (table 3). There were minor differences in the proportion of mothers under 20 years of age (20 percent of American Indian mothers compared with 18 percent of Alaska Native mothers) and in the proportion of mothers aged 30 years and older (18 percent of American Indians compared with 20 percent of Alaska Natives). There are far more substantial differences between the age distributions of Indian and white mothers. One in five Indian mothers was under 20 years of age compared with only 1 in 10 white mothers (figure 1); 25 percent of white mothers were 30 years of age or older compared with 18 percent of Indian mothers. The age distribution of Indian mothers was more similar to that of black mothers; 24 percent of black mothers were under 20 years old and 17 percent of black mothers were 30 years of age or older.

One of the reasons for the higher proportion of young Indian than white mothers is that the Indian female population is younger than the white female population; in 1980, the median age of Indian females was 23.4 years compared with 32.5 years for white females.<sup>2</sup>

A comparison of American Indian, Alaska Native, white, and black fertility can be made by examining the distributions of births by live-birth order. As shown in table 4, these distributions are quite similar for American Indians and Alaska Natives—about one-third of the births are first births and 18–21 percent, fourth or higher order births. This is an indication that the fertility of American Indians and Alaska Natives is quite similar.

There are proportionately more white and black first births than Indian first births and relatively fewer white and black

fourth and higher order births. It appears then that Indian women currently have substantially higher fertility than either white or black women. This is further substantiated by a comparison of 1980 fertility rates from vital statistics data and the number of children ever born to Indian, white, and black women as reported in the 1980 Census of Population.<sup>3</sup> In 1980, the fertility rate (births per 1,000 women aged 15–44 years) was 103.6 for Indians compared with 64.7 for white women and 88.1 for black women. The average number of children ever born per 1,000 Indian women aged 15–44 years was 1,687; for white women, it was 1,246 and for black women, 1,576.

### Educational attainment

American Indian mothers are more likely than Alaska Native mothers to have less than 12 years of schooling; 39 percent of American Indian mothers compared with 31 percent of Alaska Native mothers who gave birth in 1984 had not completed high school (table 5 and figure 2). However, the same proportion of mothers of both Indian groups (20 percent) had completed 13 or more years of schooling.

The educational attainment of Indian mothers as a group was far less than that of white mothers and slightly less than that of black mothers. More than twice the proportion of Indian than white mothers (38 percent compared with 18 percent) had

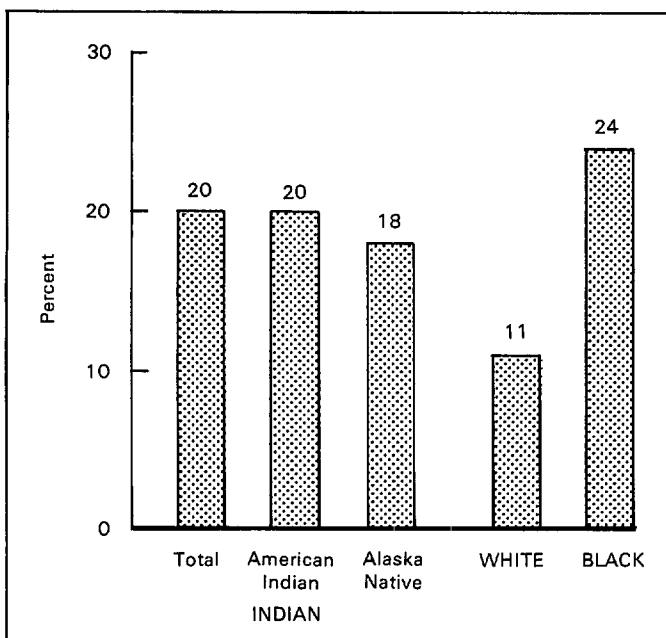


Figure 1. Percent of Indian, white, and black births to mothers under 20 years of age: United States, 1984

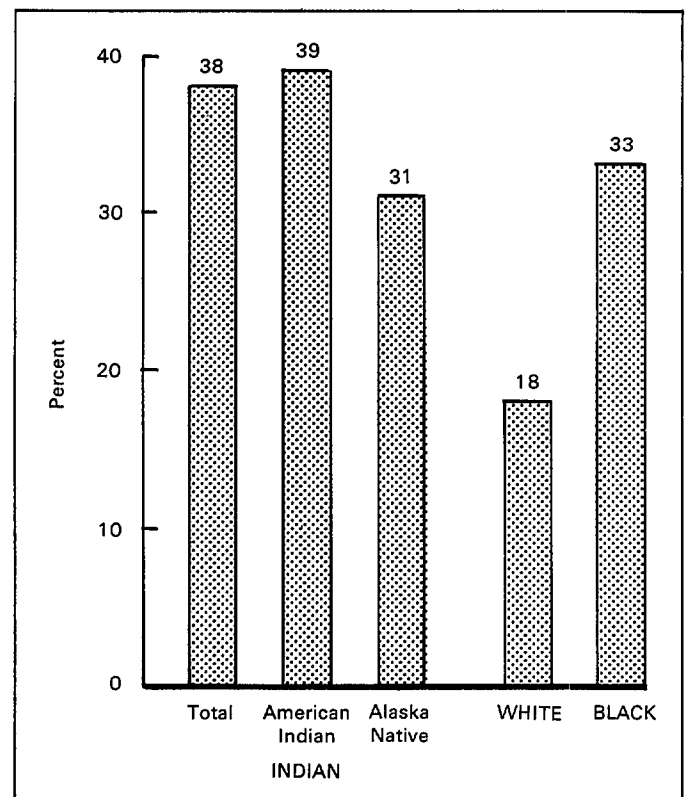


Figure 2. Percent of Indian, white, and black mothers with less than 12 years of school: 47 reporting States and the District of Columbia, 1984

less than 12 years of schooling. The proportion of Indian mothers with less than 12 years of schooling was also higher than that of black mothers (33 percent). While 39 percent of white mothers and 24 percent of black mothers had completed 13 or more years of schooling, only 20 percent of Indian mothers had this level of educational attainment.

These differences in educational attainment cannot be wholly explained by the younger age of Indian mothers. If racial comparisons are limited to women aged 20 years and older, it is still evident that the educational attainment of Indian mothers is less than that of white or black mothers. For women aged 20 years and older, 31 percent of Indian mothers, but 13 percent of white mothers and 23 percent of black mothers, had less than a high school education; 24 percent of Indian mothers, compared with 43 percent of white mothers and 31 percent of black mothers, had completed at least 13 years of schooling (table not shown).

It is important to note that the birth certificates for California, Texas, and Washington did not include educational attainment. In 1984 19 percent of Indian mothers resided in these three States.

### Births to unmarried women

Out-of-wedlock childbearing occurs with about the same frequency among American Indian as among Alaska Native mothers—397 per 1,000 American Indian births and 405 per 1,000 Alaska Native births were to unmarried women. The overall out-of-wedlock ratio for Indian births (398 births to unmarried mothers per 1,000 total births) was intermediate between the white ratio (134) and the black ratio (592) (table 6).

Out-of-wedlock childbearing is more common among young mothers and, as noted earlier, Indian mothers tend to be younger than white mothers. However, this does not explain the racial differential. For mothers in all age groups the Indian out-of-wedlock ratio is higher than the white ratio and lower than the black ratio. If each racial group had the same age distribution as that of all races combined, there would be only a small change in the comparative level of out-of-wedlock childbearing between Indian and white mothers and no change between Indian and black mothers. Before adjustment for age differences, the Indian out-of-wedlock ratio of 398 was 3 times as high as the white ratio of 134; after adjustment, the Indian ratio was 2.5 times as high. Because both Indian and black mothers are younger than mothers of all races combined, adjustment for age differences lowered both the Indian and the black ratios, and the black ratio remained 1.5 times as high as the Indian ratio.

### Sex ratio and multiple-birth ratio

The sex ratio at birth (males per 1,000 females) varies widely among racial groups. A large difference is evident between the ratios for Alaska Native births (1,058) and American Indian births (1,011). The overall Indian ratio of 1,014 is

distinctly lower than either the white ratio of 1,054 or the black ratio of 1,031. This probably reflects a difference in the level of fetal mortality because the sex ratio for fetal deaths is higher than that of live births.<sup>4</sup>

The multiple-birth ratio (live births in multiple deliveries per 1,000 total live births) was higher for Alaska Native births (24.9) than for American Indian births (17.6) (table 6). The overall Indian ratio (18.1), mainly reflecting American Indian births, was lower than that for either white (19.8) or black births (24.2). The multiple-birth ratio is lower for Indian than for black mothers for all ages over 14 years, but there is a less consistent pattern when the comparison is between Indian and white mothers. For mothers under 15 years, 25–29 years, and 40 years and over, the white ratio is lower than the Indian ratio. Because there is a positive association between the multiple-birth ratio and mother's age (the older the mother is, up to ages 35–39 years, the more likely she is to have a multiple birth),<sup>5</sup> ratios for each racial group were adjusted to reflect the age distribution of all races combined. As can be seen in table 6, this adjustment had the effect of making the overall Indian ratio more comparable to the white ratio but had little effect on the Indian-black differential.

### Place of delivery and attendant at birth

In 1984, only 1 percent of all births in the United States occurred outside of hospitals. The proportion of American Indian births occurring outside of hospitals was also 1 percent, but for Alaska Native births, it was 2.6 percent (table 7). Many Alaska Native mothers live in remote isolated areas,<sup>6</sup> and the lack of passable roads may hinder ready access to hospital facilities.

When the delivery is in a hospital, Indian mothers are far more likely to be attended by a midwife than either white or black mothers: 7 percent of American Indian mothers and 8 percent of Alaska native mothers compared with 2 percent of white and 3 percent of black mothers who gave birth in a hospital were attended by midwives. Although it was not possible to differentiate between lay midwives and nurse-midwives for this report, it is reasonable to assume that all midwife deliveries in hospitals are by nurse-midwives.

Only 10 percent of Alaska Native mothers delivering in a nonhospital setting were attended by physicians, a far lower proportion than for American Indian mothers (29 percent), white mothers (25 percent), or black mothers (45 percent). About one in four Indian out-of-hospital births (26 percent) was attended by a midwife, intermediary between the comparable proportions for white (47 percent) and black births (17 percent). As for in-hospital births, it was not possible to separately identify lay-midwife and nurse-midwife attendants for out-of-hospital deliveries.

A very high proportion of Indian mothers giving birth outside of a hospital were attended by persons other than physicians or midwives. This is especially evident for Alaska Native mothers, 72 percent of whom were attended by "other"

persons, compared with 43 percent of American Indian mothers, 28 percent of white mothers, and 38 percent of black mothers. Although it is not possible to further identify "other" persons, it is probable they are friends and relatives of the mother.

### Prenatal care

Delaying the start of prenatal care or receiving no prenatal care is a more common occurrence among American Indian mothers than among Alaska Native mothers; 13 percent of American Indian mothers compared with 9 percent of Alaska Native mothers started care as late as the seventh month of pregnancy or obtained no prenatal care during pregnancy (table 8). A lower proportion of American Indian than Alaska Native mothers started care in the first 3 months of pregnancy (60 percent compared with 66 percent).

Indian mothers as a group are far more likely to start care late in pregnancy or to have no care than are white mothers. Their pattern of care is more similar to that of black mothers. Overall, 12 percent of Indian mothers compared with 5 percent of white mothers and 10 percent of black mothers had late care (care starting in the third trimester of pregnancy) or no care.

Mothers who start care late are likely to make fewer prenatal visits. The higher level of delayed care among Indian mothers than among other groups is reflected in a lower median number of prenatal visits: Indian mothers averaged 10.0 visits compared with 12.0 visits for white mothers and 10.3 visits for black mothers (table 8).

### Birth weight and period of gestation

An infant's birth weight is highly associated with its potential for survival and the risk of morbidity. The percent of Indian infants that are of low birth weight (less than 2,500 grams or 5½ pounds) compares favorably with that for white infants and is only half that observed for black infants. In 1984, 6.2 percent of Indian infants weighed less than 5½ pounds, compared with 5.6 percent of white infants and 12.4 percent of black infants. American Indian infants were slightly more likely than Alaska Native infants to be of low birth weight (6.2 percent compared with 5.9 percent) (table 9 and figure 3).

The percent of white and Indian infants weighing 4,000 grams or more (8 pounds 14 ounces or more) was nearly identical (12.4 percent compared with 12.1 percent), but Indian infants were more than twice as likely as black infants to weigh this much (5.3 percent).

Period of gestation is highly correlated with birth weight, and preterm infants (less than 37 weeks' gestation) have a high probability of a low-birth-weight outcome. Although Indian infants were only 11 percent more likely than white infants to be of low birth weight, they were nearly 40 percent more likely to be born preterm (11 percent of Indian infants compared with 8 percent of white infants) (table 10). However, the same pro-

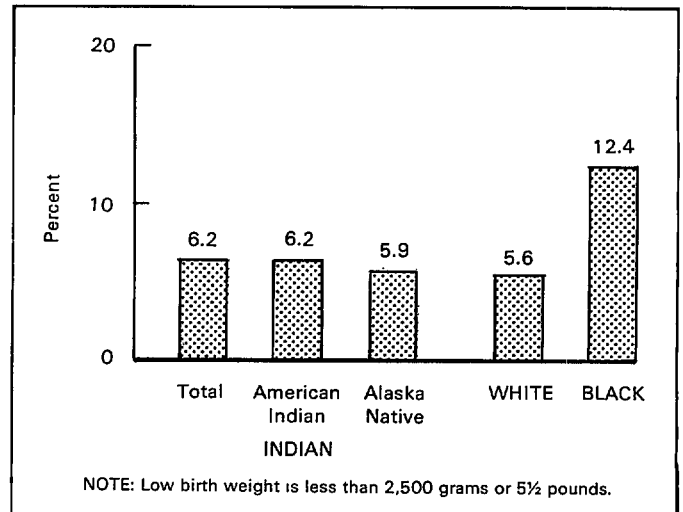


Figure 3. Percent of Indian, white, and black births of low birth weight: United States, 1984

portion of white and Indian infants had gestations of 41 weeks or longer (32 percent). Indian infants were one-third less likely to be preterm than were black infants (11 percent compared with 17 percent) but, as noted earlier, Indian infants were one-half as likely to be of low birth weight. Indian births were also more likely than black births to have gestational periods of 41 weeks or longer (32 percent compared with 24 percent).

Although American Indian infants and Alaska Native infants had about the same risk of preterm delivery (11 percent compared with 12 percent), American Indian infants were more likely to have gestations extending to 41 weeks or longer (32 percent compared with 25 percent).

The favorable birth-weight distribution for Indian births compared with white births is unexpected in light of Indian mothers' lower educational attainment and younger ages, relatively high proportion who are unmarried and who start prenatal care late or who have no prenatal care, and the much higher proportion of preterm births. Therefore, the incidence of low birth weight for Indian infants was further examined according to these characteristics. It is evident from the data presented in table 11 that the proportion of low-birth-weight Indian infants is about equal to or lower than that of white infants for many of these variables. Especially striking is the markedly lower incidence of low birth weight for Indian mothers who are teenagers, who are unmarried, who start care late in pregnancy or have no care, who have less than 12 years of schooling, and who have premature births (less than 37 weeks' gestation).

Thus the relatively unfavorable demographic profile of Indian mothers, lack of prenatal care, and high incidence of prematurity are offset by the very favorable birth weight for these groups compared with their white counterparts. Apparently other factors that cannot be identified from birth certificate data play an important role in the birth weight for Indian mothers in high-risk categories.



## Apgar score

Another predictor of an infant's chances for survival is the Apgar score. This is a summary measure of five conditions observable at birth: Heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each of these factors is assigned a value of 0, 1, or 2, with an overall score of 10 being optimum. A score of less than 7 indicates that the infant is moderately to severely depressed and in need of immediate medical attention.

The 1-minute Apgar score is used to evaluate the infant's condition immediately after birth. As shown in table 12, 11.0 percent of Indian infants had 1-minute Apgar scores of less than 7, compared with 9.3 percent of white infants and 12.4 percent of black infants. Alaska Native infants were more likely than American Indian infants to have a score of less than 7 (13.6 percent compared with 10.8 percent).

The 5-minute Apgar score is a better predictor than the 1-minute score of long-term health problems and chances of survival. Again, the proportion of Indian infants with a score of less than 7 (2.0 percent) was intermediary between those for white (1.7 percent) and black infants (3.3 percent).

Apgar scores are highly associated with birth weight. Because the birth weight of Indian infants compares favorably with that of white infants the less favorable Apgar scores of Indian infants are unexpected. Factors that cannot be identified from information on birth certificates may explain this anomaly.

## Residence on reservations

The 1980 census showed that one-fourth of all Indians lived on reservations.<sup>1</sup> Although information abstracted from birth certificates does not indicate whether a mother's residence is on a reservation, the mother's county of residence can be used as an approximation. In this report, if at least half of the Indian population of a county lived on a reservation, as tabulated in the 1980 census, the county was considered a "reservation" county; all other counties were classified as "nonreservation." By grouping counties by reservation status, it became possible to do a comparison of the health and demographic

characteristics of Indian mothers residing in reservation and nonreservation areas.

As shown in table 13, there were only minimal differences in the age of Indian mothers according to reservation status, but mothers living in reservation areas were far more likely to be having a fourth or higher order birth and less likely to be having a first child. This indicates that the fertility of mothers living in reservation areas is far greater than that of other Indian mothers.

The proportion of mothers living in reservation areas who had completed less than 12 years of schooling was 14 percent higher than that of mothers living in nonreservation areas (41 percent compared with 36 percent), and 13 percent fewer mothers living in reservation areas had completed at least 13 years of schooling (18 percent compared with 21 percent). In addition, out-of-wedlock childbearing is more frequent for mothers living in reservation areas (52 percent of mothers in reservation areas compared with 35 percent of mothers in nonreservation areas were unmarried). Prenatal care was less adequate in terms of timing for Indian mothers living in reservation areas—56 percent started care in the first trimester of pregnancy compared with 62 percent of nonreservation mothers, and 15 percent had late or no care compared with 11 percent of nonreservation mothers.

Although 99 percent of both reservation and nonreservation mothers delivered their infants in a hospital, 15 percent of reservation mothers had a midwife attendant in the hospital compared with 4 percent of nonreservation mothers.

As indicated earlier, the incidence of low birth weight for Indian infants is only 11 percent higher than that for white infants (6.2 percent compared with 5.6 percent). The percent low birth weight for infants born to reservation mothers was identical to that of white infants, 5.6 percent, but for infants of nonreservation mothers it was somewhat higher, 6.4 percent. A reduced risk of low birth weight of about one-half of a percentage point for reservation mothers was also found for 1982 and 1983 births. The lower incidence of low birth weight for mothers living in reservation areas compared with that of mothers living in nonreservation areas is especially puzzling in light of the latter's lower incidence of out-of-wedlock childbearing, higher level of educational attainment, and earlier prenatal care.

## References

<sup>1</sup>U.S. Bureau of the Census: *1980 Census of Population*, Supplementary Report, American Indian Areas and Alaska Native Villages, 1980. PC80-S1-13. Washington. U.S. Government Printing Office, Aug. 1984.

<sup>2</sup>U.S. Bureau of the Census: *1980 Census of Population*, Vol. 1, Characteristics of the Population, Chapter B, General Population Characteristics, Part 1, United States Summary. PC80-1-B1. Washington. U.S. Government Printing Office, May 1983.

<sup>3</sup>U.S. Bureau of the Census: *1980 Census of Population*, Vol. 1, Characteristics of the Population, Chapter C, General Social and Economic Characteristics, Part 1, United States Summary. PC80-1-C1. Washington. U.S. Government Printing Office, Dec. 1983.

<sup>4</sup>G. E. Markle: Sex ratio at birth: Values, variance, and some determinants. *Demography* 11(1):131-142, Feb. 1974.

<sup>5</sup>National Center for Health Statistics, R. L. Heuser: Multiple births, 1964. *Vital and Health Statistics*. Series 21, No. 14. DHEW Pub. No. (HRA) 76-1298. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1967.

<sup>6</sup>Indian Health Service: A comprehensive health care program for American Indians and Alaska natives. Public Health Service. U.S. Department of Health and Human Services.

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### Symbols

- - - Data not available
  - . . . Category not applicable
  - Quantity zero
  - 0.0 Quantity more than zero but less than 0.05
  - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
  - \* Figure does not meet standards of reliability or precision (when the base of the measure includes fewer than 20 events)
-

**Table 1. Number of American Indian, Alaska Native, white, and black births and percent change: United States, selected years, 1970-84**

Year	All races <sup>1</sup>	Indian			White	Black
		Total	American Indian	Alaska Native		
Number						
1984 .....	3,669,141	41,451	38,844	2,607	2,923,502	592,745
1980 .....	3,612,258	36,797	34,629	2,168	2,898,732	589,616
1975 .....	3,144,198	27,546	25,806	1,740	2,551,996	511,581
1970 .....	3,731,386	25,864	24,218	1,646	3,091,264	572,362
Percent change						
1980-84 .....	1.6	12.6	12.2	20.2	0.9	0.5
1975-80 .....	14.9	33.6	34.2	24.6	13.6	15.3
1970-75 .....	-15.7	6.5	6.6	5.7	-17.4	-10.6

<sup>1</sup>Includes races not shown separately.

**Table 2. Percent distribution of American Indian, Alaska Native, white, and black births by mother's region of residence: United States, 1984**

Region of residence	All races <sup>1</sup>	Indian			White	Black
		Total	American Indian	Alaska Native		
Percent distribution						
United States .....	100.0	100.0	100.0	100.0	100.0	100.0
Northeast .....	18.6	3.5	3.7	...	19.1	18.0
Midwest .....	24.6	17.7	18.9	...	26.2	19.7
South .....	34.5	20.7	22.1	...	31.9	52.1
West .....	22.3	58.1	55.3	100.0	22.8	10.2

<sup>1</sup>Includes races not shown separately.

Table 3. Percent distribution of American Indian, Alaska Native, white, and black births by age of mother: United States, 1984

Age of mother	All races <sup>1</sup>	Indian		White	Black
		Total	American Indian		
Percent distribution					
All ages.....	100.0	100.0	100.0	100.0	100.0
Under 15 years.....	0.3	0.4	0.4	0.2	1.0
15-19 years.....	12.8	19.7	19.8	17.5	22.7
15 years.....	0.7	0.9	0.9	0.6	1.8
16 years.....	1.4	2.3	2.3	1.6	3.2
17 years.....	2.4	3.9	3.9	3.3	4.6
18 years.....	3.5	5.5	5.5	5.2	6.0
19 years.....	4.7	7.2	7.2	6.7	7.1
20-24 years.....	31.1	36.9	37.0	35.4	34.3
25-29 years.....	31.8	25.1	25.0	26.9	24.8
30-34 years.....	17.9	12.6	12.5	14.4	12.5
35-39 years.....	5.3	4.5	4.5	4.8	4.1
40-49 years.....	0.8	0.8	0.8	1.0	0.7

<sup>1</sup>Includes races not shown separately.

Table 4. Percent distribution of American Indian, Alaska Native, white, and black births by live birth order: United States, 1984

Live-birth order	All races <sup>1</sup>	Indian		White	Black
		Total	American Indian		
Percent distribution					
All birth orders.....	100.0	100.0	100.0	100.0	100.0
1st birth.....	41.9	35.6	35.7	33.5	39.6
2d birth.....	33.1	28.6	28.6	28.1	29.6
3d birth.....	15.4	17.7	17.7	17.5	16.9
4th and higher order births.....	9.6	18.1	17.9	20.9	13.9

<sup>1</sup>Includes races not shown separately.

**Table 5. Number and percent distribution of American Indian, Alaska Native, white, and black births by educational attainment of mother: 47 States and the District of Columbia, 1984**

Years of school completed	All races <sup>1</sup>	Indian			White	Black
		Total	American Indian	Alaska Native		
Number						
All years of school <sup>2</sup> . . . . .	2,853,459	33,478	30,871	2,607	2,260,113	502,216
Percent distribution						
All years of school . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years . . . . .	3.6	5.8	5.9	5.2	3.3	4.4
9-11 years . . . . .	17.3	32.2	32.8	25.5	14.7	28.7
12 years or more . . . . .	79.1	62.0	61.3	69.4	82.0	66.9
12 years . . . . .	42.8	41.9	41.4	49.0	43.1	42.8
13-15 years . . . . .	19.8	15.5	15.4	16.5	20.5	17.0
16 years or more . . . . .	16.4	4.5	4.6	3.9	18.4	7.0

<sup>1</sup>Includes races not shown separately.

<sup>2</sup>Includes births with educational attainment of mother not stated; these births are excluded from the computation of the percent distributions.

NOTE: Excludes data for California, Texas, and Washington, which did not require the reporting of educational attainment.

**Table 6. Ratio of births to unmarried women and multiple-birth ratio of American Indian, Alaska Native, white, and black births: United States, 1984**

Ratio	All races <sup>1</sup>	Indian			White	Black
		Total	American Indian	Alaska Native		
Ratio of births to unmarried women <sup>2</sup>						
Observed . . . . .	210.0	397.7	397.2	405.4	134.1	592.0
Age adjusted <sup>3</sup> . . . . .	...	363.9	363.2	374.9	141.7	530.2
Multiple-birth ratio <sup>4</sup>						
Observed . . . . .	20.3	18.1	17.6	24.9	19.8	24.2
Age adjusted <sup>3</sup> . . . . .	...	19.2	18.8	24.9	19.6	25.8

<sup>1</sup>Includes races not shown separately.

<sup>2</sup>Births to unmarried women per 1,000 total live births.

<sup>3</sup>Adjusted by the direct method of standardization using the distribution of all races by age of mother as the standard.

<sup>4</sup>Births in multiple deliveries per 1,000 total live births.

**Table 7. Number and percent distribution of American Indian, Alaska Native, white, and black births by place of delivery and attendant at birth: United States, 1984**

Place of delivery and attendant at birth	All races <sup>1</sup>	Indian			White	Black
		Total	American Indian	Alaska Native		
Number						
All births	3,669,141	41,451	38,844	2,607	2,923,502	592,745
Percent distribution						
All places of delivery	100.0	100.0	100.0	100.0	100.0	100.0
In hospital <sup>2</sup>	99.0	99.0	99.1	97.4	98.9	99.3
Not in hospital <sup>3</sup>	1.0	1.0	0.9	2.6	1.1	0.7
Number						
Births in hospital <sup>2,4</sup>	3,630,903	41,018	38,479	2,539	2,890,477	588,870
Percent distribution						
All attendants	100.0	100.0	100.0	100.0	100.0	100.0
Physician	97.5	91.1	92.2	74.4	97.8	96.6
Midwife	2.2	6.9	6.9	8.0	1.9	2.9
Other	0.4	2.0	1.0	17.6	0.3	0.4
Number						
Births not in hospital <sup>3,4</sup>	38,238	433	365	68	33,025	3,875
Percent distribution						
All attendants	100.0	100.0	100.0	100.0	100.0	100.0
Physician	26.8	26.1	29.4	10.3	24.6	44.9
Midwife	43.5	26.1	27.9	17.6	47.2	16.9
Other	29.7	47.8	42.7	72.1	28.2	38.2

<sup>1</sup>Includes races not shown separately.

<sup>2</sup>Includes births delivered en route to or on arrival at the hospital.

<sup>3</sup>Includes births with place of delivery not stated.

<sup>4</sup>Includes births with attendant not stated; these births are excluded from the computation of the percent distributions.

**Table 8. Percent distribution of American Indian, Alaska Native, white, and black births by month of pregnancy prenatal care began and median number of prenatal visits: United States, 1984**

Month of pregnancy prenatal care began and median number of visits	All races <sup>1</sup>	Indian			White	Black
		Total	American Indian	Alaska Native		
Percent distribution						
All births <sup>2</sup>	100.0	100.0	100.0	100.0	100.0	100.0
1st and 2d months	53.5	36.7	36.4	42.0	56.7	38.9
3d month	23.0	23.2	23.2	23.5	22.9	23.3
4th-6th months	17.9	27.7	27.8	25.5	15.7	28.2
7th-9th months	3.9	9.2	9.3	7.1	3.3	6.4
No prenatal care	1.7	3.2	3.3	1.9	1.3	3.3
Median						
Number of prenatal visits <sup>3</sup>	11.7	10.0	10.0	9.8	12.0	10.3

<sup>1</sup>Includes races not shown separately.

<sup>2</sup>Births with prenatal care not stated are excluded from the computation of the percent distributions.

<sup>3</sup>Based on information from 49 reporting States and the District of Columbia. California did not require reporting of number of prenatal visits. Excludes births to mothers with no prenatal care.

Table 9. Percent distribution of American Indian, Alaska Native, white, and black births by birth weight: United States, 1984

Birth weight	All races <sup>1</sup>	Indian				
		Total	American Indian	Alaska Native	White	Black
		Percent distribution				
All births <sup>2</sup> . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Less than 1,000 grams . . . . .	0.6	0.4	0.4	0.5	0.4	1.3
1,000–1,499 grams . . . . .	0.6	0.6	0.6	0.5	0.5	1.2
1,500–1,999 grams . . . . .	1.3	1.2	1.2	1.4	1.1	2.4
2,000–2,499 grams . . . . .	4.2	3.9	3.9	3.5	3.6	7.4
2,500–2,999 grams . . . . .	15.9	15.1	15.3	12.1	14.2	23.7
3,000–3,499 grams . . . . .	36.7	36.3	36.6	32.3	36.2	38.4
3,500–3,999 grams . . . . .	29.6	30.3	30.0	35.5	31.7	20.2
4,000–4,999 grams . . . . .	9.1	9.7	9.5	11.9	10.2	4.4
4,500–4,999 grams . . . . .	1.7	2.1	2.1	2.0	1.9	0.7
5,000 grams or more . . . . .	0.2	0.3	0.3	0.3	0.3	0.1
Less than 2,500 grams . . . . .	6.7	6.2	6.2	5.9	5.6	12.4
4,000 grams or more . . . . .	11.1	12.1	11.9	14.3	12.4	5.3

<sup>1</sup>Includes races not shown separately.

<sup>2</sup>Births with birth weight not stated are excluded from the computation of the percent distributions.

Table 10. Percent distribution of American Indian, Alaska Native, white, and black births by period of gestation: 49 reporting States and the District of Columbia, 1984

Period of gestation	All races <sup>1</sup>	Indian				
		Total	American Indian	Alaska Native	White	Black
		Number				
All births . . . . .	3,641,786	37,799	35,192	2,607	2,900,760	592,100
		Percent distribution				
All births . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Less than 28 weeks . . . . .	0.7	0.8	0.8	0.7	0.5	1.8
28–31 weeks . . . . .	1.1	1.3	1.3	1.4	0.8	2.4
32–35 weeks . . . . .	4.5	5.5	5.5	6.2	3.7	8.1
36 weeks . . . . .	3.1	3.4	3.3	4.1	2.8	4.6
37–39 weeks . . . . .	37.6	36.3	36.0	40.6	36.7	40.7
40 weeks . . . . .	22.4	20.9	20.9	21.9	23.2	18.3
41 weeks . . . . .	15.6	14.5	14.8	10.8	16.5	11.3
42 weeks or more . . . . .	15.1	17.2	17.4	14.5	15.7	13.0
Less than 37 weeks . . . . .	9.4	11.0	10.9	12.3	7.9	16.8

<sup>1</sup>Includes races not shown separately.

NOTE: Excludes data for New Mexico, which did not require reporting of date of last normal menstrual period.

