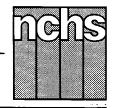
# Monthly Vital Statistics Report



Final Data From the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

### Advance Report of Final Natality Statistics, 1994

by Stephanie J. Ventura, A.M.; Joyce A. Martin, M.P.H.; T.J. Mathews, M.S.; and Sally C. Clarke, M.A., Division of Vital Statistics

#### **Abstract**

Objectives—This report presents 1994 data on U.S. births according to a wide variety of characteristics. Data are provided for maternal demographic characteristics including age, live-birth order, race, Hispanic origin, marital status, and educational attainment; maternal lifestyle and health characteristics (medical risk factors, weight gain, tobacco and alcohol use); medical care utilization by pregnant women (prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth, and method of delivery); and infant health characteristics (period of gestation, birthweight, Apgar score, abnormal conditions, congenital anomalies, and multiple births). Also presented are birth and fertility rates by age, live-birth order, race, Hispanic origin, and marital status. Selected data by mother's State of residence are shown, as well as data on month and day of birth, sex ratio, and age of father. Trends in fertility patterns and maternal and infant characteristics are described and interpreted.

*Methods*—Descriptive tabulations of data reported on the birth certificates of the nearly 4,000,000 births that occurred in 1994 are presented and explained.

Results—Birth and fertility rates generally declined in 1994, particularly for teenagers and women in their twenties. Rates increased modestly for women 30 years and older. Measures of nonmarital childbearing rose 4-5 percent. Smoking by pregnant women continued to decline and improvements in prenatal care utilization were reported. Rates for cesarean delivery continued to fall. However, measures of birth outcome, particularly the percents of low birthweight and preterm births, deteriorated or changed little. The proportions of multiple births, especially triplets, continued to increase sharply.

#### **Highlights**

**Births** in the United States declined for the fourth consecutive year in 1994 by 1 percent, to 3,952,767. This total is 5 percent lower than in 1990, the most recent high point (4,158,212). The **birth rate** fell 2 percent to 15.2 births per 1,000 total population, the lowest rate since 1978. The **fertility rate** declined 1 percent to 66.7 births per 1,000 women aged 15–44 years; the 1994 rate was 6 percent lower than in 1990.

**Birth rates for teenagers** declined in 1994, to 37.6 per 1,000 women aged 15–17 years and 91.5 births per 1,000 women aged 18–19, both declines of 1 percent. Although these rates have declined 3 percent each in the 1990's, they are still as high or higher than they were more than 20 years ago. Recent declines in abortion rates as well as birth rates for teenagers indicate that the

#### Acknowledgments

This report was prepared under the general direction of Robert L. Heuser, Chief of the Natality, Marriage, and Divorce Statistics Branch. Donna L. Wright assisted with technical support. Joseph D. Farrell, Chief of the Systems and Programming Branch (SPB), and Linda Pardoe, Jordan Sacks, Gail Parr, and Manju Sharma of SPB provided computer programming support and statistical tables. Thomas D. Dunn of the Statistical Resources Branch provided content review. Patricia Day, David W. Justice, and Ann F. Scarlett of the Technical Services Branch carried out quality evaluation and acceptance procedures for the State data files on which this report is based. Staff of the Registration Methods Branch consulted with State vital statistics offices regarding the collection of birth certificate data. This report was edited by Demarius V. Miller and typeset by Jacqueline M. Davis of the Publications Branch, Division of Data Services.





teenage pregnancy rate has fallen in the 1990's.

**Birth rates for women in their twenties** declined in 1994, to 111.1 per 1,000 women aged 20–24 years and 113.9 per 1,000 women aged 25–29 years, both declines of 1 percent. These rates for women in the principal child-bearing ages were each 5 percent lower than their recent high point in 1990.

Birth rates for women in their thirties increased to 81.5 per 1,000 women aged 30–34 years and 33.7 per 1,000 for women aged 35–39 years. The rate for women in their early thirties has changed very little since 1990, following a 31-percent rise during the 1980's. The long-term increase in the rate for women aged 35–39 years has also slowed, but the rate for these women is among the few to have risen steadily since 1990.

Birth rates for women in racial and Hispanic origin subgroups differ substantially. Rates were highest for Hiswomen, especially Mexican women, and for black women. Successively lower rates were reported for American Indian, Asian or Pacific Islander, and white women. Rates for teenaged women were highest for Mexican, Puerto Rican, and black women. Rates for women in their thirties were highest for Asian or Pacific Islander women, but were also high for Mexican and "other" Hispanic women. Agespecific rates declined in 1994 for women in most racial and Hispanic subgroups.

Measures of childbearing by unmarried women increased 4-5 percent in 1994. The birth rate per 1,000 unmarried women aged 15-44 rose to 46.9. During the 5-year period 1989-94, the rate rose 13 percent or about 2 percent annually, a much slower rate of increase compared with the previous 5-year period (34 percent overall). The number of nonmarital births totaled 1,289,592 in 1994, and 32.6 percent of all births were to unmarried women. Births to unmarried women comprised 25 percent of births to white women, 70 percent of births to black women, and 43 percent of Hispanic-origin births. Proportions for Asian or Pacific Islander women were generally lower, averaging 16 percent.

More than three-fourths of women who gave birth in 1994 had at least 12

years of schooling (77 percent) and 42 percent had one or more years of college. In general, white mothers had more education than black mothers but the disparity was limited to those aged 25 years and over. **Educational attainment** was generally highest among Asian or Pacific Islander mothers, and lowest for Hispanic mothers, but there were wide variations among racial and Hispanic subgroups.

Maternal weight gain during pregnancy has been shown to have an independent positive relationship with the weight of the newborn. As in previous years, almost two-thirds (64 percent) of women who gave birth in 1994 gained 26 pounds or more during pregnancy. The median weight gain was 30.4 pounds in 1994 and has been virtually unchanged over the last five years. Although the median has remained stable, the percent of mothers who gained less than 16 pounds increased between 1989 (9.4 percent) and 1994 (10.4 percent). The median weight gain for white women was almost 2 pounds more than for black women—30.6 compared with pounds.

The most frequently reported medical risk factor, pregnancyassociated hypertension, rose for the third consecutive year to 32 per 1,000 births, an increase of 8 percent, the largest single year increase since 1989. Maternal diabetes was stable at 26 per 1,000, but the anemia rate rose 7 percent to 20 per 1,000. Rates for all other reported medical risk factors either increased or were stable.

Cigarette smoking during pregnancy declined again in 1994, for the fifth consecutive year, to 14.6 percent of mothers. Rates fell for white women to 15.6 percent and for black women to 11.4 percent. Smoking rates for women in most Asian or Pacific Islander and Hispanic origin subgroups were much lower, averaging 4 to 5 percent. Maternal smoking has a strong adverse effect on infant birthweight. In 1994, 12.3 percent of births to smokers weighed less than 2,500 grams compared with 6.7 percent of births to nonsmokers.

Eighty percent of mothers began **prenatal care** within the first trimester of pregnancy, for the third consecutive year

of increase. From 1979 to 1991 this level was static at 76 percent. The proportion of mothers with late or no care continued to decline, dropping to 4 percent. Prenatal care utilization improved among all age and racial and ethnic groups, with the largest increases among those with the least advantageous levels of care.

The rate for the most prevalent **obstetric procedure**, electronic fetal monitoring (EFM), rose for the fifth consecutive year to include 80 percent of all births. The use of ultrasound also increased by the same amount (2 percent), to 61 percent. Although less common than the former two procedures, induction of labor and stimulation of labor have become much more common in recent years, rising steadily from 9 and 11 percent, respectively, for 1989 to 15 percent for 1994.

Data on method of delivery show that the rate of cesarean delivery declined for the fifth consecutive year, and was 7 percent lower in 1994 (21.2 percent) than in 1989 (22.8 percent). The primary cesarean rate was also 7 percent lower in 1994 (14.9 first cesareans per 100 women who had no previous cesarean delivery) than in 1989 (16.1). The rate of vaginal birth following a previous cesarean delivery (VBAC) was 39 percent higher in 1994 (26.3) than in 1989 (18.9). Overall cesarean rates increase steadily with advancing age of mother and were twice as high in 1994 for mothers 40-49 years of age (31.5) as for teenagers (15.0). The percent of births delivered by forceps is declining (3.8 percent in 1994) while the use of vacuum extraction is on the rise (5.7 percent in 1994).

The percent of **preterm** infants was unchanged at 11 percent. The proportion of births of less than 37 completed weeks of gestation increased from 9.4 to 11.0 percent between 1981–93. Preterm births among black newborns fell to 18.1 percent, the lowest proportion in almost a decade, but among white infants the level rose by 2 percent, to 9.6. Preterm rates were unchanged among American Indian and Hispanic births, but rose slightly for Asian or Pacific Islanders.

The **incidence of low birthweight** continued to climb, rising from 7.2 to 7.3 percent. The percent low birthweight

has risen from 6.8 percent since the mid-1980's. Low birthweight improved among black mothers, dropping slightly between 1993 and 1994 to 13.2 percent, but rose among white mothers to 6.1 percent. There was no change in low birthweight among American Indian or Hispanic mothers, but levels increased among Asian or Pacific Islander infants.

The **multiple birth** ratio rose to 25.7 per 1,000, an increase of 2 percent over the previous year, and 33 percent since 1980. The higher-order multiple birth ratio (primarily triplet births) jumped 12 percent, to 116.2 per 100,000. This ratio has doubled since only 1987 and tripled since the early 1980's. There were 97,064 births in twin and 4, 233 births in triplet deliveries.

#### Introduction

This report, the annual release of national birth statistics, presents detailed data on births, birth and fertility rates, maternal lifestyle and health characteristics, medical services utilization by pregnant women, and infant health characteristics. These data provide important information on fertility patterns among American women by such characteristics as age, live-birth order, race, Hispanic origin, marital status, and educational attainment. Up-to-date information on these fertility patterns is critical to understanding population growth and change in this country and in individual States. Data on maternal characteristics affecting birth outcome such as weight gain, tobacco and alcohol use, and medical risk factors are useful in accounting for differences in birth outcome. Information on use of prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth and place of delivery, and method of delivery by maternal demographic characteristics can also help to explain differences in birth outcomes. It is very important that data on birth outcomes, especially levels of low birthweight and preterm birth, be continuously monitored, because these variables are important predictors of infant mortality and morbidity.

Beginning with the 1989 data year, a large variety of new data on maternal and infant health characteristics has been available from birth certificates.

supplementing previously available data on demographic characteristics and more limited health information. Summaries of data on the new characteristics as well as summaries of data on the previously available topics were published in separate reports for 1989-91 (1-6). Beginning with the 1992 data year the annual reports were redesigned as a single report (7,8). The focus of the redesigned report is to provide more detailed information on fertility trends and the demographic characteristics surrounding these trends and to describe the relationships of the new information on maternal lifestyle and medical risk factors and medical care utilization to various birth outcomes for a variety of population subgroups, including detailed racial and Hispanic origin groups.

#### **Methods**

Data shown in this report are based on 100 percent of the birth certificates registered in all States and the District of Columbia. More than 99 percent of births occurring in this country are registered. Tables showing data by State also provide separate information for Puerto Rico, Virgin Islands, and Guam. Beginning with 1980 data, tabulations of births are by race of mother; for years prior to 1980, tabulations are by race of child. Details of the differences in tabulation procedure are described in the Technical notes. Race and ethnicity differentials in birth rates and characteristics of births may reflect differences in income, educational levels, access to health care, and health insurance. Text references to black births and black mothers or white births and white mothers are used interchangeably. Additional information on the measurement of marital status, gestational age, and birthweight; the computation of derived statistics and rates; population denominators; random variation and relative standard error; and the definitions of terms are presented in the Technical notes.

#### Results and discussion

#### **Demographic characteristics**

#### Births and birth rates

The number of births in the United States dropped to 3,952,767, in 1994,

1 percent below the 1993 total and 5 percent fewer than the recent high point, 1990 (4,158,212) (table 1 and figure 1). Provisional data suggest that births continued to decline in 1995 by about 2 percent. The 5-percent drop in births between 1990 and 1994 partly reverses the 11-percent rise reported from 1986 to 1990 (3.8 to 4.2 million). From 1980 to 1986, U.S. births were relatively stable at 3.6–3.8 million annually.

The birth rate in 1994 was 15.2 births per 1,000 total population, the lowest rate observed since 1978 (15.0). The 1994 rate was 2 percent lower than in 1993 (15.5), and 9 percent lower than in 1990 (16.7). Provisional data indicate a continued decline in the birth rate in 1995, by about 3 percent.

The fertility rate in 1994 was 66.7 births per 1,000 women aged 15–44 years, 1 percent lower than in 1993 (67.6) and 6 percent lower than in 1990 (70.9). According to provisional statistics, the fertility rate is expected to fall again in 1995, by about 2 percent.

Age of mother—Birth rates by age of mother fell 1 percent in each age group for women 15–29 years. Rates for women in their thirties rose 1 to 2 percent, while the rate for women aged 40–44 years increased 5 percent. Rates for the youngest teenagers, 10–14 years, and for women aged 45–49 years were unchanged. (See tables 2–7 for births and birth rates by age of mother and live-birth order, by race and Hispanic origin.)

The birth rate for young teenagers 15–17 years was 37.6 per 1,000 in 1994, 3 percent lower than in 1991 (38.7) when it was higher than in any year since 1972. Despite the 1-percent decline from 1993 to 1994, the rate for 15–17-year-olds was still as high as it was two decades earlier (table 4 and figure 2). Although this rate had declined 17 percent through the 1970's, it changed very little in the 1980–85 period. The rate for young teenagers then rose 27 percent in the 5-year period, 1986–91.

The rate for older teenagers 18–19 years was 91.5 per 1,000, also 1 percent lower than in 1993. This rate has fallen 3 percent in the 1992–94 period. Nevertheless, the rate in 1994 was higher than in any year from 1973 to 1990; the rate was 96.9 in 1972. The birth rate for older teenagers fell sharply in the 1970's

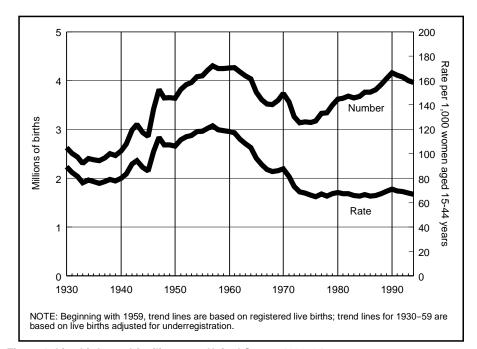


Figure 1. Live births and fertility rates: United States, 1930-94

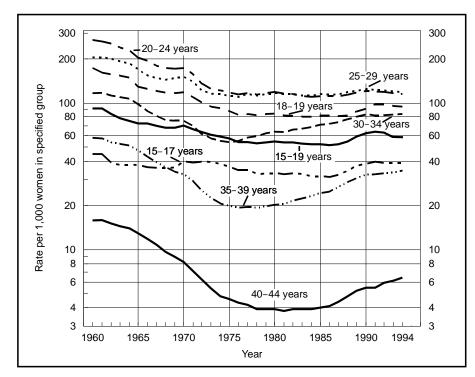


Figure 2. Birth rates by age of mother: United States, 1960-94

(29 percent from 1970 to 1979), and then was essentially unchanged until 1987 when it began a 20-percent increase that stopped in 1991–92.

Although the rate for teenagers 15–17 years declined slightly in 1994, the number of births to women in this age group rose 2 percent to 195,169, the second annual increase of this size. This

increase is entirely a reflection of the 3-percent rise between 1993 and 1994 in the number of young women aged 15–17 years (9). Population projections show that the number of women aged 15–17 years will continue to rise over the next several years as the number of young girls aged 12–14 years gradually enter the age group 15–17 years (10). It is already

evident that the modest declines since 1991 in the birth rate for teenagers 15–17 years are insufficient to compensate for this population growth. Without larger declines in the birth rate, the number of births to these young women can be expected to continue to increase.

Although declines in the birth rate for older teenagers 18-19 years were similar to those for younger teenagers, the effect on the number of births was quite different. The number of teenagers 18-19 years rose about 1 percent in 1994 (9), essentially compensating for the 1-percent decline in the birth rate. As a result, the number of births to women aged 18–19 years was virtually the same in 1994 (310,319) as in 1993 (310,558). The population of older teenagers will also rise over the next several years, as the growing number of younger teenagers gradually enter the 18-19-year age group (10). The birth rate for teenagers aged 18-19 years will have to decline further in order to keep the number of births from increasing again. If birth rates for both young and older teenagers remain at their 1994 levels in the year 2000, the number of births to women aged 15-19 years could rise to about 570,000, 13 percent higher than the 1994 total, because of the projected increases in the teenage population.

Birth rates for women in their twenties, the principal childbearing ages, dropped 1 percent in 1994. The rate for women aged 20-24 years was 111.1 per 1,000, 5 percent lower than its recent high point, 116.5, in 1990. The rate for women aged 25-29 years was 113.9, also 5 percent lower than in 1990 (120.2). From the mid 1970's to the mid 1980's, rates for women in their twenties were relatively stable. Rates for these women did rise in the late 1980's. However, the increases were relatively small (8-9 percent) compared with those for teenagers and women in age groups 30-44 years (15-34 percent).

The birth rate for women aged 30–34 rose just 1 percent in 1994, to 81.5 per 1,000. This rate changed very little each year between 1990 and 1994, in sharp contrast to the 31-percent rise between 1980 and 1990 (61.9 to 80.8 per 1,000). Despite the small increase in the rate in 1994, the number of births to women aged 30–34 reached a record high of

906,498, overcoming a decline in the number of women in this age group (9). In the coming years, the number of women aged 30–34 will continue to fall (10). It is likely therefore that the number of births in this age group will stabilize and begin to fall unless there are offsetting increases in their birth rate.

The birth rate for women in their late thirties rose again in 1994, by 2 percent, to 33.7 per 1,000. The 1994 rate was 70 percent higher than in 1980 (19.8). Although the pace of increase in this rate has slowed considerably in the 1990's, still the rate for women aged 35–39 years is among the few that have risen steadily since 1990. Reflecting increases of 2 percent each in the number of women aged 35–39 years (9) and in the birth rate, the number of births to these women reached a record high, 371,608, in 1994.