Table 11. Percent low birth weight of American Indian, Alaska Native, white, and black births by selected characteristics: United States, 1984

Characteristic	All races <sup>1</sup>	Indian				White	Black
		Total	American Indian	Alaska Native			
Age of mother							
Under 20 years . . . . .	9.4	6.4	6.5	5.9	7.7	13.6	
30 years and over . . . . .	6.2	6.7	6.6	7.9	5.3	12.0	
Marital status							
Unmarried . . . . .	11.0	6.9	6.9	6.8	8.6	14.0	
Married . . . . .	5.6	5.7	5.7	5.3	5.1	10.0	
Educational attainment of mother <sup>2</sup>							
Less than 12 years of school . . . . .	10.0	6.8	6.9	6.4	8.4	14.5	
13 years of school or more . . . . .	5.1	4.7	4.7	5.1	4.4	10.0	
Period of gestation <sup>3</sup>							
Less than 37 weeks . . . . .	40.3	31.9	32.1	29.0	39.6	42.6	
37-39 weeks . . . . .	4.8	4.2	4.3	3.0	4.1	7.8	
40 weeks or more . . . . .	1.8	2.7	2.7	2.8	1.5	4.0	
Start of prenatal care							
1st trimester . . . . .	6.0	5.6	5.7	4.4	5.1	11.5	
3d trimester or no care . . . . .	10.8	7.9	7.7	11.6	8.8	16.3	

<sup>1</sup>Includes races not shown separately.

<sup>2</sup>Excludes data for California, Texas, and Washington, which did not require the reporting of educational attainment.

<sup>3</sup>Excludes data for New Mexico, which did not require reporting of date of last normal menstrual period.

NOTE: Low birth weight is defined as less than 2,500 grams (5 pounds 8 ounces).



Table 12. Number and percent distribution of American Indian, Alaska Native, white, and black births by 1- and 5-minute Apgar scores: 46 reporting States and the District of Columbia, 1984

Apgar score	All races <sup>1</sup>	Indian				White	Black
		Total	American Indian	Alaska Native			
Number							
All births <sup>2</sup> .....	2,858,643	30,056	27,449	2,607	2,270,413	497,876	
Percent distribution							
1-minute score							
All scores.....	100.0	100.0	100.0	100.0	100.0	100.0	
0-3 .....	2.4	2.7	2.7	3.4	2.1	4.0	
4-6 .....	7.4	8.3	8.2	10.2	7.2	8.5	
7-8 .....	47.9	54.4	54.3	55.6	48.7	43.8	
9-10 .....	42.2	34.5	34.9	30.9	42.0	43.8	
Less than 7 .....	9.9	11.0	10.8	13.6	9.3	12.4	
5-minute score							
All scores.....	100.0	100.0	100.0	100.0	100.0	100.0	
0-3 .....	0.6	0.6	0.6	0.6	0.5	1.2	
4-6 .....	1.3	1.4	1.4	1.4	1.2	2.1	
7-8 .....	10.7	12.0	11.8	15.0	10.5	11.7	
9-10 .....	87.4	86.0	86.3	83.0	87.9	85.0	
Less than 7 .....	2.0	2.0	2.0	2.1	1.7	3.3	

<sup>1</sup>Includes races not shown separately.

<sup>2</sup>Includes births with Apgar score not stated; these births are excluded from the computation of the percent distributions.

NOTE: Excludes data for California, Delaware, Oklahoma, and Texas, which did not require the reporting of Apgar score.

Table 13. Number and percent of Indian mothers residing in reservation areas by selected characteristics: United States, 1984

Characteristic	Mother's area of residence		
	Total	Reservation	Nonreservation
All births.....	41,451	12,385	29,066
		Number	
		Percent	
Age			
Under 20 years.....	20.0	20.8	19.7
30 years and over.....	17.9	19.3	17.3
Live-birth order			
1st births.....	35.6	31.6	37.3
4th and higher order births.....	18.1	24.5	15.4
Educational attainment <sup>1</sup>			
Less than 12 years of school.....	38.0	41.4	36.2
13 years of school or more.....	20.0	18.2	21.0
Marital status			
Unmarried.....	39.8	51.6	34.7
Start of prenatal care			
1st trimester.....	60.0	56.2	61.5
3rd trimester or no care.....	12.4	15.1	11.2
Attendant and place of delivery			
Physician in hospital.....	90.2	82.5	93.5
Midwife in hospital.....	6.9	14.7	3.5
Birth weight of infant			
Less than 2,500 grams.....	6.2	5.6	6.4
4,000 grams or more.....	12.1	11.6	12.3

<sup>1</sup>Excludes births to mothers residing in California, Texas, and Washington, which did not require reporting of educational attainment of mother.

## Technical notes

### Source of data

Data shown in this report for 1984 are based on 100 percent of the birth certificates of 46 States that provided data through the Vital Statistics Cooperative Program. Data from the remaining areas (Arizona, California, Delaware, the District of Columbia, and Georgia) are based on a 50-percent sample of birth certificates filed in these areas.

### Racial classification

Racial designation shown in this report is that of the child. The child's race is determined from the race or national origin of the parents. When only one parent is white, the child is assigned the other parent's race or national origin. When neither parent is white, the child is assigned the father's race or national origin, with one exception; if the mother is Hawaiian or part-Hawaiian, the child is considered Hawaiian. If information on race is missing for one of the parents, the child is assigned the known race of the other parent. When the information is missing for both parents, the child is assigned the race of the child on the preceding record.

As used in this report the category "Alaska Native" includes births identified as Indian, Aleut, and Eskimo for mothers residing in Alaska. The category "American Indian" includes Indian, Aleut, and Eskimo births for mothers residing in all other States. The term "Indian" refers to the composite group of Alaska Native and American Indian births. This terminology is also used by the U.S. Bureau of the Census when describing the Indian population.

In 1984, 26 percent more births were designated as Indian than the number of mothers because of interracial parentage; this difference was 27 percent for American Indian births and 11 percent for Alaska Native births. Twenty-one percent of births identified as Indian had white mothers; about 15 percent of these white mothers were of Hispanic origin.

### Reservation status

Because the birth certificate does not indicate whether the mother's residence is on an Indian reservation, information from the 1980 Census of Population on the residence of the Indian population was used as a surrogate. If at least half of the Indian population of a county (borough or census area in Alaska) lived on a reservation, the county was designated as a "reservation" county. All other counties were considered "non-reservation" counties. Overall, 72 percent of the Indian population residing in "reservation" areas lived on reservations.

### Computation of percents, medians, and ratios

Percent distributions, medians, and ratios are computed using only events for which the characteristic is reported; the "Not stated" category is subtracted from the total before the computation of these measures. Median age of mother and median number of prenatal visits are computed from single-year and single-visit distributions. The median number of prenatal visits excludes births where the mother had no prenatal care.

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## Births of Hispanic Parentage, 1983 and 1984

by Stephanie J. Ventura, A.M., Division of Vital Statistics

### Introduction

Information on births of Hispanic parentage in 1983 and 1984 was available for 23 States and the District of Columbia; in 1984, 346,986 births to mothers of Hispanic origin were reported in those States. The areas that incorporated an item on the birth certificate requesting the Hispanic or ethnic origin of the mother and father were Arizona, Arkansas, California, Colorado, the District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Maine, Mississippi, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Tennessee, Texas, Utah, and Wyoming. More than 92 percent of the total U.S. Hispanic population resided in these States in 1984.<sup>1</sup> Consequently, the data in this report are considered to reflect nearly complete coverage of the Hispanic population in this country, even though the reporting area is restricted to 23 States and the District of Columbia.

Previous publications have reported on the demographic and health characteristics of Hispanic births occurring in 1978–82.<sup>2–6</sup> Additionally, birth and fertility rates by Hispanic origin for each State were computed for 1980, using population information available only from the decennial census.<sup>7</sup>

In this report, summary demographic data are shown for births of Hispanic parentage for 1983 and 1984 (tables 1–8). Data on educational attainment of mother, nativity of mother, prenatal care, low birth weight, preterm births, 1- and 5-minute Apgar scores, and attendant at birth and place of delivery are presented only for 1984 because the distributions of births for these characteristics are very similar for 1983 and 1984.

Since birth data by Hispanic origin first became available in 1978, the reporting of this information has improved substantially. In 1984, just 4.1 percent of all birth certificates in the reporting area lacked information on the mother's origin, compared with 7.0 percent in 1980 and 12.1 percent in 1978. Reporting of father's origin has also improved, but the informa-

tion for fathers is still much more likely to be omitted. In 1984, the father's origin was not reported for 14.5 percent of births in the reporting area, compared with 16.4 percent in 1980 and 20.2 percent in 1978. Because the completeness of reporting of the mother's origin far exceeds that of the father's (see tables 1–3), births are classified only by origin of the mother in tables 2 and 4–14 and in the text that follows.

### Geographic distribution

The Hispanic population in the United States and consequently births of Hispanic origin are highly concentrated geographically. Of the estimated 16,553,000 Hispanic persons in the United States in 1984, 14,393,000 or 87 percent lived in eight States (Arizona, California, Florida, Illinois, New Jersey, New Mexico, New York, and Texas). Furthermore, 94 percent of the Hispanic origin population in the reporting area (23 States and the District of Columbia) in 1984 resided in these eight States, identical to the proportion of Hispanic births occurring in these States. Each of the eight States reported at least 10,000 births to Hispanic mothers in 1984 (table 2).

### Race of child

The vast majority of births to Hispanic mothers are white. In 1984, 94.8 percent were white, 3.5 percent were black, and 1.8 percent were of other races (table 4). This distribution has been virtually unchanged since 1978. Substantial variations in the racial composition of births of various Hispanic groups are evident in table 4.

### Birth and fertility rates

The fertility of the Hispanic population as a whole continued to be substantially higher than that of the non-Hispanic popula-

tion in 1983 and 1984 (table 5). However, with few exceptions, both birth and fertility rates fell for all specific Hispanic groups from 1982 through 1984, continuing a decline begun in 1981.

The birth rate for the Hispanic population was 22.7 live births per 1,000 population in 1984 and 22.8 in 1983, compared with 23.9 in 1982. The rates for 1983 and 1984 were about 50 percent higher than those for the non-Hispanic population. Birth rates for the Mexican, Puerto Rican, and Cuban populations declined 7–11 percent from 1982 to 1984. However, the rate for "other Hispanic," which includes Central and South American and other and unknown Hispanic persons, increased 7 percent.

Trends in fertility rates for Hispanic women were similar to those for the birth rates. The fertility rate for all Hispanic women was 91.5 live births per 1,000 women aged 15–44 years, 42 percent above the rate for non-Hispanic women, 64.3. The rate for Hispanic women fell 5 percent between 1982 and 1984. The decline from 1982 to 1984 was greatest for Cuban women, for whom the rate fell 17 percent, from 54.0 in 1982 to 44.7 in 1984. The rate for Mexican women was 95.8 in 1984, 6 percent below the rate of 102.2 for 1982; the rate for Puerto Rican women dropped 3 percent, from 67.7 to 65.6; and the rate for other Hispanic women increased 1 percent, from 108.8 to 109.6.

The birth and fertility rates described here were computed for the total of 11 States for which the necessary population data by Hispanic origin were available from the U.S. Bureau of the Census. The 11 States were Arizona, California, Colorado, Florida, Illinois, Indiana, New Jersey, New Mexico, New York, Ohio, and Texas. The population data needed to compute these rates for the non-Hispanic population by race are not available. More than 97 percent of the 346,986 births to mothers of Hispanic origin in the 23 States and the District of Columbia in 1984 occurred to residents of these 11 States. Furthermore,

nearly 90 percent of the nationwide total of Hispanic women of childbearing age (15–44 years) resided in these 11 States.<sup>1</sup>

### Age of mother and live-birth order

Hispanic women, especially Mexican and Puerto Rican women, tend to begin childbearing at relatively young ages. Births to teenagers accounted for 18 percent of births to Mexican mothers and 21 percent of births to Puerto Rican mothers in 1984, compared with 12 percent of births to non-Hispanic mothers and only 8 percent of births to Cuban mothers (figure 1 and table 6).

Childbearing by Hispanic women also tends to continue to older ages, accounting for the relatively high frequency of large families among Mexican and Puerto Rican women. Thus, 21 percent of births to Mexican women and 19 percent of births to Puerto Rican women were to mothers aged 30 years and older. High proportions (26 percent) of births to Cuban women and to white non-Hispanic women were also to mothers aged 30 years and older; teenage childbearing among these women, however, is relatively uncommon. If it is assumed that this is the typical pattern of childbearing by Cuban and white non-Hispanic women, then this would account for the comparatively few fourth and higher order births (6–8 percent) reported for these women (table 7). Usually, higher proportions of births to women in their thirties are consistent with relatively more high order births, as was true for Mexican and Puerto Rican women (19 and 12 percent, respectively).

### Childbearing by unmarried women

In 1984, 98,273 Hispanic births were to unmarried mothers, accounting for 28 percent of all Hispanic births in the 23 States and the District of Columbia. Increases in nonmarital births

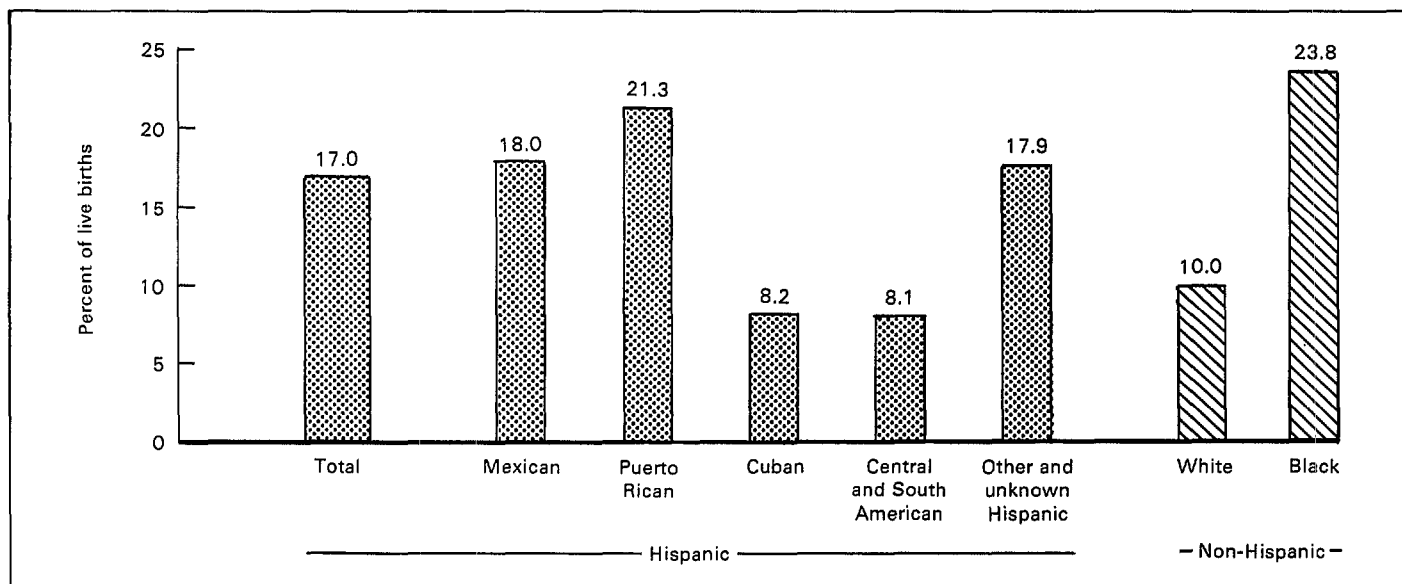


Figure 1. Percent of Hispanic and white and black non-Hispanic births to mothers under 20 years of age: Total of 23 reporting States and the District of Columbia, 1984

between 1982 and 1984 were observed for all Hispanic and non-Hispanic groups. Wide variations continue to be evident in the proportions of nonmarital births (table 8). In 1984, 51 percent of births to Puerto Rican women, 34 percent of births to Central and South American women, and 24 percent of births to Mexican women were nonmarital, compared with 16 percent of Cuban births, 11 percent of white non-Hispanic births, and 60 percent of black non-Hispanic births.

### Educational attainment of mother

Educational attainment of the mother was reported by 21 States and the District of Columbia in 1984. This information was not available for California and Texas. Hispanic origin women giving birth in 1984 were more likely to have completed high school than their counterparts in 1982, although wide disparities in educational attainment persist among the various Hispanic and non-Hispanic origin groups. Overall, 55 percent of all Hispanic origin mothers had completed at least 12 years of schooling in 1984 (table 9) compared with 52 percent in 1982. The 1984 proportions were 41 percent for Mexican mothers, 52 percent for Puerto Rican mothers, 78 percent for Cuban mothers, and 63–64 percent for Central and South Amer-

ican and other Hispanic mothers, compared with 84 percent of white non-Hispanic and 66 percent of black non-Hispanic mothers. In all origin groups except white non-Hispanic, mothers aged 25–34 years were most likely to have completed high school.

### Nativity of mother

Forty-seven percent of Hispanic mothers giving birth in 1984 had been born in the United States; 53 percent were natives of Puerto Rico or countries outside the United States (figure 2). There are wide variations among the various Hispanic origin groups in the proportions of U.S.- and foreign- or Puerto Rican-born mothers. In 1984, the proportions of Hispanic mothers who were born in the United States were 49 percent, Mexican; 48 percent, Puerto Rican; 10 percent, Cuban; 2 percent, Central and South American; and 78 percent, other and unknown Hispanic.

Hispanic mothers born in the United States are more likely to be teenagers and less likely to be aged 30 years and older than Hispanic mothers born outside the United States. The proportions of births to teenagers among Hispanic women born in the United States, ranging from 20 to 28 percent in 1984,

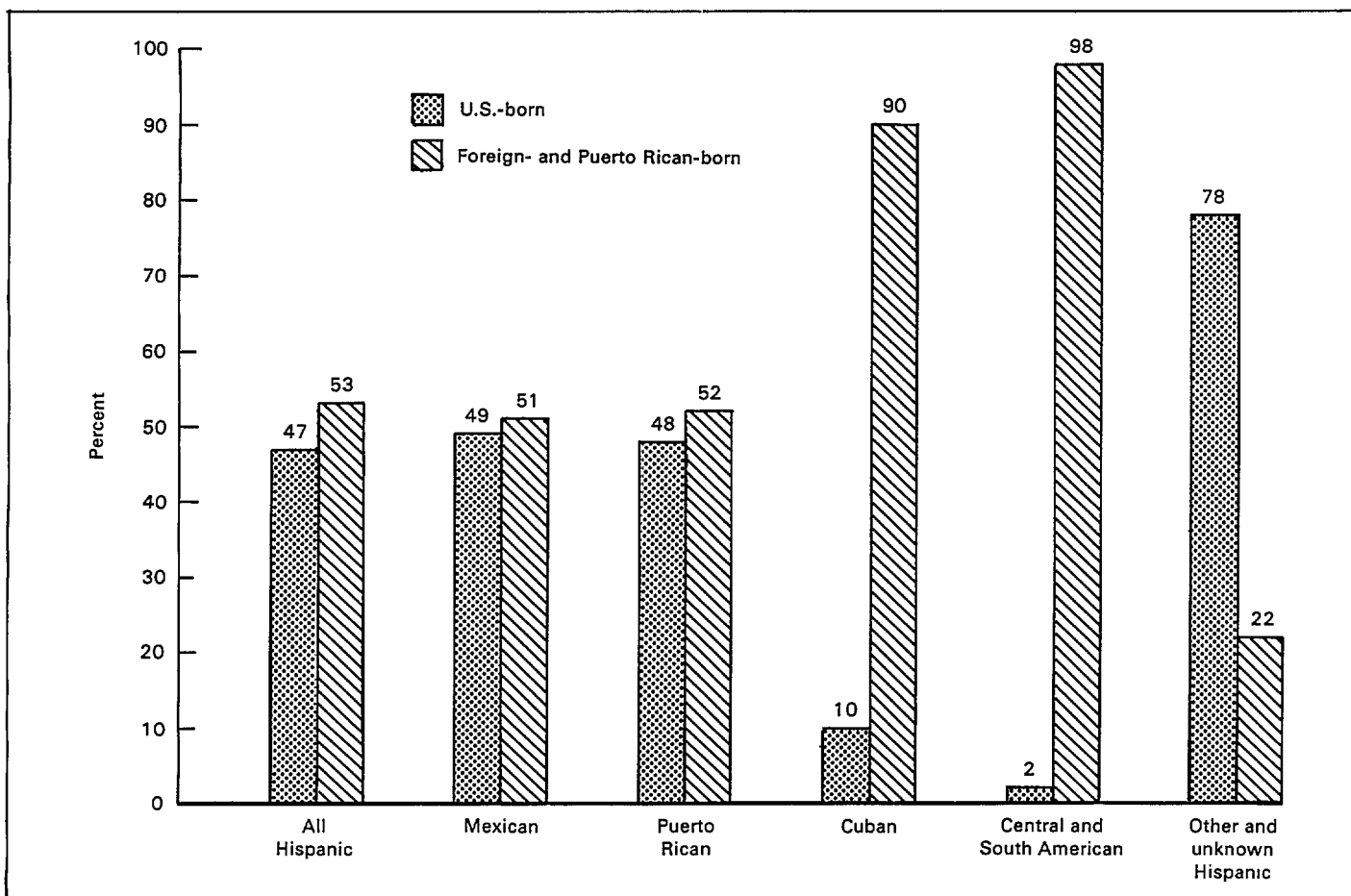


Figure 2. Percent of Hispanic mothers who are U.S.- or foreign- and Puerto Rican-born: Total of 23 reporting States and the District of Columbia, 1984

more nearly resembled those of black non-Hispanic women, while the proportions of teenage births to foreign- and Puerto Rican-born Hispanic mothers were comparable to those of white non-Hispanic mothers, ranging from 7 to 15 percent (table 10).

The differences in age-of-mother distributions between U.S.- and foreign- or Puerto Rican-born Hispanic mothers are in turn associated with differences in the proportions of high order births. That is, the higher proportion of teenage mothers among U.S.-born Hispanic women is consistent with low proportions of fourth and higher order births for these women (13 percent overall), while the higher proportions of older mothers among foreign- and Puerto Rican-born Hispanic women are consistent with a greater frequency of high order births among these women (18 percent).

A previous study has shown differences in other demographic characteristics of Hispanic mothers according to their nativity status.<sup>8</sup> Data for 1984 reflect a continuation of these differences. U.S.-born Hispanic mothers were more likely than their foreign- or Puerto Rican-born counterparts to be unmarried (30 percent compared with 26 percent) and to have completed high school (60 percent compared with 52 percent).

#### **Prenatal care and number of prenatal visits**

Hispanic mothers, except Cuban mothers, are substantially less likely to have begun prenatal care in the first trimester of pregnancy and considerably more likely to have received delayed care (commencing in the third trimester) or no care than are white non-Hispanic mothers (table 11). Gains were made in timely receipt of prenatal care by all origin groups (except Mexican mothers) between 1982 and 1984, but the differences persist. In 1984, 62 percent of Hispanic origin mothers made their initial visit for prenatal care in the first trimester, compared with 82 percent of white non-Hispanic mothers and 61 percent of black non-Hispanic mothers. Among Hispanic origin women, Puerto Rican mothers were least likely to begin care in the first trimester (57 percent), followed by Mexican mothers (60 percent), Central and South American mothers (61 percent), other Hispanic mothers (67 percent), and Cuban mothers (82 percent).

Delayed or no prenatal care was reported for 13 percent of all Hispanic origin mothers, with the proportions ranging from only 4 percent for Cuban mothers to 16 percent for Puerto Rican mothers. Among non-Hispanic mothers, 4 percent of white women and 11 percent of black women received delayed or no care.

As would be expected, the number of visits made to obtain prenatal care varies with the onset of care. That is, women beginning care early have more visits than women who begin care later. Hispanic women (except Cuban and other Hispanic women) made 1 to 2 fewer visits for prenatal care in 1984 on average than white or black non-Hispanic women.

#### **Low birth weight**

The incidence of low birth weight among babies born to Hispanic women is generally comparable to that for babies

born to white non-Hispanic women (table 12). Levels of low birth weight among babies born to Mexican and Central and South American women are relatively low in spite of other factors that tend to be associated with less favorable birth weight distributions. As already noted, for example, these women are less likely to have completed high school and less likely to have begun prenatal care in the first trimester than are Cuban or white non-Hispanic women. In 1984, 5.7 percent of Mexican babies, 5.8 percent of Central and South American babies, and 5.9 percent of Cuban babies weighed less than 2,500 grams (5 lb. 8 oz.) at birth, compared with 5.5 percent of white non-Hispanic babies. Levels of low birth weight were considerably higher for Puerto Rican infants (8.9 percent) and black non-Hispanic infants (12.4 percent).

#### **Preterm births**

Another useful measure of pregnancy outcome is the proportion of infants born prior to 37 weeks of gestation (preterm births), available from all reporting areas except New Mexico. Hispanic origin mothers are somewhat more likely than white non-Hispanic mothers but less likely than black non-Hispanic mothers to have given birth to preterm infants. In 1984, 10.4 percent of Mexican infants, 12.3 percent of Puerto Rican infants, and 8.7 percent of Cuban infants, compared with 7.6 percent of white non-Hispanic infants and 16.8 percent of black non-Hispanic infants, were born preterm (table 13).

#### **Apgar scores**

The 1- and 5-minute Apgar scores are useful measures to evaluate the baby's health at birth. These scores are composite evaluations of five factors, including the infant's heart rate, respiratory effort, muscle tone, irritability, and color. Each of these factors is assigned a value from 0 to 2. The overall score is the sum of the five values, with a score of 10 being optimum. A score of less than 7 at 1 or 5 minutes after birth suggests that the infant is in some difficulty. Data on Apgar scores are available from all areas except California and Texas.

Babies born to Cuban mothers had the lowest incidence of Apgar scores below 7 in 1984; 6.2 percent of their 1-minute scores and 1.1 percent of their 5-minute scores were less than 7 (table 13). The proportions of low 1-minute Apgar scores were also relatively favorable for births to Puerto Rican and Central and South American mothers (7.9 percent). Proportions of 1-minute scores below 7 for other groups were 9.0 percent, Mexican; 10.5 percent, other Hispanic; 9.1 percent, white non-Hispanic; and 12.0 percent, black non-Hispanic. Levels of low 5-minute scores were very similar for all Hispanic (except Cuban) and white non-Hispanic births, ranging from 1.6 to 1.8 percent, compared with 3.2 percent for black non-Hispanic births.

#### **Attendant at birth and place of delivery**

Midwife-attended deliveries among Hispanic mothers continued to increase in 1983 and 1984, although the numbers and



proportions of these births are relatively low (table 14). In 1984, 5.7 percent of all Hispanic babies were delivered by midwives, compared with 4.1 percent in 1982. Among babies born to non-Hispanic mothers, 2.0 percent of white infants and 3.8 percent of black infants were delivered by midwives in 1984. Central and South American and Puerto Rican mothers were most likely to have used the services of midwives—7.6 and 7.2 percent, respectively.

The vast majority of Hispanic and non-Hispanic births

occur in hospitals. In 1984, 98.2 percent of births to Hispanic mothers occurred in hospitals compared with 99.1 percent of births to non-Hispanic mothers. Births attended by midwives, however, are somewhat less likely to have occurred in hospitals. Among midwife-attended births in 1984, 78.6 percent of Hispanic births occurred in hospitals compared with 80.4 percent of white non-Hispanic births and 96.7 percent of black non-Hispanic births.

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- <sup>7</sup>National Center for Health Statistics, S. Taffel: Birth and fertility rates for States, United States, 1980. *Vital and Health Statistics*. Series 21, No. 42. DHHS Pub. No. (PHS) 84-1920. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1984.
- <sup>8</sup>S. J. Ventura and S. M. Taffel: Childbearing characteristics of U.S.- and foreign-born Hispanic mothers. *Public Health Reports* 100 (8): 647-652, Nov.-Dec. 1985.

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### Symbols

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

Table 1. Live births by Hispanic origin of mother and father: Total of 23 reporting States and the District of Columbia, 1983 and 1984

Origin of father	Origin of mother								
	Hispanic								
	All origins	Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Non-Hispanic	Not stated
1984									
All origins . . . . .	2,230,815	346,986	225,767	34,219	9,477	36,401	41,122	1,791,949	91,880
Hispanic . . . . .	320,993	270,991	186,564	24,240	6,948	28,583	24,656	48,695	1,307
Mexican . . . . .	215,421	188,291	180,812	885	221	3,106	3,267	26,450	680
Puerto Rican . . . . .	29,759	24,030	1,189	20,629	308	1,328	576	5,499	230
Cuban . . . . .	10,268	7,878	440	612	5,733	752	341	2,357	33
Central and South American . . . . .	31,582	28,129	2,484	1,690	499	23,043	413	3,333	120
Other and unknown Hispanic . . . . .	33,963	22,663	1,639	424	187	354	20,059	11,056	244
Non-Hispanic . . . . .	1,585,287	42,634	20,909	3,876	1,594	3,917	12,338	1,537,257	5,396
Not stated . . . . .	324,535	33,361	18,294	6,103	935	3,901	4,128	205,997	85,177
1983									
All origins . . . . .	2,205,509	336,833	221,788	33,856	9,709	31,043	40,437	1,782,902	85,774
Hispanic . . . . .	312,694	264,544	184,102	23,975	7,321	24,524	24,622	47,070	1,080
Mexican . . . . .	212,526	186,011	179,412	819	210	2,656	2,914	25,986	529
Puerto Rican . . . . .	29,549	23,845	1,168	20,579	321	1,252	525	5,520	184
Cuban . . . . .	10,092	8,080	379	583	6,122	678	318	1,976	36
Central and South American . . . . .	27,059	24,109	2,085	1,598	485	19,725	216	2,863	87
Other and unknown Hispanic . . . . .	33,468	22,499	1,058	396	183	213	20,649	10,725	244
Non-Hispanic . . . . .	1,582,023	40,663	20,333	3,775	1,472	3,264	11,819	1,535,793	5,567
Not stated . . . . .	310,792	31,626	17,353	6,106	916	3,255	3,996	200,039	79,127

**Table 2. Live births by Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia and each State, 1983 and 1984**

State	Origin of mother										
	All origins	Hispanic						Non-Hispanic			
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>1</sup>	White	Black	Not stated
1984											
All reporting States	2,230,815	346,986	225,767	34,219	9,477	36,401	41,122	1,791,949	1,352,523	338,943	91,880
Arizona	55,001	12,317	11,738	79	20	82	398	41,962	33,563	2,333	722
Arkansas	34,840	319	92	5	7	23	192	33,741	25,228	8,188	780
California	447,730	134,316	106,354	1,394	810	13,584	12,174	305,829	217,352	42,818	7,585
Colorado	54,364	7,298	2,698	70	18	62	4,450	44,291	40,155	2,486	2,775
District of Columbia	9,666	448	12	2	2	246	186	7,773	1,114	6,591	1,445
Florida	155,397	15,392	2,030	1,765	6,127	2,236	3,234	138,317	99,948	36,565	1,688
Georgia	92,013	720	223	149	66	115	167	89,249	56,987	31,270	2,044
Hawaii	18,707	1,835	228	524	17	47	1,019	16,851	4,266	797	21
Illinois	179,274	16,171	9,556	2,330	229	908	3,148	158,892	117,594	37,702	4,211
Indiana	80,084	1,317	929	172	18	37	161	74,785	65,771	8,364	3,982
Kansas	40,010	1,297	1,006	53	15	51	172	34,976	30,843	3,048	3,737
Maine	16,770	87	18	5	9	12	43	15,744	15,445	89	939
Mississippi	43,841	121	49	12	6	14	40	42,828	21,928	20,474	892
Nebraska	26,127	561	484	6	2	10	59	24,291	22,452	1,346	1,275
Nevada	14,803	1,338	813	20	28	57	420	11,816	10,120	726	1,649
New Jersey	101,334	11,021	226	6,129	1,107	2,557	1,002	80,876	59,601	18,669	9,437
New Mexico	27,373	11,179	1,894	35	6	47	9,197	16,162	11,691	584	32
New York	251,053	37,560	871	20,067	703	13,173	2,746	199,702	146,364	46,035	13,791
North Dakota	11,825	71	31	4	3	1	32	11,184	10,169	128	570
Ohio	158,519	1,920	781	676	23	112	328	148,928	125,699	21,613	7,671
Tennessee	65,006	252	55	15	6	14	162	40,547	30,990	9,209	24,207
Texas	299,025	89,423	84,484	672	241	2,993	1,033	208,265	162,572	39,574	1,337
Utah	38,299	1,510	915	27	13	15	540	36,437	34,608	242	352
Wyoming	9,754	513	280	8	1	5	219	8,503	8,063	92	738
1983											
All reporting States	2,205,509	336,833	221,788	33,856	9,709	31,043	40,437	1,782,902	1,350,949	334,602	85,774
Arizona	53,785	11,956	11,232	53	18	69	584	41,214	33,084	2,136	615
Arkansas	34,996	280	86	15	3	45	131	32,847	24,526	8,001	1,869
California	436,143	128,192	105,539	1,399	821	10,096	10,337	295,881	212,346	40,598	12,070
Colorado	54,662	7,241	2,574	75	17	65	4,510	44,162	39,999	2,500	3,259
District of Columbia	9,333	360	22	22	-	202	114	6,669	1,145	5,452	2,304
Florida	149,078	15,041	1,990	1,685	6,240	2,023	3,103	132,562	94,480	36,426	1,475
Georgia	90,032	742	181	201	68	116	176	87,517	55,697	30,842	1,773
Hawaii	19,123	1,930	238	502	6	46	1,138	17,169	4,412	748	24
Illinois	178,885	16,051	8,838	2,007	202	836	4,168	158,507	117,515	37,216	4,327
Indiana	80,814	1,336	900	207	14	40	175	75,294	66,263	8,426	4,184
Kansas	40,399	1,327	973	60	13	54	227	35,461	31,351	3,083	3,611
Maine	16,666	71	20	7	2	4	38	15,574	15,274	82	1,021
Mississippi	44,000	124	50	17	4	15	38	43,101	21,981	20,687	775
Nebraska	26,232	599	498	8	2	18	73	24,446	22,638	1,311	1,187
Nevada	14,312	1,227	682	21	38	57	429	11,350	9,689	720	1,735
New Jersey	99,194	10,663	233	5,971	1,162	2,384	913	79,774	58,898	18,545	8,757
New Mexico	27,617	11,261	1,997	20	11	41	9,192	16,323	11,829	652	33
New York	248,617	36,772	770	20,218	737	12,350	2,697	201,558	147,616	46,832	10,287
North Dakota	12,380	91	36	4	-	11	40	11,702	10,663	130	587
Ohio	158,769	1,935	745	670	47	100	373	148,736	125,753	21,359	8,098
Tennessee	65,481	252	24	6	1	2	219	50,483	40,759	9,271	14,746
Texas	295,249	87,334	83,033	665	263	2,414	959	205,968	160,780	39,223	1,947
Utah	39,474	1,498	826	17	37	47	571	37,620	35,738	271	356
Wyoming	10,268	550	301	6	3	8	232	8,984	8,513	91	734

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

**Table 3. Live births by Hispanic origin of father and by race of child for fathers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia and each State, 1983 and 1984**

State	Origin of father										
	All origins	Hispanic						Non-Hispanic			
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>1</sup>	White	Black	Not stated
1984											
All reporting States . . . . .	2,230,815	320,993	215,421	29,759	10,268	31,582	33,963	1,585,287	1,263,574	227,211	324,535
Arizona . . . . .	55,001	11,820	11,206	114	36	64	400	38,223	31,241	2,165	4,958
Arkansas . . . . .	34,840	317	106	8	14	15	174	28,745	23,457	4,975	5,778
California . . . . .	447,730	135,807	109,335	1,712	1,131	12,314	11,315	295,691	208,602	42,551	16,232
Colorado . . . . .	54,364	5,185	2,246	115	19	61	2,744	38,640	35,578	1,571	10,539
District of Columbia . . . . .	9,666	376	8	12	2	220	134	5,307	1,034	4,209	3,983
Florida . . . . .	155,397	14,311	2,048	1,587	6,181	1,901	2,594	115,025	91,821	21,478	26,061
Georgia . . . . .	92,013	852	265	221	112	96	158	75,941	53,772	21,213	15,220
Hawaii . . . . .	18,707	1,491	248	483	12	34	714	14,931	3,795	764	2,285
Illinois . . . . .	179,274	16,470	10,117	2,342	290	814	2,907	147,257	111,024	32,777	15,547
Indiana . . . . .	80,084	1,225	835	190	17	35	148	63,969	59,468	3,873	14,890
Kansas . . . . .	40,010	1,295	990	77	27	48	153	31,649	28,542	2,142	7,066
Maine . . . . .	16,770	77	20	9	12	7	29	13,827	13,576	78	2,866
Mississippi . . . . .	43,841	104	44	19	7	25	29	29,765	20,555	8,866	13,972
Nebraska . . . . .	26,127	535	459	18	3	10	45	21,748	20,749	597	3,844
Nevada . . . . .	14,803	1,241	769	33	33	55	351	10,291	8,998	451	3,271
New Jersey . . . . .	101,334	9,661	218	5,118	1,162	2,272	891	69,726	56,381	10,816	21,947
New Mexico . . . . .	27,373	9,063	1,940	39	16	45	7,023	18,144	13,764	633	166
New York . . . . .	251,053	31,405	775	16,189	827	11,329	2,285	172,788	136,951	28,799	46,860
North Dakota . . . . .	11,825	59	24	4	3	1	27	10,338	9,620	119	1,428
Ohio . . . . .	158,519	1,790	705	640	56	95	294	132,800	116,519	14,721	23,929
Tennessee . . . . .	65,006	245	52	25	7	12	149	31,076	27,443	3,306	33,685
Texas . . . . .	299,025	75,829	71,836	772	287	2,120	814	176,416	149,750	20,813	46,780
Utah . . . . .	38,299	1,330	875	25	13	21	396	35,173	33,487	212	1,796
Wyoming . . . . .	9,754	505	300	7	1	4	193	7,817	7,447	82	1,432
1983											
All reporting States . . . . .	2,205,509	312,694	212,526	29,549	10,092	27,059	33,468	1,582,023	1,263,928	226,079	310,792
Arizona . . . . .	53,785	11,893	11,179	118	34	48	514	38,269	31,150	2,110	3,623
Arkansas . . . . .	34,996	308	97	15	10	49	137	27,741	22,739	4,702	6,947
California . . . . .	436,143	129,438	108,015	1,765	1,074	9,124	9,460	286,339	204,101	40,239	20,366
Colorado . . . . .	54,662	5,307	2,325	111	26	52	2,793	38,869	35,763	1,585	10,486
District of Columbia . . . . .	9,333	318	12	6	8	188	104	5,047	1,031	3,948	3,968
Florida . . . . .	149,078	14,139	2,020	1,542	6,105	1,780	2,692	109,513	86,535	21,412	25,426
Georgia . . . . .	90,032	771	246	188	90	78	169	74,494	52,575	20,949	14,767
Hawaii . . . . .	19,123	1,495	230	480	16	35	734	15,195	3,852	727	2,433
Illinois . . . . .	178,885	16,236	9,342	1,985	216	767	3,926	147,383	111,098	32,637	15,266
Indiana . . . . .	80,814	1,234	849	194	21	29	141	64,902	60,239	4,080	14,678
Kansas . . . . .	40,399	1,423	1,070	86	24	42	201	32,172	29,058	2,191	6,804
Maine . . . . .	16,666	60	12	14	3	4	27	13,692	13,454	68	2,914
Mississippi . . . . .	44,000	133	50	19	8	17	39	30,270	20,630	9,296	13,597
Nebraska . . . . .	26,232	589	491	12	2	16	68	22,096	21,016	649	3,547
Nevada . . . . .	14,312	1,157	718	26	45	49	319	9,902	8,639	451	3,253
New Jersey . . . . .	99,194	9,415	196	5,086	1,149	2,138	846	68,779	55,791	10,714	21,000
New Mexico . . . . .	27,617	9,222	2,054	32	17	29	7,090	18,239	13,784	699	156
New York . . . . .	248,617	30,893	698	16,335	851	10,726	2,283	175,277	138,341	30,047	42,447
North Dakota . . . . .	12,380	97	44	7	-	6	40	10,798	10,059	130	1,485
Ohio . . . . .	158,769	1,905	764	710	45	92	294	132,693	116,623	14,504	24,171
Tennessee . . . . .	65,481	212	20	4	3	1	184	40,719	36,462	3,830	24,550
Texas . . . . .	295,249	74,564	70,918	796	311	1,757	782	175,160	148,631	20,800	45,525
Utah . . . . .	39,474	1,367	855	12	33	29	438	36,175	34,452	242	1,932
Wyoming . . . . .	10,268	518	321	6	1	3	187	8,299	7,905	69	1,451

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

Table 4. Number and percent distribution of live births by race of child, according to Hispanic origin of mother: Total of 23 reporting States and the District of Columbia, 1983 and 1984

Year and race of child	Origin of mother									
	All origins	Hispanic							Non-Hispanic	Not stated
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic			
1984										
										Number
All races.....	2,230,815	346,986	225,767	34,219	9,477	36,401	41,122	1,791,949	91,880	
White.....	1,756,350	328,815	219,599	31,259	9,051	31,070	37,836	1,352,523	75,012	
Black.....	365,046	12,023	3,655	2,393	377	4,351	1,247	338,943	14,080	
Other.....	109,419	6,148	2,513	567	49	980	2,039	100,483	2,788	
										Percent distribution
All races.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White.....	78.7	94.8	97.3	91.3	95.5	85.4	92.0	75.5	81.6	
Black.....	16.4	3.5	1.6	7.0	4.0	12.0	3.0	18.9	15.3	
Other.....	4.9	1.8	1.1	1.7	0.5	2.7	5.0	5.6	3.0	
1983										
										Number
All races.....	2,205,509	336,833	221,788	33,856	9,709	31,043	40,437	1,782,902	85,774	
White.....	1,739,198	319,308	216,045	30,836	9,223	26,092	37,112	1,350,949	68,941	
Black.....	360,612	11,833	3,371	2,464	440	4,412	1,146	334,602	14,177	
Other.....	105,699	5,692	2,372	556	46	539	2,179	97,351	2,656	
										Percent distribution
All races.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White.....	78.9	94.8	97.4	91.1	95.0	84.1	91.8	75.8	80.4	
Black.....	16.4	3.5	1.5	7.3	4.5	14.2	2.8	18.8	16.5	
Other.....	4.8	1.7	1.1	1.6	0.5	1.7	5.4	5.5	3.1	

Table 5. Birth and fertility rates, by Hispanic origin of mother: Total of 11 States, 1983 and 1984

Year	Origin of mother							
	All origins	Hispanic					Other Hispanic <sup>1</sup>	Non-Hispanic <sup>2</sup>
		Total	Mexican	Puerto Rican	Cuban			
Birth rate <sup>3</sup>								
1984.....	16.2	22.7	22.9	17.7	9.9	30.8	15.2	
1983.....	16.2	22.8	23.4	17.9	10.0	29.6	15.2	
Fertility rate <sup>4</sup>								
1984.....	68.1	91.5	95.8	65.6	44.7	109.6	64.3	
1983.....	68.4	91.8	97.8	67.0	41.4	107.9	64.7	

<sup>1</sup>Includes Central and South American and other and unknown Hispanic origin.<sup>2</sup>Includes origin not stated.<sup>3</sup>Rate per 1,000 total population.<sup>4</sup>Rate per 1,000 women aged 15-44 years.

NOTE: The 11 States are Arizona, California, Colorado, Florida, Illinois, Indiana, New Jersey, New Mexico, New York, Ohio, and Texas.

**Table 6. Live births by age and Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1983 and 1984**

Age of mother	Origin of mother									
	All origins <sup>1</sup>	Hispanic					Non-Hispanic			
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
1984										
All ages . . . . .	2,230,815	346,986	225,767	34,219	9,477	36,401	41,122	1,791,949	1,352,523	338,943
Under 15 years . . . . .	6,318	1,242	860	179	9	34	160	4,830	1,320	3,363
15-19 years . . . . .	288,346	57,717	39,712	7,112	766	2,930	7,197	218,930	133,902	77,460
15 years . . . . .	15,217	3,300	2,322	366	25	119	468	11,355	4,856	6,178
16 years . . . . .	33,080	7,239	5,127	877	73	251	911	24,530	12,709	11,063
17 years . . . . .	54,817	11,395	7,961	1,492	128	467	1,347	41,125	24,227	15,508
18 years . . . . .	79,582	15,909	10,851	2,014	208	858	1,978	60,437	37,798	20,551
19 years . . . . .	105,650	19,874	13,451	2,363	332	1,235	2,493	81,483	54,312	24,160
20-24 years . . . . .	693,489	117,339	76,857	12,141	3,163	11,055	14,123	548,649	408,620	116,347
25-29 years . . . . .	701,204	95,546	60,836	8,416	3,090	11,724	11,480	576,847	459,638	83,478
30-34 years . . . . .	399,628	51,849	32,624	4,375	1,756	7,290	5,804	330,285	263,356	41,947
35-39 years . . . . .	123,491	19,223	12,221	1,681	559	2,794	1,968	98,926	76,076	13,974
40-44 years . . . . .	17,588	3,890	2,519	305	129	558	379	12,939	9,270	2,269
45-49 years . . . . .	751	180	138	10	5	16	11	543	341	105
1983										
All ages . . . . .	2,205,509	336,833	221,788	33,856	9,709	31,043	40,437	1,782,902	1,350,949	334,602
Under 15 years . . . . .	6,201	1,272	933	165	6	33	135	4,697	1,381	3,171
15-19 years . . . . .	299,038	58,187	39,964	7,435	909	2,625	7,254	229,175	143,588	77,977
15 years . . . . .	15,580	3,431	2,435	482	41	102	371	11,562	5,033	6,219
16 years . . . . .	34,027	7,263	5,101	960	83	214	905	25,449	13,473	11,224
17 years . . . . .	57,213	11,745	8,174	1,527	125	458	1,461	43,235	25,899	15,995
18 years . . . . .	83,149	16,021	11,010	2,042	240	705	2,024	63,833	40,950	20,799
19 years . . . . .	109,069	19,727	13,244	2,424	420	1,146	2,493	85,096	58,233	23,740
20-24 years . . . . .	701,552	114,479	75,915	11,955	3,394	9,458	13,757	559,963	420,153	115,760
25-29 years . . . . .	687,023	91,191	58,971	8,165	3,061	10,014	10,980	569,021	454,501	81,880
30-34 years . . . . .	379,951	49,162	31,291	4,255	1,603	6,106	5,907	315,850	251,928	40,238
35-39 years . . . . .	114,175	18,559	12,081	1,567	599	2,322	1,990	91,181	70,206	13,069
40-44 years . . . . .	16,821	3,774	2,479	300	130	467	398	12,497	8,882	2,391
45-49 years . . . . .	748	209	154	14	7	18	16	518	310	116

<sup>1</sup>Includes origin not stated.  
<sup>2</sup>Includes races other than white and black.

**Table 7. Percent distribution of live births by live-birth order, according to Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1983 and 1984**

Live-birth order	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
1984										
All birth orders . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
First child . . . . .	41.7	36.4	33.8	40.8	45.1	40.4	41.1	42.6	43.4	39.6
Second child . . . . .	32.7	29.7	28.9	29.8	36.3	31.5	31.2	33.2	34.3	29.4
Third child . . . . .	15.5	17.9	18.7	17.1	13.1	16.6	16.6	15.1	14.7	16.8
Fourth child . . . . .	5.9	8.5	9.4	7.3	3.8	7.1	6.6	5.4	4.8	7.8
Fifth child . . . . .	2.3	3.7	4.4	2.9	1.1	2.5	2.6	2.0	1.6	3.4
Sixth child and over . . . . .	2.0	3.8	4.8	2.2	0.6	2.0	1.9	1.6	1.2	3.0
1983										
All birth orders . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
First child . . . . .	42.0	36.5	34.0	40.6	47.7	41.0	40.4	43.0	44.0	39.4
Second child . . . . .	32.4	29.6	28.9	29.7	34.4	31.1	31.0	32.9	33.8	29.3
Third child . . . . .	15.4	17.6	18.2	17.1	12.6	17.0	16.6	15.0	14.5	16.9
Fourth child . . . . .	5.9	8.4	9.3	7.3	3.4	6.5	7.1	5.5	4.8	7.8
Fifth child . . . . .	2.3	3.8	4.5	3.0	1.2	2.5	2.5	2.0	1.6	3.5
Sixth child and over . . . . .	2.0	4.0	5.0	2.2	0.8	1.9	2.3	1.7	1.2	3.1

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.



Table 8. Number and ratio of births to unmarried women, by age and Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1983 and 1984

Years and age of mother	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
1984										
Number										
All ages . . . . .	489,400	98,273	54,611	17,397	1,534	12,381	12,350	372,586	152,083	204,992
Under 15 years . . . . .	5,688	972	617	177	9	33	136	4,494	1,064	3,308
15-19 years . . . . .	160,500	28,577	17,103	5,179	288	1,704	4,303	125,712	52,056	69,389
15 years . . . . .	12,455	2,293	1,451	331	13	105	393	9,728	3,429	6,035
16 years . . . . .	23,919	4,419	2,788	730	44	174	683	18,559	7,369	10,625
17 years . . . . .	34,489	6,245	3,860	1,156	55	308	866	26,836	11,427	14,521
18 years . . . . .	42,976	7,564	4,407	1,428	85	480	1,164	33,733	14,262	18,302
19 years . . . . .	46,661	8,056	4,597	1,534	91	637	1,197	36,856	15,569	19,906
20-24 years . . . . .	175,979	34,569	19,158	6,216	549	4,260	4,386	134,877	55,194	74,223
25-29 years . . . . .	89,600	19,954	10,477	3,428	384	3,464	2,201	66,406	26,235	37,127
30-34 years . . . . .	40,084	9,491	4,832	1,604	212	1,947	896	28,967	11,966	15,258
35-39 years . . . . .	14,797	3,840	1,951	651	70	815	353	10,362	4,770	4,874
40 years and over . . . . .	2,752	870	473	142	22	158	75	1,768	798	813
Ratio per 1,000 total births										
All ages . . . . .	219.4	283.2	241.9	508.4	161.9	340.1	300.3	207.9	112.4	604.8
Under 15 years . . . . .	900.3	782.6	717.4	988.8	*1,000.0	970.6	850.0	930.4	806.1	983.6
15-19 years . . . . .	556.6	495.1	430.7	728.2	376.0	581.6	597.9	574.2	388.8	895.8
15 years . . . . .	818.5	694.8	624.9	904.4	520.0	882.4	839.7	856.7	706.1	976.9
16 years . . . . .	723.1	610.4	543.8	832.4	602.7	693.2	749.7	756.6	579.8	960.4
17 years . . . . .	629.2	548.0	484.9	774.8	429.7	659.5	642.9	652.5	471.7	936.4
18 years . . . . .	540.0	475.5	406.1	709.0	408.7	559.4	588.5	558.2	377.3	890.6
19 years . . . . .	441.7	405.4	341.8	649.2	274.1	515.8	480.1	452.3	286.7	823.9
20-24 years . . . . .	253.8	294.6	249.3	512.0	173.6	385.3	310.6	245.8	135.1	637.9
25-29 years . . . . .	127.8	208.8	172.2	407.3	124.3	295.5	191.7	115.1	57.1	444.8
30-34 years . . . . .	100.3	183.1	148.1	366.6	120.7	267.1	154.4	87.7	45.4	363.7
35-39 years . . . . .	119.8	199.8	159.6	387.3	125.2	291.7	179.4	104.7	62.7	348.8
40 years and over . . . . .	150.1	213.8	178.0	450.8	164.2	275.3	192.3	131.1	83.0	342.5
1983										
Number										
All ages . . . . .	468,741	92,550	52,592	16,744	1,568	10,236	11,410	358,456	145,135	198,859
Under 15 years . . . . .	5,577	975	668	159	4	30	114	4,382	1,141	3,120
15-19 years . . . . .	160,329	28,107	16,972	5,240	304	1,464	4,127	125,955	52,543	69,343
15 years . . . . .	12,609	2,300	1,455	437	24	82	302	9,818	3,470	6,094
16 years . . . . .	24,241	4,365	2,746	755	48	147	669	18,905	7,586	10,788
17 years . . . . .	35,083	6,186	3,780	1,141	44	287	934	27,540	11,774	14,909
18 years . . . . .	43,141	7,487	4,500	1,403	76	391	1,117	34,003	14,538	18,357
19 years . . . . .	45,255	7,769	4,491	1,504	112	557	1,105	35,689	15,175	19,195
20-24 years . . . . .	167,984	32,255	18,335	5,878	594	3,532	3,916	129,422	52,195	72,087
25-29 years . . . . .	82,797	18,061	9,709	3,172	369	2,878	1,933	61,739	23,845	34,992
30-34 years . . . . .	36,646	8,848	4,577	1,614	196	1,564	897	26,473	10,747	14,147
35-39 years . . . . .	12,771	3,489	1,878	554	84	631	342	8,766	3,924	4,313
40 years and over . . . . .	2,637	815	453	127	17	137	81	1,719	740	857

See footnotes at end of table.

**Table 8. Number and ratio of births to unmarried women, by age and Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1983 and 1984—Con.**

Years and age of mother	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
1983—Con.										
	Ratio per 1,000 total births									
All ages . . . . .	212.5	274.8	237.1	494.6	161.5	329.7	282.2	201.1	107.4	594.3
Under 15 years . . . . .	899.4	766.5	716.0	963.6	*666.7	909.1	844.4	932.9	826.2	983.9
15–19 years . . . . .	536.1	483.0	424.7	704.8	334.4	557.7	568.9	549.6	365.9	889.3
15 years . . . . .	809.3	670.4	597.5	906.6	585.4	803.9	814.0	849.2	689.4	979.9
16 years . . . . .	712.4	601.0	538.3	786.5	578.3	686.9	739.2	742.9	563.1	961.2
17 years . . . . .	613.2	526.7	462.4	747.2	352.0	626.6	639.3	637.0	454.6	932.1
18 years . . . . .	518.8	467.3	408.7	687.1	316.7	554.6	551.9	532.7	355.0	882.6
19 years . . . . .	414.9	393.8	339.1	620.5	266.7	486.0	443.2	419.4	260.6	808.6
20–24 years . . . . .	239.4	281.8	241.5	491.7	175.0	373.4	284.7	231.1	124.2	622.7
25–29 years . . . . .	120.5	198.1	164.6	388.5	120.5	287.4	176.0	108.5	52.5	427.4
30–34 years . . . . .	96.4	180.0	146.3	379.3	122.3	256.1	151.9	83.8	42.7	351.6
35–39 years . . . . .	111.9	188.0	155.5	353.5	140.2	271.7	171.9	96.1	55.9	330.0
40 years and over . . . . .	150.1	204.6	172.0	404.5	124.1	282.5	195.7	132.1	80.5	341.8

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.

**Table 9. Percent of mothers completing 12 years or more of school by age and Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 21 reporting States and the District of Columbia, 1984**

Age of mother	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
All ages . . . . .	78.2	55.2	41.3	51.8	77.6	62.9	64.1	80.3	84.2	66.2
Under 15 years . . . . .	-	-	-	-	-	-	-	-	-	-
15–19 years . . . . .	38.7	26.7	21.3	23.9	37.2	38.5	32.3	40.2	41.8	37.6
15–17 years . . . . .	9.6	7.7	5.9	7.9	9.1	14.4	8.0	9.9	9.8	9.9
18–19 years . . . . .	54.8	37.8	30.6	34.0	48.6	47.0	47.1	56.9	56.2	58.3
20–24 years . . . . .	76.5	56.6	44.3	54.0	76.6	62.6	66.4	78.5	80.5	72.8
25–29 years . . . . .	88.2	65.6	49.0	65.9	85.6	68.1	75.9	90.0	92.4	79.1
30–34 years . . . . .	90.7	64.0	46.5	66.0	84.0	64.6	75.3	92.7	95.1	79.8
35–39 years . . . . .	87.1	57.4	39.1	56.9	80.9	61.4	67.1	89.8	93.2	75.1
40 years and over . . . . .	76.8	46.8	24.8	44.4	61.5	55.7	59.7	81.0	86.7	62.8

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.

NOTE: Excludes data for California and Texas, which did not report educational attainment.

**Table 10. Percent of births with selected characteristics, by nativity status and Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1984**

Characteristic of mother	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
Mothers under 20 years of age:										
U.S.-born	} 13.2	22.8	22.8	27.6	20.3	22.3	20.5	} 12.5	10.0	23.8
Foreign- or Puerto Rican-born		11.9	13.3	15.4	6.9	7.7	8.5			
Mothers 30 years of age and over:										
U.S.-born	} 24.3	16.2	17.0	9.8	11.8	15.2	16.7	} 24.7	25.8	17.2
Foreign- or Puerto Rican-born		26.4	24.9	26.8	27.4	29.7	30.8			
Fourth and higher order births:										
U.S.-born	} 10.1	13.2	14.9	7.5	3.6	6.7	10.9	} 9.1	7.5	14.3
Foreign- or Puerto Rican-born		18.4	22.2	16.7	5.8	11.6	12.0			
Births to unmarried mothers:										
U.S.-born	} 21.9	30.4	26.6	53.4	18.8	28.7	32.0	} 20.8	11.2	60.5
Foreign- or Puerto Rican-born		26.5	21.8	48.5	15.9	34.0	23.1			
Mothers completing less than 12 years of school: <sup>3</sup>										
U.S.-born	} 21.8	40.3	43.2	45.7	23.3	28.1	34.3	} 19.7	15.8	33.8
Foreign- or Puerto Rican-born		48.5	75.9	50.5	22.3	37.4	40.2			
Mothers completing 12 years or more of school: <sup>3</sup>										
U.S.-born	} 78.2	59.7	56.8	54.3	76.7	71.9	65.7	} 80.3	84.2	66.2
Foreign- or Puerto Rican-born		51.5	24.1	49.5	77.7	62.6	59.8			

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>Excludes data for California and Texas, which did not report educational attainment.

Table 11. Percent of mothers who began prenatal care in the first trimester of pregnancy and percent of mothers who had late or no prenatal care, by age and Hispanic origin of mother and by race of child for mothers of non-Hispanic origin, and median number of prenatal visits by Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1984

Trimester of pregnancy prenatal care began, age of mother, and median number of visits	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
Percent										
First trimester										
All ages.....	74.9	61.5	60.4	57.4	82.2	61.1	66.7	77.4	81.7	61.0
Under 15 years.....	33.7	36.2	38.0	32.0	*55.6	33.3	30.5	32.9	35.7	31.9
15-19 years.....	52.6	47.5	47.7	43.5	63.8	46.7	49.1	53.8	58.2	46.6
15-17 years.....	47.3	44.7	44.8	42.0	58.7	46.3	45.3	47.9	51.9	43.0
18-19 years.....	55.5	49.2	49.5	44.4	66.0	46.9	51.4	57.0	61.0	49.2
20-24 years.....	70.9	59.6	58.8	55.8	79.6	57.4	64.5	73.2	77.3	60.0
25-29 years.....	82.1	67.7	66.5	64.9	86.5	64.1	74.2	84.3	87.5	69.9
30-34 years.....	84.3	69.4	68.2	67.8	86.9	65.6	76.8	86.5	89.3	72.3
35-39 years.....	80.7	65.3	62.7	64.8	86.1	66.7	74.2	83.7	86.7	69.7
40 years and over.....	70.8	59.0	55.4	63.8	78.4	64.0	65.7	74.5	78.2	61.6
Third trimester or no care										
All ages.....	6.4	12.6	13.0	16.3	4.0	12.6	9.1	5.3	3.9	10.5
Under 15 years.....	21.6	24.3	23.4	30.3	*11.1	30.0	21.9	21.0	22.9	20.4
15-19 years.....	13.0	18.2	18.0	22.7	8.1	19.4	15.1	11.7	9.9	14.5
15-17 years.....	14.6	19.1	18.7	23.6	8.4	21.7	16.9	13.4	11.8	15.4
18-19 years.....	12.1	17.6	17.6	22.1	8.0	18.4	14.0	10.8	9.1	13.9
20-24 years.....	7.6	13.4	13.7	17.1	4.8	14.2	9.7	6.4	5.0	10.8
25-29 years.....	4.3	10.2	10.6	13.4	3.0	11.5	6.6	3.4	2.4	7.8
30-34 years.....	3.7	9.2	9.6	11.2	3.0	10.4	5.5	2.8	1.9	7.2
35-39 years.....	4.9	10.6	11.5	12.1	2.0	9.9	7.1	3.8	2.8	8.2
40 years and over.....	8.1	12.2	14.1	9.3	5.2	9.2	8.6	6.7	5.2	11.2
Median										
Number of prenatal visits <sup>3,4</sup> .....	11.2	9.8	9.6	9.6	11.0	9.9	10.4	11.3	11.6	10.7

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>Excludes births to mothers with no prenatal care.

<sup>4</sup>Excludes data for California, which did not report prenatal visits.

**Table 12. Percent of births of low birth weight by age and Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1984**

Age of mother	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
All ages.....	6.8	6.2	5.7	8.9	5.9	5.8	6.9	6.9	5.5	12.4
Under 15 years.....	12.8	10.6	9.3	16.8	*11.1	17.6	9.4	13.4	10.2	14.7
15-19 years.....	9.3	7.5	6.9	10.4	7.6	7.3	8.1	9.7	7.7	13.4
15-17 years.....	10.3	8.1	7.4	11.6	9.7	9.2	7.6	10.8	8.7	13.6
18-19 years.....	8.8	7.2	6.6	9.6	6.7	6.5	8.4	9.1	7.2	13.2
20-24 years.....	7.0	6.1	5.6	8.8	5.8	5.4	7.0	7.1	5.7	12.2
25-29 years.....	5.9	5.4	5.0	7.8	5.8	5.1	6.5	6.0	4.9	11.7
30-34 years.....	6.0	5.7	5.3	8.5	5.1	6.0	5.9	6.0	5.1	11.9
35-39 years.....	6.8	6.7	6.3	8.5	6.3	7.6	6.3	6.8	5.8	12.5
40 years and over.....	8.1	8.0	7.2	12.1	6.0	8.4	10.4	8.0	6.8	13.7

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.

NOTE: Low birth weight is defined as less than 2,500 grams (5 lb. 8 oz.).

**Table 13. Percent of births born prior to 37 weeks of gestation and percent of births with 1- and 5-minute Apgar scores less than 7, by Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of reporting States, 1984**

Gestation and Apgar score	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
Born prior to 37 weeks of gestation <sup>3</sup> .....	9.6	10.4	10.4	12.3	8.7	10.0	9.6	9.4	7.6	16.8
1-minute Apgar scores less than 7 <sup>4</sup> .....	9.3	8.7	9.0	7.9	6.2	7.9	10.5	9.7	9.1	12.0
5-minute Apgar scores less than 7 <sup>4</sup> .....	1.9	1.7	1.6	1.8	1.1	1.6	1.8	1.9	1.6	3.2

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>Data are for 22 reporting States and the District of Columbia. Excludes data for New Mexico, which did not report first day of last normal menstrual period.

<sup>4</sup>Data are for 21 reporting States and the District of Columbia. Excludes data for California and Texas, which did not report 1- and 5-minute Apgar scores.