The birth rate for women in their early forties has risen steadily for a decade. The rate in 1994 was 6.4 births per 1,000 women aged 40–44 years, compared with 3.9 in 1984. The number of women in this age group has continued to rise in recent years, 3 percent from 1993 to 1994, and 12 percent from 1990 to 1994 (9,11). The increases in the rate and the number of women have resulted in dramatic increases in the number of births in this age group. The 1994 total, 63,502, was 8 percent higher than in 1993, and the highest number since 1967 (67,053).

The modest changes in birth rates in 1994 for teenagers likely reflect a combination of demographic and behavioral factors. The decline, although modest, in teenage birth rates appears to reflect in part recent changes in teenage sexual activity. The proportion of young teenagers in particular who have had sexual intercourse has stopped increasing (12). A growing proportion of those teenagers who are sexually active are using contraceptives, especially the condom (12).

It appears that the steady increases in the teenage pregnancy rate observed during that late 1980's may have halted; the rate for women aged 15–19 years had increased 10 percent from 105 per 1,000 in 1986 to 115 in 1990 and 1991 (13). The pregnancy rate for 15–19-year-olds fell 3 percent between 1991 and 1992, to 111 per 1,000, reflected in declines in both the birth and abortion rates;

additional declines in the teenage pregnancy rate are indicated for 1993 based on the continued declines in the birth rate and preliminary abortion data (7,14,15, and 16).

The rapid pace of increase in birth rates reported for women in their thirties in the late 1970's through 1990 (5,17) has slowed considerably, especially for women aged 30–34 years. This recent moderation likely reflects several factors. Levels of childlessness among women in their thirties have stopped increasing. The proportion of women aged 35 years at the end of 1994 who were childless was about 20 percent, essentially unchanged since 1990, although much higher than in the early 1970's (10 percent) (18).

Moreover, the proportion of currently married childless women in their early thirties who report that they expect to have at least one child has declined since 1990 (19). It may be that this decline reflects increased recognition of possible fertility impairments which will likely limit the realization of their expectations. About one-third of currently married childless women aged 35-44 years have impaired fertility according to the 1988 National Survey of Family Growth (20). In addition, the proportion of women in their thirties who are not currently married has continued to increase; these women have lower birth expectations than their married counterparts (19,21). The combination of declining proportions married and declines in birth expectations among the currently married are both likely factors in the recent moderation in birth rate increases for women in their thirties.

Birth and population patterns described here and in recent reports (5-8,10) suggest that total births will continue to fall over the next several years, resulting from declining or stable birth rates and declining numbers of women in age groups 20-34 years, the ages when more than three-quarters of births occur. Any increases in the total number of births in the near future will depend on appreciable increases in birth rates for these women which more than offset the declines in the number of women.

Live-birth order—Birth rates declined by 2 to 3 percent for second, third, and fourth order births in 1994, while

rates for first and fifth and higher-order births did not change (table 5). Although the first birth rate was unchanged at 27.5 per 1,000 women aged 15–44 years, this rate was 5 percent below its most recent high point in 1990 (29.0). Between 1990 and 1994, rates for second through fifth order births dropped 6–9 percent.

The stability in the overall first birth rate results from compensating changes in first birth rates by age. (See table 3 for 1994 rates.) Rates increased 1 to 2 percent for women in age groups 15-17 and 18-19 years and 3 percent for women aged 30-34 and 35-39 years. The rate for women aged 40-44 years also increased. However, the first birth rates were essentially unchanged for women in their twenties, the ages at which more than half of first births occur. Increases in first birth rates for women in their thirties continue a pattern observed since the mid 1970's, although the pace of increase has slowed in recent years (17).

The first birth rate for teenagers 15-17 years increased 1 percent in 1994, and 3 percent between 1992 and 1994, reversing the 3-percent drop in the rate from 1991 to 1992. The rate in 1994, 32.8, is nearly as high as it was in 1991, its recent peak. The rate for older teenagers rose 2 percent in 1994, to 65.6, higher than at any time since 1973 (67.5). These rates for teenagers are of concern because they indicate a renewed increase in the proportion of young women who have become mothers for the first time. On the other hand, there were considerable declines between 1993 and 1994 in second and third birth rates for teenagers. Second order birth rates fell 9 percent for ages 15-17 years and 5 percent for ages 18-19 years. In other words, rates of repeat childbearing fell for teenagers.

Second order birth rates fell by 1 percent for women aged 20–24 and 25–29 years, while they increased 1–3 percent for women aged 30–34 and 35–39 years. Third and fourth birth rates generally fell for women under 35 years; these rates increased 3 percent each for women 35–39 years of age.

Race—The number of births declined 1 percent for white women and 3 percent for black and American Indian women. Births rose 3 percent for Asian or Pacific Islander (API) women. Birth rates per 1,000 total population declined in all

racial groups, by 1 to 2 percent for the white and API populations and by 4 to 5 percent for the black and American Indian populations. Fertility rates per 1,000 women aged 15–44 years were also lower in 1994 for white women (1 percent) and for black and American Indian women (3 to 4 percent). The rate for API women rose slightly. (See tables 1–4 and 8 for national and State data.)

Fertility rates for each racial group in 1994 were 4–11 percent lower than in 1990, declines that are generally mirrored in comparable reductions in births in 1994 compared with 1990. The single exception is the number of API births, which rose 11 percent from 1990 to 1994, despite the 4-percent drop in the fertility rate. The number of births rose because the number of API women in the child-bearing ages (15–44 years) rose 16 percent during this period (9,11)

The fertility rate for white women declined 1 percent because the birth rate for married white women fell 3 percent, to an all-time low of 85.0 per 1,000. The rate for unmarried white women did increase 7 percent, but this was not enough to make up for the decline in marital fertility among white women, which fell 10 percent between 1990 and 1994. The 4-percent drop in the fertility rate for black women reflects a substantial decline (9 percent) in marital fertility to an all-time low of 66.9 per 1,000, as well as a smaller decline (2 percent) in nonmarital fertility.

Birth rates by age differ substantially for white, black, American Indian, and API women (table 3). Up to age 25 years, black and American Indian women have the highest rates, with rates much lower for white and API teenagers and women in their early twenties. For example, the 1994 rates for black and American Indian teenagers 18–19 years (130–148 per 1,000) were 59 to 236 percent higher than for white and API women of the same age (44–82 per 1,000).

Rates by race are most similar at ages 25–29, with a range of 104 (black and American Indian) to 116–119 (white and API). Beginning at ages 30 and older, the pattern noted for the youngest mothers is reversed. Rates are highest for white and API women. The rate for API women aged 30–34, for example, was

60–72 percent higher than the rates for black and American Indian women of the same age.

The high birth rates for white and API women in their thirties, especially for first births, indicate that the making up of previously postponed childbearing continues to be an important trend. First birth rates for API women aged 30-34 and 35-39 years rose 5 and 6 percent, respectively, in 1994, to levels higher than for any other racial group. A previous report showed substantial variability in birth patterns by age for API subgroups (Chinese, Japanese, Hawaiian, and Filipino) (22). Evidence of considerable variability in birth patterns for several additional API subgroups (Asian Indian, Korean, Vietnamese, Guamanian, and Samoan) has recently been reported (23); in this report, data for these subgroups are included in the "other" API category. Unfortunately, birth rates for API subgroups can only be computed in census years when the necessary populations are available. The 1990-based study indicated that delayed childbearing was particularly evident among Chinese and Japanese women (22).

Rates declined up to 4 percent for black and American Indian teenagers and increased up to 1 percent for white teenagers and up to 2 percent for API teenagers. Rates for women in their twenties declined much more for black and American Indian women than for their white and API peers. At ages 30–34 and 35–39 years, rates declined up to 3 percent for black and American Indian women, while they rose up to 3 percent for white and API women.

Hispanic origin—The fertility rate of Hispanic women as a group declined 1 percent in 1994 to 105.6 per 1,000. Rates for Mexican and Cuban women increased 1 percent, while rates for Puerto Rican and "other" Hispanic women declined 1 and 7 percent, respectively. The rate for Mexican women, 115.4 in 1994, continues to be the highest among the racial and ethnic groups for whom fertility patterns can be reliably computed. The rates for other Hispanic subgroups were 81.9 for Puerto Rican, 55.9 for Cuban, and 97.7 for "other" Hispanic. (See tables 6, 7, and 9 for births and birth rates.)

In general, birth rates by age for Hispanic women as a group and for Mexican women are higher than for either non-Hispanic white or black women. One exception is the rate for young teenagers 15–17 years; the rate for non-Hispanic black teenagers was slightly higher than for Mexican teenagers of the same age. Rates for Puerto Rican teenagers were slightly lower than those for Mexican teenagers.

The disparity in the fertility of Hispanic and non-Hispanic black women compared with the fertility of non-Hispanic white women is greatest in the rates for teenagers. The rates for Hispanic and non-Hispanic black teenagers 15–19 years are 2.3 to 3.4 times the rates for non-Hispanic white teenagers (table A). The differential in rates declines with advancing maternal age through ages 35–39 years, but rates for Hispanic women in every age group 20–49 years exceed those for non-Hispanic white and black women.

Between 1993 and 1994, the rates for Mexican teenagers 15–17 and 18–19 years jumped 9 and 6 percent, respectively, faster than for any other major population subgroup. Rates for Mexican women in age groups 20–24 and 35–44 years rose up to 4 percent, while rates declined for women in age groups 25–34 and 45–49 years.

The fertility pattern of Mexican women is unique in that rates are high throughout the childbearing period. In contrast, the pattern of rates for Puerto Rican women is quite similar to that for non-Hispanic black women, with high fertility for women under age 30 years followed by much lower rates for women aged 30 years and over. The pattern of rates for Cuban women suggests a tendency to postpone childbearing, with very low rates for women under age 25 years and relatively high rates for women in their thirties.

Total fertility rate—The total fertility rate indicates the number of births that a hypothetical group of 1,000 women would have if they experienced during their childbearing years the age-specific birth rates observed in a given calendar year. This hypothetical measure shows the potential impact of current fertility levels on completed family size. The total

Table A. Birth rates by age and Hispanic origin of mother, and by race of mother for mothers of non-Hispanic origin: United States, 1994

[Rate per 1,000 women in specified group]

			Non-H	ispanic
Age of mother	Total	Hispanic	White	Black
15–44 years <sup>1</sup>	66.7	105.6	58.3	79.0
10-14 years	1.4	2.7	0.5	4.7
15–19 years	58.9	107.7	40.4	107.7
15–17 years	37.6	74.0	22.8	78.6
18–19 years	91.5	158.0	67.4	152.9
20–24 years	111.1	188.2	90.9	150.3
25–29 years	113.9	153.2	107.9	107.0
30-34 years	81.5	95.4	80.7	67.5
35–39 years	33.7	44.3	32.1	29.5
40–44 years	6.4	10.7	5.7	6.0
45–49 years	0.3	0.6	0.2	0.3

<sup>1</sup>Rates computed by relating total births, regardless of age of mother, to women aged 15–44 years.

fertility rate is age-adjusted because it is computed from age-specific birth rates; it assumes the same number of women in each age group.

The total fertility rate (TFR) in 1994 was 2,036.0, slightly lower than in 1993 (2,046.0) (table 4). The rate has fallen slowly but steadily since 1990 (2,081.0). The TFR continued to fall in 1994 because birth rates by age declined for all women under age 30 years when birth rates are highest. Increases in birth rates for women aged 30 years and over were not sufficient to offset the declines in rates for younger women.

The TFR considered necessary for a given generation to exactly replace itself is 2,100. The TFR in the United States has been below the "replacement" level since 1971 (2,266.5). TFR's in 1994 were above replacement level for Mexican (3,211.5), "other" Hispanic (2,855.5), Puerto Rican (2,490.0), and non-Hispanic black women (2,365.0) (tables 10 and 11). The rate for American Indian women was close to replacement level (2,080.0), but rates for Asian or Pacific Islander (API) (1,943.0), non-Hispanic white (1,792.0), and Cuban women (1,680.5) were much lower. TFR's increased up to 3 percent for Cuban, Mexican, and API women. Rates declined by up to 6 percent for "other" Hispanic, non-Hispanic black, American Indian, Puerto Rican, and non-Hispanic white women. The relative levels of the TFR's have been fairly stable since 1990 (5-8).

#### Births by State

Birth data by race and Hispanic origin for 1994 are shown in tables 8 and

9 for the 50 States and the District of Columbia, and Puerto Rico, the Virgin Islands, and Guam. The American Indian, API, and Hispanic populations are highly concentrated geographically as reflected in these distributions of births by State. For example, more than half of American Indian births in the 50 States and the District of Columbia were reported by 5 States (Alaska, Arizona, California, New Mexico, and Oklahoma). Similarly, California, Hawaii, and New York accounted for more than half of API births.

Nearly 60 percent of all Hispanic births in the 50 States and the District of Columbia were to residents of California and Texas; three-quarters of Mexican births were to residents of these two States. More than half of Puerto Rican births outside of Puerto Rico were to residents of Florida, New Jersey, and New York. Two-thirds of Cuban births were to Florida residents.

Births declined in 1994 by up to 5 percent in 39 States and in Puerto Rico and the Virgin Islands; births to residents of the District of Columbia fell 7 percent. Increases of up to 3 percent were reported in 10 States and Guam; births in Nevada rose 7 percent.

The birth rate per 1,000 total population declined in 47 States and the District of Columbia by 1–5 percent. Rates increased in Arkansas, Nevada, and Utah by 1 percent each.

The fertility rate per 1,000 women aged 15–44 years declined up to 4 percent in 45 States and the District of Columbia. Rates increased up to 2 percent in Arkansas, Nevada, and New Jersey, and were unchanged in Arizona

and Utah. Birth and fertility rates are not available for Puerto Rico, the Virgin Islands, and Guam.

#### Sex ratio

There were 2,022,589 male live births in 1994 compared with 1,930,178 female live births. These numbers yielded a sex ratio of 1,048 male per 1,000 female live births (table 10), similar to the sex ratio in 1993 (1,050) and similar to ratios over the last 50 years. As in previous years, Asian or Pacific Islander mothers had the highest sex ratio (1,064), followed by white mothers (1,051), American Indian mothers (1,031), and black mothers (1,028). The sex ratio for Hispanic mothers was 1,041, intermediate between non-Hispanic white mothers (1,054) and non-Hispanic black mothers (1,028) (table 11).

#### Month of birth

Monthly birth rates in 11 months of 1994 were below the rates for the same month observed in 1993. In 10 of the 12 months of 1994, monthly fertility rates were below the rates observed in 1993. The peak months of occurrence of births in 1994 were July and August (table 12). When the seasonal component is removed from the monthly birth and fertility rates, the underlying trends can be observed. Like the 4 previous years, seasonally adjusted birth and fertility rates for the first half of 1994 were, on average, higher than the rates for the second half of the year. Seven months had the lowest seasonally adjusted birth rates in 16 years, while October and December showed the lowest rates since 1977.

#### Day of the week of birth

Since 1980 when these data were first tabulated, there has been a steady decline in births on Saturdays and Sundays, with a concomitant increase in births on weekdays. Variation in the daily pattern of births can be measured by an index of occurrence. The index is defined as the ratio of the average number of births for a particular day of the week to the average daily number of births for the

year, multiplied by 100. In 1994 the Sunday index was 76.1, an indication that there were 23.9 percent fewer births on Sundays than the daily average, considered to be 100.0. The Saturday index was 82.7. As in past years, births occurred most frequently on Tuesdays with an index of 112.0 in 1994.

A weekend deficit is apparent for both vaginal and cesarean deliveries, but is far larger for cesarean deliveries, particularly repeat cesareans (table 13). In 1994 the Sunday index for vaginal births was 81.6, compared with 66.2 for primary, and 38.6 for repeat cesareans.

The growing concentration of births on weekdays in the early and mid 1980's has been attributed to the increasing rate of cesarean deliveries because many cesareans are scheduled on weekdays (24). However, in the late 1980's, the cesarean rate stabilized (25), and since 1989 it has declined. The more recent increase in the weekend deficit can be partly explained by the growing proportion of births that are induced, and the fact that labor is more likely to be induced on weekdays than on weekends.

#### Births to unmarried women

The birth rate for unmarried women increased 4 percent in 1994, to 46.9 births per 1,000 unmarried women aged 15–44 years. Other measures of nonmarital birth rose as well. The number of births increased 4 percent to 1,289,592, and the proportion of all births that occurred outside of marriage rose to 32.6 percent (tables B, 14, and 15).

The increases in nonmarital childbearing in 1994 were large compared with those in recent years, and to a great extent reflect improvements in the completeness of reporting of nonmarital births in two States, Michigan and Texas. Previous issues of this report and other NCHS publications have noted the underreporting of Texas' nonmarital births (7, 8, and 26). Briefly, both of these States had underreported the number of nonmarital births since 1989 because they did not include births for which paternity acknowledgment had been made in the nonmarital totals. The number of paternity acknowledgments has increased steadily in these States since the late 1980's. Beginning with 1994, Texas has a

Table B. Number, rate, and percent of births to unmarried women: United States, 1980 and 1985–94

Year	Number	Rate <sup>1</sup>	Percent <sup>2</sup>
1994	1,289,592	46.9	32.6
1993	1,240,172	45.3	31.0
1992	1,224,876	45.2	30.1
1991	1,213,769	45.2	29.5
1990	1,165,384	43.8	28.0
1989	1,094,169	41.6	27.1
1988	1,005,299	38.5	25.7
1987	933,013	36.0	24.5
1986	878,477	34.2	23.4
1985	828,174	32.8	22.0
1980	665,747	29.4	18.4

<sup>&</sup>lt;sup>1</sup>Births to unmarried women per 1,000 unmarried women aged 15-44 years.

separate direct question on the birth certificate asking for the mother's marital status, so that data are no longer affected by the presence or absence of a paternity affidavit. Michigan's nonmarital birth data continue to be inferred on the basis of related information on the birth certificate because there is no direct marital status question, but the presence of a paternity acknowledgment is now taken into account in the coding process as an indicator of a nonmarital birth. These reporting changes are described in more detail in the Technical notes.

Although it is not possible to compute birth rates for unmarried women for a reporting area which includes all States except Michigan and Texas because State populations by marital status are not available, it is possible to compare the trends in the numbers and proportions of nonmarital births for such a reporting area. The number of nonmarital births in this reporting area declined very slightly between 1993 and 1994, while increasing 4 percent for the United States as a whole. Similarly, the proportion of all births to unmarried women in this reporting area rose just 1 percent compared with a 5-percent increase in the total United States. Thus, virtually all of the increases in the number and proportion of nonmarital births in the United States are due to the changes in reporting by Michigan and Texas.

Although the annual changes in nonmarital births were somewhat understated for the 1989–93 period in previous reports, and the increase from 1993 to 1994 is relatively large, the overall trend from 1989 to 1994 has been affected much less by these changes in reporting

practices. That is, the increase in nonmarital births has slowed considerably in recent years. This can be seen clearly if the change from 1984 to 1989, when nonmarital childbearing increased dramatically, is compared with the change between 1989 and 1994; statistics for 1989 and 1994 are believed to represent fairly accurately the incidence of nonmarital births, although data for the intervening years are not complete. For example, the nonmarital birth rate increased 34 percent between 1984 and 1989, or about 6 percent per year. Over the ensuing 5-year period 1989-94, the rate increased 13 percent overall, or just about 2 percent annually.

Birth rates for unmarried white and Hispanic women increased 6 to 7 percent in 1994, to 38.3 and 101.2 per 1,000, respectively. The rate for black women declined 2 percent to 82.1. The nonmarital birth rate for black women was 4.5 times the rate for white women in 1980; by 1994, the differential had declined to 2.1. This change is due entirely to the 112-percent rise in the rate for white women, while the rate for black women increased just 1 percent.

For unmarried white women, the increase in the birth rate between 1984 and 1989 was 47 percent, or about 8 percent annually, compared with 27 percent overall during 1989–94, or 5 percent per year. Among black women, the rate rose 21 percent during 1984–89, less than 4 percent per year, and then declined 9 percent from 1989 to 1994, or about 2 percent annually. The change in reporting practices in Texas also affected the rate for unmarried Hispanic women, which increased to 101.2 in 1994

<sup>&</sup>lt;sup>2</sup>Percent of all births to unmarried women.

compared with 89.6 in 1990, the first year for which this rate is available (26); 14 percent of U.S. Hispanic births to unmarried women were to Texas residents in 1994.

Increases in birth rates to unmarried women by age over the 5-year period 1989–94 were also relatively modest compared with increases in the 1984–89 period. During 1989–94, they amounted to 11–38 percent, compared with 31–50 percent in the previous 5 years (figure 3).

Rates by age rose 25–48 percent for white women during 1989–94, compared with 41–60 percent during the previous period. Increases for white women in recent years were largest for women aged 18–19 and 40–44 years. For black women during the 1989–94 period, rates declined 3–9 percent for women in age groups 15–17 and 20–34 years and increased for women 35–44 years. In the 1984–89 period, all age-specific rates for black women had increased, by 16–38 percent.

Regardless of the changes in recent years in rates by age and race, the relative levels of unmarried childbearing have remained fairly stable. That is, in 1994, as in previous years, the rates were highest for women aged 18–19 and 20–24 years (70 and 72 per 1,000 in 1994, respectively) followed by women aged 25–29 years (59 per 1,000). Rates were much lower for women aged 15–17 and 30–34 years (32–40 per 1,000).

One factor accounting for the recent increases in rates for unmarried white women is the relatively high rate for Hispanic women and the growing proportion of births to Hispanic women. Race and Hispanic origin are reported independently on the birth certificate; 91 percent of Hispanic women were reported as white in 1994 (9). Since about one-fifth of births to white women are to Hispanic women, the high rates for Hispanic women would be expected to affect the overall white rate. In fact, the nonmarital birth rate for non-Hispanic white women in 1994 was 30.4, 21 percent lower than the overall rate for white women, 38.3 (table C). A similar difference is observed for rates for women in age groups 18-44 years.

Although the overall nonmarital birth rate for Hispanic women was 23 percent higher than for black women in 1994

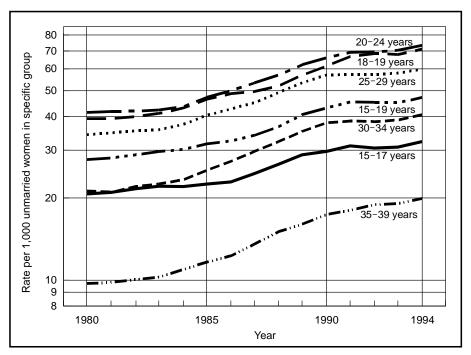


Figure 3. Birth rates for unmarried women, by age of mother: United States, 1980-94

Table C. Birth rates for unmarried women by age and Hispanic origin and race of mother: United States, 1994

[Rate per 1,000 unmarried women in specified group]

				White	
Age of mother	Total	Hispanic	Total	Non-Hispanic	Black
15–44 years <sup>1</sup>	46.9	101.2	38.3	30.4	82.1
15–19 years	46.4	82.6	36.2	35.5	100.9
15-17 years	32.0	59.0	24.1	26.9	75.1
18–19 years	70.1	123.6	56.4	45.0	141.6
20-24 years	72.2	154.8	58.1	43.8	138.1
25–29 years	59.0	141.6	49.7	35.0	93.6
30-34 years	40.1	95.5	34.2	24.9	57.2
35–39 years	19.8	48.4	17.3	12.9	26.3
40–44 years <sup>2</sup>	4.7	14.0	4.3	3.1	5.9

<sup>1</sup>Rates computed by relating all births to unmarried women to unmarried women aged 15-44 years.

<sup>2</sup>Rates computed by relating all births to unmarried women aged 40 years and over to unmarried women aged 40–44 years.

(101.2 and 82.1, respectively), this difference is not replicated within each age group (table 14). Rates for black teenagers are higher than for Hispanic teenagers, but the pattern reverses for women aged 20 years and over. Rates for Hispanic women remain high throughout the childbearing ages while rates for black women decline considerably after ages 20–24 years. One factor contributing to the high Hispanic rates is the relatively high incidence of cohabitation among Hispanic couples (27). Evidence of this also comes from the birth certificate. For

example, 42 percent of Puerto Rican births in Puerto Rico were nonmarital in 1994 (table 16), but about three-quarters of these nonmarital births or 32 percent of all births were to women living with the father of the child. A number of studies have shown an increase in cohabitation among couples in the United States (28, 29).

The proportion of all births that were to unmarried women rose in 1994 to 32.6 percent. Twenty-five percent of white births, 70 percent of black births, and 43 percent of Hispanic births were

nonmarital. The proportion of nonmarital births is affected not only by the birth rate for unmarried women and the number of unmarried women, but also by the birth rate for married women. This rate, as noted in an earlier section (Births and birth rates), has fallen sharply in recent years to unprecedented low levels-83.8 per 1,000 in 1994, down 10 percent compared with 1990 (93.2). This rapid decline in marital fertility-measured for both white and black women—is the principal factor in the continued increase in the proportion of nonmarital births in the last few years. Although the proportion of nonmarital births (the nonmarital birth ratio) clearly has important analytic limitations, it is often the only measure that is available in addition to the number of births, because the population data needed to compute rates are available only in census years for States and cities.

The proportions of nonmarital births vary widely by race and Hispanic origin (tables 10 and 11). At least 41 percent of births to American Indian, Hawaiian, Mexican, Puerto Rican, Central and South American, and non-Hispanic black women were nonmarital in 1994 (range of 41–71 percent). Proportions were lowest for Chinese and Japanese births (7–11 percent). The range for other groups was 16–23 percent (Filipino, "other" Asian, Cuban, and non-Hispanic white). As these figures indicate, there is wide variability in the proportions for API and Hispanic subgroups.

Over the next several years, the principal area of population change will be an increase in the number of teenagers while the number of women in their thirties starts to decline (10). Thus the number of unmarried women can be expected to grow faster because the overwhelming majority of teenagers are unmarried. This population growth in turn will likely contribute to further increases in nonmarital births unless birth rates for unmarried women begin to fall.

The numbers and proportions of births to unmarried women by race are shown in table 16 for the 50 States and the District of Columbia, Puerto Rico, Virgin Islands, and Guam. The proportions by State in 1994 increased in all but nine States. The proportions declined in Georgia, Montana, North Carolina, Ohio, Tennessee, and Washington, and did not

change in Idaho and North and South Dakota. As already noted, numbers and proportions increased substantially in Michigan and Texas. The percent of nonmarital births rose to 29 percent in Texas and to 35 percent in Michigan.

#### Age of father

The birth rate per 1,000 men aged 15–54 years declined again in 1994, by 2 percent, to 53.2 (table 17). This rate fell by 9 percent between 1990 and 1994, following a 7-percent increase during 1986–90.

Rates declined by 2 percent or less for men in age groups 25-39 years. The rate for men aged 15-19 years rose 1 percent. The rates for men aged 40 years and over are the lowest by age and either did not change or declined. Between 1986 and 1991, the rate for teenaged men had increased 39 percent and has now risen again in both 1993 and 1994. Increases for men aged 20-54 years were observed from 1986 through 1990 only, and were considerably smaller than for teenagers. Although 16 percent of the records do not have the father's age reported in 1994, these records are distributed before rates are computed in a way to reduce bias in rates by age (see Technical notes).

Birth rates declined by 2 percent for white men, to 50.0 per 1,000, and by 4 percent for black men, to 74.9. Patterns by age for white men showed declines for ages 25–29 and 45–49 years. Birth rates by age for black men declined for all age groups ranging from 2 percent (20–24 years) to 15 percent (55 years and over).

#### **Educational attainment**

educational attainment women who give birth is important because higher educational attainment is associated with more timely receipt of prenatal care and fewer lifestyle and health behaviors during pregnancy that are detrimental to birth outcome (discussed in later sections). Data from the birth certificate show that the educational attainment of mothers has increased substantially over the last few decades, partly reflecting the increases in educational attainment of all women during the time period (30). More than three-fourths of women who gave birth in 1994 had at least 12 years of schooling (77 percent)

and 42 percent had at least some college (table 18). The percent of mothers with at least a high school diploma increased with additional age, to about 90 percent for women who gave birth in their thirties, and then declined slightly for mothers 40 years of age and over (86 percent). The median educational attainment for all mothers in 1994 was 12.8 years.

In general, white mothers had more education than black mothers—78 percent of white mothers had at least a high school diploma compared with 71 percent of black mothers; 44 percent of white mothers had at least some college compared with 30 percent of black mothers. However, the higher educational attainment for white than black mothers was limited to those 25 years of age and over. There was almost no difference by race in the percent of teenaged mothers with at least a high school diploma, and a slightly higher proportion of black than white mothers 20–24 years of age had attained this educational level.

Only two-thirds of American Indian mothers had 12 or more years of schooling, the lowest of any racial group, while more than 80 percent of all Asian or Pacific Islander (API) subgroups except for "other" API had attained this educational level (table 10). In particular, nearly all of Japanese mothers (97 percent) had 12 or more years of schooling. The proportion of Hispanic mothers with at least a high school education was low (47 percent) but there was tremendous variation among Hispanic subgroups, ranging from 41 percent of Mexican mothers to 85 percent of Cuban mothers (table 11). The low educational attainment of Hispanic mothers in general and the variation among subgroups parallels the educational attainment of the Hispanic population in general (31).

# Maternal lifestyle and health characteristics

#### Maternal weight gain

Maternal weight gain is one of the components in the complex relationship between lifestyle characteristics of the mother and the development of the fetus (32). The total weight gained by the mother during pregnancy has been shown to have an independent, positive relationship with the weight of the newborn (33). Inadequate maternal weight gain along

with low prepregnancy weight and smoking during pregnancy have been shown to be critical factors in intrauterine growth retardation and low birthweight (34, 35).

In 1990 the National Academy of Sciences published weight-gain guidelines that varied according to the mother's body mass index (BMI), which is calculated from her prepregnancy weight and height. The guidelines recommend that women who are underweight (low BMI) gain 28–40 pounds, those who are of normal weight (average BMI) gain 25–35 pounds, those who are overweight (high BMI), 15–25 pounds, and obese women, not more than 15 pounds (36).

Beginning with 1989, information on maternal weight gain was collected from the birth certificate, but information on the mother's prepregnancy weight and height is not collected. Therefore, it is not possible to determine whether the weight gain was within the recommendations for the mother's BMI. Differences between subgroups in maternal weight gain may reflect differences in the proportion of mothers who gained outside the recommended range but could also be the result of group differences in height and prepregnancy weight. Given the limitations of vital statistics data, the primary focus of this section is on the median weight gain (for descriptive purposes) and on weight gains that are for most women considered inadequate regardless of prepregnancy weight and height (less than 16 pounds).

In 1994 all States except California reported information on weight gain. Births to mothers residing in these States accounted for 86 percent of all births in the United States. As in previous years, in 1994 almost two-thirds (64 percent) of women who gave birth gained 26 pounds or more during pregnancy (table 19). The median weight gain was 30.4 pounds in 1994 and has been virtually unchanged since 1989. Although the median has remained stable, the percent of mothers who gained minimally (less than 16 pounds) was higher in 1994 (10.4 percent) than in 1989 (9.4 percent).

The weight gain of the mother varied considerably by period of gestation. Mothers who had preterm infants (gestations of under 37 completed weeks) gained 4 pounds less during pregnancy

(26.8 pounds) than mothers who had babies with gestations of 40 weeks and over (30.8 pounds). The percent of mothers who gained less than 16 pounds was twice as high for gestations of under 37 weeks than for gestations of 40 weeks and over—17.9 compared with 8.9 percent.

Overall, white women gained almost two pounds more during pregnancy than black women—30.6 compared with 28.7 pounds. For gestations of under 37 weeks, the median weight gain for white women was 3.3 pounds heavier than for black women but declined to less than a pound for longer gestational periods. Overall, the percent of black mothers who had weight gains of less than 16 pounds (16.5 percent) was much higher than for white mothers (9.1 percent) while American Indian mothers were intermediate (13.8 percent) (table 23). In general, the percent of Asian or Pacific Islander (API) mothers who gained less than 16 pounds (9.4 percent) was very similar to that of white mothers but all API subgroups had a lower proportion with the exception of "other" API mothers (10.9 percent).

The median weight gain for Hispanic mothers (29.6 pounds) was intermediate between non-Hispanic white mothers (30.7 pounds) and non-Hispanic black mothers (28.7 pounds) (table 21). However, the weight gained by Hispanic mothers and non-Hispanic black mothers was virtually the same for gestation periods of 37 weeks or longer. Within Hispanic subgroups, Cuban mothers gained the most weight (30.9 pounds) while Mexican mothers gained the least (28.5 pounds) and this relationship was evident within each gestational period. The percent of mothers who gained less than 16 pounds was lowest for Cuban mothers (7.4 percent) and highest for Mexican mothers (13.4 percent) (table 24).

As mentioned above, maternal weight gain has been shown to have a positive correlation with the birthweight of the infant. This relationship is substantiated by the data in table 20 that shows the percent of infants with low birthweight by the weight gain of the mother. Overall, the percent of infants with low birthweight drops steadily with increasing weight gain through 35

pounds and then levels off with higher weight gains. About 15 percent of infants whose mothers gained less than 16 pounds were low birthweight compared with 5 percent of those whose mothers gained 31-35 pounds. The percent of infants with low birthweight ranged between 4 and 5 percent for mothers who gained more than 35 pounds. The relationship between maternal weight gain and low birthweight was evident for both white and black mothers regardless of gestational period. The decline in low birthweight with additional maternal weight gain was also present for each Hispanic subgroup (table 22).

#### Medical risk factors

Medical risk factors can severely complicate pregnancy, particularly when not adequately treated. For example, the hypertensive disorders (preeclampsia and pregnancy-associated and chronic hypertension) have been tied to inadequate birthweight, shortened gestations, and infant death; diabetes has been associated with cesarean delivery, hyaline membrane disease/respiratory distress syndrome, and congenital malformations (37–39).

Sixteen diverse risk factors affecting the pregnancy are identified on the birth certificate. Despite the fairly small proportion of certificates for which the presence or absence of risk factors was not stated (1.3 percent for 1994), birth certificate data may underreport medical risk factor prevalence (40). It is also important to note that rates for some smaller population groups and for less common factors can vary widely from year to year and should be used with caution.

Between 1993 and 1994 no substantive declines in medical risk factor rates were observed; rates for all reported medical risk factors either increased or were essentially stable. (See table 25 for current year data.)

Pregnancy-associated hypertension, the most frequently reported risk factor, increased for the third consecutive year, rising by 8 percent from 29.7 to 32.2 per 1,000, the largest single-year increase since these data first became available (1989). Increases were noted among all age groups. The rate of chronic hypertension was unchanged but that of

eclampsia, a potentially serious hypertensive condition related to pregnancy-associated hypertension, rose slightly from 3.3 to 3.5 per 1,000 between 1993 and 1994. The eclampsia rate had been declining since 1989.

Diabetes and anemia are the second and third most frequently reported maternal medical risk factors. Following several years of increase, the diabetes rate was basically stable at 25.5 per 1,000 for 1994. The maternal anemia rate, which had been quite stable, increased by 7 percent between 1993 and 1994, rising from 18.7 to 20.0 per 1,000.

The prevalence of maternal acute or chronic lung disease (e.g., asthma, tuberculosis) and hydramnios/oligohydramnios (the excess or shortage of amniotic fluid) rose by 19 and 11 percent, respectively, between 1993 and 1994. Rates for both factors have risen steadily since 1989 with increases most pronounced among mothers under 25 years of age.

Rates for most medical risk factors vary widely by age of mother. For example, anemia is most common among teenaged mothers, whereas chronic conditions such as cardiac disease and diabetes occur more frequently among mothers 30 years of age and over. For other risk factors, such as eclampsia and pregnancy-associated hypertension, rates are highest at both extremes of the age distribution.