## Technical notes

### Sources of data

Concurrent with the 1978 revision of the U.S. Standard Certificate of Live Birth, the National Center for Health Statistics recommended that States add items to identify the Hispanic or ethnic origin of the newborn's mother and father. In 1983 and 1984, 23 States and the District of Columbia included questions on origin, selecting one of two basic formats. The first format was an open-ended item to obtain the specific origin or descent of each parent (for example, Italian, Mexican, German, Puerto Rican, English, or Cuban). The second format was directed specifically toward the Hispanic population and asked whether the mother and father were of Spanish origin. If so, the specific origin, such as Mexican, Puerto Rican, or Cuban, was to be indicated.

### Sampling

Birth data shown in this report are based on 100 percent of the births occurring in the 20 States that provided data through the Vital Statistics Cooperative Program. Births occurring in the remaining three States (Arizona, California, and Georgia) and the District of Columbia are sampled at a 50-percent rate. Because the sampling rate is large, the associated errors are relatively small. The data shown in the tables are for births to all residents of the 23 States and the District of Columbia reporting ethnic or Hispanic origin, regardless of where the births occurred. Births occurring in nonreporting States to residents of the reporting area are included in the "not stated" origin category.

### Racial classification

Racial designation in this report is that of the child, which is determined from the race of the parents as entered on the birth certificate. When the parents are of different races and one parent is white, the child is assigned the other parent's race. When the parents are of different races and neither parent is white, the child is assigned the father's race with one exception—if the mother is Hawaiian or part-Hawaiian, the child is considered Hawaiian. When race is missing on the certificate for one parent, the child is assigned the race of the other parent. When race is not reported for either parent, the race of the

child is assigned the race of the child on the immediately preceding record.

### Population denominators

Birth and fertility rates for 1983 and 1984 are based on estimates of the Hispanic population from the Current Population Survey. Population estimates were provided for 11 States, including Arizona, California, Colorado, Florida, Illinois, Indiana, New Jersey, New Mexico, New York, Ohio, and Texas. These estimates are controlled to postcensal independent estimates of the Hispanic population by age and sex for the United States, based on 1980 census data. The population data are based on small samples and may, therefore, be subject to substantial sampling error. Information on the derivation of these estimates and the sampling error is presented in a recent U.S. Bureau of the Census report.<sup>1</sup>

### Computation of rates

In computing vital statistics rates for this report, births with unknown origin of mother are included with non-Hispanic births rather than being distributed. Thus rates for the Hispanic population are underestimates of the true rates to the extent that the births with unknown origin of mother for the 11-State area (2.9 percent) are actually to Hispanic mothers. The population with unknown origin has been imputed. The effect on the rates is believed to be small.

### Computation of percent distributions and medians

Births with unknown live-birth order, nativity of mother, educational attainment of mother, month of pregnancy in which prenatal care began, birth weight, period of gestation, 1- and 5-minute Apgar scores, and attendant at birth were subtracted from total births before percent distributions were computed. The median number of prenatal visits includes only mothers who received some prenatal care. Data are shown with an asterisk (\*) when the base of the measure is less than 20 live births.

NOTE: A list of references follows the text.

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# nchs MONTHLY VITAL STATISTICS REPORT

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## Induced Terminations of Pregnancy: Reporting States, 1984

by Eve Powell-Griner, Ph.D., Division of Vital Statistics

### Highlights

In 1984, there were 306,792 abortions reported as occurring to residents within the 13-State reporting area, an increase of 2,296 (1 percent) over the number for the previous year. The abortion ratio of 364.3 abortions per 1,000 live births was slightly higher than the figure for 1983 (360.8); the increase continues the general upward trend since 1978. Changes in the abortion ratio between 1983 and 1984 largely reflect greater increases for white women than for black women, for married women than for unmarried women, and for women under age 30 years than for older women for whom abortion ratios declined between the two years.

Induced abortion ratios are associated with a number of demographic characteristics of women. The highest ratios continued to be among the youngest and oldest women, and the abortion ratios continued to be twice as high for black as for white women, although ratios for young women (under 19 years) were higher for white women.

Abortion ratios are much lower among married than unmarried women. About three-fourths of the abortions occurring in the reporting area in 1984 were to unmarried women. Ratios for educational attainment showed the highest ratio for white women with 9–11 years of education; among black women, the highest ratio was for those who had completed 12 years of schooling. The lowest ratio for white women was for those with 16 years or more of education. In contrast, the lowest ratio for black women was for those with less than 9 years education.

In terms of previous pregnancy history, nearly 6 out of 10 women having induced terminations in 1984 had no previous live birth, and about 6 out of 10 never had a prior induced termination. The median duration of gestation was 9.2 weeks for women having induced terminations in 1984. It was longer for black women on average than for white women, longer for less educated women, and longer for out-of-State residents than for in-State residents. In 1984 suction curettage was the type of

procedure used in 95.1 percent of all terminations. Complications were reported for less than 1 percent of all induced terminations. The abortion ratio among women residing in metropolitan areas was 2½ times that of nonmetropolitan residents.

### Introduction

This report on induced terminations of pregnancy is based on 1984 data reported to the National Center for Health Statistics (NCHS) by 13 States. Earlier reports showed data for 5 States in 1977, 8 States in 1978, 13 States in 1979, 12 States in 1980 and 1981, and 13 States in 1982 and 1983.<sup>1-5</sup> The States in this report include Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia. Although New York City is a separate registration area from the remainder of New York State, the data for both areas are combined except where otherwise noted.

Data are based on individual reports of induced abortions submitted to State vital registration offices. Reports of induced terminations are submitted to these offices in accordance with the laws and statutes of the respective States. The reporting States provided NCHS data on magnetic tape for individual events coded from copies of the original reports of induced termination of pregnancy.

Induced abortions are distinguished in NCHS statistics from spontaneous abortions or fetal deaths. Induced abortion "means the purposeful interruption of pregnancy with the intention other than to produce a live-born infant or to remove a dead fetus which does not result in a live birth."<sup>6</sup> All other abortions are "spontaneous." In this report, the term "abortion" refers to "induced abortion" or "induced termination of pregnancy"; all three terms are used interchangeably.

Abortion data are shown on both an occurrence and a residence basis. Detailed tables at the end of the report and selected text tables show data for all abortions to U.S. residents

occurring in the 13-State reporting area. The occurrence tables represent characteristics and factors associated with the utilization of health services within the geographic area in which the abortion occurred. In contrast, ratio tables within the text exclude abortions to nonresidents of the reporting States. Such tables show the frequency of abortions in relation to demographic characteristics associated with births to residents of the area. The distinction between occurrence and residence data is made in the text and in the headnotes of the tables.

Data are analyzed using percent distributions, medians, and ratios (see Technical notes). Abortion ratios are based on the number of abortions and live births occurring in the reporting States to residents of those States. Ratios are expressed as the number of abortions per 1,000 live births. Such ratios provide an approximate indication of the frequency of abortions in relation to the frequency of pregnancies. An estimate of pregnancies could include the sum of live births, induced terminations, and fetal deaths; however, it is common practice to use only live births in calculating these ratios,<sup>7,8</sup> because data on fetal deaths under 20 weeks of gestation are not reported for all States. When fetal deaths of 20 weeks or more gestation are included in the denominator along with live births and abortions, the abortion ratios for the reporting area are slightly lower than when only live births and abortions are used. A comparison of abortion ratios per 1,000 live births and per 1,000 live births plus induced terminations is shown in the Technical notes.

The magnitude of the ratios is affected by the distribution of both live births and abortions according to such characteristics of the female population as age, race, marital status, and educational attainment in a specified State or group of States. Therefore, ratios for the same demographic group, such as white females, may vary for different multi-State areas. Accordingly, caution should be used in generalizing from the ratios re-

ported for the multi-State reporting areas to the entire U.S. population.

### Number of abortions and abortion ratios

In 1984, a total of 306,792 abortions were reported as occurring to United States residents within the 13-State reporting area, an increase of 1 percent from the 304,496 abortions reported for the same area in 1983. Of the 1984 abortions, 17,963, or 6 percent, involved nonresidents of the area. The induced abortion ratio for the 13-State area in 1984 was 364.3 abortions per 1,000 live births, an increase of 1 percent over the previous year (table A).

### Age and race

One-fourth of the induced abortions in 1984 in the 13-State area were to women under 20 years of age (table 1). More than one-third (35 percent) occurred to women at ages 20–24 years. The remaining 40 percent were to women 25 years of age and over.

The pattern of abortions by age for white and black women has remained similar since 1978. In 1984, as in previous years, a larger proportion of white women who had abortions (62 percent) were under 25 years of age compared with black women (58 percent). This difference is reflected in a slightly lower median age at pregnancy termination for white (23.1 years) than for black women (23.7 years) and a slightly lower peak age for white (20 years) than for black women (21 years).

Abortion ratios vary by age of women at the time of pregnancy termination (table A). Ratios are higher at the extremes of the age distribution of the childbearing period, that is, among women 14 years of age and younger and 40 years of age and older. However, the women in both of these age groups com-

**Table A. Ratios of induced terminations of pregnancy by race and age of woman, 1984, and percent change, 1983–84: 13-State area**

[Ratios per 1,000 live births. Induced terminations of pregnancy and live births are only those occurring in the area among residents of the area]

Age of woman	All	White	Black	All	White	Black
	rates <sup>1</sup>			rates <sup>1</sup>		
	Ratio			Percent change <sup>2</sup>		
All ages	364.3	307.4	646.3	1.0	1.1	0.3
Under 14 years	1,946.9	2,088.7	1,884.2	-3.1	10.9	-10.7
14 years	1,501.3	1,845.9	1,290.8	10.4	17.2	5.6
15–19 years	728.8	756.8	678.1	3.1	4.4	0.1
15 years	1,077.2	1,239.3	914.9	6.3	15.4	-3.6
16 years	890.5	984.1	747.9	3.5	3.6	3.1
17 years	759.5	811.1	664.1	5.4	7.3	1.0
18 years	760.0	804.1	667.9	1.8	2.7	-0.3
19 years	599.0	598.8	611.4	2.2	3.0	-0.1
20–24 years	414.3	360.4	651.4	4.2	4.4	2.4
25–29 years	242.4	187.3	587.6	1.1	1.1	-0.5
30–34 years	225.6	172.8	591.2	-1.7	-2.1	-0.7
35–39 years	358.3	294.0	737.3	-3.2	-2.7	-2.8
40 years and over	692.1	607.2	1,083.3	-4.0	-3.2	-4.0

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

<sup>2</sup>See Technical notes.

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

bined accounted for a total of only 1 percent of all induced terminations and all live births. Although abortion ratios by age for both white and black women have a U-shaped pattern, the variation in abortion ratios is greater for white women (figure 1).

For white women there were 307.4 abortions per 1,000 live births in 1984 compared with 646.3 for black women. In both 1983 and 1984 the ratio of abortions to live births was higher for white teens than for black teens; but for women 20 years of age and older, the ratio was higher for black than for white women in every 5-year age group.

From 1983 to 1984, abortion ratios for residents of the 13-State area increased by 1 percent for white women but remained about the same for black women (table A). For white women, the increase was the result of increases in abortion ratios for younger women, that is, age groups under 30 years. Age groups beyond that age showed decreases. For black women, there were declines for age groups over 24 years and under 14

years; the most substantial declines were among those aged 35 years and older.

**Marital status**

Twelve States (Colorado, Indiana, Kansas, Missouri, Montana, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia) and New York City collected information on the marital status of women having induced terminations. Of the abortions occurring in this reporting area in 1984, 22 percent were reported for married women and 78 percent were reported for unmarried women (table 2).

Married women who had abortions were older than unmarried women. Of married women, more than two-thirds (68 percent) were 25 years of age or older, compared with one-third (33 percent) of unmarried women. The median age of married women having abortions in 1984 was 27.8 years, 5.4 years older than the median age of 22.4 years for unmarried women.

Black women who had abortions tended to be older than white women, regardless of marital status. Of married black women, 72 percent were 25 years of age or older compared with 65 percent of married white women. Similarly, among unmarried women having abortions, 37 percent of black women were 25 years of age or older compared with 32 percent of white women. In 1984, the median age of married women obtaining an abortion was 28.4 years for black women and 27.5 years for white women, compared with 22.9 years for unmarried black and 22.1 years for unmarried white women.

Induced abortion ratios by marital status and race for events to residents occurring in the 12-State area are shown in table B. Data for New York were excluded because information was not obtained on mother's marital status for live births occurring in upstate New York. Married women had less than 1 induced abortion for every 10 live births, while unmarried women had 11 induced abortions for every 10 live births (table B). Among married women, the abortion ratio for black women was nearly three times that for white women. However, among unmarried women the relationship was reversed: For white unmarried women the abortion ratio was three times that for black unmarried women. This reversal for unmarried women occurred because the number of abortions (the numerator) for white unmarried women was more than three times the number of abortions for black unmarried women, although the total number of live births (the denominator) for white unmarried women and black unmarried women was nearly the same.

Increases in abortion ratios between 1983 and 1984 among married women were shared by white women (2 percent) and black women (6 percent). For unmarried women, the ratios increased for black women (4 percent) but decreased for white women (2 percent).

**Educational attainment**

For an 11-State area (Indiana, Kansas, Missouri, Montana, New York, Oregon, South Carolina, Tennessee, Utah,

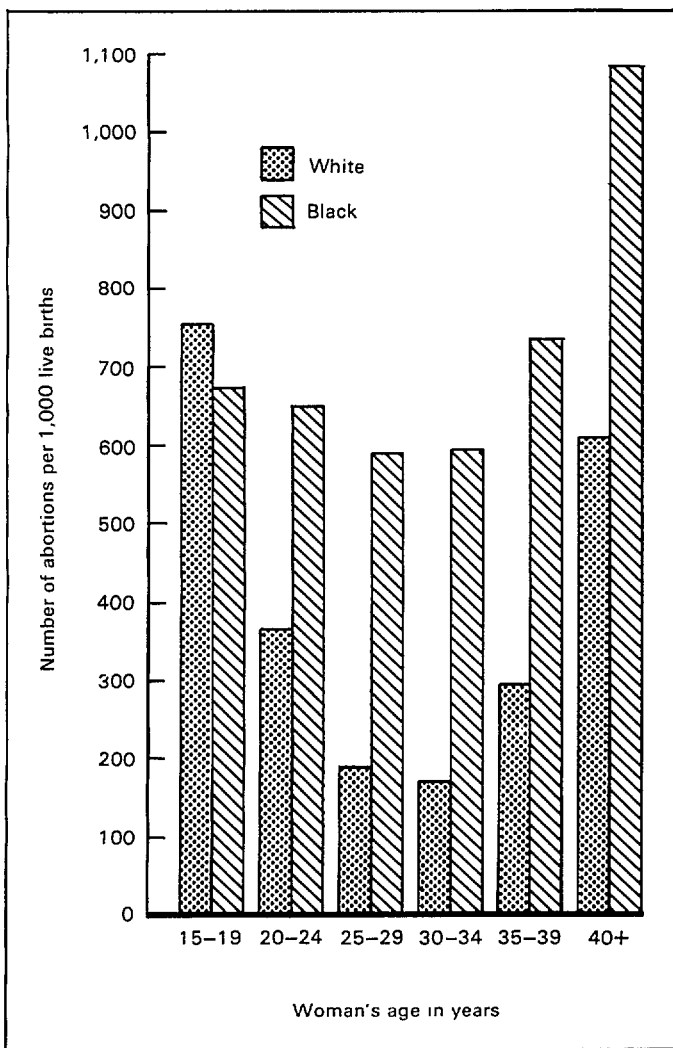


Figure 1. Abortion ratios by age and race of woman: 13-State area, 1984

**Table B. Ratios of induced terminations of pregnancy, by marital status and race of woman, 1984, and percent change, 1983-84: 12-State area**

[Ratios per 1,000 live births. Induced terminations of pregnancy and live births are only those occurring in the area among residents of the area]

Race of woman	All women			Percent change <sup>2</sup>		
	Married	Unmarried	Ratio	All women	Married	Unmarried
All races <sup>1</sup>	262.9	1,102.2	67.7	3.4	2.9	0.4
White	242.7	1,625.2	58.4	2.9	2.3	-1.6
Black	383.1	536.7	160.9	5.1	6.3	3.7

<sup>1</sup>Includes races other than white and black.<sup>2</sup>See Technical notes.

NOTE: The 12-State area includes Colorado, Indiana, Kansas, Missouri, Montana, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

Vermont, and Virginia) in 1984, data are available on induced abortions by the educational attainment of the women (table 3). Area residents having abortions had about the same median educational attainment (12.6 years) as their counterparts carrying their pregnancies to term, 12.7 years.

Abortion ratios are associated with educational attainment, but the pattern differs somewhat between white women and black women (table C). For white women, the highest ratio was for those with 9-11 years of schooling (356.9 abortions per 1,000 live births), and the peak for black women was for those with 12 years of education (743.6). Moreover, for white women, the lowest ratio is for those with the highest educational attainment (16 years or more), compared with black women for whom the lowest ratio is for those with the least education (0-8 years of schooling).

The pattern of abortion ratios by educational attainment for all ages combined may be affected by the interrelation of age, marital status, and years of school completed. Very young women are more likely to be unmarried and may not have completed their schooling. Further, the ratios for women of high educational attainment may reflect the lower ratios that characterize

older women. To take into account these interrelationships and to obtain a better indication of the association between educational attainment and abortion patterns, an analysis was made for women aged 25 years old and over, most of whom will have completed their formal education by that age (figure 2). This analysis shows that the peak abortion ratios for both race groups were for women with 12 years of education. For white women over 25 years, the ratio was 245.5 abortions per 1,000 live births and for black women, 773.8. With additional education, abortion ratios declined for both black and white women, but the decline was proportionately greater for white than for black women.

### Previous pregnancies

#### Previous live births

In 1984 more than half (55 percent) of the women who obtained abortions in the 13-State area had no previous live birth (table D). The percent was greater among white than among black women, 62 percent compared with 37 percent, and was related to the age of the woman having an abortion: the younger

**Table C. Ratios of induced terminations of pregnancy, by race, age, and educational attainment of woman: 11-State area, 1984**

[Ratios per 1,000 live births. Induced terminations of pregnancy and live births are only those occurring in the area among residents of the area]

Age and race of woman	Total	Years of schooling completed				
		0-8 years	9-11 years	12 years	13-15 years	16 years or more
All races <sup>1</sup>	366.4	255.0	385.3	404.9	392.6	241.7
10-17 years	874.5	555.1	841.0	1,684.6	5,218.4	-
18-24 years	465.3	164.0	270.4	457.9	735.8	934.8
25 years and over	258.8	199.1	280.8	332.4	230.7	179.2
White	306.6	224.9	356.9	326.7	329.8	207.7
10-17 years	940.1	460.8	921.9	1,870.8	4,973.1	-
18-24 years	418.5	152.7	238.2	394.6	688.0	895.4
25 years and over	199.2	204.6	241.0	245.5	175.7	149.2
Black	641.7	373.9	463.7	743.6	735.8	662.0
10-17 years	785.9	719.4	724.8	1,407.7	7,222.2	-
18-24 years	640.6	231.1	368.0	695.8	930.9	1,275.8
25 years and over	611.9	199.4	380.9	773.8	586.9	561.4

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

NOTE: The 11-State area includes Indiana, Kansas, Missouri, Montana, New York, Oregon, South Carolina, Tennessee, Utah, Vermont, and Virginia.

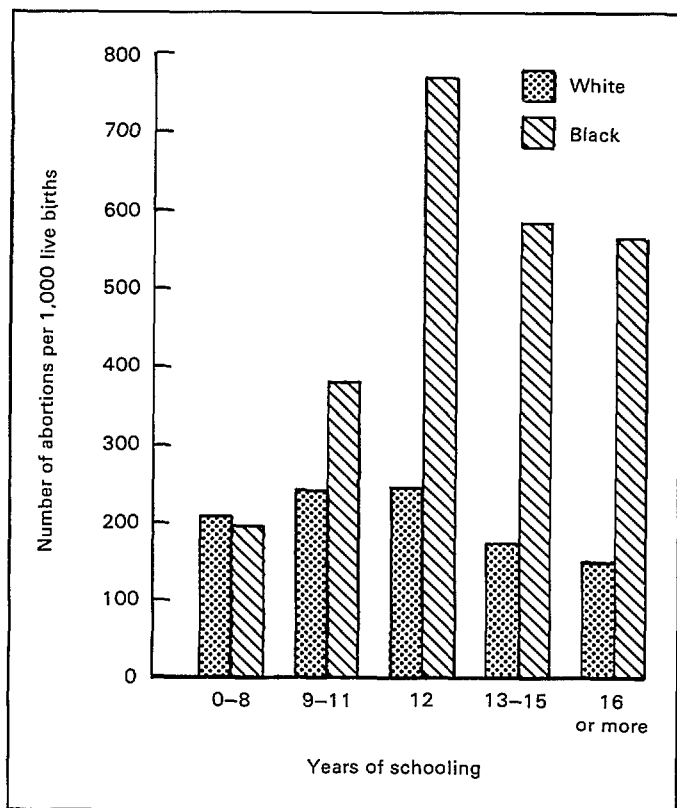


Figure 2. Abortion ratios by educational attainment for white and black women aged 25 years and over: 11-State area, 1984

the woman, the more likely she never had a previous live birth (table 4). Among women aged 15-17 years, 92 percent had no previous live birth. In contrast, among women aged 40 years and over, only 11 percent had no previous live birth. While this same pattern existed for women of both races, black women having abortions were more likely to have had previous live births at every age than white women.

Table D. Percent distribution of induced terminations of pregnancy by number of previous live births of woman, according to race: 13-State area, 1984

[Data include only induced terminations of pregnancy occurring in the reporting area]

Number of previous live births	Percent distribution		
	All races <sup>1</sup>	White	Black
Total	100.0	100.0	100.0
No previous live birth	54.6	62.0	37.4
1 previous live birth	21.7	18.2	30.1
2 previous live births	15.2	13.2	19.7
3 previous live births	5.5	4.5	7.7
4 previous live births	1.9	1.4	3.1
5 previous live births	0.7	0.4	1.2
6 previous live births	0.3	0.2	0.4
7 previous live births or more	0.2	0.1	0.3

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

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

For a 12-State area (Colorado, Indiana, Kansas, Missouri, Montana, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia) and New York City, data are available on the number of previous live births to women having abortions in 1984 according to the marital status of the women. One-fifth of married women and nearly two-thirds (62 percent) of unmarried women who obtained abortions had no previous live birth (table 5).

**Previous induced terminations**

For the 13-State area, almost two-thirds (63 percent) of white women and about half (49 percent) of black women having abortions in 1984 had no prior induced termination (table E). For those under 15 years of age, the youngest group, 94 percent had no previous induced abortion.

Over half (51 percent) of black women and more than one-third (37 percent) of white women had repeat abortions. In each age group, a larger proportion of black than white women had experienced a prior abortion (table 6). Among black women, more than half of each 5-year age group aged 20-24 years and older had experienced a prior induced abortion. Among white women, the age group 25-29 years had the largest percent of repeat abortions, 51 percent.

**Period of gestation**

Nine out of 10 induced terminations occurring in the 13-State area in 1984 occurred during the first trimester of pregnancy, as shown in tables F, 7, and 8. Almost half (47 percent) were for pregnancies of 8 weeks or less duration and 43 percent were for pregnancies of 9-12 weeks duration. Only 11 percent of all abortions were obtained by women whose pregnancies had lasted more than 12 weeks.

The median gestational period for black women having abortions was slightly longer at 9.5 weeks than the corresponding period for white women, 9.1 weeks. The length of the gestational period also tended to be somewhat longer for younger

Table E. Percent of induced terminations of pregnancy to women with no previous induced termination, by age and race of woman: 13-State area, 1984

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman	Percent distribution		
	All races <sup>1</sup>	White	Black
All ages	58.8	62.8	49.2
Under 15 years	93.6	95.1	92.6
15-17 years	86.0	88.4	80.4
18-19 years	75.1	78.0	65.8
20-24 years	57.1	60.9	47.1
25-29 years	45.4	49.1	37.0
30-34 years	45.9	50.1	36.3
35-39 years	50.8	56.2	37.8
40 years and over	56.3	62.8	39.4

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

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table F. Percent distribution of induced terminations of pregnancy by period of gestation, and median gestational period, according to age of woman: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation <sup>1</sup>	Percent distribution								
	All ages	Under 15 years	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40 years and over
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	11.0	6.6	5.4	6.9	9.7	13.4	16.0	17.3	15.3
7-8 weeks . . . . .	35.7	23.3	26.3	31.5	35.4	39.2	41.2	42.0	41.7
9-12 weeks . . . . .	42.6	46.6	50.2	48.0	44.3	39.2	35.9	34.1	35.3
13 weeks or more . . . . .	10.5	23.0	17.8	13.4	10.4	7.9	6.6	6.3	7.4
Not stated . . . . .	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.3	0.3
	Median								
Period of gestation . . . . .	9.2	10.4	10.2	9.7	9.3	8.9	8.7	8.6	8.6

<sup>1</sup>Period of gestation is calculated from "date last normal menses began" or "physician's estimate of gestation"; see Technical notes.

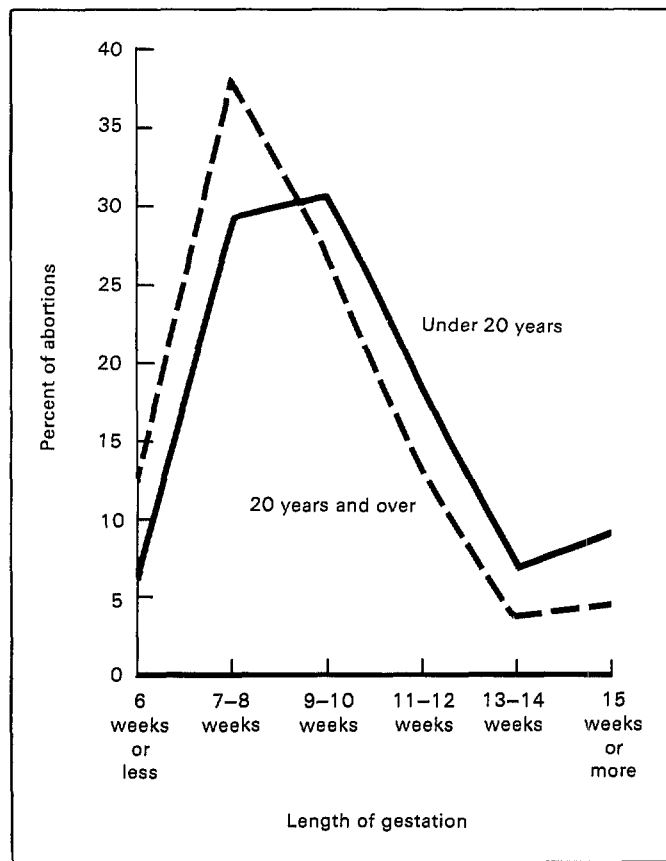
NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

than for older women (figure 3). For women under 20 years of age, the median gestational period was 10.0 weeks, about 1 week longer than the 9.0-week period for women age 20 years or more. The same pattern by age prevailed for both black and white women. However, black women at every age had longer gestational periods prior to induced termination than white women.

For an 11-State area (Indiana, Kansas, Missouri, Montana, New York, Oregon, South Carolina, Tennessee, Utah, Vermont, and Virginia) in 1984, data are available to examine duration of pregnancy prior to abortion by educational attainment, age, and race of women (table 9). Generally, delayed terminations were associated with less educational attainment. For women with less than a high school education, median gestation period was 9.9 weeks compared with 9.0 weeks for women with 12 or more years of school. When this analysis is restricted to women 25 years of age and over who have had the opportunity to complete their schooling, the relationship is attenuated. The median gestation at time of termination for women with less than a high school education was 9.1 weeks, and the median for those with 12 years or more was 8.7 weeks. The relationship between educational attainment and gestational duration was similar for white and black women, although black women of every educational attainment level had induced abortions later in their pregnancies than white women.

**Type of procedure and reported complications**

Data on types of procedures used to induce pregnancy terminations are available for the 13-State area for 1984 (tables G and 10). These figures indicate that more than 9 out of 10 inductions were performed by suction curettage. The second most frequently reported method, saline instillation, accounted for



**Figure 3. Percent distribution of abortions by length of pregnancy, according to woman's age: 13-State area, 1984**

only 2 percent of the inductions in 1984. Suction curettage was the predominant procedure for induced abortions under 21 weeks gestation as shown in table 10, but the proportion of terminations by saline instillation increased as gestation increased. At

**Table G. Percent distribution of induced terminations of pregnancy by type of procedure, according to period of gestation: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Type of procedure	Period of gestation <sup>1</sup>			
	All periods	Less than 13 weeks	13-15 weeks	16 weeks or more
	Percent distribution			
All procedures . . . . .	100.0	100.0	100.0	100.0
Suction curettage . . . . .	95.1	98.4	85.0	46.2
Sharp curettage . . . . .	0.4	0.4	1.0	1.3
Saline instillation . . . . .	1.7	0.2	3.8	27.5
Prostaglandin instillation . . . . .	0.6	0.1	2.0	8.1
Hysterotomy . . . . .	0.0	0.0	0.1	0.1
Hysterectomy . . . . .	0.0	0.0	0.0	0.1
Other . . . . .	2.1	0.9	8.1	16.7

<sup>1</sup>Period of gestation is calculated from "date last normal menses began" or "physician's estimate of gestation"; see Technical notes.

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

gestations of 21 weeks or more, a larger proportion of terminations were by saline instillation (41 percent) than suction curettage (35 percent).

Overall, complications were indicated on the reporting form for less than 1 percent of the induced terminations in 1984. Of the 1,819 reporting forms that indicated complications, 54 percent reported retained products alone or retained products in combination with other complications; 17 percent reported hemorrhage alone or hemorrhage in combination with other complications, and 30 percent reported other complications. The procedure used in 95 percent of all abortions occurring in the 13-State area, suction curettage, accounted for about half of the reported complications (54 percent). Saline instillation, used in 2 percent of all abortions, accounted for 25 percent of the complications. The complication rate for suction curettage was very low (3.4 per 1,000 abortions) compared with the complication rate reported for saline instillation (87.6 per 1,000 abortions).

## Residence patterns

### Metropolitan and nonmetropolitan residence

In 1984, metropolitan area residents obtained 87 percent of the induced terminations occurring in the 13-State area (table 11). Residents of nonmetropolitan areas having induced abortions were, on the average, younger than metropolitan women having abortions. The median age at termination for nonmetropolitan women was 22.3 years and for metropolitan women, 23.5 years.

The relative frequency of induced abortion per 1,000 live births for residents of metropolitan areas was about 2½ times that for residents of nonmetropolitan areas, 429.3 and 168.4, respectively (table H). Black women living in metropolitan areas were three times as likely to obtain abortions as black women living in nonmetropolitan areas; the relative frequency of induced abortions among white women living in metropolitan areas was two times that of white women residing in nonmetropolitan areas. Among nonmetropolitan residents, abortion ratios for black women (212.7) were nearly 1½ times those for white women (164.6). In metropolitan areas, the abortion ratio for black women (718.5) was 2 times that for white women (361.2). Thus, the difference in abortion ratios between the two racial groups was somewhat greater in metropolitan areas than in nonmetropolitan areas, reflecting the very high abortion ratios of black women in metropolitan areas.

### Out-of-State residents

In the 13-State area in 1984, only 7 percent of induced abortions were obtained by U.S. residents outside their State of residence (table 12). Nearly two-thirds (65 percent) were obtained by women in their home county, and the remainder (28 percent) were obtained by women in their home State but outside their county of residence.