Medical risk factor rates also often differ by race or ethnicity. In order of frequency, the most common risk factors among white mothers are pregnancy-associated hypertension, diabetes, and anemia, whereas among black mothers anemia, pregnancy-associated hypertension, and diabetes are the first, second, and third most commonly reported factors. In general, the overall trends and differences for 1993–94 in medical risk factor rates discussed above were applicable for both black and white mothers.

Anemia and pregnancy-associated hypertension rates also rose for Asian or Pacific Islanders (table 26) and Hispanics (table 27) overall, and among each of the respective subgroups. Overall diabetes rates and those for most subgroups were stable.

Among American Indian mothers the anemia rate declined from a high of 63.3 reported for 1993 to 58.9 for 1994. The

diabetes rate was essentially unchanged, and the rate of pregnancy-associated hypertension rose slightly between 1993 and 1994. Levels of these conditions continue to be higher among American Indian mothers than among those of any other racial/ethnic groups (table 26).

#### Tobacco use during pregnancy

Smoking during pregnancy was reported by 14.6 percent of women who gave birth in 1994, down 8 percent from 1993 (15.8 percent). Reported tobacco use during pregnancy has fallen about 25 percent since questions on maternal smoking were first added to the birth certificate in 1989, when the smoking rate was 19.5 percent. Items on tobacco use were included on the birth certificates of 46 States, the District of Columbia, and New York City in 1994 (tables 23, 24, and 28-31). This reporting area, which excluded California, Indiana, South Dakota, and the remainder of New York, accounted for 79 percent of U.S. births in 1994.

The decline in smoking by pregnant women is generally consistent with recent trends in smoking by all women in the childbearing ages. Smoking rates for all women are somewhat higher than for pregnant women, but changed little during 1990–92 after declining in the late 1980's (41).

Tobacco use during pregnancy has been repeatedly associated with a variety of adverse birth outcomes, including low birthweight and intrauterine growth retardation, infant morbidity and infant mortality (including sudden infant death syndrome) (42-45).Tobacco adversely affects pregnancy and birth outcome by facilitating the passage of substances such as nicotine, hydrogen cyanide, and carbon monoxide from the placenta into the fetal blood supply, thus restricting the growing infant's access to oxygen (43, 46). Additionally, cigarette smoking has been linked to adverse consequences for child health and development, including, for example, higher rates of upper respiratory and ear infections and asthma; some negative consequences were found even among children born to mothers who stopped smoking early in pregnancy (45, 47).

Declines in smoking rates were reported for both white and black women

in 1994, to 15.6 percent of white mothers and 11.4 percent of black mothers. During the 1989–94 period, maternal smoking fell steadily, by 24 percent for white mothers and 33 percent for black mothers

Maternal smoking continues to be very uncommon for Asian or Pacific Islander (API) (3.6 percent) and Hispanic (4.6 percent) mothers (tables 23, 24, and 29). Higher smoking rates were reported for American Indian mothers (21.0 percent). All smoking rates for 1994 were lower than reported for 1993.

Data on smoking for API and Hispanic women have been somewhat limited because the information has not been reported by California and New York, which together account for nearly half of all births to these women. However, in completeness of coverage improved for at least some API and Hispanic subgroups, especially Chinese, Puerto Rican, and Central and South American, because New York City began reporting tobacco use. In 1994, at least half and up to 95 percent of Chinese, Puerto Rican, and Central and South American births were to residents of the reporting area. Low smoking rates derived from birth certificate data for API and Hispanic women have also been confirmed by other studies (48).

The much lower smoking rates of Hispanic women as a group are an important factor in helping to reduce the overall smoking rate for white women. In 1994, 91 percent of Hispanic women were reported as white (9). The smoking rate for non-Hispanic white women (17.7 percent) is substantially higher than for most other racial and ethnic groups.

In 1994 the rate for non-Hispanic white mothers was highest for older teenagers 18–19 years (29 percent) and then fell steadily with advancing maternal age to 11 percent of mothers in their forties (table 29 and figure 4). In contrast, rates for non-Hispanic black mothers were very low among those under age 20 years (6 percent or less) and then rose sharply to 19 percent of mothers aged 35–39 before declining for mothers in their forties. In contrast to these variations by age, maternal smoking rates for Hispanic women were quite low for all ages.

During the 1989–94 period, smoking rates fell 24–29 percent for mothers

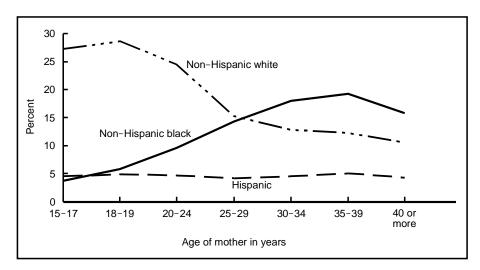


Figure 4. Percent of mothers who smoked during pregnancy by age and race/Hispanic origin of mother: United States, 1994

under age 30 years and 10–22 percent for mothers aged 30 years and over. Declines between 1993 and 1994, however, were somewhat larger for mothers aged 25–29 and 30–34 years (8 to 9 percent) compared with teenage mothers and mothers aged 35 years and over (declines of 3–6 percent).

Just as tobacco use during pregnancy has declined in recent years, likewise the average number of cigarettes smoked per day has fallen. Overall, the proportion of mothers smoking more than half a pack (10 cigarettes) per day was 36 percent in 1994, compared with 37 percent in 1993 and 42 percent in 1989 (1, 8). Declines in the number of cigarettes smoked were observed for white and black mothers, but as in past years, white mothers were much more likely to smoke more than half a pack, 39 percent compared with 21 percent. Young mothers, black and white, are less apt to smoke more than 10 cigarettes daily; the number of cigarettes smoked increases steadily with advancing maternal age (table 28).

Among the most consistent relationships is that between smoking during pregnancy and maternal education (table 30). In 1994, as in earlier years, mothers who have completed some high school but have not graduated had the highest smoking rate, 27 percent, followed by high school graduates, 18 percent, and mothers with a grade school education, 14 percent. Among mothers with some college, 11 percent were smokers, while just 3 percent of college graduates reported smoking. College

graduates who smoked also reported the lowest number of cigarettes smoked. Even among mothers aged 20 years and over, smoking rates were persistently highest for mothers who attended but did not complete high school (34 percent) (tabular data not shown).

Many studies over a long period of time have linked smoking during pregnancy with an elevated risk of low birthweight (42, 43, 49, and 50). Findings from birth certificate data continue to corroborate these findings. In 1994, 12.3 percent of births to smokers weighed less than 2,500 grams compared with 6.7 percent of births to nonsmokers (table 31). This differential by maternal smoking status of nearly two times has been observed since 1989 (1-3, 7, and 8). For both white and black infants, the smoker/nonsmoker differential in low birthweight (LBW) is also nearly two times.

Advancing maternal age is an additional risk for births to white and black mothers who smoke (50). In fact, the disparity in LBW by maternal smoking status tends to increase with increasing maternal age, peaking for births to mothers in their thirties before declining slightly. The elevated LBW risk for births to older mothers who smoke may be linked to the greater number of cigarettes smoked by these women, as noted earlier, in addition to the higher rates of LBW at each consumption level for births to older women.

Low birthweight levels are higher for all births to mothers who smoke,

regardless of the number of cigarettes smoked, compared with births to non-smokers. Even babies born to mothers smoking fewer than 6 cigarettes per day were at 67 percent greater risk of LBW than babies born to nonsmokers (11.2 percent compared with 6.7 percent). The LBW risk for births to mothers smoking more than a pack a day was 32 percent greater than that for light smokers (14.8 percent compared with 11.2 percent) and more than double the risk for nonsmokers.

It is evident that smokers and nonsmokers differ in important ways, including such characteristics as age and educational attainment. Nevertheless, as already indicated, the LBW rate for births to smokers is consistently higher than for nonsmokers in every age group. The overall impact of smoking on LBW can be approximated by estimating the risk of LBW attributable to maternal smoking, that is, the percent of attributable risk (42, 49, and 51). Approximately 11 percent of the incidence of LBW in 1994 was related to maternal smoking. That is, if no mothers had smoked during pregnancy and the levels of other risk factors were comparable, the LBW rate would have been about 6.4 percent rather than the 7.3 percent actually reported. This translates to approximately 33,000 fewer babies with LBW in 1994.

#### Alcohol use during pregnancy

Pregnancy and birth outcome can be jeopardized by maternal alcohol use during pregnancy. The most severe adverse effect of excessive drinking is fetal alcohol syndrome (FAS), which is characterized by growth retardation, facial malformations, and disorders of the central nervous system, in particular mental retardation (52, 53). Even low to moderate alcohol use has been shown to negatively impact birth outcome, independent of other risk factors such as tobacco use and other maternal risk factors (52, 54, and 55).

Reported alcohol use declined again in 1994. Just 1.7 percent of mothers reported any alcohol use (table 32) compared with 2.1 percent in 1993 and 4.1 percent in 1989, the first year this information was reported on the birth certificates (1, 8). All States except California and South Dakota included items

on alcohol use on their birth certificates in 1994. This reporting area accounted for 85 percent of U.S. births.

Among mothers who reported alcohol use in 1994, a pattern of increased consumption was noted. Fifty-three percent of mothers in 1994 reported consuming 1 drink or less per week, compared with 55 percent in 1993 and 61 percent in 1989 (1, 8).

Alcohol use during pregnancy is clearly substantially underreported on the birth certificate (40). Numerous other studies based on personal interviews and self-administered questionnaires have reported rates of alcohol use during pregnancy ranging from 20 to 45 percent during the 1980's (56, 57). Moreover, a recently published study reported alcohol use by about half of women in the childbearing ages and by 15 percent of pregnant women (58). It is probable that the questions on alcohol use on the birth certificate have unintentionally affected the levels of reporting. These questions focus on the number of drinks per week, whereas other studies inquire about drinks per month. Women who drink relatively little, perhaps 1 to 2 drinks per month, may believe that their alcohol consumption is too little to report in response to the birth certificate questions. Also contributing to the underreporting, no doubt, is the stigma associated with alcohol use during pregnancy (32, 59).

Even taking into account the severe underreporting of alcohol use on the birth certificate, these data do show a distinct pattern of elevated risk of low birthweight (LBW) among births to mothers reporting alcohol use. Moreover, greater alcohol consumption is associated with higher LBW rates. In 1994, 14.8 percent of births to drinkers weighed less than 2,500 grams, compared with 7.3 percent of births to nondrinkers. The LBW rate for births to mothers consuming five drinks or more weekly was 2.6 times the rate for births to mothers consuming one drink or less (26 percent compared with 10 percent).

#### Medical services utilization

#### Prenatal care

For 1994, 80 percent of mothers began care in the first trimester of

pregnancy compared with 79 percent for 1993, and 78 percent for 1992. Following rapid improvement during the 1970's, levels of timely care held static during the 1980's at about 76 percent. The percent of mothers who delayed care until the third trimester or had no care at all also improved between 1993 and 1994 dropping to the lowest level ever reported, 4 percent. Despite these gains, nearly 800,000 women who gave birth in 1994 did not receive prenatal care in the first trimester. (See table 33 for 1994 data.)

Although the effects of prenatal care are difficult to measure (60, 61), early comprehensive care can promote healthier pregnancies by detecting and managing preexisting medical conditions, providing health behavior advice, and assessing the risk of pregnancy complications such as low birthweight and preterm birth (62). Prenatal care can be crucial to maternal health and can serve as a gateway into the health care system, especially for socially disadvantaged women (61).

Between 1993 and 1994 gains were made in first trimester care for mothers of all racial and ethnic groups, educational levels, and marital statuses, but slightly larger increases were observed among groups with less advantageous levels of care. Between 1993 and 1994, early care increased by 3 to 4 percent for teenaged mothers, unmarried mothers, mothers with less than a high school education, and for black and Hispanic mothers, compared with a 2-percent increase among all mothers.

The percent of white mothers receiving timely care rose slightly from 82 to 83 percent between 1993 and 1994, and the percent of mothers with late or no care remained at 4 percent. Throughout the 1980's these levels had changed little, hovering at about 79 and 4 to 5 percent, respectively (63).

Between 1993 and 1994 the percent of black mothers with first trimester care increased from 66 to 68 percent and the percent of mothers with a concurrent decline in late or no care went from 9 to 8 percent. Timely care among black mothers has improved markedly since 1989 (60 percent), after deteriorating slightly during the 1980's (table D) (63).

Although the black-white difference in prenatal care utilization has narrowed slightly as the result of larger gains among black mothers, it is still substantial (68 compared with 83 percent). This gap is reduced, however, with increasing education. For 1994, 95 percent of white compared with 91 percent of black college-educated married mothers received prenatal care in the first trimester (data not shown). Differences by race or ethnicity in "unintended" births (mistimed or unwanted) which are less likely to receive early care, may also contribute to the differential in prenatal care (56, 64).

Among Hispanic mothers, first trimester prenatal care increased from 67 to 69 percent and late or no care declined from 9 to 8 percent from the previous year. (See table 24 for 1994 data.) Since 1991, Hispanic prenatal care utilization has improved markedly; early care has risen from 61 and late or no care has fallen from 11 percent. Although the proportion of mothers who begin care early has risen among all subgroups with the largest gains occurring among groups with the lowest levels, broad subgroup differences persist. For example, for 1994, 90 percent of Cuban mothers compared with 67 percent of Mexican mothers began care in the first trimester of pregnancy.

The proportion of American Indian mothers with first trimester care increased from 63 to 65 percent and with late or no care remained at 10 percent between 1993 and 1994 (table 23 for 1994 data). Nonetheless, American Indian mothers continue to be less likely than mothers of any other racial or ethnic group to receive timely prenatal care, and to be the most likely to begin care in the final trimester or to receive no care at all.

Prenatal care utilization also improved among all Asian or Pacific Islander subgroups. Overall, the increase was from 78 to 80 percent. For 1994 more than 86 percent of Chinese and Japanese mothers began care in the first trimester, among the highest levels reported (table 23).

At least 10 prenatal visits are recommended for an uncomplicated term pregnancy of 37 completed weeks of gestation or more (65). For 1994 the

Table D. Percent of mothers beginning prenatal care in the first trimester by race of mother: United States, 1980 and 1985–94

Year	All races <sup>1</sup>	White	Black
1994	80.2	82.8	68.3
1993	78.9	81.8	66.0
1992	77.7	80.8	63.9
1991	76.2	79.5	61.9
1990	75.8	79.2	60.6
1989	75.5	78.9	60.0
1988	75.9	79.3	60.7
1987	76.0	79.3	60.8
1986	75.9	79.1	61.2
1985	76.2	79.3	61.5
1980	76.3	79.2	62.4

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

median number of prenatal visits for all gestations, including complicated pregnancies, was 12.2 (table 35), unchanged from 1993. There has been only small movement in this measure since 1987 (12.0 visits). The median for white mothers was also unchanged at 12.3 visits. Among black mothers, however, the median number of visits rose from 10.6 to 10.9 between 1989 and 1993, and to 11.1 for 1994.

Timely care increased for nearly all States for both black and white mothers between 1993 and 1994, as it had for 1992–93. The few States for which early care receipt did not increase were unchanged or declined by less than 2 percent. (Only States with at least 1,000 births to black mothers are included in this analysis.) Decreases in the proportion of black and white mothers with late or no prenatal care were also reported for most States. (See table 34.)

#### **Obstetric procedures**

The most prevalent obstetric procedure in 1994 was electronic fetal monitoring (EFM), reported for over 3.1 million births, or 80 percent of all live births (table 36). EFM usage in 1994 rose for the fifth consecutive year, reflecting continuing increases in all age groups. White mothers had the highest (81 percent) and Filipino mothers had the lowest (72 percent) rates in EFM usage in 1994 (table 26). For Hispanic mothers, table 27 shows the lowest rate to be for Mexican mothers (72 percent).

According to data from the birth certificate, 61 percent of mothers who had live births in 1994 received ultrasound, about the same as in 1993 but

a 27-percent increase over 1989 (48 percent).

The overall rates of stimulation of labor and induction of labor in 1994 were 152 and 147 per 1,000 live births, respectively, about 10 percent above their levels in 1993. The rates of both of these procedures have been rising steadily every year since 1989 (figure 5), stimulation by about 40 percent (from 109 per 1,000) and induction by 63 percent (from 90 per 1,000).

Amniocentesis, an invasive prenatal diagnostic procedure performed to detect genetic disorders, was reported for 31 of every 1,000 live births in 1994. The rate of amniocentesis for the oldest age group (40–49 years of age) was 19 times the rate for the youngest mothers (less than 20 years of age), 193 per 1,000 compared with 10 per 1,000.

# Complications of labor and/or delivery

Of the fifteen reported complications of labor and/or delivery, five were reported at a rate greater than or equal to 30 per 1,000 live births in 1994: meconium, moderate/heavy (57 per 1,000), fetal distress (41 per 1,000), breech/malpresentation (37 per 1,000), premature rupture of membrane (PROM) (31 per 1,000), and dysfunctional labor (30 per 1,000) (table 37). For these five complications there were observable variations by race and Hispanic origin (tables 26 and 27). It has been shown that levels of these complications may be underreported on the birth certificate (40).

Although not frequent, placenta previa is a serious complication that occured in over 13,000 births in 1994. Data from birth certificates identify increasing age of mother and live-birth order as two risk factors for this complication (66).

# Attendant at birth and place of delivery

A physician-attended delivery in a hospital setting was by far the most common approach to delivery in 1994, comprising 93.7 percent of all births (table 38). The percent of births with this arrangement was unchanged from 1993, but has declined since 1975 when nearly all births were of this type (98.4 percent).

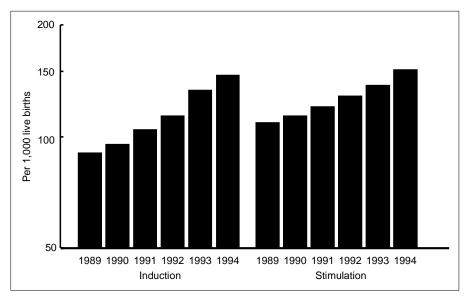


Figure 5. Rates of induction and stimulation of labor: United States, 1989-94

During this period, the percent of births attended by midwives increased sharply, from 1.0 percent in 1975 to 5.5 percent in 1994. About 94 percent of midwifedelivered births were by certified nurse midwives (CNM), and the remaining 6 percent by "other" midwives. CNM-attended deliveries were almost universally in hospitals (95 percent) whereas deliveries by "other" midwives were most likely in a residence (63 percent).