Residence status is associated with the duration of gestation prior to termination. Women obtaining abortions out of their State of residence have slightly longer pregnancies prior to termination than women having abortions in their State of residence. The median gestational period for out-of-State residents was 9.6 weeks compared with 9.2 weeks for women obtaining abortions in their State of residence. About 17 percent

**Table H. Ratios of induced terminations of pregnancy by race and metropolitan-nonmetropolitan residence, 1984, and percent change, 1983-84: 13-State area**

[Ratios per 1,000 live births. Induced terminations of pregnancy and live births are only those occurring in the area among residents of the area]

Geographic area	All races <sup>1</sup>	White		All races <sup>1</sup>	White	
		Black	Ratio		Black	Percent change <sup>2</sup>
All areas . . . . .	364.3	307.4	646.3	1.0	1.1	0.3
Metropolitan areas . . . . .	429.3	361.2	718.5	0.6	0.6	0.2
Nonmetropolitan areas . . . . .	168.4	164.6	212.7	1.5	2.0	-0.8

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

<sup>2</sup>See Technical notes.

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

of out-of-State residents obtained their abortions after 12 weeks compared with 10 percent of State residents.

Of all the abortions (including those for non-U.S. residents) in 1984 that were reported to NCHS, the proportion in each of the 13 reporting States accounted for by residents of that State varied from a high of 97 percent in Indiana to a low

of 63 percent in Kansas (table 13). Some 35 percent of the abortions reported by Kansas were for Missouri residents, whereas only 3 percent of Kansas residents who terminated their pregnancies in 1984 obtained their abortions in Missouri. In Montana, 10 percent of abortions were obtained by non-U.S. residents, most of whom were Canadians.



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- <sup>1</sup>National Center for Health Statistics, D. Burnham: Induced terminations of pregnancy: Reporting States, 1977 and 1978. *Monthly Vital Statistics Report*. Vol. 30, No. 6 Supp. DHHS Pub. No. (PHS) 81-1120. Public Health Service. Hyattsville, Md., Sept. 28, 1981.
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- <sup>3</sup>National Center for Health Statistics, D. Burnham: Induced terminations of pregnancy: Reporting States, 1980. *Monthly Vital Statistics Report*. Vol. 32, No. 8 Supp. DHHS Pub. No. (PHS) 84-1120. Public Health Service. Hyattsville, Md., Dec. 20, 1983.
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- <sup>5</sup>National Center for Health Statistics, E. Powell-Griner: Induced terminations of pregnancy: Reporting States, 1982 and 1983. *Monthly Vital Statistics Report*. Vol. 35, No. 2 Supp. DHHS Pub. No. (PHS) 86-1120. Public Health Service. Hyattsville, Md., June 1986.
- <sup>6</sup>National Center for Health Statistics: *Model State Vital Statistics Act and Model State Vital Statistics Regulations*, 1977 Revision. DHEW Publication No. (PHS) 78-1115. Public Health Service. Hyattsville, Md., May 1978.
- <sup>7</sup>Tietze, C.: *Induced Abortion, 1979: A Population Council Fact Book*. New York. The Population Council, Inc., 1979.
- <sup>8</sup>Centers for Disease Control: *Abortion Surveillance—Annual Summary 1979-1980*. Public Health Service. Atlanta, Ga., May 1983.
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- <sup>12</sup>Institute of Medicine: *Legalized Abortion and the Public Health*. Washington. National Academy of Sciences, May 1975.

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**Symbols**

- - - Data not available
  - . . . Category not applicable
  - Quantity zero
  - 0.0 Quantity more than zero but less than 0.05
  - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
  - \* Figure does not meet standards of reliability or precision (when the base of the measure includes fewer than 20 events)
-

**Table 1. Number and percent distribution of reported induced terminations of pregnancy by age of woman, according to race of woman: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
All ages . . . . .	306,792	203,408	92,969	87,033	5,936	10,415
Under 14 years . . . . .	758	289	457	450	7	12
14 years . . . . .	2,295	1,139	1,108	1,096	12	48
15-19 years . . . . .	74,437	52,399	20,039	19,308	731	1,999
15 years . . . . .	5,268	3,148	1,974	1,945	29	146
16 years . . . . .	9,922	6,700	2,958	2,884	74	264
17 years . . . . .	14,739	10,394	3,962	3,832	130	383
18 years . . . . .	21,619	15,647	5,404	5,168	236	568
19 years . . . . .	22,889	16,510	5,741	5,479	262	638
20-24 years . . . . .	105,360	71,482	30,902	29,241	1,661	2,976
25-29 years . . . . .	64,278	40,954	21,710	20,135	1,575	1,614
30-34 years . . . . .	34,714	22,107	11,752	10,647	1,105	855
35-39 years . . . . .	16,797	11,109	5,263	4,619	644	425
40 years and over . . . . .	4,673	3,173	1,401	1,216	185	99
Not stated . . . . .	3,480	756	337	321	16	2,387
Percent distribution						
All ages . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Under 14 years . . . . .	0.2	0.1	0.5	0.5	0.1	0.1
14 years . . . . .	0.8	0.6	1.2	1.3	0.2	0.6
15-19 years . . . . .	24.5	25.9	21.6	22.3	12.3	24.9
15 years . . . . .	1.7	1.6	2.1	2.2	0.5	1.8
16 years . . . . .	3.3	3.3	3.2	3.3	1.2	3.3
17 years . . . . .	4.9	5.1	4.3	4.4	2.2	4.8
18 years . . . . .	7.1	7.7	5.8	6.0	4.0	7.1
19 years . . . . .	7.5	8.1	6.2	6.3	4.4	7.9
20-24 years . . . . .	34.7	35.3	33.4	33.7	28.1	37.1
25-29 years . . . . .	21.2	20.2	23.4	23.2	26.6	20.1
30-34 years . . . . .	11.4	10.9	12.7	12.3	18.7	10.7
35-39 years . . . . .	5.5	5.5	5.7	5.3	10.9	5.3
40 years and over . . . . .	1.5	1.6	1.5	1.4	3.1	1.2

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 2. Number of reported induced terminations of pregnancy by race and marital status of woman and percent distribution by age, according to marital status and race of woman: 12-State area and New York City, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Marital status and age of woman	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
All women . . . . .	252,223	160,274	82,821	77,364	5,457	9,128
Percent distribution						
All ages . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years . . . . .	1.0	0.7	1.7	1.8	0.3	0.6
15-17 years . . . . .	9.7	9.8	9.5	9.9	3.9	9.9
18-19 years . . . . .	14.0	15.2	11.7	11.9	8.3	14.8
20-24 years . . . . .	34.3	34.9	32.9	33.3	28.1	37.6
25-29 years . . . . .	21.9	20.9	23.8	23.6	26.7	20.3
30-34 years . . . . .	11.9	11.3	13.1	12.7	18.9	10.6
35-39 years . . . . .	5.6	5.6	5.8	5.5	10.7	5.0
40 years and over . . . . .	1.5	1.5	1.5	1.4	3.1	1.1
Number						
Married women . . . . .	53,891	35,768	16,632	13,969	2,663	1,491
Percent distribution						
All ages . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years . . . . .	0.1	0.0	0.1	0.1	0.1	-
15-17 years . . . . .	0.9	1.1	0.6	0.6	0.5	1.3
18-19 years . . . . .	4.1	4.8	2.5	2.5	2.4	6.7
20-24 years . . . . .	27.1	28.6	23.5	24.3	19.1	31.8
25-29 years . . . . .	30.0	29.0	32.4	32.8	30.3	27.8
30-34 years . . . . .	21.6	20.6	23.8	23.4	25.9	18.7
35-39 years . . . . .	12.3	12.1	13.0	12.3	16.7	10.9
40 years and over . . . . .	3.9	3.8	4.1	4.0	5.1	2.9
Number						
Unmarried women . . . . .	191,703	121,865	65,151	62,436	2,715	4,687
Percent distribution						
All ages . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years . . . . .	1.3	0.9	2.1	2.2	0.6	0.8
15-17 years . . . . .	12.2	12.4	11.7	11.9	7.3	12.9
18-19 years . . . . .	16.9	18.3	14.1	14.1	14.1	17.3
20-24 years . . . . .	36.4	36.8	35.4	35.3	36.8	39.6
25-29 years . . . . .	19.5	18.5	21.5	21.5	23.5	17.9
30-34 years . . . . .	9.1	8.6	10.3	10.2	11.8	7.7
35-39 years . . . . .	3.8	3.6	4.0	4.0	4.8	3.3
40 years and over . . . . .	0.8	0.8	0.8	0.8	1.1	0.6
Number						
Not stated . . . . .	6,629	2,641	1,038	959	79	2,950
Percent distribution						
All ages . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years . . . . .	0.7	0.6	1.1	1.2	-	0.8
15-17 years . . . . .	9.2	9.1	9.8	10.1	6.3	8.6
18-19 years . . . . .	12.7	13.2	9.4	9.8	5.1	15.5
20-24 years . . . . .	33.6	33.9	30.6	30.6	30.4	37.0
25-29 years . . . . .	23.6	22.5	27.9	28.6	19.0	21.3
30-34 years . . . . .	12.7	12.5	13.6	12.6	25.3	12.3
35-39 years . . . . .	6.1	6.7	6.0	5.6	10.1	3.9
40 years and over . . . . .	1.4	1.5	1.7	1.5	3.8	0.6

NOTE: The 12-State area includes Colorado, Indiana, Kansas, Missouri, Montana, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 3. Number of reported induced terminations of pregnancy by race and age of woman and percent distribution by educational attainment, according to age and race of woman: 11-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman and years of school completed	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
All ages . . . . .	281,826	185,707	90,885	85,515	5,370	5,234
Percent distribution						
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years . . . . .	2.5	2.3	3.0	2.8	6.1	2.5
9-11 years . . . . .	18.1	17.5	19.4	19.9	11.2	20.0
12 years . . . . .	46.4	44.9	49.6	49.8	46.1	46.4
13-15 years . . . . .	21.8	22.6	20.0	20.1	18.7	20.2
16 years or more . . . . .	11.2	12.7	8.0	7.4	17.8	10.8
Number						
Under 15 years . . . . .	2,892	1,318	1,544	1,527	17	30
Percent distribution						
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years . . . . .	65.3	63.3	67.1	66.9	80.0	50.0
9-11 years . . . . .	34.7	36.7	32.9	33.1	20.0	50.0
12 years . . . . .	-	-	-	-	-	-
13-15 years . . . . .	-	-	-	-	-	-
16 years or more . . . . .	-	-	-	-	-	-
Number						
15-17 years . . . . .	27,540	18,521	8,741	8,545	196	278
Percent distribution						
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years . . . . .	4.5	3.8	5.9	5.9	4.2	5.9
9-11 years . . . . .	76.6	76.9	75.9	76.0	71.4	77.8
12 years . . . . .	18.2	18.5	17.4	17.3	22.4	16.3
13-15 years . . . . .	0.8	0.7	0.8	0.8	2.1	-
16 years or more . . . . .	-	-	-	-	-	-
Number						
18-19 years . . . . .	40,620	29,316	10,888	10,450	438	416
Percent distribution						
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years . . . . .	1.1	1.2	0.8	0.7	2.6	1.8
9-11 years . . . . .	18.2	16.6	22.3	22.5	18.1	19.8
12 years . . . . .	58.7	58.5	59.1	59.4	53.5	57.2
13-15 years . . . . .	21.8	23.4	17.4	17.1	25.4	20.7
16 years or more . . . . .	0.3	0.3	0.3	0.3	0.5	0.5
Number						
20-24 years . . . . .	96,050	64,955	30,107	28,626	1,481	988
Percent distribution						
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years . . . . .	1.3	1.3	1.1	0.9	4.6	1.8
9-11 years . . . . .	12.1	11.3	13.8	13.9	11.0	15.1
12 years . . . . .	47.9	45.5	52.9	53.3	45.8	46.9
13-15 years . . . . .	28.5	29.7	26.0	26.0	25.5	27.4
16 years or more . . . . .	10.3	12.2	6.2	5.9	13.2	8.8

See note at end of table.

**Table 3. Number of reported induced terminations of pregnancy by race and age of woman and percent distribution by educational attainment, according to age and race of woman: 11-State area, 1984—Con.**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman and years of school completed	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
25-29 years	59,240	37,442	21,202	19,769	1,433	596
Percent distribution						
All years of school completed	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years	1.6	1.7	1.4	1.0	6.1	1.3
9-11 years	9.6	8.9	10.6	10.9	6.7	10.0
12 years	49.0	46.8	52.8	53.3	46.6	49.5
13-15 years	22.6	22.4	22.9	23.2	18.1	19.4
16 years or more	17.2	20.1	12.3	11.6	22.5	19.7
Number						
30-34 years	32,096	20,251	11,519	10,506	1,013	326
Percent distribution						
All years of school completed	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years	2.4	2.5	2.2	1.6	8.0	2.1
9-11 years	7.4	6.5	8.9	9.1	6.9	7.5
12 years	47.8	44.6	53.3	53.9	46.9	54.8
13-15 years	22.0	22.7	20.9	21.3	16.0	17.8
16 years or more	20.4	23.7	14.8	14.1	22.2	17.8
Number						
35-39 years	15,593	10,230	5,175	4,571	604	188
Percent distribution						
All years of school completed	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years	3.1	2.9	3.4	2.9	7.6	3.5
9-11 years	7.1	6.3	8.7	9.2	4.9	4.7
12 years	48.7	45.7	54.5	55.3	47.8	44.2
13-15 years	19.2	20.3	17.2	18.1	10.3	20.9
16 years or more	21.9	24.8	16.2	14.6	29.4	26.7
Number						
40 years and over	4,413	2,978	1,382	1,208	174	53
Percent distribution						
All years of school completed	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years	3.7	3.5	4.0	3.3	8.7	-
9-11 years	8.0	7.5	9.2	9.6	6.2	9.1
12 years	53.5	50.5	59.4	60.9	49.4	72.7
13-15 years	15.7	17.0	12.9	12.9	13.1	9.1
16 years or more	19.2	21.5	14.5	13.3	22.5	9.1
Number						
Not stated	3,382	696	327	313	14	2,359
Percent distribution						
All years of school completed	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years	1.9	1.7	2.7	2.5	7.7	-
9-11 years	18.1	16.1	21.8	22.1	15.4	22.6
12 years	46.7	47.2	45.6	46.3	30.8	48.4
13-15 years	17.9	16.9	19.8	19.6	23.1	19.4
16 years or more	15.4	18.2	10.1	9.5	23.1	9.7

NOTE: The 11-State area includes Indiana, Kansas, Missouri, Montana, New York, Oregon, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 4. Number of reported induced terminations of pregnancy by race and age of woman and percent distribution by number of previous live births, according to age and race of woman: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman and number of previous live births	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
All ages .....	306,792	203,408	92,969	87,033	5,936	10,415
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth .....	54.6	62.0	37.7	37.4	43.1	61.4
1 previous live birth .....	21.7	18.2	29.5	30.1	20.8	19.1
2 previous live births .....	15.2	13.2	19.8	19.7	21.7	13.5
3 previous live births .....	5.5	4.5	7.8	7.7	8.5	4.1
4 previous live births .....	1.9	1.4	3.1	3.1	3.3	1.3
5 previous live births .....	0.7	0.4	1.3	1.2	1.4	0.3
6 previous live births .....	0.3	0.2	0.5	0.4	0.5	0.1
7 previous live births or more .....	0.2	0.1	0.4	0.3	0.6	0.2
Number						
Under 15 years .....	3,053	1,428	1,565	1,546	19	60
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth .....	97.3	97.9	96.7	96.9	83.3	98.0
1 previous live birth .....	2.1	1.5	2.7	2.6	5.6	2.0
2 previous live births .....	0.4	0.4	0.3	0.3	5.6	-
3 previous live births .....	0.1	0.1	0.1	0.1	5.6	-
4 previous live births .....	0.1	-	0.1	0.1	-	-
5 previous live births .....	-	-	-	-	-	-
6 previous live births .....	-	-	-	-	-	-
7 previous live births or more .....	-	-	-	-	-	-
Number						
15-17 years .....	29,929	20,242	8,894	8,661	233	793
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth .....	91.7	94.3	85.7	85.5	90.4	92.8
1 previous live birth .....	7.5	5.3	12.8	12.9	8.3	6.1
2 previous live births .....	0.7	0.4	1.4	1.4	1.3	0.9
3 previous live births .....	0.1	0.1	0.1	0.1	-	0.1
4 previous live births .....	0.0	-	0.0	0.0	-	-
5 previous live births .....	0.0	-	0.0	0.0	-	-
6 previous live births .....	-	-	-	-	-	-
7 previous live births or more .....	0.0	-	0.0	0.0	-	-
Number						
18-19 years .....	44,508	32,157	11,145	10,647	498	1,206
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth .....	81.0	86.5	65.2	64.4	81.9	82.2
1 previous live birth .....	15.4	11.1	27.8	28.5	13.6	14.0
2 previous live births .....	3.1	2.1	6.0	6.1	3.9	3.2
3 previous live births .....	0.4	0.2	0.8	0.8	0.4	0.5
4 previous live births .....	0.1	0.0	0.2	0.2	0.2	-
5 previous live births .....	0.0	-	0.0	0.0	-	-
6 previous live births .....	0.0	0.0	0.0	0.0	-	-
7 previous live births or more .....	0.0	0.0	0.0	0.0	-	0.1

See note at end of table.

**Table 4. Number of reported induced terminations of pregnancy by race and age of woman and percent distribution by number of previous live births, according to age and race of woman: 13-State area, 1984—Con.**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman and number of previous live births	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
20–24 years . . . . .	105,360	71,482	30,902	29,241	1,661	2,976
Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth . . . . .	59.2	68.0	38.3	37.0	61.8	66.5
1 previous live birth . . . . .	25.1	20.1	37.1	38.0	21.3	20.8
2 previous live births . . . . .	11.9	9.3	18.0	18.4	12.1	10.0
3 previous live births . . . . .	2.9	2.1	4.9	5.0	3.6	2.1
4 previous live births . . . . .	0.7	0.4	1.3	1.3	0.8	0.6
5 previous live births . . . . .	0.1	0.1	0.2	0.2	0.4	0.0
6 previous live births . . . . .	0.0	0.0	0.1	0.1	-	0.0
7 previous live births or more . . . . .	0.0	0.0	0.0	0.0	0.1	-
Number						
25–29 years . . . . .	64,278	40,954	21,710	20,135	1,575	1,614
Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth . . . . .	38.4	47.0	21.7	20.4	38.9	46.3
1 previous live birth . . . . .	27.4	24.3	33.3	33.8	27.4	25.3
2 previous live births . . . . .	23.1	20.3	28.5	29.0	22.6	19.9
3 previous live births . . . . .	7.7	6.3	10.6	10.8	8.0	6.0
4 previous live births . . . . .	2.4	1.6	4.0	4.2	2.1	2.1
5 previous live births . . . . .	0.7	0.4	1.3	1.3	0.5	0.3
6 previous live births . . . . .	0.2	0.1	0.4	0.4	0.4	0.1
7 previous live births or more . . . . .	0.1	0.1	0.2	0.2	-	0.1
Number						
30–34 years . . . . .	34,714	22,107	11,752	10,647	1,105	855
Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth . . . . .	25.5	31.9	13.2	12.7	17.7	34.6
1 previous live birth . . . . .	24.3	23.2	26.5	27.0	21.7	22.3
2 previous live births . . . . .	29.3	28.2	31.5	31.0	36.8	28.7
3 previous live births . . . . .	13.1	11.3	16.5	16.8	14.1	11.0
4 previous live births . . . . .	4.8	3.6	7.4	7.6	5.5	1.6
5 previous live births . . . . .	1.8	1.2	3.1	3.2	2.6	0.8
6 previous live births . . . . .	0.7	0.5	1.0	1.1	0.7	0.5
7 previous live births or more . . . . .	0.4	0.2	0.7	0.7	0.9	0.5
Number						
35–39 years . . . . .	16,797	11,109	5,263	4,619	644	425
Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth . . . . .	16.6	20.0	9.1	8.9	11.1	18.6
1 previous live birth . . . . .	20.3	21.0	19.0	19.6	14.8	20.7
2 previous live births . . . . .	32.7	33.0	31.7	30.7	38.9	35.8
3 previous live births . . . . .	17.1	15.9	19.9	20.1	18.4	14.9
4 previous live births . . . . .	7.5	6.3	10.2	10.3	9.4	7.2
5 previous live births . . . . .	3.3	2.2	5.8	6.1	3.8	1.3
6 previous live births . . . . .	1.3	0.9	2.2	2.2	1.7	-
7 previous live births or more . . . . .	1.2	0.7	2.1	2.2	1.9	1.6

See note at end of table.



**Table 4. Number of reported induced terminations of pregnancy by race and age of woman and percent distribution by number of previous live births, according to age and race of woman: 13-State area, 1984—Con.**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman and number of previous live births	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
40 years and over . . . . .	4,673	3,173	1,401	1,216	185	99
Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth . . . . .	11.0	13.5	5.5	5.1	8.2	9.2
1 previous live birth . . . . .	14.0	14.1	13.5	13.8	12.0	18.4
2 previous live births . . . . .	30.6	31.7	28.0	28.5	24.5	35.5
3 previous live births . . . . .	20.9	21.1	20.7	20.6	21.2	15.8
4 previous live births . . . . .	12.1	11.5	13.7	13.6	14.7	10.5
5 previous live births . . . . .	5.7	4.4	8.7	8.7	8.7	6.6
6 previous live births . . . . .	2.9	2.1	4.7	4.8	3.8	1.3
7 previous live births or more . . . . .	2.7	1.6	5.2	5.0	7.1	2.6
Number						
Not stated . . . . .	3,480	756	337	321	16	2,387
Percent distribution						
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
No previous live birth . . . . .	53.2	61.0	32.2	31.6	43.7	64.8
1 previous live birth . . . . .	20.5	16.9	29.8	30.7	12.5	15.7
2 previous live births . . . . .	15.0	13.2	19.5	19.5	18.7	13.0
3 previous live births . . . . .	6.7	5.4	10.3	10.2	12.5	3.7
4 previous live births . . . . .	3.0	2.5	4.6	4.2	12.5	1.9
5 previous live births . . . . .	1.0	0.4	2.4	2.6	-	-
6 previous live births . . . . .	0.5	0.3	1.2	1.3	-	-
7 previous live births or more . . . . .	0.3	0.3	-	-	-	0.9

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, Oregon, New York, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 5. Number of reported induced terminations of pregnancy by marital status and age of woman and percent distribution by number of previous live births, according to age and marital status of woman: 12-State area and New York City, 1984**  
 [Data include only induced terminations of pregnancy occurring in the reporting area]

<i>Age of woman and number of previous live births</i>	<i>All women</i>	<i>Married</i>	<i>Unmarried</i>	<i>Not stated</i>
		Number		
All ages .....	252,223	53,891	191,703	6,629
		Percent distribution		
Total .....	100.0	100.0	100.0	100.0
No previous live birth .....	52.7	19.8	62.0	49.2
1 previous live birth .....	22.7	29.9	20.7	24.0
2 previous live births .....	15.8	31.9	11.2	16.9
3 previous live births .....	5.6	11.8	3.9	6.1
4 previous live births .....	2.0	4.1	1.4	2.4
5 previous live births .....	0.7	1.5	0.5	0.6
6 previous live births .....	0.3	0.5	0.2	0.3
7 previous live births or more .....	0.2	0.4	0.1	0.4
		Number		
Under 15 years .....	2,616	30	2,555	31
		Percent distribution		
Total .....	100.0	100.0	100.0	100.0
No previous live birth .....	97.2	53.6	97.7	96.7
1 previous live birth .....	2.2	21.4	1.9	3.3
2 previous live births .....	0.4	14.3	0.2	-
3 previous live births .....	0.2	3.6	0.1	-
4 previous live births .....	0.1	7.1	-	-
5 previous live births .....	-	-	-	-
6 previous live births .....	-	-	-	-
7 previous live births or more .....	-	-	-	-
		Number		
15-17 years .....	24,198	506	23,302	390
		Percent distribution		
Total .....	100.0	100.0	100.0	100.0
No previous live birth .....	91.3	48.0	92.3	86.8
1 previous live birth .....	7.8	44.6	7.0	10.7
2 previous live births .....	0.8	6.6	0.6	1.9
3 previous live births .....	0.1	0.8	0.0	0.3
4 previous live births .....	0.0	-	0.0	0.3
5 previous live births .....	0.0	-	0.0	-
6 previous live births .....	-	-	-	-
7 previous live births or more .....	0.0	-	0.0	-
		Number		
18-19 years .....	34,977	2,206	32,231	540
		Percent distribution		
Total .....	100.0	100.0	100.0	100.0
No previous live birth .....	79.5	40.2	82.3	72.5
1 previous live birth .....	16.5	45.8	14.5	19.6
2 previous live births .....	3.4	12.3	2.8	6.7
3 previous live births .....	0.4	1.4	0.4	1.0
4 previous live births .....	0.1	0.1	0.1	0.2
5 previous live births .....	0.0	0.0	0.0	-
6 previous live births .....	0.0	0.0	0.0	-
7 previous live births or more .....	0.0	0.1	0.0	-

See note at end of table.

**Table 5. Number of reported induced terminations of pregnancy by marital status and age of woman and percent distribution by number of previous live births, according to age and marital status of woman: 12-State area and New York City, 1984—Con.**

[Data include only induced terminations of pregnancy occurring in the reporting area]

<i>Age of woman and number of previous live births</i>	<i>All women</i>	<i>Married</i>	<i>Unmarried</i>	<i>Not stated</i>
Number				
20–24 years.....	85,511	14,562	69,520	1,429
Percent distribution				
Total.....	100.0	100.0	100.0	100.0
No previous live birth.....	56.9	27.0	63.2	52.1
1 previous live birth.....	26.6	39.4	23.9	28.1
2 previous live births.....	12.5	26.3	9.6	14.6
3 previous live births.....	3.1	6.0	2.4	3.8
4 previous live births.....	0.7	1.0	0.6	0.8
5 previous live births.....	0.1	0.2	0.1	0.2
6 previous live births.....	0.0	0.0	0.0	0.1
7 previous live births or more.....	0.0	0.0	0.0	0.2
Number				
25–29 years.....	54,460	16,133	37,325	1,002
Percent distribution				
Total.....	100.0	100.0	100.0	100.0
No previous live birth.....	37.0	20.0	44.5	35.8
1 previous live birth.....	28.1	30.1	27.3	28.1
2 previous live births.....	23.5	34.2	18.9	23.7
3 previous live births.....	7.8	11.1	6.4	8.6
4 previous live births.....	2.5	3.4	2.0	3.0
5 previous live births.....	0.7	0.8	0.6	0.4
6 previous live births.....	0.2	0.3	0.2	0.2
7 previous live births or more.....	0.1	0.1	0.1	0.2
Number				
30–34 years.....	29,613	11,580	17,493	540
Percent distribution				
Total.....	100.0	100.0	100.0	100.0
No previous live birth.....	25.0	13.3	32.7	25.6
1 previous live birth.....	24.8	23.3	25.7	26.8
2 previous live births.....	29.2	37.5	23.8	27.2
3 previous live births.....	13.1	16.5	10.8	11.8
4 previous live births.....	4.9	5.7	4.3	5.1
5 previous live births.....	1.9	2.3	1.7	2.0
6 previous live births.....	0.7	0.8	0.6	1.0
7 previous live births or more.....	0.4	0.5	0.3	0.6
Number				
35–39 years.....	14,058	6,615	7,185	258
Percent distribution				
Total.....	100.0	100.0	100.0	100.0
No previous live birth.....	16.3	9.2	22.6	23.2
1 previous live birth.....	20.7	18.9	22.4	18.3
2 previous live births.....	32.6	37.3	28.4	27.7
3 previous live births.....	16.9	19.4	14.5	17.9
4 previous live births.....	7.7	8.7	6.7	6.7
5 previous live births.....	3.5	3.9	3.1	2.7
6 previous live births.....	1.3	1.4	1.2	0.9
7 previous live births or more.....	1.2	1.2	1.1	2.7

See note at end of table.

**Table 5. Number of reported induced terminations of pregnancy by marital status and age of woman and percent distribution by number of previous live births, according to age and marital status of woman: 12-State area and New York City, 1984—Con.**

[Data include only induced terminations of pregnancy occurring in the reporting area]

<i>Age of woman and number of previous live births</i>	<i>All women</i>	<i>Married</i>	<i>Unmarried</i>	<i>Not stated</i>
		Number		
40 years and over .....	3,764	2,100	1,606	58
		Percent distribution		
Total .....	100.0	100.0	100.0	100.0
No previous live birth .....	10.6	7.0	15.3	9.3
1 previous live birth.....	14.7	13.7	15.9	18.5
2 previous live births.....	30.3	32.0	28.3	25.9
3 previous live births.....	20.3	21.7	18.5	18.5
4 previous live births.....	12.1	13.2	10.5	18.5
5 previous live births.....	6.1	6.1	6.2	3.7
6 previous live births.....	2.9	2.9	3.1	1.9
7 previous live births or more.....	2.9	3.4	2.3	3.7
		Number		
Not stated .....	3,026	159	486	2,381
		Percent distribution		
Total .....	100.0	100.0	100.0	100.0
No previous live birth .....	47.8	32.3	50.0	56.0
1 previous live birth.....	22.8	27.8	23.2	16.9
2 previous live births.....	16.8	23.4	14.6	16.9
3 previous live births.....	6.7	8.2	7.1	4.2
4 previous live births.....	3.9	6.3	3.1	3.6
5 previous live births.....	1.2	1.9	1.3	0.6
6 previous live births.....	0.6	-	0.4	1.8
7 previous live births or more.....	0.1	-	0.2	-

NOTE: The 12-State area includes Colorado, Indiana, Kansas, Missouri, Montana, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 6. Number of reported induced terminations of pregnancy by race and age of woman and percent distribution by number of previous induced terminations, according to age and race of woman: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman and number of previous induced terminations	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
All ages .....	306,792	203,408	92,969	87,033	5,936	10,415
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination .....	58.8	62.8	49.8	49.2	58.9	63.5
1 previous induced termination .....	26.1	24.7	29.2	29.5	24.3	25.3
2 previous induced terminations .....	9.7	8.2	13.1	13.3	10.4	8.1
3 previous induced terminations or more .....	5.4	4.3	7.9	8.0	6.5	3.1
Number						
Under 15 years .....	3,053	1,428	1,565	1,546	19	60
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination .....	93.6	95.1	92.3	92.6	73.7	9.0
1 previous induced termination .....	5.4	4.2	6.5	6.4	15.8	8.0
2 previous induced terminations .....	0.6	0.4	0.8	0.8	5.3	2.0
3 previous induced terminations or more .....	0.3	0.4	0.3	0.3	5.3	-
Number						
15-17 years .....	29,929	20,242	8,894	8,661	233	793
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination .....	86.0	88.4	80.7	80.4	89.1	86.6
1 previous induced termination .....	12.2	10.4	16.5	16.6	9.2	12.7
2 previous induced terminations .....	1.5	1.1	2.5	2.5	1.3	0.5
3 previous induced terminations or more .....	0.2	0.1	0.4	0.4	0.4	0.1
Number						
18-19 years .....	44,508	32,157	11,145	10,647	498	1,206
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination .....	75.1	78.0	66.3	65.8	78.4	78.4
1 previous induced termination .....	19.9	18.1	25.3	25.7	16.7	17.5
2 previous induced terminations .....	4.1	3.3	6.5	6.6	3.7	3.4
3 previous induced terminations or more .....	1.0	0.7	1.9	1.9	1.2	0.7
Number						
20-24 years .....	105,360	71,482	30,902	29,241	1,661	2,976
Percent distribution						
Total .....	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination .....	57.1	60.9	48.0	47.1	63.4	61.5
1 previous induced termination .....	28.8	27.4	31.9	32.4	22.9	28.9
2 previous induced terminations .....	9.9	8.4	13.5	13.8	9.4	7.4
3 previous induced terminations or more .....	4.2	3.3	6.6	6.8	4.3	2.2

See note at end of table.

Table 6. Number of reported induced terminations of pregnancy by race and age of woman and percent distribution by number of previous induced terminations, according to age and race of woman: 13-State area, 1984—Con.

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman and number of previous induced terminations	All races	White	All other			Not stated
			Total	Black	Other races	
Number						
25-29 years	64,278	40,954	21,710	20,135	1,575	1,614
Percent distribution						
Total	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination	45.4	49.1	38.2	37.0	54.1	49.6
1 previous induced termination	31.1	30.5	32.2	32.6	27.3	30.8
2 previous induced terminations	14.5	12.9	17.6	18.1	11.1	13.8
3 previous induced terminations or more	9.0	7.5	12.0	12.4	7.5	5.8
Number						
30-34 years	34,714	22,107	11,752	10,647	1,105	855
Percent distribution						
Total	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination	45.9	50.1	37.7	36.3	51.3	52.2
1 previous induced termination	29.9	29.0	31.7	32.2	26.9	29.2
2 previous induced terminations	14.1	12.3	17.4	17.8	13.0	12.6
3 previous induced terminations or more	10.1	8.6	13.2	13.7	8.8	6.0
Number						
35-39 years	16,797	11,109	5,263	4,619	644	425
Percent distribution						
Total	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination	50.8	56.2	39.1	37.8	48.7	55.4
1 previous induced termination	27.0	25.2	30.7	31.2	27.3	25.5
2 previous induced terminations	12.8	10.7	17.3	17.7	14.1	13.0
3 previous induced terminations or more	9.4	7.8	12.9	13.3	10.0	6.1
Number						
40 years and over	4,673	3,173	1,401	1,216	185	99
Percent distribution						
Total	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination	56.3	62.8	40.5	39.4	47.8	76.0
1 previous induced termination	25.2	22.4	32.2	33.3	25.0	16.0
2 previous induced terminations	9.9	7.6	15.5	15.7	14.4	4.0
3 previous induced terminations or more	8.6	7.3	11.7	11.6	12.8	4.0
Number						
Not stated	3,480	756	337	321	16	2,387
Percent distribution						
Total	100.0	100.0	100.0	100.0	100.0	100.0
No previous induced termination	58.2	62.9	41.2	40.4	56.2	79.2
1 previous induced termination	25.8	25.0	31.9	32.2	25.0	12.3
2 previous induced terminations	9.1	6.9	15.5	15.6	12.5	3.8
3 previous induced terminations or more	6.9	5.2	11.5	11.7	6.2	4.7

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 7. Number of reported induced terminations of pregnancy by race of woman and percent distribution by period of gestation, according to race of woman: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation <sup>1</sup>	All races	White	<sup>2</sup> All other			Not stated
			Total	Black	Other races	
Number						
Total.....	306,792	203,408	92,969	87,033	5,936	10,415
Percent distribution						
All periods of gestation .....	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less.....	11.0	11.1	10.8	10.6	14.1	9.7
7 weeks.....	16.5	17.3	15.0	14.6	19.8	12.7
8 weeks.....	19.3	20.2	17.4	17.2	20.1	19.7
9 weeks.....	15.8	16.2	15.2	15.2	14.8	14.8
10 weeks.....	12.6	12.5	12.6	12.6	11.8	13.5
11 weeks.....	9.0	8.8	9.5	9.7	7.5	9.5
12 weeks.....	5.3	4.9	5.9	6.0	4.0	6.5
13 weeks.....	2.8	2.5	3.4	3.5	2.0	3.5
14 weeks.....	1.7	1.5	2.1	2.1	1.4	2.3
15 weeks.....	1.2	1.0	1.5	1.6	0.8	2.1
16 weeks.....	1.0	0.8	1.3	1.4	0.7	1.2
17 weeks.....	0.8	0.7	1.1	1.2	0.5	1.4
18 weeks.....	0.8	0.6	1.0	1.1	0.6	1.2
19 weeks.....	0.6	0.5	0.8	0.9	0.4	0.5
20 weeks.....	0.5	0.4	0.8	0.8	0.5	0.5
21 weeks or more.....	1.1	0.9	1.5	1.6	0.9	1.0

<sup>1</sup>Period of gestation is calculated from "date last normal menses began" or "physician's estimate of gestation"; see Technical notes.

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 8. Number of reported induced terminations of pregnancy by age of woman and percent distribution by period of gestation, according to age of woman: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation <sup>1</sup>	All ages	Under 14 years	14 years	15-19 years							20-24 years	25-29 years	30-34 years	35-39 years	40 years and over	Not stated
				Total	15 years	16 years	17 years	18 years	19 years							
Number																
Total.....	306,792	758	2,295	74,437	5,268	9,922	14,739	21,619	22,889	105,360	64,278	34,714	16,797	4,673	3,480	
Percent distribution																
All periods of gestation.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
6 weeks or less.....	11.0	7.0	6.4	6.3	4.9	5.3	5.7	6.5	7.4	9.8	13.4	16.1	17.4	15.3	19.0	
7 weeks.....	16.5	10.7	9.9	12.2	9.5	10.2	11.3	12.6	13.7	16.1	18.8	20.1	21.0	21.5	16.4	
8 weeks.....	19.3	12.8	13.6	17.3	14.3	15.6	16.4	17.9	18.8	19.4	20.5	21.2	21.1	20.3	13.7	
9 weeks.....	15.8	14.3	14.3	16.2	14.8	15.6	16.0	16.3	16.8	16.4	15.7	15.1	14.5	15.3	8.6	
10 weeks.....	12.6	12.8	13.6	14.6	15.2	14.7	15.1	14.7	14.1	13.1	11.3	10.5	10.0	10.3	12.8	
11 weeks.....	9.0	10.6	11.8	11.3	11.9	12.3	11.8	11.2	10.5	9.4	7.9	6.7	6.2	6.1	9.4	
12 weeks.....	5.3	6.5	8.2	6.9	7.9	8.1	7.5	6.5	6.1	5.4	4.4	3.7	3.5	3.7	6.4	
13 weeks.....	2.8	4.2	4.1	3.9	4.6	4.3	4.1	3.8	3.4	2.9	2.3	1.9	1.7	2.3	1.5	
14 weeks.....	1.7	4.1	3.1	2.4	3.2	2.6	2.6	2.4	2.1	1.7	1.3	1.0	1.0	1.0	2.1	
15 weeks.....	1.2	2.9	2.8	1.7	2.3	1.9	2.0	1.6	1.5	1.2	0.9	0.8	0.6	0.7	3.5	
16 weeks.....	1.0	2.4	2.0	1.5	2.3	1.8	1.6	1.3	1.1	1.0	0.7	0.7	0.5	0.6	1.0	
17 weeks.....	0.8	2.5	1.8	1.2	2.0	1.4	1.4	1.1	0.9	0.8	0.6	0.5	0.5	0.4	2.4	
18 weeks.....	0.8	2.2	1.8	1.1	1.6	1.5	1.1	1.0	0.9	0.7	0.5	0.4	0.5	0.6	1.8	
19 weeks.....	0.6	1.8	1.4	0.9	1.3	1.2	0.9	0.8	0.8	0.5	0.4	0.3	0.4	0.5	0.5	
20 weeks.....	0.5	1.1	1.9	0.8	1.1	1.1	0.7	0.8	0.6	0.5	0.3	0.3	0.4	0.4	0.3	
21 weeks or more.....	1.1	4.1	3.4	1.7	3.0	2.3	2.0	1.4	1.3	1.0	0.8	0.6	0.8	0.9	0.6	

<sup>1</sup>Period of gestation is calculated from "date last normal menses began" or "physician's estimate of gestation"; see Technical notes.

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.



**Table 9. Number of reported induced terminations of pregnancy by educational attainment, race, and age of woman and percent distribution by period of gestation, according to race, age, and educational attainment of woman: 11-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation, <sup>1</sup> age, and race of woman	Years of school completed						
	Total	0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not stated
<b>All races<sup>2</sup></b>							
All ages . . . . .	281,826	6,549	47,109	120,736	56,570	29,019	21,843
Number							
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	11.4	10.6	7.5	10.7	12.3	17.6	13.7
7-8 weeks . . . . .	35.9	30.1	28.3	35.2	39.9	45.9	33.5
9-12 weeks . . . . .	42.4	43.5	48.2	43.5	40.8	32.1	41.2
13-15 weeks . . . . .	5.6	7.9	8.5	5.7	4.1	2.5	6.5
16-20 weeks . . . . .	3.6	6.1	5.7	3.7	2.2	1.3	3.9
21 weeks or more . . . . .	1.1	1.9	1.8	1.2	0.8	0.6	1.1
Number							
10-17 years . . . . .	30,432	2,802	20,401	4,628	194	-	2,407
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	5.7	5.8	5.3	6.2	7.2	-	8.3
7-8 weeks . . . . .	26.4	23.8	25.9	29.6	36.1	-	26.3
9-12 weeks . . . . .	45.8	47.7	50.4	49.3	46.4	-	48.4
13-15 weeks . . . . .	8.9	9.8	9.0	7.3	5.2	-	9.5
16-20 weeks . . . . .	6.7	9.3	6.8	5.3	2.6	-	5.8
21 weeks or more . . . . .	2.5	3.5	2.5	2.3	2.6	-	1.7
Number							
18-24 years . . . . .	136,670	1,536	17,699	65,088	33,736	9,313	9,298
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	9.3	9.3	7.8	8.7	10.0	14.0	10.2
7-8 weeks . . . . .	34.4	30.0	27.9	32.9	38.3	44.9	33.6
9-12 weeks . . . . .	45.1	44.7	48.5	46.3	43.8	36.3	44.1
13-15 weeks . . . . .	6.1	9.2	8.9	6.4	4.5	2.7	7.1
16-20 weeks . . . . .	3.8	5.7	5.5	4.4	2.5	1.4	3.8
21 weeks or more . . . . .	1.2	1.0	1.3	1.3	0.9	0.7	1.3
Number							
25 years and over . . . . .	111,342	2,193	8,840	50,584	22,473	19,563	7,689
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	15.4	17.2	12.4	13.8	15.7	19.2	17.4
7-8 weeks . . . . .	40.4	38.3	34.5	38.8	42.4	46.3	37.2
9-12 weeks . . . . .	37.1	37.3	42.4	39.3	36.2	30.1	37.0
13-15 weeks . . . . .	4.1	4.5	6.2	4.5	3.4	2.4	4.7
16-20 weeks . . . . .	2.3	2.3	3.7	2.8	1.7	1.3	2.7
21 weeks or more . . . . .	0.8	0.3	1.0	0.8	0.6	0.6	1.1

See footnotes and note at end of table.

**Table 9. Number of reported induced terminations of pregnancy by educational attainment, race, and age of woman and percent distribution by period of gestation, according to race, age, and educational attainment of woman: 11-State area, 1984—Con.**  
 [Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation, <sup>1</sup> age, and race of woman	Years of school completed						
	Total	0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not stated
All races <sup>2</sup> —Con.							
Not stated . . . . .	3,382	18	169	436	167	143	2,449
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	19.3	44.4	7.7	14.1	16.2	23.1	20.8
7-8 weeks . . . . .	30.1	16.7	28.0	34.2	37.7	40.6	28.4
9-12 weeks . . . . .	37.3	33.3	41.1	41.2	34.7	31.5	36.9
13-15 weeks . . . . .	7.0	-	10.7	5.4	6.6	2.8	7.3
16-20 weeks . . . . .	5.8	5.6	7.7	4.7	2.4	0.7	6.3
21 weeks or more . . . . .	0.6	-	4.8	0.5	2.4	1.4	0.2
White							
All ages . . . . .	185,707	3,955	30,045	77,165	38,947	21,902	13,693
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	11.6	10.6	7.4	11.0	12.1	17.9	13.0
7-8 weeks . . . . .	37.7	32.1	29.4	37.1	41.3	46.6	35.8
9-12 weeks . . . . .	42.1	44.1	49.5	43.2	40.4	31.3	41.0
13-15 weeks . . . . .	4.9	7.6	7.7	4.9	3.6	2.3	5.8
16-20 weeks . . . . .	2.8	4.3	4.4	2.9	1.9	1.3	3.2
21 weeks or more . . . . .	1.0	1.2	1.5	0.9	0.7	0.6	1.2
Number							
10-17 years . . . . .	19,839	1,375	13,510	3,151	127	-	1,675
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	-	100.0
6 weeks or less . . . . .	5.7	5.7	5.1	6.5	7.9	-	9.0
7-8 weeks . . . . .	28.1	24.7	27.5	31.5	38.6	-	28.2
9-12 weeks . . . . .	51.5	51.4	51.9	51.0	47.2	-	49.2
13-15 weeks . . . . .	7.9	9.2	8.1	6.4	3.9	-	8.5
16-20 weeks . . . . .	4.9	6.7	5.2	3.5	1.6	-	4.2
21 weeks or more . . . . .	1.9	2.3	2.1	1.1	0.8	-	0.9
Number							
18-24 years . . . . .	94,271	1,122	11,307	43,385	24,275	7,437	6,745
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	9.4	8.6	7.7	8.7	9.7	14.3	10.5
7-8 weeks . . . . .	36.3	31.5	29.2	35.0	39.9	45.6	34.8
9-12 weeks . . . . .	44.9	45.1	49.8	46.3	43.5	35.7	43.4
13-15 weeks . . . . .	5.3	9.4	8.1	5.6	4.0	2.4	6.5
16-20 weeks . . . . .	3.0	4.5	4.2	3.4	2.1	1.3	3.4
21 weeks or more . . . . .	1.0	1.0	1.1	1.0	0.8	0.7	1.4

See footnotes and note at end of table.

**Table 9. Number of reported induced terminations of pregnancy by educational attainment, race, and age of woman and percent distribution by period of gestation, according to race, age, and educational attainment of woman: 11-State area, 1984—Con.**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation, <sup>1</sup> age, and race of woman	Years of school completed						
	Total	0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not stated
<b>White—Con.</b>							
25 years and over . . . . .	70,901	1,448	5,131	30,344	14,443	14,355	5,180
				Number			
				Percent distribution			
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	16.1	16.7	13.0	14.6	16.1	19.7	17.5
7-8 weeks . . . . .	42.1	39.8	35.0	40.7	43.8	47.1	39.7
9-12 weeks . . . . .	35.7	36.2	42.7	38.0	35.0	29.1	35.1
13-15 weeks . . . . .	3.5	4.9	5.5	3.8	3.0	2.2	4.0
16-20 weeks . . . . .	1.9	1.9	3.0	2.2	1.5	1.3	2.5
21 weeks or more . . . . .	0.7	0.3	0.7	0.7	0.5	0.6	1.2
				Number			
Not stated . . . . .	696	10	97	285	102	110	92
				Percent distribution			
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	14.8	40.0	5.2	15.2	15.7	21.8	12.0
7-8 weeks . . . . .	35.9	10.0	26.8	36.1	38.2	42.7	37.0
9-12 weeks . . . . .	39.0	50.0	46.4	39.7	35.3	30.0	42.4
13-15 weeks . . . . .	5.8	-	13.4	4.3	4.9	2.7	7.6
16-20 weeks . . . . .	3.2	-	5.2	4.3	2.9	0.9	1.1
21 weeks or more . . . . .	1.3	-	3.1	0.4	2.9	1.8	-
<b>Black</b>							
All ages . . . . .	85,515	2,244	16,189	40,513	16,359	6,043	4,167
				Number			
				Percent distribution			
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	10.7	9.9	7.7	10.1	12.7	16.3	12.9
7-8 weeks . . . . .	31.9	26.1	26.0	31.5	36.5	42.9	27.8
9-12 weeks . . . . .	43.5	42.5	45.9	44.3	41.9	35.4	44.4
13-15 weeks . . . . .	7.1	8.8	9.8	7.2	5.1	3.6	8.6
16-20 weeks . . . . .	5.2	9.6	8.1	5.4	2.8	1.5	4.9
21 weeks or more . . . . .	1.6	3.2	2.4	1.6	1.0	0.4	1.4
				Number			
10-17 years . . . . .	10,072	1,393	6,627	1,409	63	-	580
				Percent distribution			
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	-	100.0
6 weeks or less . . . . .	5.7	6.0	5.6	5.6	4.8	-	7.6
7-8 weeks . . . . .	23.2	23.2	22.9	25.1	30.2	-	21.8
9-12 weeks . . . . .	46.5	43.9	47.4	45.2	46.0	-	45.9
13-15 weeks . . . . .	10.6	10.5	10.8	9.6	7.9	-	11.4
16-20 weeks . . . . .	10.1	11.7	10.0	9.5	4.8	-	9.4
21 weeks or more . . . . .	3.8	4.7	3.4	4.9	6.3	-	3.8

See footnotes and note at end of table.

**Table 9. Number of reported induced terminations of pregnancy by educational attainment, race, and age of woman and percent distribution by period of gestation, according to race, age, and educational attainment of woman: 11-State area, 1984—Con.**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation, <sup>1</sup> age, and race of woman	Years of school completed						
	Total	0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not stated
Black—Con.							
18-24 years . . . . .	39,076	324	6,032	20,439	8,794	1,637	1,850
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	9.1	10.8	7.9	8.4	10.6	12.6	9.7
7-8 weeks . . . . .	29.7	24.8	25.6	28.3	34.1	41.9	28.7
9-12 weeks . . . . .	45.8	43.0	46.5	46.6	44.7	38.9	45.8
13-15 weeks . . . . .	8.0	9.9	10.3	8.3	6.0	4.2	9.3
16-20 weeks . . . . .	5.8	9.9	7.9	6.5	3.4	2.1	5.3
21 weeks or more . . . . .	1.6	1.5	1.9	1.9	1.2	0.4	1.2
Number							
25 years and over . . . . .	36,054	520	3,467	18,533	7,446	4,379	1,709
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	13.8	19.2	11.4	12.3	15.1	17.6	18.2
7-8 weeks . . . . .	36.7	34.6	32.9	35.5	39.5	43.3	28.9
9-12 weeks . . . . .	40.2	38.7	42.5	41.7	38.7	34.1	42.3
13-15 weeks . . . . .	5.3	3.8	7.2	5.7	4.1	3.4	6.9
16-20 weeks . . . . .	3.1	3.5	4.7	3.8	2.0	1.2	2.9
21 weeks or more . . . . .	0.9	0.2	1.4	1.0	0.6	0.4	0.8
Number							
Not stated . . . . .	313	7	63	132	56	27	28
Percent distribution							
All periods of gestation . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less . . . . .	14.2	42.9	12.9	10.7	16.1	29.6	7.4
7-8 weeks . . . . .	31.6	28.6	30.6	29.8	37.5	33.3	29.6
9-12 weeks . . . . .	39.4	14.3	30.6	46.6	33.9	33.3	48.1
13-15 weeks . . . . .	6.1	-	6.5	6.9	8.9	3.7	-
16-20 weeks . . . . .	6.5	14.3	12.9	5.3	1.8	-	11.1
21 weeks or more . . . . .	2.3	-	6.5	0.8	1.8	-	3.7

<sup>1</sup>Period of gestation is calculated from "date last normal menses began" or "physician's estimate of gestation"; see Technical notes.<sup>2</sup>Includes races other than white and black.

NOTE: The 11-State area includes Indiana, Kansas, Missouri, Montana, New York, Oregon, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 10. Number of reported induced terminations of pregnancy by type of procedure and percent distribution by type of procedure, according to period of gestation: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation <sup>1</sup>	All procedures	Suction curettage	Sharp curettage	Saline instillation	Prostaglandin instillation	Hysterotomy	Hysterectomy	Other	
									Number
Total.....	2306,792	289,471	1,331	5,158	1,902	41	43	6,320	
	Percent distribution								
All periods of gestation.....	100.0	95.1	0.4	1.7	0.6	0.0	0.0	2.1	
6 weeks or less.....	100.0	97.9	0.5	0.2	0.0	0.0	0.0	1.3	
7 weeks.....	100.0	98.1	0.3	0.1	0.0	0.0	0.0	1.5	
8 weeks.....	100.0	98.7	0.3	0.1	0.1	0.0	0.0	0.8	
9 weeks.....	100.0	99.0	0.3	0.1	0.1	0.0	0.0	0.4	
10 weeks.....	100.0	98.8	0.4	0.2	0.2	0.0	0.0	0.4	
11 weeks.....	100.0	98.4	0.4	0.3	0.3	0.0	0.0	0.7	
12 weeks.....	100.0	96.4	0.5	0.8	0.5	0.0	0.0	1.8	
13 weeks.....	100.0	90.9	0.9	2.2	1.0	0.1	0.0	4.9	
14 weeks.....	100.0	83.5	1.1	3.7	2.3	0.1	0.0	9.3	
15 weeks.....	100.0	73.3	1.1	7.7	4.0	0.1	-	13.8	
16 weeks.....	100.0	62.6	1.4	13.8	7.4	0.2	0.1	14.7	
17 weeks.....	100.0	52.5	1.4	18.9	10.0	0.1	-	17.0	
18 weeks.....	100.0	43.8	1.3	26.6	11.3	0.1	0.1	16.7	
19 weeks.....	100.0	40.7	1.6	31.2	9.8	0.1	0.1	16.5	
20 weeks.....	100.0	37.3	1.0	35.4	7.2	0.1	0.1	19.0	
21 weeks or more.....	100.0	35.4	1.0	41.4	4.6	0.0	0.0	17.6	
Not stated.....	100.0	88.1	2.0	2.3	4.3	0.2	0.4	2.9	

<sup>1</sup>Period of gestation is calculated from "date last normal menses began" or "physician's estimate of gestation"; see Technical notes.

<sup>2</sup>Includes procedure not stated.

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 11. Number and percent distribution of reported induced terminations of pregnancy by age of woman, according to metropolitan-nonmetropolitan residence and race of woman: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Age of woman	All areas			Metropolitan areas			Nonmetropolitan areas		
	All races <sup>1</sup>	White	Black	All races <sup>1</sup>	White	Black	All races <sup>1</sup>	White	Black
	Number								
All ages . . . . .	306,792	203,408	87,033	266,508	169,741	81,914	40,284	33,667	5,119
Under 14 years . . . . .	758	289	450	636	223	395	122	66	55
14 years . . . . .	2,295	1,139	1,096	1,904	854	1,002	391	285	94
15-19 years . . . . .	74,437	52,399	19,308	62,519	42,117	18,038	11,918	10,282	1,270
15 years . . . . .	5,268	3,148	1,945	4,369	2,420	1,801	899	728	144
16 years . . . . .	9,922	6,700	2,884	8,249	5,296	2,671	1,673	1,404	213
17 years . . . . .	14,739	10,394	3,832	12,324	8,293	3,588	2,415	2,101	244
18 years . . . . .	21,619	15,647	5,168	18,220	12,658	4,858	3,399	2,989	310
19 years . . . . .	22,889	16,510	5,479	19,357	13,450	5,120	3,532	3,060	359
20-24 years . . . . .	105,360	71,482	29,241	91,477	59,842	27,479	13,883	11,640	1,762
25-29 years . . . . .	64,278	40,954	20,135	56,993	35,071	19,042	7,285	5,883	1,093
30-34 years . . . . .	34,714	22,107	10,647	30,762	18,881	10,104	3,952	3,226	543
35-39 years . . . . .	16,797	11,109	4,619	14,771	9,415	4,378	2,026	1,694	241
40 years and over . . . . .	4,673	3,173	1,216	4,083	2,667	1,161	590	506	55
Not stated . . . . .	3,480	756	321	3,363	671	315	117	85	6
	Percent distribution								
All ages . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 14 years . . . . .	0.2	0.1	0.5	0.2	0.1	0.5	0.3	0.2	1.1
14 years . . . . .	0.8	0.6	1.3	0.7	0.5	1.2	1.0	0.8	1.8
15-19 years . . . . .	24.5	25.9	22.3	23.8	24.9	22.1	29.7	30.6	24.8
15 years . . . . .	1.7	1.6	2.2	1.7	1.4	2.2	2.2	2.2	2.8
16 years . . . . .	3.3	3.3	3.3	3.1	3.1	3.3	4.2	4.2	4.2
17 years . . . . .	4.9	5.1	4.4	4.7	4.9	4.4	6.0	6.3	4.8
18 years . . . . .	7.1	7.7	6.0	6.9	7.5	6.0	8.5	8.9	6.1
19 years . . . . .	7.5	8.1	6.3	7.4	8.0	6.3	8.8	9.1	7.0
20-24 years . . . . .	34.7	35.3	33.7	34.8	35.4	33.7	34.6	34.7	34.5
25-29 years . . . . .	21.2	20.2	23.2	21.7	20.7	23.3	18.1	17.5	21.4
30-34 years . . . . .	11.4	10.9	12.3	11.7	11.2	12.4	9.8	9.6	10.6
35-39 years . . . . .	5.5	5.5	5.3	5.6	5.6	5.4	5.0	5.0	4.7
40 years and over . . . . .	1.5	1.6	1.4	1.6	1.6	1.4	1.5	1.5	1.1

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

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 12. Number of reported induced terminations of pregnancy by residence status of woman and percent distribution by period of gestation, according to residence status of woman: 13-State area, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Period of gestation <sup>1</sup>	All induced terminations occurring in area	Induced terminations occurring in area among U.S. residents	Induced terminations occurring in State of residence			Induced terminations among interstate nonresidents	Induced terminations among non-residents of United States
			Total	Occurring in county of residence	Among intrastate nonresidents		
Number							
Total .....	308,510	306,792	283,883	199,424	84,459	22,909	1,718
Percent distribution							
All periods of gestation .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6 weeks or less .....	11.0	11.0	11.1	12.3	8.4	9.1	7.3
7 weeks .....	16.4	16.5	16.6	17.3	15.0	14.4	13.9
8 weeks .....	19.3	19.3	19.5	19.4	19.6	17.4	15.1
9 weeks .....	15.8	15.8	15.9	15.5	16.7	15.2	12.8
10 weeks .....	12.6	12.6	12.6	12.2	13.6	12.5	11.5
11 weeks .....	9.0	9.0	9.0	8.5	10.1	9.5	9.8
12 weeks .....	5.3	5.3	5.3	5.0	5.8	5.4	7.6
13 weeks .....	2.8	2.8	2.8	2.7	3.1	3.1	5.2
14 weeks .....	1.7	1.7	1.7	1.6	1.8	2.0	3.6
15 weeks .....	1.2	1.2	1.2	1.2	1.2	1.5	2.1
16 weeks .....	1.0	1.0	1.0	0.9	1.1	1.4	1.7
17 weeks .....	0.8	0.8	0.8	0.8	0.8	1.2	0.9
18 weeks .....	0.8	0.8	0.7	0.7	0.8	1.2	1.1
19 weeks .....	0.6	0.6	0.6	0.5	0.6	1.0	1.7
20 weeks .....	0.5	0.5	0.4	0.4	0.5	1.3	1.2
21 weeks or more .....	1.1	1.1	0.9	0.9	0.9	3.9	4.5

<sup>1</sup>Period of gestation is calculated from "date last normal menses began" or "physician's estimate of gestation"; see Technical notes.

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table 13. Number of reported induced terminations of pregnancy in the 13 reporting States and New York City by place of residence according to place of occurrence: United States, each State, New York City, and specified places outside the United States, 1984**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Place of residence	Place of occurrence																		
	Total	Colorado	Indiana	Kansas	Missouri	Montana	New York									Tennessee	Utah	Vermont	Virginia
							Total	Upstate New York	New York City	Oregon	Rhode Island	South Carolina							
All places of residence . . . . .	308,510	17,549	15,343	7,303	20,204	3,618	152,146	55,685	96,461	13,133	7,422	11,704	21,124	4,024	3,420	31,520			
United States . . . . .	306,792	17,545	15,342	7,301	20,203	3,246	150,834	54,569	96,265	13,130	7,421	11,696	21,121	4,022	3,411	31,520			
Alabama . . . . .	125	-	1	-	2	-	3	1	2	-	-	-	115	-	-	4			
Alaska . . . . .	28	-	-	1	-	-	1	1	-	25	-	-	-	-	-	1			
Arizona . . . . .	26	9	1	-	1	-	4	3	1	2	2	1	2	2	1	1			
Arkansas . . . . .	1,048	2	-	9	126	-	1	-	1	-	-	-	909	-	-	1			
California . . . . .	165	10	3	1	3	2	23	6	17	98	3	6	6	3	1	6			
Colorado . . . . .	16,659	16,642	1	3	4	2	1	1	-	-	-	-	-	4	2	-			
Connecticut . . . . .	784	-	-	-	-	-	699	307	392	-	80	-	-	-	3	2			
Delaware . . . . .	20	-	-	-	-	-	19	1	18	-	-	-	-	-	-	1			
District of Columbia . . . . .	235	-	-	-	-	-	37	5	32	-	1	-	-	-	-	197			
Florida . . . . .	94	2	2	2	2	1	41	16	25	1	4	19	7	-	1	12			
Georgia . . . . .	505	-	2	1	2	-	3	3	-	-	-	95	393	-	-	9			
Hawaii . . . . .	6	-	-	-	1	-	-	-	-	1	2	1	1	-	-	-			
Idaho . . . . .	94	2	-	-	-	20	-	-	-	43	-	-	-	29	-	-			
Illinois . . . . .	2,177	1	303	11	1,816	1	26	5	21	1	-	4	11	-	-	3			
Indiana . . . . .	14,875	2	14,831	1	24	-	8	3	5	-	-	3	6	-	-	-			
Iowa . . . . .	44	-	-	20	21	-	1	-	1	-	-	2	-	-	-	-			
Kansas . . . . .	5,350	47	-	4,615	685	-	1	-	1	-	-	1	-	-	-	1			
Kentucky . . . . .	790	1	4	3	97	-	8	-	8	-	-	1	669	-	-	7			
Louisiana . . . . .	12	1	-	-	1	-	4	1	3	-	-	2	3	-	-	1			
Maine . . . . .	29	-	-	-	-	1	19	1	18	-	3	2	1	-	1	2			
Maryland . . . . .	539	1	-	-	1	1	141	15	126	-	1	3	2	-	1	388			
Massachusetts . . . . .	1,875	2	-	-	-	-	135	29	106	-	1,690	4	-	-	41	3			
Michigan . . . . .	109	3	85	-	1	1	12	7	5	-	-	2	3	-	-	2			
Minnesota . . . . .	24	3	1	2	1	1	12	1	11	-	-	3	-	1	-	-			
Mississippi . . . . .	1,372	-	-	-	-	-	1	1	-	-	-	3	1,368	-	-	-			
Missouri . . . . .	19,944	7	-	2,526	17,306	-	6	-	6	-	-	-	94	1	-	4			
Montana . . . . .	2,909	12	-	-	-	2,894	-	-	-	2	-	-	-	-	-	-			
Nebraska . . . . .	190	122	1	34	33	-	-	-	-	-	-	-	-	-	-	-			
Nevada . . . . .	19	2	-	-	-	-	-	-	-	-	-	-	-	17	-	-			
New Hampshire . . . . .	216	-	-	-	-	-	11	3	8	1	5	-	-	-	199	-			
New Jersey . . . . .	2,227	2	-	-	1	-	2,198	316	1,882	-	2	5	1	-	6	12			
New Mexico . . . . .	210	207	-	-	1	1	1	1	-	-	-	-	-	-	-	-			
New York . . . . .	146,192	3	-	2	5	1	145,393	52,326	93,067	2	10	6	5	2	716	47			
Upstate New York . . . . .	55,085	2	-	2	2	-	54,341	50,861	3,480	1	9	2	3	1	716	6			
New York City . . . . .	91,107	1	-	-	3	1	91,052	1,465	89,587	1	1	4	2	1	-	41			

See note at end of table.