Altogether, 99 percent of births in 1994 were delivered in hospitals, almost unchanged from the 1975 level. The majority of out-of-hospital deliveries were in a residence (62 percent) while 29 percent were in a freestanding birthing center. Birthing centers have been shown to be a cost-effective, safe alternative to a hospital setting for low-risk women (67).

About 9 out of 10 deliveries for both white and black women were attended by doctors of medicine (MD's) in a hospital setting. However, there were some differences between white and black women in the attendant and place of delivery. For hospital deliveries, black women were slightly less likely than white women to have births attended by doctors of osteopathy (DO's) (2.5 and 3.8 percent, respectively) but more likely to have CNM-attended births (5.5 and 4.7 percent, respectively). For out-of-hospital deliveries, black women were more likely than white women to have births attended by MD's and less likely to have midwifeattended births. For example, for births occurring in a residence more than half of those to white women were attended by a midwife (53 percent) compared with only 7 percent of births to black women. In contrast, MD's attended the births of only 10 percent of white women delivering in a residence compared with 42 percent of black women.

There are distinct differences in the populations of women who give birth in hospitals compared with other places of delivery. For example, a higher proportion of births in hospitals were to teenaged and unmarried women than were births in most other places of delivery (data not shown). About 13 percent of births in hospitals were to teenagers compared with 9.1 percent of births in clinics or doctor's offices, 8.9 percent of births in birthing centers, and 6.2 percent of home births. Similarly, the proportion of

hospital births that were to unmarried women (32.7 percent) was higher than the proportion of births occurring in clinics or doctor's offices (27.8 percent), residences (23.7 percent), or birthing centers (17.2 percent).

#### Method of delivery

The rate of cesarean delivery declined for the fifth consecutive year and was 7 percent lower in 1994 (21.2) per 100 live births) than in 1989 (22.8), the first year this information was available on the birth certificate (table E and table 39). Similarly, the primary cesarean rate (first cesareans per 100 live births to women who had no previous cesarean) also declined each year and was also 7 percent lower in 1994 (14.9) than in 1989 (16.1). Concomitant with the decline in cesarean rates during this period was a 39-percent increase in the rate of vaginal birth after previous cesarean delivery (VBAC)-from 18.9 in 1989 to 26.3 in 1994.

Despite the favorable trends, the cesarean and VBAC rates still fall far short of the year 2000 objectives (overall cesarean rate—15 or lower; primary cesarean rate—12 or lower; VBAC rate—35 or higher (68)). However, some States are approaching or have already achieved these rates. Two States (Colorado and Idaho) had overall cesarean rates that were just above 15. Ten States had already achieved primary cesarean rates of 12 or lower and 9 States had VBAC rates of 35 or higher. A detailed analysis of State variation in cesarean and VBAC rates is published elsewhere (69).

Overall cesarean rates increased almost linearly by age of the mother and were twice as high for mothers 40–49 years of age (31.5) than for teenagers

(15.0) (table 40). Primary cesarean rates also increased with additional age but the differences between age categories were small for mothers under 35 years of age. VBAC rates declined with increasing age—almost a third of teenagers who had a previous cesarean had a VBAC delivery (31.2 percent) compared with 20 percent of mothers 40–49 years of age. Compared with 1993, all age groups had lower overall and primary rates and higher VBAC rates in 1994.

The cesarean rate in 1994 for black women (21.8) was higher than for white women (21.2), reversing the pattern from 1989-92. Since 1992, when the primary rates for white and black women were identical, the primary cesarean rate for white women declined by 6 percent (from 15.7 in 1992 to 14.8 in 1994) while the primary rate for black women remained unchanged at 15.7. The rate of VBAC delivery in 1992 was also virtually identical for white and black women but has increased more sharply for white women since then. In 1994, overall and primary cesarean rates for every age category were higher for black than white women. VBAC rates for black mothers were higher than for white mothers at ages under 25 years but were lower than for white mothers at older ages.

With the exception of Filipino mothers, all specified categories of Asian or Pacific Islander mothers had lower rates of cesarean delivery than white and black mothers (table 23). The rate of cesarean delivery for American Indian mothers (18.0) was also lower than for white and black mothers.

Rates of cesarean delivery were slightly lower for Hispanic than non-Hispanic mothers—20.5 compared with 21.4 per 100 births (table 24). The rate of

Table E. Total and primary cesarean rates and vaginal birth after previous cesarean delivery rates: United States, 1989–94

	Cesa	rean rate	
Year	Total <sup>1</sup>	Primary <sup>2</sup>	VBAC rate <sup>3</sup>
1994	21.2	14.9	26.3
1993	21.8	15.3	24.3
1992	22.3	15.6	22.6
1991	22.6	15.9	21.3
1990	22.7	16.0	19.9
1989	22.8	16.1	18.9

<sup>&</sup>lt;sup>1</sup>Percent of all live births by cesarean delivery.

<sup>&</sup>lt;sup>2</sup>Number of primary cesareans per 100 live births to women who have not had a previous cesarean.

<sup>&</sup>lt;sup>3</sup>Number of vaginal births after previous cesarean (VBAC) delivery per 100 live births to women with a previous cesarean delivery.

cesarean delivery varied between 20.0 and 21.6 for all Hispanic subgroups except for Cuban mothers whose rate was much higher (30.9).

All of the selected medical risk factors in table 41 were associated with overall cesarean rates that were higher than the national average. Cesarean rates for the medical risk factors ranged from 21.6 for mothers with Rh sensitization to 49.5 for mothers with eclampsia. Other medical risk factors in which more than a third of births were by cesarean were chronic hypertension (39.6), hydramnios/ oligohydramnios (38.8), genital herpes (38.4), pregnancy-associated hypertension (37.4), and diabetes (35.4). Certain complications of labor and/or delivery are also associated with high cesarean rates. Nearly all births with cephalopelvic disproportion were cesarean deliveries (97.4) while the cesarean rates for breech/malpresentation (85.5) and placenta previa (82.8) were also very high. In addition, more than half of births with dysfunctional labor (65.2), cord prolapse (61.8), abruptio placenta (57.9), and fetal distress (56.5) were by cesarean delivery. Obstetric procedures with cesarean rates above the national average were amniocentesis (33.1), tocolysis (28.4), and ultrasound (23.0). Cesarean rates for most of the medical risk factors, complications of labor and/or delivery, and obstetric procedures have declined since 1989.

During the 1989–94 period, the percent of births that were delivered by forceps declined each year while the use of vacuum extraction consistently increased. In 1994, 3.8 percent of births were delivered by forceps compared with 5.5 percent in 1989—a 31 percent decline. Vacuum extraction was used in 5.7 percent of births in 1994, a 63-percent increase compared with 1989 (3.5). As in previous years, forcep- and vacuum-extraction deliveries were slightly more common in births to white than black mothers.

# Infant health characteristics Period of gestation

The overall incidence of preterm birth was 11.0 percent for 1994, unchanged from 1993 (figure 6). The percent of births born preterm (prior to 37)

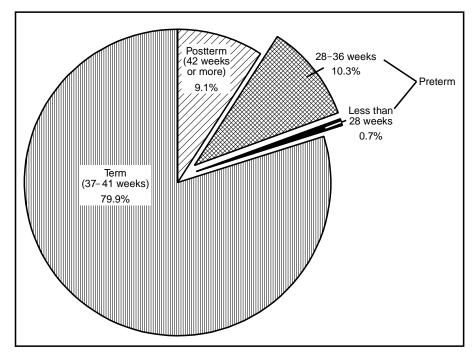


Figure 6. Gestation distribution: United States, 1994

completed weeks of gestation) has risen quite steadily since 1981 (from 9.4 percent). (See tables 42 and 43.) Preterm birth is an important cause of infant mortality and morbidity. More than half of all infant deaths are preterm babies (70), and those who survive run a greater risk of neurodevelopmental and respiratory disorders, as well as other problems (71).

The primary method used to determine the gestational age of the newborn from birth certificate data is the interval between the first day of the mother's last normal menstrual period (LMP) and the date of birth. It is subject to error for several reasons including imperfect maternal recall or misidentification of the LMP because of postconception bleeding, delayed ovulation, or intervening early miscarriage. Since 1989, the "clinical estimate of gestation," which is the birth attendant's estimate of gestational length based on ultrasound or other techniques, has been used when the LMP is inconsistent with birthweight or unknown. For 1994, the clinical estimate was used for 4.1 percent of the records. The effect of the use of the clinical estimate has been to depress preterm rates slightly. Based on gestation computed from the LMP alone (the method used prior to 1989) the 1994 preterm rate would have been 11.05 percent, compared with reported rate (LMP with clinical

estimate) of 11.02 percent. Recent increases in the preterm rate cannot, therefore, be attributed to this change in the editing procedure.

Preterm birth results principally from spontaneous labor, premature rupture of the membrane (PROM), or medically induced labor, categories which are not necessarily mutually exclusive (71). PROM, induced deliveries, and several conditions resulting in spontaneous labor, have been separately identified on the birth certificate since 1989. Since that year, the preterm rate for PROM has declined slightly, but the reported preterm rate for induced deliveries has risen by 58 percent. Labor may be induced because of maternal illness or fetal distress; rates for at least two medical risk factors which are indications for induction, pregnancy-induced hypertension and diabetes (72), have also risen over this period (see section on medical risk factors).

The preterm rate increased slightly among births to white mothers between 1993 and 1994, from 9.5 to 9.6 percent. The increase was chiefly among lowerrisk births of 34–36 weeks of gestation and included both singleton and multiple births and all age groups.

Among births to black mothers the percent preterm declined from 18.5 to 18.1, the lowest level reported since

1986. The preterm rate for black births had risen to 18.8–18.9 percent for 1989–91. Preterm levels fell among mothers less than 35 years of age, but increased among older mothers.

There was essentially no change in the percent of American Indian (12.1) or Hispanic preterm births (10.9) between 1993 and 1994 (tables 23 and 24). Rates for most Hispanic subgroups were also largely unchanged and continued to show marked variation, ranging from 10.6 (Mexican) to 13.4 percent (Puerto Rican).

Among Asian or Pacific Islanders, the Chinese preterm rate was unchanged from 1993, but the level among Japanese, Hawaiian, and Filipino newborns increased (table 23). The percent of preterm births among subgroups ranged from 7.2 (Chinese) to 12.2 percent (Hawaiian).

#### **Birthweight**

The proportion of low birthweight (LBW) births rose slightly to 7.3 for 1994, following an increase from 7.1 to 7.2 percent for 1992-93. During the 1970's and early 1980's LBW declined, but recent increases have raised the level to that reported for 1976. (See table 43 and figure 5.) Low birthweight (less than 2,500 grams) is the result of shortened gestation, impaired growth in utero, or a combination of the two. These infants are at much greater risk of mortality and long-term disability than heavier babies, and despite medical advances which have greatly improved their survival (73, 74), they are twenty times more likely than heavier infants to die during the first year of life (70).

Low birthweight rose slightly among births to white mothers from 6.0 to 6.1 percent, and declined slightly among black mothers, from 13.3 to 13.2 percent. Because births to white mothers comprise the large majority of all births (79 percent for 1994), most of the current year rise in overall LBW (as for 1992–93) reflects the increase in white LBW.

Since 1992, white singleton LBW has increased, rising from 4.7 to 4.8 for 1992–93 and to 4.9 for 1994. This is in contrast to 1980–92, when LBW among white singleton births declined slightly, and the increase in overall white LBW was attributed to the rise in multiple births because of their high LBW risk

(75). The largest increases in white singleton low birthweight for 1993–94 were among mothers under 20 years of age and 40 years of age and older, but increases were observed among most age groups. Low birthweight rose among singleton births to white mothers of all educational levels, including college-educated married mothers (data not shown).

The 1993–94 increase in white LBW was in the "moderate" LBW interval of 1,500–2,499 grams, and thus, the percent very low birthweight (VLBW) (less than 1,500 grams) was unchanged at 1.0 percent (figure 7). VLBW babies are at very high risk of morbidity and mortality; they account for 1 percent of all births, but two-thirds of all neonatal deaths.

The decrease in LBW among births to black mothers for 1993–94 occurred in the moderately LBW range and, therefore, the proportion of VLBW (less than 1,500 grams) was unchanged at 3.0 percent. The percent of VLBW rose from 2.4 to 3.0 between 1970 and 1991, and has been static since.

Much of the disparity in LBW between black and white births can be attributed to the higher rate of preterm births (less than 37 completed weeks of

gestation) among black mothers (18.1 compared with 9.6 percent). Although preterm LBW risk varies somewhat by race, overall, nearly half of all preterm births are LBW compared with 3 percent of term infants. Also contributing to the disparity is the higher risk of LBW among black infants, regardless of gestation. The black preterm LBW rate was 48.4 percent compared with 40.4 percent for white infants (table 42); black term babies were twice as likely as white babies to weigh less than 2,500 grams (5.6 compared with 2.5 percent) (figure 8).

The risk of LBW is greatest among infants born to mothers under 15 years of age. For 1994, about one out of 10 infants born to these youngest mothers was low birthweight compared with one out of 15 infants born to mothers 25-34 years of age (table 44). LBW levels for infants born to mothers 40 years of age and older were similar to those of teenaged mothers (9.5 compared with 9.3 percent). These patterns however can vary considerably by race or ethnicity. Among black mothers 35-39 years of age the LBW risk rivals that of even the youngest mothers (16.4 compared with 16.3 percent) while white mothers 35-39 years of age were

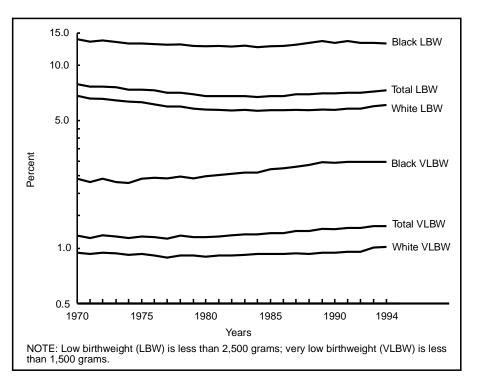


Figure 7. Percent low birthweight and very low birthweight by race of mother: United States, 1970–94

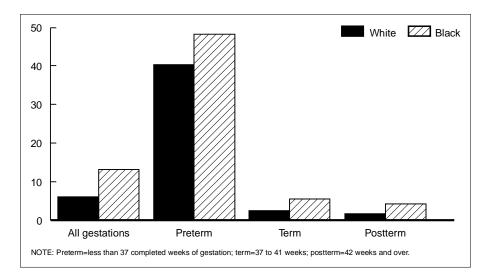


Figure 8. Percent low birthweight by gestation and race of mother: United States, 1994

much less likely than their much younger counterparts to have a LBW infant (6.8 compared with 11.1 percent).

There was no change in LBW among American Indian (6.4 percent) and Hispanic infants (6.2 percent) between 1993 and 1994, but the overall low birthweight percent increased among Asian or Pacific Islander newborns from 6.6 to 6.8 percent. Sizable increases were noted for Japanese, Hawaiian, and Filipino infants.

The percent of macrosomic infants (birthweight of at least 4,000 grams) fell again for 1994 to 10.4 percent of all births (table 23). This level has dropped since 1991, after peaking at about 11 percent in the 1980's.

Between 1993 and 1994 increases in white LBW of at least 3 percent occurred in about half of the States. The only declines were for Arkansas, the District of Columbia, Kansas, and North Dakota. Rates ranged from 5.0 percent for Alaska and Washington to 8.8 percent for Wyoming. Conversely, declines in black LBW occurred in more than half of the 37 areas reporting at least 1,000 black births. Declines of at least 3.0 percent were observed in Arizona, Delaware, the District of Columbia, Illinois, Indiana, Maryland, Nevada, New York, and Washington. Low birthweight levels among black infants ranged from 10.1 percent for Washington to 16.1 percent for the District of Columbia.

#### Apgar score

The Apgar score was developed by the late Virginia Apgar, M.D., as a means of evaluating the physical condition of newborns shortly after delivery (76). The score considers five characteristics of the baby that are easily identifiable—heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each of these characteristics is assessed and assigned a value of 0–2, with 2 being optimum. The total score is the sum of the scores of the five components and a score of 7 or greater indicates that the baby is in good to excellent physical condition. The Apgar score is assessed at 1 and 5 minutes after delivery and used to predict the baby's survival chances.

In 1994 every State except California and Texas collected information on both the 1- and 5-minute Apgar score. Births to residents in these States accounted for 78 percent of all births in the United States. In 1994, 8.4 percent of babies had 1-minute scores that were considered low (less than 7), identical to the percent in 1993 (table 23). Only 1.4 percent of babies had low scores at 5 minutes after birth, also unchanged from 1993. The percent of infants with low 1- and 5-minute Apgar scores declined sharply between 1984–90 but has changed very little since then.

Of all racial groups, Asian or Pacific Islander babies were in the best physical condition shortly after delivery (table 23). This was particularly true for Japanese and Chinese babies—only 5 percent had low 1-minute scores and less than 1 percent had low 5-minutes scores. The percent of babies with low scores was

intermediate for white and American Indian mothers and highest for black mothers. More than one in ten black babies had low 1-minute scores and 2.5 percent had low 5-minute scores.

Overall, Hispanic babies were in better physical condition at 1 minute after birth (only 7.2 percent had low scores) than either non-Hispanic white or black babies (table 24). However, there was considerable variation among Hispanic subgroups in the percent of babies with low 1-minute scores—from 4.4 percent of Cuban babies to 7.9 percent of Mexican and "other" Hispanic babies. Non-Hispanic black infants were twice as likely to have low 5-minute scores (2.5 percent) than either Hispanic babies or non-Hispanic white babies (each with 1.2 percent).

In general, the variation among racial and ethnic groups in the percent of babies with low 1- and 5-minute Apgar scores was consistent with the percent of babies that were born preterm or with low birthweight (tables 23 and 24).