**Table 13. Number of reported induced terminations of pregnancy in the 13 reporting States and New York City by place of residence according to place of occurrence: United States, each State, New York City, and specified places outside the United States, 1984—Con.**

[Data include only induced terminations of pregnancy occurring in the reporting area]

Place of residence	Total	Place of occurrence														
		Colorado	Indiana	Kansas	Missouri	Montana	New York		Oregon	Rhode Island	South Carolina	Tennessee	Utah	Vermont	Virginia	
							Total	New York City								
North																
Carolina . . . . .	1,240	-	1	-	-	-	33	11	22	-	-	364	44	-	-	798
North Dakota . . .	39	1	-	-	-	37	-	-	-	-	-	1	-	-	-	-
Ohio . . . . .	157	1	102	-	2	-	29	12	17	-	1	7	6	-	-	9
Oklahoma . . . . .	92	2	-	62	25	-	2	2	-	-	-	-	-	1	-	-
Oregon . . . . .	12,191	1	1	-	-	2	-	-	-	12,187	-	-	-	-	-	-
Pennsylvania . . .	1,786	1	-	-	4	2	1,748	1,451	297	-	1	7	1	-	-	22
Rhode Island . . .	5,662	-	-	-	-	-	45	5	40	-	5,612	1	-	-	2	2
South																
Carolina . . . . .	11,142	-	-	-	-	-	6	3	3	1	-	11,127	-	-	-	8
South Dakota . .	18	9	-	1	3	2	1	1	-	-	-	-	-	1	-	1
Tennessee . . . .	17,341	1	-	-	16	-	8	2	6	-	1	7	17,298	-	-	10
Texas . . . . .	57	4	1	4	8	-	15	6	9	2	-	4	5	-	-	14
Utah . . . . .	3,889	90	-	-	1	-	1	-	1	1	-	1	-	3,795	-	-
Vermont . . . . .	2,466	-	-	-	1	-	27	14	13	-	1	-	-	-	2,437	-
Virginia . . . . .	30,019	-	-	2	3	-	93	6	87	1	2	13	159	-	-	29,746
Washington . . . .	780	5	-	-	3	5	5	2	3	760	-	-	-	1	-	1
West Virginia . . .	225	-	-	-	-	-	9	-	9	-	-	1	10	-	-	205
Wisconsin . . . . .	9	-	2	-	2	-	2	-	2	1	-	-	1	1	-	-
Wyoming . . . . .	787	347	-	1	1	272	1	1	-	1	-	-	1	163	-	-
Outside of United States																
Puerto Rico . . . .	11	-	-	-	-	-	11	1	10	-	-	-	-	-	-	-
Virgin Islands . . .	2	-	-	-	-	-	2	1	1	-	-	-	-	-	-	-
Canada . . . . .	1,593	2	-	1	1	370	1,205	1,105	100	2	1	1	1	1	8	-
Mexico . . . . .	4	-	1	-	-	-	3	2	1	-	-	-	-	-	-	-
Remainder of World . . . . .	108	2	-	1	-	2	91	7	84	1	-	7	2	1	1	-

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

## Technical notes

### Nature and sources of data

Data in this report are based on information for the same 13 States in 1984 as in 1982 and 1983: Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

The reporting States provided data on magnetic tape for individual events coded from copies of the original reports of induced termination of pregnancy. These data were provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program. NCHS collects information on individual abortions occurring in selected States with mandatory abortion reporting requirements. The State abortion reporting forms include information on the demographic characteristics and pregnancy history of the woman and the nature of the procedure. The NCHS data system, based on reports of individual abortions, enables detailed cross-classification.

Two other organizations currently publish information on induced abortions—the Centers for Disease Control (CDC), which like NCHS is a component of the U.S. Public Health Service, and the Alan Guttmacher Institute (AGI), a private organization. CDC relies primarily on aggregate abortion data reported by State health agencies, hospitals, and medical institutions; AGI obtains its information from a nationwide survey of abortion providers.

### Item completeness

Item completeness, which is measured by the percent of records with codes other than “not stated,” is shown in table I for the varying number of States included in the analysis of each item. States were excluded from analysis either if information was not collected on the item or if no information for the item was reported for 25 percent or more of the records. Table I shows that resident status was 100 percent complete for 1984. Residence information, if unknown or incomplete, is

allocated at the coding level according to the following rules. First, records with unknown residence are allocated to place of occurrence. Second, records where only State of residence is reported, with no city or county specified, and the State named is different from the State of occurrence, are allocated to the largest city of the State of residence.

### Classification of data

Procedures used for coding and classifying the items on the Report of Induced Termination of Pregnancy are described in the NCHS *Vital Statistics Instruction Manual*, Part 10, “Classification and coding instructions for induced termination of pregnancy records, 1984.”<sup>9</sup> Codes for geographic areas are described in Part 8, “Vital records geographic classification, 1982.”<sup>10</sup> Additional information on classifying selected items can be found in the Technical Appendix of *Vital Statistics of the United States, Vol. I*.<sup>11</sup> Definitions of types of procedures used are given in *Legalized Abortion and the Public Health*.<sup>12</sup> Data on period of gestation are computed from information on “date of termination” and “date last normal menses began.” If “date of last normal menses” is not stated or if computed gestation in weeks is not possible, “physician’s estimate of gestation” is used.

### Ratios, percents, and medians

Measures of incidence in this report are based on ratios of induced terminations of pregnancy to live births. These ratios refer to the number of induced terminations and live births occurring in the reporting States to residents of the reporting States. In the computation of ratios, “not stated” cases have been distributed according to the reported or known proportion for a particular characteristic. Ratios of induced terminations of preg-

NOTE: A list of references follows the text.

Table I. Percent completeness for items on reporting form and number of reporting States: 1983 and 1984

Item	1984		1983	
	Percent completeness	Number of reporting States	Percent completeness	Number of reporting States
Age of woman	98.9	13	98.9	13
Complications	96.8	13	96.9	13
Education	92.2	11	89.1	11
Marital status <sup>1</sup>	97.4	12	97.8	12
Period of gestation	99.8	13	99.7	13
Previous induced terminations	97.2	13	97.5	13
Previous live births	97.5	13	97.8	13
Race of woman	96.6	13	96.8	13
Resident status <sup>2</sup>	100.0	13	100.0	13
Type of procedure	99.2	13	99.5	13

<sup>1</sup>New York City also reported marital status.

<sup>2</sup>Resident status unknown is allocated at the coding level; see Technical notes.

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

**Table II. Type I and Type II induced termination of pregnancy ratios by race and age of woman: 13-State area, 1984**

[Type I ratio is per 1,000 live births. Type II ratio is per 1,000 live births and induced terminations. Induced terminations of pregnancy and live births are only those occurring in the area among residents of the area]

Age of woman	Type I			Type II		
	All races <sup>1</sup>	White	Black	All races <sup>1</sup>	White	Black
All ages . . . . .	364.3	307.4	646.3	267.0	235.1	392.6
Under 14 years . . . . .	1,946.9	2,088.7	1,884.2	660.5	675.6	653.0
14 years . . . . .	1,501.3	1,845.9	1,290.8	600.2	648.5	563.3
15-19 years . . . . .	728.8	756.8	678.1	421.6	430.8	404.1
15 years . . . . .	1,077.2	1,239.3	914.9	518.6	553.4	477.7
16 years . . . . .	890.5	984.1	747.9	471.0	496.0	427.9
17 years . . . . .	759.5	811.1	664.1	431.7	447.8	399.0
18 years . . . . .	760.0	804.1	667.9	431.8	445.7	400.4
19 years . . . . .	599.0	598.8	611.4	374.6	374.5	379.4
20-24 years . . . . .	414.3	360.4	651.4	292.9	264.9	394.5
25-29 years . . . . .	242.4	187.3	587.6	195.1	157.7	370.1
30-34 years . . . . .	225.6	172.8	591.2	184.1	147.4	371.5
35-39 years . . . . .	358.3	294.0	737.3	263.8	227.2	424.4
40 years and over . . . . .	692.1	607.2	1,083.3	409.0	377.8	519.9

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

NOTE: The 13-State area includes Colorado, Indiana, Kansas, Missouri, Montana, New York, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Vermont, and Virginia.

nancy provide an approximate indication of the frequency of induced abortions to the frequency of pregnancies.

Two forms of induced abortion ratios (ratios per 1,000 live births—Type I ratios—and ratios per 1,000 live births and induced abortions—Type II ratios) are shown in table II. Induced abortion ratios in the text of this report are of Type I. These ratios are larger than those in Type II, because the latter includes a larger number of events in the denominator than the former. Both types of ratios have the same number of events—induced terminations—in the numerator. For Type I ratios, age differentials are greater; that is, the range between the largest and the smallest ratios by age of women is greater than for Type II ratios. Induced abortion differentials by race are also more pronounced using Type I than Type II ratios.

In the computation of percent distributions and medians, “not stated” cases are excluded. Proportional allocation of “not stated” cases in computing these measures would yield exactly

the same results. In addition, medians were calculated using single years of age, single years of education, and single weeks of gestation.

In the computation of percent change, the following general formula was used:

$$\frac{R_1 - R_2}{R_2} \cdot 100$$

where  $R_1$  equals the ratio of interest in 1984 and  $R_2$  equals the ratio of interest in 1983. The total percent change is a weighted average of the change for the groups of interest. Although it is unusual, the total percent change can be greater or smaller than either of the percent changes in its component parts as seen in tables A and B.

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**Suggested citation**

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## Trends and Variations in Post Partum Sterilization in the United States, 1972 and 1980

by Charles W. Warren, Ph.D., Division of Reproductive Health, Centers for Disease Control, Kenneth G. Keppel, Ph.D., Division of Vital Statistics, National Center for Health Statistics, and Melinda L. Flock, M.S.P.H., Division of Reproductive Health, Centers for Disease Control

### Introduction

The use of male and female surgical sterilization by married couples in the United States has increased substantially since 1965. By 1982 surgical sterilization was the most popular single method of contraception used in the United States (Bachrach, 1984; Westoff and Jones, 1977). In 1982 an estimated 7.9 million married women relied on sterilization (male or female) as their contraceptive method (Bachrach, 1984). Due to the rapid adoption of surgical sterilization in the last few years—especially the female procedure (tubal ligation)—surgical sterilization is now more frequently used than the birth control pill as a contraceptive method among married couples in the United States (Bachrach, 1984).

Female sterilization performed immediately following a completed pregnancy is referred to as a “post partum” procedure. Female sterilization not performed immediately following a completed pregnancy is referred to as an “interval” procedure. Although the proportion of all sterilizations performed post partum declined during the 1970’s (Centers for Disease Control, 1981), the number of post partum sterilizations increased significantly. This report examines trends in post partum sterilization between 1972 and 1980 among married mothers and its levels within social and demographic subgroups. More extensive analyses of the 1972 data have been published previously (NCHS, 1977a, 1977b).

### Data and methods

The data presented in this report are from the 1972 and 1980 National Natality Surveys (NNS’s) conducted by the National Center for Health Statistics. These surveys are based on probability samples of all live births to U.S. residents that

occurred in 1972 and 1980, respectively. Information beyond that obtainable from birth certificates was collected through questionnaires sent to mothers, hospitals, and attendants at delivery. In 1972 and 1980 hospitals were asked whether any operation was performed that would prevent future pregnancies. In 1980 only, hospitals were asked what type of operation was performed and why. Missing values for all sources of information were imputed and each birth was weighted to produce national estimates. A more detailed description of these surveys is included in the Technical notes.

When interpreting the results discussed in this report, a number of points must be kept in mind. First, other studies indicate that the social and demographic relationships for post partum sterilization presented here may differ from relationships for interval and male sterilizations (Bumpass and Presser, 1972). Second, it should be emphasized that these data include all operations performed post partum to prevent future pregnancies (tubal ligation, hysterectomy, and others). Based on data from hospitals included in the 1980 NNS, 94 percent of post partum sterilizations of married mothers were done by tubal ligation (as opposed to other types of female sterilization), and 94 percent were done solely for contraceptive reasons. The findings discussed in this report are, therefore, most representative of post partum tubal ligations performed for contraceptive reasons. Third, the post partum sterilization rates presented in this report are for incidence, not prevalence; that is, they refer only to post partum sterilizations among mothers who had a live birth in 1972 or 1980. Fourth, the patterns described for post partum sterilization among married mothers who delivered in a hospital may differ from patterns for unmarried mothers and for nonhospital births in 1972 and 1980. The proportion of live births to unmarried mothers changed from 12.4 percent in 1972 to 18.4 percent in 1980,

while the proportion of hospital live births changed from 99.2 percent in 1972 to 99.0 percent in 1980.

### Incidence of post partum sterilization

The estimated number of married mothers in the United States who were sterilized following a hospital delivery of a live birth increased from 220,000 in 1972 to 330,000 in 1980. The percent of married mothers sterilized post partum increased from 7.8 percent in 1972 to 11.3 percent in 1980 (figure 1), a relative increase of 45 percent. The increase in the percent of married mothers sterilized post partum was greater for black than for white mothers. The percent of married black mothers who were sterilized nearly doubled from 9.8 percent in 1972 to 19.2 percent in 1980, a relative increase of 96 percent. Among married white mothers, the percent sterilized increased from 7.7 to 10.5 percent over the same period, a relative increase of 36 percent. In 1972 the difference in the percent sterilized between white and black married mothers was not statistically significant. In 1980, however, the difference was statistically significant.

Between 1972 and 1980, the percent of married mothers sterilized post partum increased in each of the four regions of the United States (figure 2). In 1972 there were no significant differences among the regions. In 1980, however, the South had the highest percent of married mothers sterilized post partum. The South also had the greatest percent increase in post partum sterilization between 1972 and 1980. During this period the percent of married mothers sterilized post partum increased by 26–36 percent in the other regions compared with 69 percent in the South.

In 1980 the percent of married white mothers sterilized in the South was also higher than the percent in the other regions (table 1). Between 1972 and 1980, the percent of married

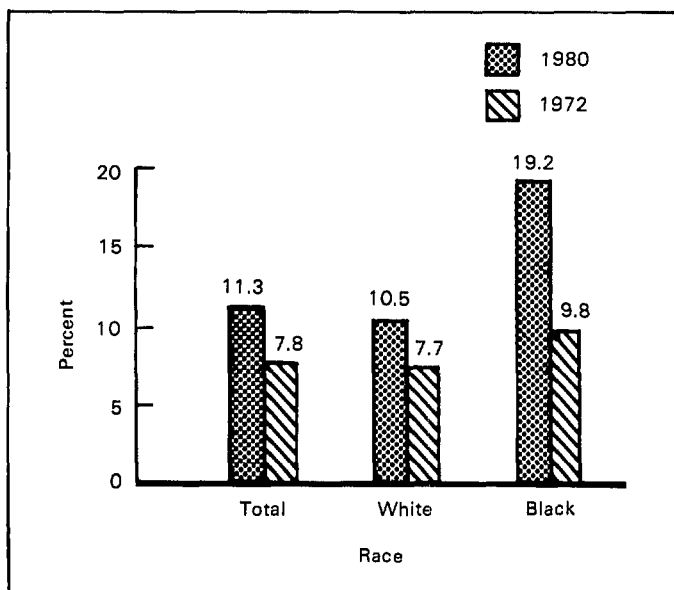


Figure 1. Percent of married mothers sterilized following hospital delivery by race of mother: United States, 1972 and 1980 National Natality Surveys

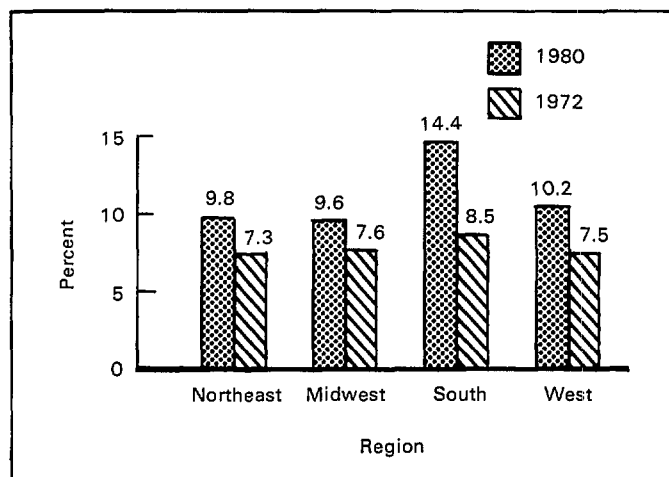


Figure 2. Percent of married mothers sterilized following hospital delivery by region of residence: United States, 1972 and 1980 National Natality Surveys

white mothers sterilized in the South increased by 59 percent. The percent of married black mothers sterilized in the South more than doubled, from 9.2 percent in 1972 to 19.6 percent in 1980.

Because most post partum sterilizations are performed for contraception, differences in percents of mothers sterilized according to the mother's age would be expected. In 1972 the percent of mothers sterilized increased for each successive age group (figure 3). In 1980 the positive association between age

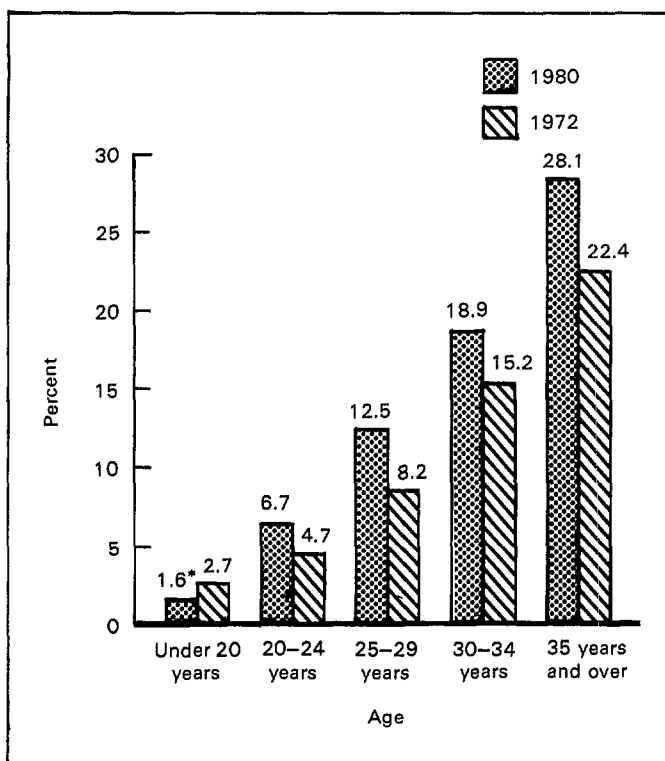


Figure 3. Percent of married mothers sterilized following hospital delivery by age: United States, 1972 and 1980 National Natality Surveys

and the percent of mothers sterilized was again evident: Among mothers 20 years and over, the percent sterilized increased for each successive age group. Between 1972 and 1980, the percent sterilized increased among married mothers in the age groups from 20 to 34 years of age. In 1980 there were not enough married teenagers sterilized to obtain a reliable estimate, and the apparent increase among mothers 35 years and over was not statistically significant.

The same patterns are evident among married white mothers (table 1). The percent sterilized tended to increase with age and over time within age groups, but not all of the differences were statistically significant. Although the percents for married black mothers are based on relatively few cases, the same patterns are evident.

The number of prior live births also influences decisions about sterilization. In 1972 the percent of mothers sterilized increased with each additional birth, from 1.9 percent for mothers having their first child to 19.3 percent for mothers having at least a fourth child (figure 4). A similar pattern was found in 1980, when the percent of mothers sterilized increased with each additional birth, from 1.0 percent for mothers having their first child to 26.1 percent for mothers having their third child. In 1980 there was no statistically significant difference in the percent sterilized post partum between mothers with three children and those with four or more children.

Between 1972 and 1980, the percent of married mothers sterilized after their first live birth declined from 1.9 to 1.0 percent. At each of the other birth orders, the percent of mothers

sterilized increased between 1972 and 1980. Among mothers having their second live birth, the percent sterilized increased by 123 percent, substantially more than the increase for the other live-birth orders. This may be evidence of an increasing desire for a two-child family. These differentials and trends are generally evident for both white and black women.

The percents of married mothers sterilized post partum by live-birth order and age are shown in table 2. The percents for mothers having their first live birth are unreliable because post partum sterilization is relatively rare among mothers under 30 years of age and because first births are relatively rare among mothers 30 years and over. Among mothers having a second live birth, the percent of post partum sterilizations more than doubled between 1972 and 1980 for mothers in the 20–24 and 25–29 year age groups. Among mothers having a third or higher order live birth, increases in the percents sterilized were evident for mothers 20 years and over, but these increases were not as great as for those mothers having a second live birth.

There was also an association between the wantedness status of a pregnancy and the percent of mothers sterilized (figure 5). In 1980, 9–10 percent of mothers who wanted the pregnancy “earlier” or “then” and 12 percent of mothers who wanted the pregnancy “later” were sterilized. The percent of mothers sterilized following an unwanted pregnancy (31 percent) was about three times that for mothers whose pregnancy was wanted. The same pattern was evident in 1972.

In table 3 the percent of mothers sterilized is shown by wantedness status and age. In 1972 differences by wantedness

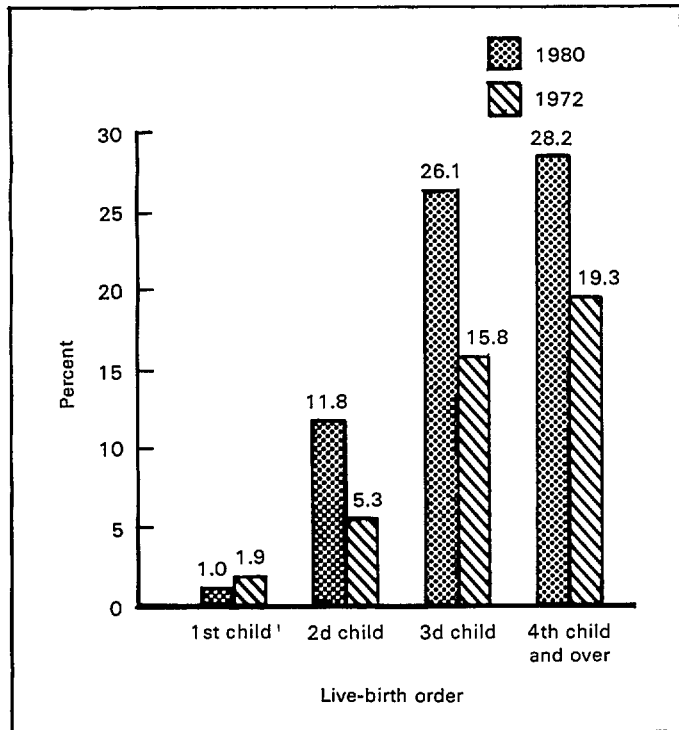


Figure 4. Percent of married mothers sterilized following hospital delivery by live-birth order: United States, 1972 and 1980 National Natality Surveys

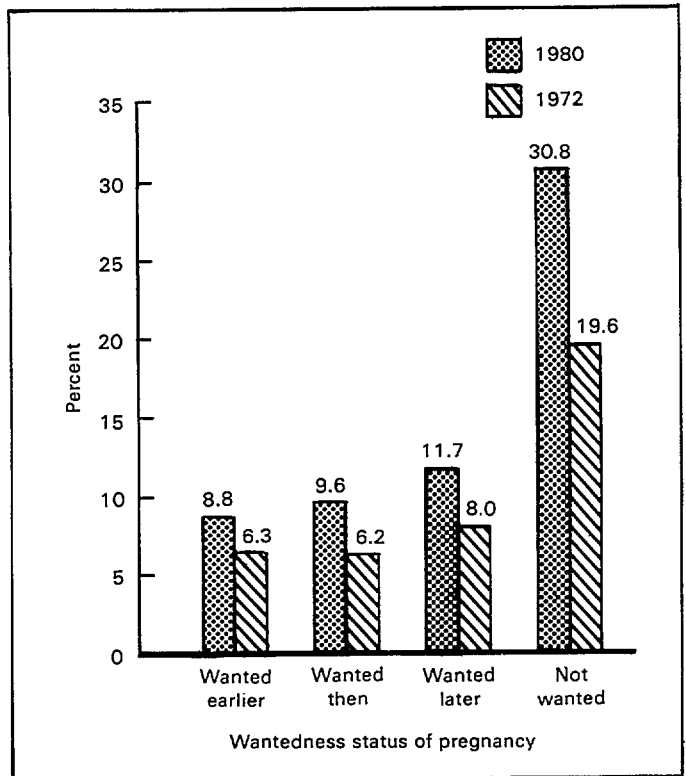


Figure 5. Percent of married mothers sterilized following hospital delivery by wantedness status of pregnancy: United States, 1972 and 1980 National Natality Surveys

status were greatest for mothers 25–29 years of age. Between 1972 and 1980, among mothers 25–29 years of age, the percent sterilized increased by 78 percent for mothers whose pregnancies were “wanted then” and by 97 percent for those whose pregnancies were not wanted. In 1980 among mothers 25–29 years of age, the range in the percent sterilized by wantedness status was greater than it had been in 1972, and it was also greater than the range for the other age groups.

The percent of mothers sterilized in 1980 is shown by educational attainment and region of residence in table 4. Although an inverse association between the percent of mothers sterilized and years of school completed is apparent, not all of the differences are statistically significant. The difference between percents sterilized for mothers with fewer than 8 years of

school (19.4) and 9–11 years of school (12.5) is not significant, nor is the difference between percents for mothers with 9–11 years of school and 12 years of school (12.1).

When the regions are compared, the most obvious difference is the higher proportion of mothers with 12 years of school or more who were sterilized in the South. In the other regions, 10–11 percent of mothers with 12 years of school and 7–8 percent of the mothers with 13 years of school or more were sterilized. In the South, however, 15.6 percent of mothers with 12 years of school and 12.2 percent of mothers with 13 years of school or more were sterilized. The higher percent of mothers sterilized in the South is, therefore, due in part to the higher proportion of mothers with 12 years of school or more who chose post partum sterilization.



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### Symbols

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

Table 1. Estimated number of live hospital births to married mothers and percent of mothers sterilized following delivery, by race of mother and selected characteristics: United States, 1972 and 1980 National Natality Surveys

Characteristic	All races <sup>1</sup>				White				Black			
	Number of births in thousands		Percent sterilized		Number of births in thousands		Percent sterilized		Number of births in thousands		Percent sterilized	
	1980	1972	1980	1972	1980	1972	1980	1972	1980	1972	1980	1972
Total	2,921	2,818	11.3	7.8	2,585	2,490	10.5	7.7	243	278	19.2	9.8
Region of residence												
Northeast	526	603	9.8	7.3	474	548	9.6	7.4	40	50	*12.9	*7.0
Midwest	819	775	9.6	7.6	762	710	8.8	6.9	43	59	*23.8	*15.6
South	958	940	14.4	8.5	799	780	13.5	8.5	140	148	19.6	9.2
West	618	500	10.2	7.5	550	453	9.2	7.9	20	20	*19.0	*4.7
Age of mother												
Under 20 years	287	415	*1.6	2.7	262	353	*1.6	*2.5	22	57	*2.1	*3.8
20-24 years	984	1,031	6.7	4.7	874	915	6.0	4.4	85	100	12.6	*8.3
25-29 years	1,001	850	12.5	8.2	889	768	11.7	8.2	82	65	20.3	*10.6
30-34 years	506	356	18.9	15.2	437	311	17.8	15.1	40	37	31.6	*16.9
35 years and over	144	166	28.1	22.4	123	143	26.2	23.1	14	19	*44.1	*20.0
Live-birth order												
1st child	1,179	1,072	1.0	1.9	1,077	965	*0.9	1.8	67	84	*1.5	*2.5
2d child	989	869	11.8	5.3	882	781	11.3	5.2	76	77	16.7	*6.8
3d child	470	428	26.1	15.8	395	379	25.3	16.4	57	41	31.5	*13.5
4th child and over	284	450	28.2	19.3	231	365	26.5	19.5	44	76	*34.9	19.1
Wantedness status												
Wanted earlier	744	579	8.8	6.3	672	526	8.3	6.5	50	45	*14.7	*5.6
Wanted then	1,158	1,241	9.6	6.2	1,028	1,108	8.9	6.2	93	111	17.1	*7.6
Wanted later	836	766	11.7	8.0	731	655	10.8	7.5	80	95	18.6	11.5
Not wanted	183	233	30.8	19.6	155	201	28.9	19.9	20	28	*42.5	*20.0

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

NOTE: Figures may not add to totals because of rounding.

Table 2. Estimated number of live hospital births to married mothers and percent of mothers sterilized following delivery, by live-birth order and age of mother: United States, 1972 and 1980 National Natality Surveys

<i>Live-birth order and age</i>	<i>Number of births in thousands</i>		<i>Percent sterilized</i>	
	<i>1980</i>	<i>1972</i>	<i>1980</i>	<i>1972</i>
1st live birth . . . . .	1,179	1,072	1.0	1.9
Under 20 years . . . . .	219	323	-	*2.2
20-24 years . . . . .	493	479	*0.5	*1.3
25-29 years . . . . .	346	215	*1.4	*0.7
30 years and over . . . . .	121	56	*3.1	*8.9
2d live birth . . . . .	989	869	11.8	5.3
Under 20 years . . . . .	60	82	*6.6	*3.7
20-24 years . . . . .	349	384	10.4	5.1
25-29 years . . . . .	380	308	11.1	4.6
30 years and over . . . . .	199	96	17.3	*9.8
3d live birth and over . . . . .	753	878	26.9	17.6
Under 20 years . . . . .	*8	11	*8.6	*8.2
20-24 years . . . . .	141	168	19.0	13.3
25-29 years . . . . .	276	328	28.1	16.5
30 years and over . . . . .	329	371	29.7	20.8

NOTE: Figures may not add to totals because of rounding.

Table 3. Estimated number of live hospital births to married mothers and percent of mothers sterilized following delivery, by age of mother and wantedness status of pregnancy: United States, 1972 and 1980 National Natality Surveys

<i>Age and wantedness status</i>	<i>Number of births in thousands</i>		<i>Percent sterilized</i>	
	<i>1980</i>	<i>1972</i>	<i>1980</i>	<i>1972</i>
Under 20 years.....	287	415	*1.6	2.7
Wanted earlier.....	60	70	-	*3.7
Wanted then.....	99	185	*2.0	*2.8
Wanted later.....	115	140	*2.0	*2.1
Not wanted.....	14	20	*3.1	*2.6
20-24 years.....	984	1,031	6.7	4.7
Wanted earlier.....	215	202	5.2	*3.6
Wanted then.....	414	480	6.3	4.5
Wanted later.....	323	305	7.8	5.2
Not wanted.....	31	44	*10.9	*8.0
25-29 years.....	1,001	850	12.5	8.2
Wanted earlier.....	283	194	8.6	6.5
Wanted then.....	418	397	11.2	6.3
Wanted later.....	256	197	14.8	10.4
Not wanted.....	44	63	35.8	18.2
30 years and over.....	649	522	21.0	17.5
Wanted earlier.....	186	113	16.2	12.6
Wanted then.....	227	179	16.3	14.2
Wanted later.....	143	124	22.7	17.5
Not wanted.....	93	106	39.1	28.4

NOTE: Figures may not add to totals because of rounding.

**Table 4. Estimated number of live hospital births to married mothers and percent of mothers sterilized following delivery, by region of residence and educational attainment: United States, 1980 National Natality Survey**

<i>Region and years of school completed</i>	<i>Number of births in thousands</i>	<i>Percent sterilized</i>
United States .....	2,921	11.3
0-8 years .....	114	19.4
9-11 years .....	410	12.5
12 years .....	1,338	12.1
13 years or more .....	1,059	9.0
Northeast .....	526	9.8
0-8 years .....	17	*6.5
9-11 years .....	53	*15.2
12 years .....	248	10.6
13 years or more .....	208	7.7
Midwest .....	819	9.6
0-8 years .....	20	*22.7
9-11 years .....	108	11.3
12 years .....	416	10.1
13 years or more .....	275	7.2
South .....	958	14.4
0-8 years .....	49	*22.8
9-11 years .....	168	13.3
12 years .....	423	15.6
13 years or more .....	318	12.2
West .....	618	10.2
0-8 years .....	28	*18.9
9-11 years .....	80	*10.6
12 years .....	252	11.2
13 years or more .....	258	8.1

## Technical notes

### Sources of data

Data presented in this report are based on the 1972 and 1980 National Natality Surveys (NNS's) conducted by the National Center for Health Statistics. More detailed descriptions of methods and procedures employed in these surveys can be found in other publications (NCHS, 1977a, 1977b, 1986). These notes briefly describe survey procedures relevant to this report.

The 1980 NNS was based on a probability sample of registered live births in the United States for 1980. The 1980 sample consisted of 9,941 live births, of which 7,825 were births to married mothers. This report is limited to married mothers because births to unmarried mothers were excluded from the 1972 NNS.

The 1972 NNS was based on a probability sample of 1 in 500 certificates of live birth filed in the United States in 1972. This resulted in a total sample of 6,505 live births, of which 5,689 were births to married mothers.

In both surveys, additional information was sought from sources named on birth certificates. Questionnaires were mailed to married mothers requesting information on their health practices, prenatal care, previous pregnancies, and social and demographic characteristics. Questionnaires were also mailed to the hospitals and to the attendants at delivery named on vital records. A questionnaire was sent to hospitals for all deliveries occurring in or en route to a hospital. A questionnaire was also mailed to the attendant at delivery (physician, nurse-midwife,

and so forth) when the attendant's address differed from the address of the hospital.

Nonhospital births (60 in 1980 and 42 in 1972) are not included in this report because the hospital questionnaire was the source of information on post partum sterilizations. The NNS data have been weighted so that the estimates in this report are representative of all married mothers of live hospital births (2,921,000 in 1980 and 2,818,000 in 1972).

### Sampling error

Because NNS estimates are based on samples, they may differ from the figures that would have been obtained had all live births been surveyed. The use of probability sampling techniques makes it possible to approximate sampling errors for these estimates. The standard error is a measure of the variability that occurs by chance because a sample, rather than the population, is surveyed. While the standard errors calculated for this report reflect some of the random variation inherent in the measurement process, they do not measure any systematic error or bias that may be present in the data. For purposes of this report, standard errors for the 1980 NNS were estimated using a balanced-repeated-replication procedure, which produces highly reliable, unbiased estimates of sampling errors. Its application to the NNS is described elsewhere (NCHS, 1986). Approximate standard errors for the estimated percents of mothers sterilized can be derived by interpolation from table I for 1980 and table II for 1972. In this report, a percent estimate is considered unreliable if the unweighted numerator is based on fewer than 30 sample cases in 1980, or fewer than 20

NOTE: A list of references follows the text.

Table I. Approximate standard errors for estimated percents expressed in percentage points by race of mother: 1980 National Natality Survey

Base of percent and race of mother	Estimated percent						
	2 or 98	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
All races and white							
10,000	2.7	4.2	5.8	7.8	8.9	9.5	9.7
30,000	1.6	2.4	3.4	4.5	5.1	5.5	5.6
50,000	1.2	1.9	2.6	3.5	4.0	4.3	4.3
70,000	1.0	1.6	2.2	2.9	3.4	3.6	3.7
100,000	0.9	1.3	1.8	2.5	2.8	3.0	3.1
200,000	0.6	0.9	1.3	1.7	2.0	2.1	2.2
500,000	0.4	0.6	0.8	1.1	1.3	1.3	1.4
700,000	0.3	0.5	0.7	0.9	1.1	1.1	1.2
1,000,000	0.3	0.4	0.6	0.8	0.9	1.0	1.0
2,000,000	0.2	0.3	0.4	0.5	0.6	0.7	0.7
3,000,000	0.2	0.2	0.3	0.4	0.5	0.5	0.6
Black							
10,000	2.8	4.3	5.9	7.9	9.1	9.7	9.9
30,000	1.6	2.5	3.4	4.6	5.2	5.6	5.7
50,000	1.2	1.9	2.6	3.5	4.0	4.3	4.4
70,000	1.0	1.6	2.2	3.0	3.4	3.7	3.7
100,000	0.9	1.4	1.9	2.5	2.9	3.1	3.1
200,000	0.6	1.0	1.3	1.8	2.0	2.2	2.2
300,000	0.5	0.8	1.1	1.4	1.7	1.8	1.8

Table II. Approximate standard errors for estimated percents expressed in percentage points: 1972 National Natality Survey

Base of percent	Estimated percent						
	2 or 98	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
10,000	2.2	3.5	4.8	6.4	7.3	7.8	8.0
30,000	1.3	2.0	2.8	3.7	4.2	4.5	4.6
50,000	1.0	1.6	2.1	2.9	3.3	3.5	3.6
70,000	0.8	1.3	1.8	2.4	2.8	3.0	3.0
100,000	0.7	1.1	1.5	2.0	2.3	2.5	2.5
200,000	0.5	0.8	1.1	1.4	1.6	1.8	1.8
500,000	0.3	0.5	0.7	0.9	1.0	1.1	1.1
700,000	0.3	0.4	0.6	0.8	0.9	0.9	1.0
1,000,000	0.2	0.3	0.5	0.6	0.7	0.8	0.8
2,000,000	0.2	0.2	0.3	0.4	0.5	0.6	0.6
2,500,000	0.1	0.2	0.3	0.4	0.5	0.5	0.5

sample cases in 1972, or if its relative standard error is 25 percent or greater.

In this report, a difference between two statistics is considered statistically significant if it could occur by chance no more than 5 percent of the time. The determination of statistical significance is based on a two-tailed *t*-test with 20 degrees of freedom. Terms in the text relating to differences such as "higher" or "less" indicate that the differences are statistically significant. Terms such as "similar" or "no difference" mean that no statistically significant difference exists between the estimates being compared. No inference about statistical significance should be made about any differences not discussed in the text; they may or may not be significant.

**Definitions of terms**

*Sterilization*—The fact of sterilization is determined from the hospital questionnaire using a single question: "Was any operation performed which will prevent future pregnancies?" In 1980 only, there were also questions about what type of operation was performed and why (NCHS, 1986).

*Race of mother*—Race is derived from the birth certificate. The category "white" includes births to mothers reported as white, Mexican, Puerto Rican, Cuban, or other Hispanic origin.

*Region*—Region of residence is derived from the birth certificate. Standard classifications of the U.S. Bureau of the Census were used to assign States to the Northeast, Midwest (formerly North Central), West, or South regions.

*Wantedness status*—Wantedness status is derived from the mother's questionnaire with the question: "Thinking back, just before you became pregnant with your new baby, did you want to become pregnant at that time?" Responses were as follows: (1) "I wanted this pregnancy at an earlier time, as well as at that time"; (2) "I wanted to become pregnant at that time"; (3) "I did not want to become pregnant at that time, but I wanted another child sometime in the future"; or (4) "I did not want to become pregnant at that time, or at any time in the future."

*Age of mother*—Age is derived from the birth certificate and refers to the mother's age at last birthday.

*Live-birth order*—Live-birth order is derived from the birth certificate and refers to the total number of children ever born alive to the mother, including the sample live birth.

*Education*—Education of mother is derived from the mother's questionnaire and refers to the highest grade of school completed. Trade or business school education is not included.

NOTE: A list of references follows the text.

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## Births of Hispanic Parentage, 1985

by Stephanie J. Ventura, A.M., Division of Vital Statistics

### Introduction

In 1985, 23 States and the District of Columbia reported information on births of Hispanic parentage (table 1). Because the vast majority of the Hispanic population in this country (an estimated 92 percent) resides in these States (the Hispanic reporting area), the birth statistics in this report are believed to be representative of fertility for the Hispanic population in the United States (U.S. Bureau of the Census, in press).

Previous publications have described the demographic and health characteristics of Hispanic births occurring in 1978–84 (NCHS, 1981, 1982, 1983, 1984b, 1985, 1987). Additionally, birth and fertility rates by Hispanic origin for each State were computed for 1980, using population information available only from the decennial census (NCHS, 1983, 1984a).

The number of babies born to Hispanic mothers in the reporting area totaled 372,814 in 1985 (table 1), a 7-percent increase over the number reported in the same States for 1984 (346,986) and an 11-percent increase over 1983.

Hispanic-origin mothers accounted for 17 percent of the infants born in the reporting area in 1985, a slight rise over 1983 and 1984 (16 percent). Nearly two-thirds of the Hispanic mothers were Mexican; Puerto Rican, Central and South American, and other Hispanic women each accounted for about 10 percent of Hispanic-origin births; and 3 percent of the Hispanic mothers were Cuban.

The reporting of Hispanic origin of the parents on the birth certificate has improved considerably since 1978, when this information was first tabulated. In 1985 origin of the mother was not available for only 3.6 percent of the births compared with 12.1 percent in 1978. Origin of the father was also better reported in 1985 than in earlier years, but it is still omitted from a substantial number of records, 14.3 percent in 1985 (table 2) compared with 20.2 percent in 1978. For this reason and also because most of the tabulations in this report relate to characteristics of the mother (for example, fertility rates, educa-

tional attainment, marital status), births are classified only by origin of the mother in tables 1 and 3–7 and in the text.

### Race of child

The vast majority of births to Hispanic mothers are white, 95.4 percent in 1985. However, there are substantial variations in the racial composition of births of the various Hispanic groups, as shown in table 3.

### Birth and fertility rates

Birth and fertility rates for the Hispanic population increased in 1985 compared with 1983 and 1984. The rates continued to be higher than for the non-Hispanic population, 50 percent on the average. (See table 4 for 1985 rates.) The increase between 1984 and 1985 was primarily associated with the 3–4 percent rise in rates for Mexicans. The birth rate for the Hispanic population was 23.3 live births per 1,000 population in 1985, 3 percent higher than in 1984 (22.7); for the non-Hispanic population the birth rate was 15.4 in 1985, 1 percent above the rate for 1984 (15.2). The fertility rate for Hispanic women was 94.0 live births per 1,000 women aged 15–44 years, 3 percent higher than in 1984 (91.5) and 46 percent higher than the rate for non-Hispanic women (64.6).

The birth rate for the Mexican population rose 4 percent, from 22.9 in 1984 to 23.8 in 1985. The rate for Puerto Ricans was 18.2, for Cubans it was 10.5, and for “other Hispanics” it was 29.8. Because of sampling variability associated with the populations used to compute these rates, the year-to-year changes in the rates are not statistically significant.

Variations in fertility rates were comparable to those for birth rates. The fertility rate for Mexican women increased 3 percent, from 95.8 to 98.5. The rate for Puerto Rican women was 66.5 in 1985, the rate for Cuban women was 51.2, and the rate for “other Hispanic” women was 109.0.

The birth and fertility rates presented in this report were computed for the total of 11 States for which the necessary population data by Hispanic origin were available from the U.S. Bureau of the Census. The 11 States were Arizona, California, Colorado, Florida, Illinois, Indiana, New Jersey, New Mexico, New York, Ohio, and Texas. The population data needed to compute these rates for the non-Hispanic population by race were not available. In 1985, 98 percent of the births in the Hispanic reporting area were to residents of these 11 States.

### Age of mother and live-birth order

Teenage childbearing is relatively common among Hispanic women, particularly Mexican and Puerto Rican women. In 1985, 17 percent of births to Mexican mothers and 21 percent of births to Puerto Rican mothers were to women under 20 years of age, similar to the level of teenage births for black non-Hispanic women (23 percent) but substantially higher than for Cuban (7 percent) and white non-Hispanic women (10 percent) (table 5).

Nearly 1 in every 5 births to Mexican mothers was a fourth or higher order birth (18.4 percent) in 1985, the highest proportion observed among any Hispanic or non-Hispanic group (table 6). The proportion of fourth and higher order births varied widely among other groups, from 5.5 and 7.5 percent for births to Cuban and white non-Hispanic women to 11.0–14.1 percent for births to other specific Hispanic and black non-Hispanic women.

### Births to unmarried mothers

Unmarried mothers accounted for 3 in 10 births to Hispanic women in 1985 (table 6), but the proportions for individual origin groups differed considerably, ranging from 16 percent of Cuban-origin births to 51 percent of Puerto Rican-origin births. The comparable proportions for non-Hispanic births were 12 percent for white and 61 percent for black births. These proportions have risen steadily for both Hispanic and non-Hispanic women in recent years.

As would be expected, nonmarital childbearing is much more frequent among teenage mothers than among mothers aged 20 years and older, regardless of origin group (table 7). Among Hispanic teenagers, the proportions of nonmarital births ranged from 37 percent for Cuban to 74 percent for Puerto Rican women; among non-Hispanic teens, 43 percent of white births and 90 percent of black births were to unmarried women.

The proportions of nonmarital births were considerably lower for all origin groups for ages 20 years and older. They ranged from 15 to 45 percent among Hispanic women compared with 9 percent for white non-Hispanic and 52 percent for black non-Hispanic women.

### Educational attainment of mother

The available data indicate that the educational attainment of Hispanic mothers has risen considerably in recent

years, although it is still substantially below that of non-Hispanic mothers (table 6). Because educational attainment is not reported on the birth certificates in California and Texas, data are available for only 35 percent of all Hispanic births and only 15 percent of Mexican births in 1985. Overall, 56 percent of Hispanic-origin mothers giving birth in 1985 had completed high school compared with 84 percent of white non-Hispanic mothers and 67 percent of black non-Hispanic mothers. The proportions for specific Hispanic groups ranged from 41 percent for Mexican mothers to 79 percent for Cuban mothers. The largest gain in educational attainment was measured for Puerto Rican mothers, among whom 53 percent of those giving birth in 1985 had completed high school compared with 45 percent in 1980.

### Country of birth

Among Hispanic women giving birth in 1985, 45 percent were born in the United States and 55 percent in Puerto Rico or countries outside the United States (table 6). There continue to be wide variations in the proportions of U.S.-born mothers among the various origin groups, from 47 and 51 percent for Mexican and Puerto Rican women to 3 percent for Central and South American women. These proportions are somewhat higher for teenage mothers than for older mothers (table 7).

On the average, U.S.-born Hispanic mothers are about twice as likely to be teenaged as are foreign- or Puerto Rican-born Hispanic mothers (data are not shown in this report). U.S.-born Hispanic women are somewhat more likely to have completed high school than their foreign- or Puerto Rican-born counterparts, a pattern that has been observed for several years (NCHS, 1987; Ventura and Taffel, 1985).

### Prenatal care

Data on prenatal care and selected measures of the health of newborn infants show that although Hispanic mothers (except Cubans) begin prenatal care later than white non-Hispanic mothers, the levels of low birth weight and low Apgar scores are comparable (table 6). Overall, 61 percent of Hispanic mothers and black non-Hispanic mothers began prenatal care in the first trimester of pregnancy in 1985 compared with 82 percent of white non-Hispanic mothers. The proportions for specific origin groups ranged from 58 percent for Puerto Rican women to 83 percent for Cuban women. Of all Hispanic mothers, 12 percent received delayed prenatal care (beginning in the third trimester of pregnancy) or no care (a range of 4 to 16 percent). Regardless of origin, teenage mothers are less likely to begin prenatal care early and more likely to receive delayed or no care than are older mothers (table 7). Levels of delayed or no care were highest for Puerto Rican teenage mothers (21 percent) and were substantial for other Hispanic-origin groups (except Cubans) as well (16–19 percent).

### Birth weight, Apgar scores, and preterm birth

In spite of their relatively less favorable status with respect to receipt of prenatal care, births to Hispanic women have levels of low birth weight and low Apgar scores that are comparable to those of babies born to white non-Hispanic mothers, as indicated above. In 1985, 6.2 percent of Hispanic babies weighed less than 2,500 grams at birth (5 pounds 8 ounces) compared with 5.6 percent of white non-Hispanic infants and 12.4 percent of black non-Hispanic infants (table 6). The proportions for specific Hispanic groups ranged from 5.7 percent for Central and South American babies to 8.7 percent for Puerto Rican babies. The proportions of infants with 1-minute Apgar scores less than 7 averaged 8.3 percent for Hispanic babies compared with 8.9 percent of white non-Hispanic and 11.9 percent of black non-Hispanic infants. Low 5-minute Apgar scores were reported for 1.6 percent of Hispanic babies compared with 1.5 percent of white non-Hispanic and 3.1 percent of black non-Hispanic babies.

Preterm birth (less than 37 weeks of gestation) was reported for 11 percent of all Hispanic infants compared with 8 percent of white non-Hispanic and 17 percent of black non-Hispanic infants. The proportions of preterm births among Hispanic babies ranged from 9 percent (Cuban) to 13 percent (Puerto Rican).

In an effort to clarify the relationships between Hispanic origin and levels of low birth weight, the birth weight data were further classified by the age of the mother (table 7) and by the month of pregnancy in which prenatal care began and the educational attainment of the mother (data are not shown in this report). Levels of low birth weight were lower for infants whose mothers were aged 20 years and older, who began prenatal care early, and who were high school graduates. But even for babies born to teenagers, to women with delayed or no prenatal care, or to women who did not complete high school, the proportions of low-weight infants were still relatively favorable for Hispanic-origin, especially Mexican, babies. It is difficult to account for this pattern, one that has been observed for several years. One factor may be the much lower incidence of smoking among Hispanic than among non-Hispanic women. Unpublished data from the 1980 National Natality Survey conducted by the National Center for Health Statistics (NCHS) show that only 10 percent of Mexican women, compared with 27 percent of white non-Hispanic women, smoked during pregnancy. Information from the 1985 National Health Interview Survey, also conducted by NCHS, confirms a significantly lower rate of smoking among Hispanic women (NCHS, in press).

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### Symbols

- - - Data not available
  - . . . Category not applicable
  - Quantity zero
  - 0.0 Quantity more than zero but less than 0.05
  - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
  - \* Figure does not meet standard of reliability or precision
-

Table 1. Live births by Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia and each State, 1985

State	Origin of mother										
	All origins	Hispanic						Non-Hispanic			
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>1</sup>	White	Black	Not stated
All reporting States . . . . .	2,298,287	372,814	242,976	35,147	10,024	40,985	43,682	1,841,641	1,384,671	350,108	83,832
Arizona . . . . .	59,348	13,423	12,641	89	17	87	589	45,469	36,578	2,400	456
Arkansas . . . . .	35,221	174	121	7	5	5	36	34,608	26,091	8,189	439
California . . . . .	470,951	149,184	117,764	1,638	856	16,760	12,166	317,553	223,782	43,810	4,214
Colorado . . . . .	55,123	7,486	2,654	72	12	80	4,668	44,965	40,654	2,628	2,672
District of Columbia . . . . .	9,870	500	186	8	-	261	45	7,975	7,124	6,760	1,395
Florida . . . . .	163,816	17,090	2,269	1,883	6,646	2,466	3,826	144,505	103,993	38,541	2,221
Georgia . . . . .	96,340	837	277	160	68	146	186	93,872	60,109	32,647	1,631
Hawaii . . . . .	18,307	1,690	247	534	18	48	843	16,592	4,211	846	25
Illinois . . . . .	180,737	16,779	9,832	2,498	250	942	3,257	159,615	118,431	37,906	4,343
Indiana . . . . .	80,946	1,288	893	152	20	55	168	76,295	67,276	8,368	3,363
Kansas . . . . .	39,679	1,297	986	71	14	46	180	34,791	30,700	3,008	3,591
Maine . . . . .	16,903	116	22	7	38	10	39	15,828	15,557	65	959
Mississippi . . . . .	43,449	134	39	11	6	20	58	42,736	22,337	19,942	579
Nebraska . . . . .	25,551	563	497	9	3	11	43	23,808	21,995	1,334	1,180
Nevada . . . . .	15,325	1,345	808	20	21	57	439	11,756	9,881	794	2,224
New Jersey . . . . .	105,566	11,836	267	6,294	1,058	2,928	1,289	83,405	61,607	18,947	10,325
New Mexico . . . . .	27,757	11,279	1,983	40	13	28	9,215	16,458	11,770	623	20
New York . . . . .	259,465	38,577	1,060	20,268	677	13,429	3,143	203,198	147,251	47,874	17,690
North Dakota . . . . .	11,721	86	47	6	-	7	26	11,111	10,031	137	524
Ohio . . . . .	160,474	1,956	794	622	45	111	384	151,236	127,157	22,389	7,282
Tennessee . . . . .	66,757	248	71	19	9	26	123	50,322	38,057	11,816	16,187
Texas . . . . .	308,164	94,888	88,335	686	232	3,418	2,217	211,985	164,832	40,734	1,291
Utah . . . . .	37,451	1,515	883	43	14	36	539	35,500	33,666	266	436
Wyoming . . . . .	9,366	523	300	10	2	8	203	8,058	7,581	84	785

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

Table 2. Live births by Hispanic origin of mother and father: Total of 23 reporting States and the District of Columbia, 1985

Origin of father	Origin of mother								
	All origins	Hispanic						Non-Hispanic	Not stated
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic		
All origins .....	2,298,287	372,814	242,976	35,147	10,024	40,985	43,682	1,841,641	83,832
Hispanic .....	342,186	289,146	199,079	24,394	7,383	32,170	26,120	52,046	994
Mexican .....	229,727	200,644	192,257	968	260	3,765	3,394	28,679	404
Puerto Rican .....	30,581	24,279	1,272	20,640	314	1,365	688	6,035	267
Cuban .....	10,888	8,383	510	583	6,056	836	398	2,466	39
Central and South American .....	35,722	31,849	3,290	1,741	523	25,865	430	3,776	97
Other and unknown Hispanic .....	35,268	23,991	1,750	462	230	339	21,210	11,090	187
Non-Hispanic .....	1,627,015	46,323	22,903	4,331	1,749	4,485	12,855	1,575,425	5,267
Not stated .....	329,086	37,345	20,994	6,422	892	4,330	4,707	214,170	77,571



Table 4. Birth and fertility rates, by Hispanic origin of mother: Total of 11 States, 1985

Measure	Origin of mother						
	All origins	Hispanic					Non-Hispanic <sup>2</sup>
		Total	Mexican	Puerto Rican	Cuban	Other Hispanic <sup>1</sup>	
Birth rate <sup>3</sup> .....	16.5	23.3	23.8	18.2	10.5	29.8	15.4
Fertility rate <sup>4</sup> .....	68.8	94.0	98.5	66.5	51.2	109.0	64.6

<sup>1</sup>Includes Central and South American and other and unknown Hispanic origin.

<sup>2</sup>Includes origin not stated.

<sup>3</sup>Rate per 1,000 total population.

<sup>4</sup>Rate per 1,000 women aged 15-44 years.

NOTE: The 11 States are Arizona, California, Colorado, Florida, Illinois, Indiana, New Jersey, New Mexico, New York, Ohio, and Texas.

Table 5. Live births by age and Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1985

Age of mother	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
All ages.....	2,298,287	372,814	242,976	35,147	10,024	40,985	43,682	1,841,641	1,384,671	350,108
Under 15 years.....	6,391	1,250	885	162	14	52	137	4,933	1,414	3,397
15-19 years.....	288,089	60,262	41,589	7,186	693	3,294	7,500	217,799	132,510	77,548
15 years.....	15,701	3,401	2,413	439	26	111	412	11,757	5,012	6,367
16 years.....	33,416	7,376	5,121	898	69	284	1,004	24,884	13,099	11,006
17 years.....	55,097	11,948	8,316	1,486	111	529	1,506	41,283	24,243	15,640
18 years.....	79,361	16,621	11,498	1,905	197	924	2,097	59,944	37,240	20,367
19 years.....	104,514	20,916	14,241	2,458	290	1,446	2,481	79,931	52,916	24,168
20-24 years.....	696,527	124,590	82,144	12,425	3,314	11,974	14,733	547,907	404,385	119,143
25-29 years.....	726,444	103,815	66,218	8,761	3,349	13,385	12,102	596,526	473,864	87,371
30-34 years.....	425,504	56,842	35,612	4,524	1,911	8,350	6,445	351,695	279,565	44,911
35-39 years.....	135,929	21,788	13,643	1,776	616	3,361	2,392	108,410	82,737	15,256
40-44 years.....	18,644	4,088	2,765	298	118	547	360	13,819	9,890	2,365
45-49 years.....	759	179	120	15	9	22	13	552	306	117

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.



Table 6. Percent of births with selected characteristics, by Hispanic origin of mother and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1985

Characteristic	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
First births. . . . .	41.4	36.2	33.8	40.6	45.4	40.0	40.6	42.3	43.2	39.3
Fourth and higher order births. . . . .	10.1	15.8	18.4	11.9	5.5	11.0	11.2	9.1	7.5	14.1
Births to unmarried mothers . . . . .	22.9	29.5	25.7	51.1	16.1	34.9	31.1	21.6	12.1	61.0
Mothers completing 12 years or more of school <sup>3</sup> . . . . .	78.5	55.5	41.0	53.4	78.9	63.0	63.5	80.6	84.3	66.9
Mothers born in United States . . . . .	84.0	45.4	47.3	51.1	11.7	2.5	78.6	91.4	95.4	92.0
Prenatal care:										
Beginning in 1st trimester. . . . .	74.5	61.2	60.0	58.3	82.5	60.6	65.8	77.1	81.5	60.5
Beginning in 3d trimester or no care . . . . .	6.6	12.4	12.9	15.5	3.7	12.5	9.4	5.4	4.0	10.7
Births of low birth weight <sup>4</sup> . . . . .	6.8	6.2	5.8	8.7	6.0	5.7	6.8	6.9	5.6	12.4
Born prior to 37 weeks of gestation . . . . .	10.0	10.8	10.8	12.6	9.0	10.1	10.1	9.8	7.9	17.3
1-minute Apgar scores less than 7 <sup>5</sup> . . . . .	9.4	8.3	8.6	7.7	6.3	7.2	10.1	9.5	8.9	11.9
5-minute Apgar scores less than 7 <sup>5</sup> . . . . .	1.8	1.6	1.7	1.7	1.3	1.5	1.6	1.8	1.5	3.1

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>Excludes data for California and Texas, which did not report educational attainment.

<sup>4</sup>Birth weight of less than 2,500 grams (5 lb. 8 oz.).

<sup>5</sup>Excludes data for California and Texas, which did not report 1- and 5-minute Apgar scores.

Table 7. Percent of births to teenage mothers and to mothers aged 20 years and over, by selected characteristics, Hispanic origin of mother, and by race of child for mothers of non-Hispanic origin: Total of 23 reporting States and the District of Columbia, 1985

Age of mother and characteristic	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
Under 20 years of age										
Births to unmarried mothers . . . . .	58.5	51.9	45.8	73.9	37.2	59.1	62.5	60.4	42.5	90.2
Mothers completing 12 years or more of school <sup>3</sup> . . . . .	37.3	26.5	22.3	24.7	34.3	35.6	30.7	38.6	40.6	35.4
Mothers born in United States . . . . .	---	61.7	60.6	65.4	33.8	7.6	90.2	---	---	---
Prenatal care:										
Beginning in 1st trimester . . . . .	51.8	47.1	47.3	45.4	61.5	46.3	46.5	53.0	57.7	45.5
Beginning in 3d trimester or no care . . . . .	13.4	17.8	17.7	21.4	6.7	18.9	15.9	12.2	10.2	15.4
Births of low birth weight <sup>4</sup> . . . . .	9.3	7.6	7.2	9.5	6.9	7.0	8.6	9.7	7.7	13.3
20 years of age and over										
Births to unmarried mothers . . . . .	17.7	25.1	21.5	45.1	14.5	32.8	24.4	16.3	8.9	52.3
Mothers completing 12 years or more of school <sup>3</sup> . . . . .	84.5	61.1	45.0	61.2	82.4	64.9	70.5	86.6	89.1	76.8
Mothers born in United States . . . . .	---	42.2	44.4	47.3	10.0	2.0	76.2	---	---	---
Prenatal care:										
Beginning in 1st trimester . . . . .	77.8	64.0	62.7	61.7	84.1	61.8	69.8	80.4	84.1	65.0
Beginning in 3d trimester or no care . . . . .	5.6	11.4	11.9	13.9	3.5	11.9	8.1	4.5	3.3	9.3
Births of low birth weight <sup>4</sup> . . . . .	6.5	5.9	5.5	8.5	6.0	5.6	6.5	6.5	5.4	12.1

<sup>1</sup>Includes origin not stated.

<sup>2</sup>Includes races other than white and black.

<sup>3</sup>Excludes data for California and Texas, which did not report educational attainment.

<sup>4</sup>Birth weight of less than 2,500 grams (5 lb. 8 oz.).

## Technical notes

### Sources of data

Concurrent with the 1978 revision of the U.S. Standard Certificate of Live Birth, the National Center for Health Statistics recommended that States add items to identify the Hispanic or ethnic origin of the newborn's mother and father. In 1985, 23 States and the District of Columbia included questions on origin, selecting one of two basic formats. The first format was an open-ended item to obtain the specific origin or descent of each parent (for example, Italian, Mexican, German, Puerto Rican, English, or Cuban). The second format was directed toward the Hispanic population and asked whether the mother and father were of Spanish origin. If so, the specific origin, such as Mexican, Puerto Rican, or Cuban, was to be indicated.

Birth data shown in this report are based on 100 percent of the births occurring in the 23 reporting States and the District of Columbia. The data shown in the tables are for births to all residents of the reporting area, regardless of where the births occurred. Births occurring in nonreporting States to residents of the reporting area are included in the "not stated" origin category.

### Racial classification

Racial designation in this report is that of the child, which is determined from the race of the parents as entered on the birth certificate. When the parents are of different races and one parent is white, the child is assigned the other parent's race. When the parents are of different races and neither parent is white, the child is assigned the father's race with one exception—if the mother is Hawaiian or part-Hawaiian, the child is considered Hawaiian. When race is missing on the certificate for one parent, the child is assigned the race of the other parent. When race is not reported for either parent, the child is assigned the race of the child on the immediately preceding record.

### Population denominators

Birth and fertility rates for 1985 are based on estimates of the Hispanic population from the Current Population Survey

(CPS). The populations used to compute the rates in this report for 1985 were derived by averaging the CPS estimates for 1984 and 1986 because estimates of the Hispanic population for selected States and subgroups for 1985 are believed questionable. Beginning with 1986, the CPS figures include estimates of undocumented immigrants (U.S. Bureau of the Census, 1987). The effect of this change may be to reduce the levels of the birth and fertility rates by about 1 percent.

Population estimates were provided for 11 States, including Arizona, California, Colorado, Florida, Illinois, Indiana, New Jersey, New Mexico, New York, Ohio, and Texas. These estimates were controlled to postcensal independent estimates of the Hispanic population by age and sex for the United States, based on 1980 census data. The population data are based on small samples and may, therefore, be subject to substantial sampling error. Information on the derivation of these estimates and the sampling error is presented in two U.S. Bureau of the Census reports (1987, in press).

### Computation of rates

In computing birth and fertility rates for this report, births with not-stated origin of mother are included with non-Hispanic births rather than being distributed. Thus, rates for the Hispanic population are underestimates of the true rates to the extent that the births with not-stated origin of mother for the 11-State area (2.9 percent) are actually to Hispanic mothers. The population with not-stated origin has been imputed. The effect on the rates is believed to be small.

### Computation of percents and percent distributions

Births with unknown live-birth order, nativity of mother, educational attainment of mother, month of pregnancy in which prenatal care began, birth weight, period of gestation, and 1- and 5-minute Apgar scores were subtracted from total births before percents and percent distributions were computed.

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