## Abnormal conditions of the newborn

Of the eight specific abnormal conditions reported on the birth certificate, the three highest rates per 1,000 live births in 1994 were for assisted ventilation less than 30 minutes (18 per 1,000), assisted ventilation 30 minutes or longer (8 per 1,000), and hyaline membrane disease/respiratory distress syndrome (RDS) (7 per 1,000). It has been shown that these conditions may be underreported on the birth certificate (77).

The rates for abnormal conditions in 1994 were higher for black births than for white births for all conditions except birth injuries (table 45).

Birth injury was the only abnormal condition for which there were lower rates among low birthweight infants (less than 2,500 grams) than among infants weighing 2,500 grams or more. Rates of hyaline membrane disease/RDS were far higher for low birthweight infants than those of higher weight (56 compared with 3 per 1,000 live births); there were similar large differences in rates by birthweight for assisted ventilation 30 minutes or longer (64 and 4 per 1,000 live births) (tabular data not shown).

#### Congenital anomalies

Since 1989, information for some of the most severe and common congenital anomalies has been available from a checkbox item on live birth certificates. In 1994 the birth certificates of the District of Columbia and all States except New Mexico and New York City contained an item on congenital anomalies. These areas included 96 percent of births in the United States. It has been shown that these anomalies are underreported (77).

Because many of the congenital anomalies tracked on birth certificates occur infrequently, the rates shown in this report are calculated per 100,000 live births. Caution should be used in comparing yearly rates for a specific anomaly as a small change in the number of anomalies reported can result in a relatively large change in rates.

Rates for many of the anomalies reported on the birth certificates vary considerably by age of mother (table 46). Heart malformations and chromosomal anomalies are notable examples of anomalies for which rates increase rapidly with advancing maternal age.

#### Multiple births

Babies born in multiple deliveries are more vulnerable to early death and disability than are babies born in singleton deliveries (78). More than half of all multiple births are low birthweight (less than 2,500 grams) compared with 6 percent of singleton births (data not shown). Multiple births are 7 times more likely than singletons to die in the first week of life. (70). Multiples also require more health care dollars; each birth in a twin or triplet delivery is reported to cost 2 to 3 times that of a birth in a singleton delivery (79, 80).

The number of live births in multiple deliveries increased by 1 percent between 1993 and 1994, to 101,658 births. In contrast, the number of singleton births declined by 1 percent. (See table 47 for 1994 data.) The multiple birth total included 97,064 twin, 4,233 triplet, 315 quadruplet, and 46 quintuplet or greater multiples. Over the last decade the number of twin births has risen by 33 percent (from 72,949 in 1984), and the number of higher order multiples by

178 percent (from 1,653 to 4,594 between 1984 and 1994).

Reflecting the rise in multiple and the decline in singleton births, the multiple birth ratio (the number of live births in multiple deliveries per 1,000 total births) rose to 25.7 per 1,000 for 1994 (i.e., 2.6 percent of all births), an increase of 2 percent over the level reported for 1993 (25.2). Following modest increases in the 1970's, this ratio has increased 33 percent since 1980 (19.3 per 1,000). The proportion of all multiples comprised by twins has declined with the rapid increase in triplet births, but the vast majority of multiples continue to be twins (95 percent), and thus, the multiple birth ratio is still primarily a measure of twin births.

The higher order multiple birth ratio (defined as the number of triplet and greater multiple births per 100,000 live births) rose 12 percent for the current year, from 104.2 to 116.2 per 100,000. Although still comparatively rare (only 0.1 percent of all births were higher order multiples in 1994), these births have become much more common in recent years. The higher order multiple birth ratio has doubled since 1987, tripled since the early 1980's, and quadrupled since the early 1970's. (See figure 9.) Put another way, in 1994, 1 of 860 births was a higher order multiple compared with only about 1 of 3,500 births in the early 1970's.

While multiple birth ratios have risen among both white and black mothers since 1980, the ratios for white women,

especially the higher order multiple birth ratio, have risen more rapidly. Between 1980 and 1994 the twin ratio for white mothers (the number of twin births per 1,000 total births) rose 33 percent (from 18.1 to 24.1) compared with a 20-percent rise in the twin ratio for black mothers (from 24.0 to 28.8), and the higher order multiple birth ratio for white mothers rose 252 percent (37.6 to 132.2), compared with a 52-percent increase in the ratio for black mothers (from 37.1 to 56.3). Much of the increase in white multiple births was among mothers 30 years of age and over. Between 1980 and 1994, the higher order multiple birth ratio for white mothers 30 years of age and over more than quadrupled, climbing from 58.0 to 246.3, but the ratio rose only from 29.6 to 33.8 among mothers 20-24 years of age. For 1994 older white mothers accounted for 66 percent of all higher order multiple births, but only 35 percent of all singleton births. (Note that higher order multiple birth ratios by race and/or age can fluctuate widely from year to year because of small numbers.)

The likelihood of women having a higher order multiple birth increases with age until the late thirties. The increase in black higher order multiple births has been attributed to a shift toward older childbearing, but only part of the rise in white higher order multiples has been attributed to this shift (81–83). Most of the increase among white mothers has been related to the rising use of fertility enhancing techniques (ovulation-inducing drugs and assisted reproductive

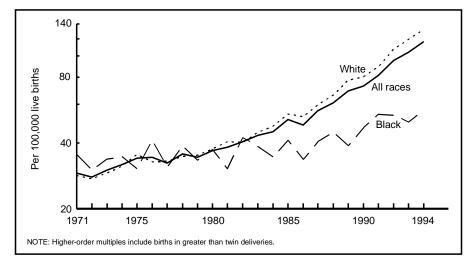


Figure 9. Higher order multiple birth ratios by race of mother: United States, 1971-94

techniques such as in vitro fertilization) (81–83). Birth certificate data does not identify births resulting from the use of fertility enhancing techniques, but another source estimates that 63–80 percent of all higher-order multiple births result from these procedures (79).

#### References

- National Center for Health Statistics. Advance report of new data from the 1989 birth certificate. Monthly vital statistics report; vol 40 no 12, supp. Hyattsville, Maryland: Public Health Service. 1992.
- National Center for Health Statistics. Advance report of maternal and infant health data from the birth certificate, 1990. Monthly vital statistics report; vol 42 no 2, supp. Hyattsville, Maryland: Public Health Service. 1993.
- National Center for Health Statistics. Advance report of maternal and infant health data from the birth certificate, 1991. Monthly vital statistics report; vol 42 no 11, supp. Hyattsville, Maryland: Public Health Service. 1994.
- National Center for Health Statistics. Advance report of final natality statistics, 1989. Monthly vital statistics report; vol 40 no 8, supp. Hyattsville, Maryland: Public Health Service. 1991.
- National Center for Health Statistics. Advance report of final natality statistics, 1990. Monthly vital statistics report; vol 41 no 9, supp. Hyattsville, Maryland: Public Health Service. 1993.
- National Center for Health Statistics. Advance report of final natality statistics, 1991. Monthly vital statistics report; vol 42 no 3, supp. Hyattsville, Maryland: Public Health Service. 1993.
- Ventura SJ, Martin JA, Taffel SM, et al. Advance report of final natality statistics, 1992. Monthly vital statistics report; vol 43 no 5, supp. Hyattsville, Maryland: National Center for Health Statistics. 1994.
- Ventura SJ, Martin JA, Taffel SM, et al. Advance report of final natality statistics, 1993. Monthly vital statistics report; vol 44 no 3, supp. Hyattsville, Maryland: National Center for Health Statistics. 1995.
- Deardorff KE, Hollman FW, Montgomery P. U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1994. U.S. Bureau of the Census. PPL-21. Washington: U.S. Department of Commerce. 1995.

- Day JC. Population projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050. U.S. Bureau of the Census. Current population reports; P-25—1130. Washington: U.S. Department of Commerce. 1996.
- Hollmann FW. U.S. population estimates, by age, sex, race, and Hispanic origin: 1980 to 1991. U.S. Bureau of the Census. Current population reports; P-25—1095. Washington: U.S. Department of Commerce. 1993.
- Centers for Disease Prevention and Control. Trends in sexual risk behavior among high school students United States, 1990, 1991, and 1993. MMWR 44(7):124–5,131–2. 1995.
- 13. Ventura SJ, Taffel SM, Mosher WD. Trends in pregnancies and pregnancy rates: Estimates for the United States, 1980–92. Monthly vital statistics report; vol 43 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics, 1995.
- 14. Henshaw S, The Alan Guttmacher Institute. Unpublished tabulation. 1996.
- Koonin LM, Smith JC, Ramick M. Abortion surveillance - United States, 1992. In CDC Surveillance Summaries. MMWR 45(No. SS-3). 1996.
- Centers for Disease Control and Prevention. Abortion surveillance: Preliminary data—United States, 1993. MMWR 45(11):235–8. 1996.
- Ventura SJ. Trends and variations in first births to older women, 1970–86.
   National Center for Health Statistics.
   Vital Health Stat 21(47). 1989.
- 18. Heuser RL. Fertility tables for birth cohorts by color: United States, 1917–73. Rockville, Maryland: National Center for Health Statistics, 1976.
- Bachu A. Fertility of American women: June 1992. Current population reports; series P-20–470. Washington: U.S. Department of Commerce. 1993.
- Mosher WD, Pratt WF. Fecundity and infertility in the United States, 1965–88. Advance data from vital and health statistics; no 192. Hyattsville, Maryland: National Center for Health Statistics. 1990.
- Saluter AF. Marital status and living arrangments: March 1994. Current population reports; series P-20-484. Washington: U.S. Department of Commerce. 1996.
- Centers for Disease Control and Prevention. Childbearing patterns among selected racial/ethnic minority groups, United States, 1990. MMWR 42(20): 398–403. 1993.

- Martin JA. Birth characteristics for Asian or Pacific Islander subgroups, 1992. Monthly vital statistics report; vol 43 no 10, supp. Hyattsville, Maryland: National Center for Health Statistics. 1995.
- 24. National Center for Health Statistics. Advance report of final natality statistics, 1988. Monthly vital statistics report; vol 39 no 4, supp. Hyattsville, Maryland: Public Health Service. 1993.
- Centers for Disease Control and Prevention. Rates of cesarean delivery: United States, 1993. MMWR 44(15):303–7. 1995.
- Ventura SJ. Births to unmarried mothers: United States, 1980–92. National Center for Health Statistics. Vital Health Stat 21(53), 1995.
- Landale NS, Fennelly K. Informal unions among mainland Puerto Ricans: Cohabitation or an alternative to legal marriage? J Marriage and the Family 54:269–80. 1992.
- 28. Bumpass LL, Sweet JA. Children's experience in single-parent families: Implications of cohabitation and marital transitions. Fam Plann Persp 21(6):256–60. 1989.
- Ventura SJ, Bachrach CA, Hill L, et al.
   The Demography of Out-of-Wedlock Childbearing. In: Department of Health and Human Services. Report to Congress on Out-of-Wedlock Childbearing. Washington, DC: National Center for Health Statistics. 1995.
- Kominski R, Adams A. Educational attainment in the United States: March 1993 and 1992. U.S. Bureau of the Census. Current population reports; P-20–476. Washington: U.S. Department of Commerce. 1994.
- Montgomery PA. The Hispanic population in the United States: March 1993.
   U.S. Bureau of the Census. Current population reports; P-20–475. Washington: U.S. Department of Commerce.
- 32. Chomitz VR, Cheung LW, Lieberman E. The role of lifestyle factors in preventing low birth weight. In: The Future of Children: Low Birthweight. Vol 5(1): 121–138. Los Altos, California: Center for the Future of Children, The David and Lucile Packard Foundation. 1995.
- 33. Abrams B, Selvin S. Maternal weight gain pattern and birth weight. Am J Obstet Gynecol. 86(2):163–9. 1995.
- Kramer MS. Intrauterine growth and gestational duration determinants. Pediatrics 80:502–11. 1987.
- 35. Kleinman JC. Maternal weight gain during pregnancy: determinants and

- consequences. NCHS Working Paper Series 33. Hyattsville, Maryland: National Center for Health Statistics. 1990.
- Institute of Medicine. Subcommittee on Nutritional Status and Weight Gain During Pregnancy. Nutrition during pregnancy. National Academy of Sciences. Washington: National Academy Press. 1990.
- Velentgas P, Benga-De E, Williams MA.
   Chronic hypertension, pregnancy-induced hypertension, and low birthweight. Epidemiology 5(3):345–48.

   1994.
- 38. Cunningham FG, Lindheimer MD. Hypertension in pregnancy. NEJM 326(14):927–32. 1992.
- DeBaun M, Rowley D, Province M, et al. Selected antepartum medical complications and very-low-birthweight infants among black and white women. Am J Public Health 84(9): 1495–7. 1994.
- Buescher PA, Taylor KP, Davis MH, Bowling JM. The quality of the new birth certificate data: A validation study in North Carolina. Am J Public Health 83(8):1163–65. 1993.
- 41. Centers for Disease Control and Prevention. Cigarette smoking among women of reproductive age—United States, 1987–1992. MMWR 43(43):789–91, 797. 1994.
- Kleinman JC, Madans JH. The effects of maternal smoking, physical stature, and educational attainment on the incidence of low birth weight. Am J Epidemiol 121(6):843–55. 1985.
- Floyd RL, Zahniser SC, Gunter EP, Kendrick JS. Smoking during pregnancy: Prevalence, effects, and intervention strategies. Birth 18(1):48–53. 1991.
- Schoendorf KC, Kiely JL. Relationship of sudden infant death syndrome to maternal smoking during and after pregnancy. Pediatrics 90(6):905–8. 1992.
- Cunningham J, Dockery D, Speizer F. Maternal smoking during pregnancy as a predictor of lung function in children. Am J Epidemiol 139(12):1139–52. 1994.
- U.S. Department of Health and Human Services. The health benefits of smoking cessation. A report of the Surgeon General. Rockville, Maryland: Public Health Service. 1990.
- 47. Weitzman M, Gortmaker S, Walker DK, Sobol A. Maternal smoking and child-hood asthma. Pediatrics 85(4):505–11. 1990.
- Vega WA, Kolody B, Hwang J, Noble A. Prevalence and magnitude of perinatal substance exposures in California. NEJM 329(12):850–4. 1993.

- Bureau of Family and Community Health. The burden of smoking on mothers and infants in Massachusetts. Boston, Massachusetts: Massachusetts Department of Public Health. 1993.
- Fox SH, Koepsell TD, Daling JR. Birth weight and smoking during pregnancy -Effect modification by maternal age. Am J Epidemiol 139(10):1008–15. 1994.
- Lilienfeld AM and Lilienfeld DE. Foundations of epidemiology. New York, Oxford: Oxford University Press. 1980.
- 52. Sampson PD, Bookstein FL, Barr HM, Steissguth AP. Prenatal alcohol exposure, birthweight, and measures of child size from birth to 14 years. Am J Public Health 84(9):1421–28. 1994.
- 53. Roeleveld N, Vingerhoets E, Zielhuis GA, Gabreels F. Mental retardation associated with parental smoking and alcohol consumption before, during, and after pregnancy. Prev Medicine 21:110–19. 1992.
- 54. Graves C, Malin H, Placek P, et al. The effect of maternal alcohol and cigarette use on infant birthweight. Alcohol Health and Research World 8(1):39–40.
- 55. Taffel SM, Ventura SJ. The hazards of maternal smoking: Evidence from the revised certificate of live birth. Paper presented at the annual meeting of the American Public Health Association. San Francisco, California. October 27, 1993.
- Chandra A. Health aspects of pregnancy and childbirth: United States, 1982–88.
   National Center for Health Statistics.
   Vital Health Stat 23(18). 1995.
- Serdulla M, Williamson DF, Kendrick JS, et al. Trends in alcohol consumption by pregnant women, 1985 through 1988. JAMA 265(7):876–79. 1991.
- Centers for Disease Control and Prevention. Frequent alcohol consumption among women of childbearing age—Behavioral Risk Factor Surveillance System, 1991. MMWR 43(18):328–29, 335. 1994.
- 59. Morrow-Tlucak M, Ernhart CB, Sokol RJ, et al. Underreporting of alcohol use in pregnancy: Relationship to alcohol problem history. Alcohol Clin Exp Res 13(3):399–401. 1989.
- Huntington J, Connell FA. For every dollar spent - the cost-savings argument for prenatal care. NEJM. 331(19):1303–7. 1994.
- 61. Fiscella K. Does prenatal care improve birth outcomes? A critical review. Obstet Gynecol 85(3):468–79. 1995.
- 62. U.S. Public Health Service. Caring for our future: The content of prenatal care.

- Washington: U.S. Department of Health and Human Services. 1989.
- Lewis CT, Mathews TJ, Heuser RL.
   Prenatal care in the United States,
   1980–94. National Center for Health
   Statistics. Vital Health Stat 21. In press.
  - 64. Piccinino LJ. Unintended pregnancy and childbearing. In:Wilcox LS, Marks JS (eds.) From data to action: CDC's public health surveillance for women, infants, and children:73–82. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention. 1994.
- American Academy of Pediatrics and the American College of Obstetricians and Gynecologists. Guidelines for prenatal care. 1992.
- 66. Mathews TJ, Singh GK. Determinants of placenta previa: United States, 1992. Paper presented at the annual meeting of the Society for Epidemiologic Research. Snowbird, Utah. June 23, 1995.
- 67. Rooks JP, Weatherby NL, Ernst EKM, et al. Outcomes of care in birth centers. NEJM 321(26):1804–11. 1989.
- 68. U.S. Department of Health and Human Services. Healthy people 2000. National health promotion and disease prevention objectives. Washington: Public Health Service. 1990.
- 69. Clarke SC, Taffel SM. State variation in rates of cesarean and VBAC delivery: 1989 and 1993. Statistical Bulletin 77(1):28–36. 1996.
- National Center for Health Statistics. Unpublished data from the linked birth/infant death data set, 1991 birth cohort.
- Berkowitz GS, Papiernik E. Epidemiology of preterm birth. Epidemiologic Reviews vol 15(2):414–43. 1993.
- American College of Obstetricians and Gynecologists. Induction of Labor. ACOG Technical Bulletin 217. Washington: American College of Obstetricians and Gynecologists. 1995.
- 73. Paneth NS. The problem of low birth weight. In: Center for the Future of Children. The future of children: Low Birth Weight. Vol 5(1):19–34. Los Altos, California: Center for the Future of Children. The David and Lucile Packard Foundation. 1995.
- Institute of Medicine. Preventing Low Birthweight. National Academy of Sciences. Washington: National Academy Press. 1985.
- 75. Martin JA, Taffel SM. Current and future impact of rising multiple birth ratios on low birthweight. Statistical Bulletin 76(2):10–18. 1995.

- Apgar V. A proposal for a new method of evaluation of the newborn infant. Current Researches in Anesthesia and Analgesia 260–267. July–Aug. 1953.
- 77. Piper JM, Mitchel EF, Snowden M, et al. Validation of 1989 Tennessee birth certificate using maternal and newborn hospital records. Am J Epidemiol 137(7):758–68. 1993.
- Keith LG, Papiernik E, Keith DM, Luke B, eds. Multiple pregnancy - Epidemiology, gestation, and perinatal outcome. New York, London: The Parthenon Publishing Group. 1995.
- Callahan TL, Hall JE, Ettner SL, et al.
   The economic impact of multiple-gestation pregnancies and the contribution of assisted-reproduction techniques to their incidence. NEJM 331(4): 244–249. 1994.
- Chelmow D, Penzias AS, Kaufman G, Cetrulo C. Costs of triplet pregnancy. Am J Obstet Gynecol 172(2):677–82. 1995.
- Jewell SE, Yip R. Increasing trends in plural births in the United States. Obstetrics and Gynecology 85(2):229–232. 1995.
- 82. Kiely JL, Kleinman JC, Kiely M. Triplets and higher-order multiple births:

- Time trends and infant mortality. AJDC 146:862–8. 1992.
- 83. Wilcox LS, Kiely JL, Melvin CL, Martin MC. Assisted reproductive technologies: Estimates of their contribution to multiple births and newborn hospital days in the United States. Fertility and Sterility 65(2):361–66. 1996.
- Heuser RL. Race and ethnicity in U.S. natality tabulations. Paper presented at the annual meeting of the American Public Health Association. Chicago, Illinois. October 24, 1989.
- 85. Ventura SJ. U.S. fertility data by race: New tabulations from NCHS. Paper presented at the annual meeting of the American Public Health Association. Washington, DC. November 10, 1992.
- Berkov B. An evaluation of California's inferred birth statistics for unmarried women. National Center for Health Statistics. Vital Health Stat 2(97). 1985.
- 87. Office of the State Registrar. Michigan Department of Public Health. Unpublished tabulation. 1995.
- 88. U.S. Bureau of the Census. Age, sex, race, and Hispanic origin information from the 1990 census: A comparison of census results with results where age and

- race have been modified. 1990 CPH-L-74. Washington, DC: U.S. Department of Commerce. 1991.
- 89. U.S. Bureau of the Census. Population estimates based on unpublished tabulations prepared by the Housing and Household Economic Statistics Division.
- 90. Brockert JE, Stockbauer JW, Senner JW, et al. Recommended standard medical definitions for the U.S. Standard Certificate of Live Birth, 1989 revision. Paper presented at the annual meeting of the Association for Vital Records and Health Statistics. Traverse City, Michigan. June 25–27, 1990.
- Taffel SM. Health and demographic characteristics of twin births: United States, 1988. National Center for Health Statistics. Vital Health Stat 21(50). 1992.
- Taffel SM. Cesarean delivery in the United States, 1990. National Center for Health Statistics. Vital Health Stat 21(51). 1994.
- Clarke SC, Ventura SJ. Birth and fertility rates for States: United States, 1990. National Center for Health Statistics. Vital Health Stat 21(52). 1994.

#### **Symbols**

- - Data not available
- . . . Category not applicable
- Quantity zero
- 0.0 Quantity more than zero but less than 0.05
- Figure does not meet standard of reliability or precision

### List of tables

	Live births, birth rates, and fertility rates, by race: United States, specified years 1940–55 and each year, 1960–94 Live births by age of mother, live-birth order, and race of	28		Live births by day of week and index of occurrence, by method of delivery, day of week, and race of mother: United States, 1994	44	23.	mothers of non-Hispanic origin: Total of 49 reporting States and the District of Columbia, 1994 Percent of births with selected medical or health characteristics,	54
3.	mother: United States, 1994 Birth rates by age of mother, live-birth order, and race of	29	17.	births to unmarried women by age and race of mother: United States, 1994	45	24.	by specified race of mother: United States, 1994	55
4.	mother: United States, 1994 Total fertility rates and birth rates by age of mother and race:	30	15.	Birth rates for unmarried women by age of mother and race: United States, 1970,	16		medical or health characteristics, by Hispanic origin of mother and by race of mother for methors of non Hispanic	
5.	United States, 1970–94 Birth rates by live-birth order and race of mother: United States, 1980–94	31	16.	1975, and 1980–94  Number and percent of births to unmarried women and number and percent of births of	46	25.	for mothers of non-Hispanic origin: United States, 1994 Live births with selected medical risk factors and rates	56
6.	Live births by age of mother, live-birth order, Hispanic origin of mother, and by race		1.7	low birthweight, by race of mother: United States and each State, 1994	48	26.	by age of mother, by race of mother: United States, 1994 Number and rate of live births	57
7	of mother for mothers of non- Hispanic origin: United States, 1994	35		Birth rates by age and race of father: United States, 1980–94	49		with selected medical risk fac- tors, complications of labor, and obstetric procedures, by specified race of mother:	
7.	Birth rates by race of mother, live-birth order, Hispanic origin of mother, and by race of mother for mothers of non-		10.	attainment of mother, by age and race of mother: United States, 1994	50	27.	United States, 1994  Number and rate of live births with selected medical risk fac-	58
8.	Hispanic origin: United States, 1994 Live births by race of mother,	37	19.	Number of live births and per- cent distribution by weight gain during pregnancy and			tors, complications of labor, and obstetric procedures, by Hispanic origin of mother and	
	birth rates, and fertility rates: United States and each State, 1994	39		median weight gain, according to period of gestation and race of mother: Total of 49 reporting States and the Dis-		28	by race of mother for mothers of non-Hispanic origin: United States, 1994	59
9.	Live births by Hispanic origin of mother and by race of mother for mothers of non- Hispanic origin: United States,	40	20.	trict of Columbia, 1994 Percent low birthweight by weight gain during pregnancy, period of gestation and race of	51	20.	smoking status of mother, per- cent smokers, and percent dis- tribution by average number of cigarettes smoked by mothers	
10.	Total number of births, rates, and percent of births with selected demographic characteristics bereiting the selected demographic characteristics.	40	21	mother: Total of 49 reporting States and the District of Columbia, 1994	52		per day, according to age and race of mother: Total of 46 reporting States, the District of Columbia, and New York City,	
11.	teristics, by specified race of mother: United States, 1994  Total number of births, rates, and percent of births with	41	21.	cent distribution by weight gain during pregnancy and median weight gain, according to period of gestation, Hispanic		29.	Number of live births by smoking status of mother and percent smokers, by age and	60
	selected demographic characteristics, by Hispanic origin of mother, and by race of mother for mothers of non-Hispanic origin: United States, 1994	42		origin of mother, and race of mother for mothers of non- Hispanic origin: Total of 49 reporting States and the Dis-			Hispanic origin of mother and by race of mother for mothers of non-Hispanic origin: Total of 46 reporting States, the Dis-	
12.	Live births by race of mother and observed and seasonally adjusted birth and fertility rates, by month: United States, 1994	43	22.	trict of Columbia, 1994 Percent low birthweight by weight gain during pregnancy and Hispanic origin of mother, and by race of mother for	53	30.	trict of Columbia, and New York City, 1994	61

	percent distribution by average number of cigarettes smoked by mothers per day, according to educational attainment and race of mother: Total of 46 reporting States, the District of Columbia, and New York City,			Live births by month of preg- nancy prenatal care began, number of prenatal visits, and median number of visits, by race of mother: United States, 1994	67	42. Live births by period of gestation, birthweight, and percent very low and low birthweight, by period of gestation and race of mother: United States,	73
31.	Percent low birthweight by smoking status, age, and race of mother: Total of 46	62	37.	obstetric procedures and rates by age of mother, by race of mother: United States, 1994 Live births with selected com-	68	<ul><li>1994</li></ul>	74
32	reporting States, the District of Columbia, and New York City, 1994	63	٥,,	plications of labor and/or delivery and rates by age of mother, by race of mother: United States, 1994	69	1981–94	75
J2.	drinking status of mother, per- cent drinkers, and percent dis- tribution by average number of			Live births by attendant, place of delivery, and race of mother: United States, 1994	70	45. Live births with selected	76
33	drinks per week, according to age and race of mother: Total of 48 reporting States and the District of Columbia, 1994 Live births by month of preg-	64	39.	Live births by method of delivery and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by age and race of mother: United			78
	nancy prenatal care began and percent of mothers beginning care in the first trimester and percent with late or no care, by age and race of mother: United		40.	States, 1994	71	46. Live births with selected congenital anomalies and rates by age of mother, by race of mother: Total of 49 reporting States (excluding New York City) and the District of	
34.	States, 1994  Percent of mothers beginning prenatal care in the first tri-	65	41.	age and race of mother: United States, 1994	72	47. Live births by plurality of birth and ratios, by age and race of	79
	mester and percent of mothers with late or no prenatal care, by race of mother: United States and each State, 1994	66		vaginal birth after previous cesarean delivery, by selected medical risk factors, complica- tions of labor and/or delivery,		mother: United States, 1994 8	31

## **Guide to tables in Advance Report of Final Natality Statistics, 1994**

TABLE:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Page:	28	29	30	31	34	35	37	39	40	41	42	43	44	45	46	48	49	50	51	52	53	54	55	56	57
Geographic area: States								8	9							16									
United States or all reporting areas	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Years: Current year only		2	3			6	7	8	9	10	11	12	13	14		16		18	19	20	21	22	23	24	25
Trend	1			4	5										15		17								
Type of entry: Number of births	1	2				6		8	9	10	11	12	13	14		16		18	19		21				25
Rates or other measures	1		3	4	5		7	8		10	11	12	13	14	15	16	17		19	20	21	22	23	24	25
Characteristics: Age of father																	17								
Age of mother		2	3	4		6	7			10	11			14	15			18							25
Alcohol use																							23	24	
Apgar score																							23	24	
Birthweight																16				20		22	23	24	
Day of week													13												
Education										10	11							18							
Gestational age																			19	20	21		23	24	
Hispanic origin of mother						6	7		9		11										21	22		24	
Live-birth order		2	3		5	6	7			10	11														
Medical risk factors																									25
Method of delivery													13										23	24	
Month of birth												12													
Nativity of mother										10	11														
Prenatal care																							23	24	
Race of father																	17								
Race of mother	<sup>1</sup> 1	<sup>1</sup> 2	13	<sup>1</sup> 4	5	<sup>2</sup> 6	<sup>2</sup> 7	<sup>1</sup> 8	29	<sup>3</sup> 10	<sup>2</sup> 11	12	13	14	15	16		18	19	20	<sup>2</sup> 21	<sup>2</sup> 22	<sup>3</sup> 23	<sup>2</sup> 24	25
Sex of child										10	11														
Tobacco use																							23	24	
Unmarried mothers										10	11			14	15	16									
Weight gain during pregnancy																			19	20	21	22	23	24	

										1												
TABLE:	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Page:	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	78	79	81
Geographic area: States									34													
United States or all reporting areas	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Years: Current year only	26	27	28	29	30	31	32	33	34	35	36	37	38		40	41	42		44	45	46	47
Trend														39				43				in the second
Type of entry: Number of births	26	27	28	29	30		32	33		35	36	37	38	39	40	41	42		44	45	46	47
Rates or other measures	26	27	28	29	30	31	32	33	34	35	36	37		39	40	41	42	43	44	45	46	47
Characteristics: Abnormal conditions of newborn																				45		
Age of mother			28	29		31	32	33			36	37			40				44	45	46	47
Alcohol use							32															
Attendant at birth													38									
Birthweight						31											42	43	44			
Complications of labor	26	27										37				41						
Congenital anomalies																					46	
Education					30																	
Gestational age																	42	43				
Hispanic origin of mother		27		29																		
Medical risk factors	26	27														41						
Method of delivery														39	40	41						
Obstetric procedures	26	27									36					41						
Place of delivery													38									
Multiple births																						47
Prenatal care								33	34	35												
Race of mother	<sup>3</sup> 26	<sup>2</sup> 27	28	<sup>2</sup> 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Tobacco use			28	29	30	31																

 <sup>&</sup>lt;sup>1</sup>Includes American Indian and Asian or Pacific Islander.
 <sup>2</sup>Non-Hispanic origin only.
 <sup>3</sup>Includes American Indian, Chinese, Japanese, Hawaiian, Filipino, and other Asian or Pacific Islander.

Table 1. Live births, birth rates, and fertility rates, by race: United States, specified years 1940-55 and each year, 1960-94

[Birth rates are live births per 1,000 population in specified group. Fertility rates per 1,000 women aged 15-44 years in specified group. Population enumerated as of April 1 for census years and estimated as of July 1 for all other years. Beginning with 1970, excludes births to nonresidents of the United States]

		^	Number					Birth ra	ate				Fertility	rate	
Year	All races 1	White	Black	American Indian <sup>2</sup>	Asian or Pacific Islander	All races 1	White	Black	American Indian <sup>2</sup>	Asian or Pacific Islander	All races 1	White	Black	American Indian <sup>2</sup>	Asian or Pacific Islander
Registered pirths															
Race of mother:															
1994		3,121,004			157,632	15.2	14.4	19.5	17.1	17.5	66.7	64.9	76.9	70.9	66.8
1993		3,149,833			152,800	15.5	14.7	20.5	17.8	17.7	67.6	65.4	80.5	73.4	66.7
1992		3,201,678			150,250	15.9	15.0	21.3	18.4	18.0	68.9	66.5	83.2	75.4	67.2
1991	4,110,907 4,158,212	3,241,273		,	145,372	16.3	15.4	21.9	18.3	18.2	69.6	67.0	85.2	75.1 76.2	67.6
1990 1989		3,290,273			141,635 133,075	16.7 16.4	15.8 15.4	22.4 22.3	18.9 19.7	19.0 18.7	70.9 69.2	68.3 66.4	86.8 86.2	76.2 79.0	69.6 68.2
1988					129,035	16.4	15.4	21.5	19.7	19.2	67.3	64.5	82.6	79.0 76.8	70.2
1987					116,560	15.7	14.9	20.8	19.1	18.4	65.8	63.3	80.1	75.6	67.1
1986					107,797	15.6	14.8	20.5	19.2	18.0	65.4	63.1	78.9	75.9	66.0
1985		3,037,913			104,606	15.8	15.0	20.4	19.8	18.7	66.3	64.1	78.8	78.6	68.4
1984 <sup>3</sup>		2,967,100		33,256	98,926	15.6	14.8	20.1	20.1	18.8	65.5	63.2	78.2	79.8	69.2
1983 <sup>3</sup>	3,638,933			32,881	95,713	15.6	14.8	20.2	20.6	19.5	65.7	63.4	78.7	81.8	71.7
1982 <sup>3</sup>	3,680,537	2,984,817	568,506	32,436	93,193	15.9	15.1	20.7	21.1	20.3	67.3	64.8	80.9	83.6	74.8
1981 <sup>3</sup>				29,688	84,553	15.8	15.0	20.8	20.0	20.1	67.3	64.8	82.0	79.6	73.7
1980 <sup>3</sup>	3,612,258	2,936,351	568,080	29,389	74,355	15.9	15.1	21.3	20.7	19.9	68.4	65.6	84.7	82.7	73.2
Race of child:															
1980 <sup>3</sup>	3,612,258	2,898,732	589,616	36,797		15.9	14.9	22.1			68.4	64.7	88.1		
1979 <sup>3</sup>	3,494,398	2,808,420	577,855	34,269		15.6	14.5	22.0			67.2	63.4	88.3		
1978 <sup>3</sup>	3,333,279	2,681,116	551,540	33,160		15.0	14.0	21.3			65.5	61.7	86.7		
1977 <sup>3</sup>	3,326,632	2,691,070	544,221	30,500		15.1	14.1	21.4			66.8	63.2	88.1		
1976 <sup>3</sup>	3,167,788	2,567,614	514,479	29,009		14.6	13.6	20.5			65.0	61.5	85.8		
1975 <sup>3</sup>	3,144,198	2,551,996	511,581	27,546		14.6	13.6	20.7			66.0	62.5	87.9		
1974 <sup>3</sup>	3,159,958	2,575,792	507,162	26,631		14.8	13.9	20.8			67.8	64.2	89.7		
1973 3	3,136,965	2,551,030		26,464		14.8	13.8	21.4			68.8	64.9	93.6		
1972 <sup>3</sup>				27,368		15.6	14.5	22.5			73.1	68.9	99.9		
1971 <sup>4</sup>				27,148		17.2	16.1	24.4			81.6	77.3	109.7		
1971 <sup>4</sup> 1969 <sup>4</sup>				25,864 24,008		18.4 17.9	17.4 16.9	25.3 24.4			87.9 86.1	84.1 82.2	115.4 112.1		
1968 <sup>4</sup>	3,000,200	2,993,014	521 152	24,006		17.9	16.6	24.4			85.2	81.3	112.1		
1967 <sup>5</sup>				22,665		17.8	16.8	25.1			87.2	82.8	118.5		
1966 4	3,606,274			23,014		18.4	17.4	26.2			90.8	86.2	124.7		
1965 <sup>4</sup>	3,760,358	3,123,860		24,066		19.4	18.3	27.7			96.3	91.3	133.2		
1964 <sup>4</sup>	4,027,490			24,382		21.1	20.0	29.5			104.7	99.8	142.6		
1963 <sup>4, 6</sup>		3,326,344		22,358		21.7	20.7				108.3	103.6			
1962 4, 6		3,394,068	,	21,968		22.4	21.4				112.0	107.5			
1961 <sup>4</sup>	4,268,326	3,600,864	611,072	21,464		23.3	22.2				117.1	112.3			
1960 4		3,600,744		21,114		23.7	22.7	31.9			118.0	113.2	153.5		
Births adjusted for underregi- stration															
Race of child:															
1955	4,097,000	3,485,000				25.0	23.8				118.3	113.7			
1950						24.1	23.0				106.2	102.3			
1945	2,858,000	2,471,000				20.4	19.7				85.9	83.4			
1940	2,559,000	2 100 000				19.4	18.6				79.9	77.1			

For 1960-91 includes births to races not shown separately.

<sup>1</sup> For 1960-91 includes pirtins to 1982 2 Includes births to Aleuts and Eskimos. Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

Based on a 50-percent sample of births.

5 Based on a 20- to 50-percent sample of births.

<sup>6</sup> Figures by race exclude New Jersey.

Table 2. Live births by age of mother, live-birth order, and race of mother: United States, 1994

[Live-birth order refers to number of children born alive to mother]

							A	Age of mo	ther					
Live-birth order and	All	Under			15-19	years			22.24	25.22	00.04	05.00	40.44	45.40
race of mother	ages	15 years	Total	15 years	16 years	17 years	18 years	19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
All races	3,952,767	12,901	505,488	30,742	63,125	101,302	137,547	172,772	1,001,418	1,088,845	906,498	371,608	63,502	2,507
First child	1,618,811	12,504	389,940	28,811	56,258	83,905	103,744	117,222	474,004	402,096	246,522	80,272	12,973	500
Second child	1,266,056	291	91,343	1,608	5,860	14,663	27,253	41,959	333,423	380,946	325,777	117,084	16,717	475
Third child	631,571	11	17,461	67	477	1,812	4,901	10,204	131,400	189,261	193,983	86,148	12,915	392
Fourth child	245,636	-	2,815	4	25	157	681	1,948	41,171	70,339	79,337	43,735	7,948	291
Fifth child	93,043	-	401	2	3	16	75	305	11,847	25,157	30,731	20,058	4,631	218
Sixth child	38,834	-	45	-	1	3	11	30	3,158	9,414	13,414	9,935	2,720	148
Seventh child	17,770	-	8	-	-	-	3	5	753	3,673	6,152	5,299	1,784	101
Eighth child and over	18,257	-	4	-	-	1	2	1	283	2,137	5,418	6,770	3,295	350
Not stated	22,789	95	3,471	250	501	745	877	1,098	5,379	5,822	5,164	2,307	519	32
White	3,121,004	5,978	348,081	17,443	40,198	68,747	96,605	125,088	764,085	889,581	754,871	305,291	51,192	1,925
First child	1,290,315	5,798	278,286	16,545	36,777	59,196	76,391	89,377	380,435	338,969	207,789	67,667	10,957	414
Second child	1,022,360	110	57,302	706	2,867	8,188	16,986	28,555	258,252	318,484	276,486	97,543	13,800	383
Third child	496,852	2	8,700	29	175	736	2,300	5,460	90,860	151,807	163,472	71,348	10,340	323
Fourth child	182,812	-	1,047	-	10	49	241	747	23,615	52,044	64,072	35,455	6,345	234
Fifth child	64,042	-	137	1	2	9	23	102	5,413	16,183	22,976	15,629	3,547	157
Sixth child	24,991	-	14	_	1	_	4	9	1,184	5,064	9,220	7,355	2,052	102
Seventh child	10,965	-	3	-	-	-	1	2	226	1,701	3,842	3,800	1,333	60
Eighth child and over	11,192	-	4	_	-	1	2	1	108	837	2,939	4,667	2,413	224
Not stated	17,475	68	2,588	162	366	568	657	835	3,992	4,492	4,075	1,827	405	28
Black	636,391	6,465	140,968	12,297	20,853	29,413	36,489	41,916	197,841	142,355	99,155	42,029	7,339	239
First child	245,196	6,270	99,106	11,343	17,652	22,119	24,040	23,952	73,726	37,470	20,794	6,730	1,068	32
Second child	182,499	164	31,067	837	2,784	6,017	9,371	12,058	63,548	45,025	30,114	11,010	1,523	48
Third child	107,572	5	8,080	32	276	1,001	2,412	4,359	35,672	30,124	22,278	9,837	1,542	34
Fourth child	51,665	-	1,621	3	10	102	408	1,098	15,613	15,153	12,013	6,160	1,078	27
Fifth child	23,832	-	236	1	1	7	45	182	5,743	7,403	6,242	3,404	774	30
Sixth child	11,082	-	25	-	-	3	7	15	1,745	3,551	3,277	1,970	492	22
Seventh child	5,256	-	5	-	-	-	2	3	468	1,585	1,777	1,112	295	14
Eighth child and over	5,007	-	-	-	-	-	-	-	146	1,039	1,862	1,447	484	29
Not stated	4,282	26	828	81	130	164	204	249	1,180	1,005	798	359	83	3
American Indian 1	37,740	211	7,705	467	1,046	1,554	2,079	2,559	12,158	9,010	5,738	2,435	461	22
First child	13,451	204	5,835	445	947	1,287	1,526	1,630	4,471	1,860	809	239	30	3
Second child	9,774	4	1,482	17	89	229	460	687	4,069	2,506	1,259	388	65	1
Third child	6,630	2	303	1	6	30	78	188	2,268	2,111	1,323	532	89	2
Fourth child	3,691	-	55	-	1	2	10	42	900	1,290	949	413	80	4
Fifth child	2,060	-	6	-	-	-	1	5	301	732	624	333	62	2
Sixth child	1,010	-	-	-	-	-	-	-	74	287	380	226	38	5
Seventh child	509	-	-	-	-	-	-	-	19	117	200	136	35	2
Eighth child and over	457	-	-	-	-	-	-	-	5	66	167	157	59	3
Not stated	158	1	24	4	3	6	4	7	51	41	27	11	3	-
Asian or Pacific Islander	157,632	247	8,734	535	1,028	1,588	2,374	3,209	27,334	47,899	46,734	21,853	4,510	321
First child	69,849	232	6,713	478	882	1,303	1,787	2,263	15,372	23,797	17,130	5,636	918	51
Second child	51,423	13	1,492	48	120	229	436	659	7,554	14,931	17,918	8,143	1,329	43
Third child	20,517	2	378	5	20	45	111	197	2,600	5,219	6,910	4,431	944	33
Fourth child	7,468	-	92	1	4	4	22	61	1,043	1,852	2,303	1,707	445	26
Fifth child	3,109	-	22	-	-	-	6	16	390	839	889	692	248	29
Sixth child	1,751	-	6	-	-	-	-	6	155	512	537	384	138	19
Seventh child	1,040	-	-	-	-	-	-	-	40	270	333	251	121	25
Eighth child and over	1,601	-	-	-	-	-	-	-	24	195	450	499	339	94
Not stated	874	-	31	3	2	7	12	7	156	284	264	110	28	1

<sup>&</sup>lt;sup>1</sup> Includes births to Aleuts and Eskimos.

Table 3. Birth rates by age of mother, live-birth order, and race of mother: United States, 1994

[Rates are live births per 1,000 women in specified age and racial group. Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

						Age o	f mother				
Live-birth order and	15-44			15-19 yea	rs						
race of mother	years <sup>1</sup>	10-14 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
All races	66.7	1.4	58.9	37.6	91.5	111.1	113.9	81.5	33.7	6.4	0.3
First shild	07 F	1.1	4E 0	22.0	CE C	F2 0	40.0	20.2	7.0	4.2	0.1
First child	27.5	1.4	45.8	32.8	65.6	52.9	42.3	22.3	7.3	1.3	0.1
Second child	21.5	0.0	10.7	4.3	20.5	37.2	40.1	29.5	10.7	1.7	0.1
Third child	10.7		2.0	0.5	4.5	14.7	19.9	17.5	7.9	1.3	0.0
Fourth child	4.2	*	0.3	0.0	0.8	4.6	7.4	7.2	4.0	0.8	0.0
Fifth child	1.6	*	0.0	0.0	0.1	1.3	2.6	2.8	1.8	0.5	0.0
Sixth and seventh child	1.0	*	0.0	*	0.0	0.4	1.4	1.8	1.4	0.5	0.0
Eighth child and over	0.3	*	*	*	*	0.0	0.2	0.5	0.6	0.3	0.0
White	64.9	0.8	51.1	30.7	82.1	106.2	115.5	83.2	33.7	6.2	0.3
First child	27.0	0.8	41.1	27.6	61.8	53.2	44.3	23.0	7.5	1.3	0.1
Second child	21.4	0.0	8.5	2.9	17.0	36.1	41.6	30.6	10.8	1.7	0.1
Third child	10.4	*	1.3	0.2	2.9	12.7	19.8	18.1	7.9	1.3	0.0
Fourth child	3.8	*	0.2	0.0	0.4	3.3	6.8	7.1	3.9	0.8	0.0
		*	0.2	*	-		2.1	2.5			
Fifth child	1.3	*	v.u *	*	0.0	0.8			1.7	0.4	0.0
Sixth and seventh child	0.8	*	*	*		0.2	0.9	1.4	1.2	0.4	0.0
Eighth child and over	0.2	*	*	*	*	0.0	0.1	0.3	0.5	0.3	0.0
Black	76.9	4.6	104.5	76.3	148.3	146.0	104.0	65.8	28.9	5.9	0.3
First child	29.8	4.5	73.9	62.7	91.3	54.7	27.6	13.9	4.7	0.9	0.0
Second child	22.2	0.1	23.2	11.8	40.8	47.2	33.1	20.1	7.6	1.2	0.1
Third child	13.1	*	6.0	1.6	12.9	26.5	22.2	14.9	6.8	1.3	0.0
Fourth child	6.3	*	1.2	0.1	2.9	11.6	11.1	8.0	4.3	0.9	0.0
Fifth child	2.9	*	0.2	*	0.4	4.3	5.4	4.2	2.4	0.6	0.0
Sixth and seventh child	2.0	*	0.2	*	0.1	1.6	3.8	3.4	2.1	0.6	0.0
		*	0.0 *	*	U. I *						
Eighth child and over	0.6					0.1	0.8	1.2	1.0	0.4	0.0
American Indian <sup>2</sup>	70.9	1.9	80.8	51.3	130.3	134.2	104.1	61.2	27.5	5.9	0.4
First child	25.4	1.8	61.4	45.0	88.9	49.6	21.6	8.7	2.7	0.4	*
Second child	18.4	*	15.6	5.6	32.3	45.1	29.1	13.5	4.4	8.0	*
Third child	12.5	*	3.2	0.6	7.5	25.1	24.5	14.2	6.0	1.2	*
Fourth child	7.0	*	0.6	*	1.5	10.0	15.0	10.2	4.7	1.0	*
Fifth child	3.9	*	*	*	*	3.3	8.5	6.7	3.8	0.8	*
Sixth and seventh child	2.9	*	*	*	*	1.0	4.7	6.2	4.1	0.9	*
Eighth child and over	0.9	*	*	*	*	*	0.8	1.8	1.8	0.8	*
Asian or Pacific											
Islander	66.8	0.7	27.1	16.1	44.1	73.1	118.6	105.2	51.3	11.6	1.0
First child	29.8	0.6	20.9	13.6	32.1	41.3	59.3	38.8	13.3	2.4	0.2
Second child	21.9	*	4.6	2.0	8.7	20.3	37.2	40.6	19.2	3.5	0.1
Third child	8.7	*	1.2	0.4	2.4	7.0	13.0	15.6	10.4	2.5	0.1
Fourth child	3.2	*	0.3	*	0.7	2.8	4.6	5.2	4.0	1.2	0.1
Fifth child	1.3	*	0.3	*	0.7	1.0	2.1	2.0	1.6	0.6	0.1
Sixth and seventh child		*	V. I *	*	v.2						
	1.2	*	*	*	*	0.5	1.9	2.0	1.5	0.7	0.1
Eighth child and over	0.7	.,	-	-	-	0.1	0.5	1.0	1.2	0.9	0.3

<sup>1</sup> Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.
2 Includes births to Aleuts and Eskimos.

Table 4. Total fertility rates and birth rates by age of mother and race: United States, 1970-94

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1970, 1980 and 1990, and estimated as of July 1 for all other years]

		Age of mother												
Year and race	Total fertility	10-14		15-19 years	3	20-24	25-29	30-34	35-39	40-44	45-49			
	rate	years	Total	15-17 years	18-19 years	years	years	years	years	years	years			
All races 1														
1994	2,036.0	1.4	58.9	37.6	91.5	111.1	113.9	81.5	33.7	6.4	0.3			
1993	2,046.0	1.4	59.6	37.8	92.1	112.6	115.5	80.8	32.9	6.1	0.3			
1992	2,065.0	1.4	60.7	37.8	94.5	114.6	117.4	80.2	32.5	5.9	0.3			
1991	2,073.0	1.4	62.1	38.7	94.4	115.7	118.2	79.5	32.0	5.5	0.2			
1990	2,081.0	1.4	59.9	37.5	88.6	116.5	120.2	80.8	31.7	5.5	0.2			
1989	2,014.0	1.4	57.3	36.4	84.2	113.8	117.6	77.4	29.9	5.2	0.2			
1988	1,934.0	1.3	53.0	33.6	79.9	110.2	114.4	74.8	28.1	4.8	0.2			
1987	1,872.0	1.3	50.6	31.7	78.5	107.9	111.6	72.1	26.3	4.4	0.2			
1986	1,837.5 1.844.0	1.3 1.2	50.2 51.0	30.5 31.0	79.6 79.6	107.4 108.3	109.8 111.0	70.1 69.1	24.4 24.0	4.1 4.0	0.2 0.2			
1985 1984 <sup>2</sup>	1,844.0	1.2	50.6	31.0	79.6 77.4	106.3	108.7	67.0	22.9	3.9	0.2			
1983 2	1,799.0	1.2	51.4	31.8	77.4 77.4	100.8	108.7	64.9	22.9	3.9	0.2			
1982 2	1,827.5	1.1	52.4	32.3	79.4	111.6	111.0	64.1	21.2	3.9	0.2			
1981 <sup>2</sup>	1,812.0	1.1	52.4	32.0	80.0	112.2	111.5	61.4	20.0	3.8	0.2			
1980 2	1,839.5	1.1	53.0	32.5	82.1	115.1	112.9	61.9	19.8	3.9	0.2			
1979 <sup>2</sup>	1.808.0	1.2	52.3	32.3	81.3	112.8	111.4	60.3	19.5	3.9	0.2			
1978 2	1,760.0	1.2	51.5	32.2	79.8	109.9	108.5	57.8	19.0	3.9	0.2			
1977 2	1,789.5	1.2	52.8	33.9	80.9	112.9	111.0	56.4	19.2	4.2	0.2			
1976 2	1,738.0	1.2	52.8	34.1	80.5	110.3	106.2	53.6	19.0	4.3	0.2			
1975 <sup>2</sup>	1,774.0	1.3	55.6	36.1	85.0	113.0	108.2	52.3	19.5	4.6	0.3			
1974 <sup>2</sup>	1,835.0	1.2	57.5	37.3	88.7	117.7	111.5	53.8	20.2	4.8	0.3			
1973 <sup>2</sup>	1,879.0	1.2	59.3	38.5	91.2	119.7	112.2	55.6	22.1	5.4	0.3			
1972 <sup>2</sup>	2,010.0	1.2	61.7	39.0	96.9	130.2	117.7	59.8	24.8	6.2	0.4			
1971 <sup>3</sup>	2,266.5	1.1	64.5	38.2	105.3	150.1	134.1	67.3	28.7	7.1	0.4			
1970 <sup>3</sup>	2,480.0	1.2	68.3	38.8	114.7	167.8	145.1	73.3	31.7	8.1	0.5			
White														
Race of mother:														
1994	1,985.0	0.8	51.1	30.7	82.1	106.2	115.5	83.2	33.7	6.2	0.3			
1993	1,982.0	0.8	51.1	30.3	82.1	106.9	116.6	82.1	32.7	5.9	0.3			
1992	1,993.5	0.8	51.8	30.1	83.8	108.2	118.4	81.4	32.2	5.7	0.2			
1991	1,995.5	0.8	52.8	30.7	83.5	109.0	118.8	80.5	31.8	5.2	0.2			
1990	2,003.0	0.7	50.8	29.5	78.0	109.8	120.7	81.7	31.5	5.2	0.2			
1989	1,931.0	0.7	47.9	28.1	72.9	106.9	117.8	78.1	29.7	4.9	0.2			
1988	1,856.5	0.6	44.4	26.0	69.6	103.7	114.8	75.4	27.7	4.5	0.2			
1987	1,804.5	0.6	42.5	24.6	68.9	102.3	112.3	73.0	25.9	4.1	0.2			
1986	1,776.0	0.6	42.3	23.8	70.1	102.7	110.8	70.9	23.9	3.8	0.2			
1985	1,787.0	0.6	43.3	24.4	70.4	104.1	112.3	69.9	23.3	3.7	0.2			
1984 2	1,748.5	0.6	42.9	24.3	68.4	102.7	109.8	67.7	22.2	3.6	0.2			
1983 2	1,740.5	0.6	43.9	25.0	68.8	103.8	109.4	65.3	21.3	3.6	0.2			
1982 2	1,767.0	0.6	45.0	25.5	70.8	107.7	111.9	64.0	20.4	3.6	0.2			
1981 2	1,748.0	0.5	44.9	25.4	71.5	108.3	112.3	61.0	19.0	3.4	0.2			
1980 <sup>2</sup>	1,773.0	0.6	45.4	25.5	73.2	111.1	113.8	61.2	18.8	3.5	0.2			

See footnotes at end of table.

Table 4. Total fertility rates and birth rates by age of mother and race: United States, 1970-94-Con.

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1970, 1980 and 1990, and estimated as of July 1 for all other years]

		Age of mother												
Year and race	Total fertility	40.44		15-19 years	3	20.04	05.00	20.04	25.22	40.44	45.40			
	rate	10-14 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years			
White - con.														
Race of child:														
1980 2	1,748.5	0.6	44.7	25.2	72.1	109.5	112.4	60.4	18.5	3.4	0.2			
1979 <sup>2</sup>	1,715.5	0.6	43.7	24.7	71.0	107.0	110.8	59.0	18.3	3.5	0.2			
1978 <sup>2</sup>	1,667.5	0.6	42.9	24.9	69.4	104.1	107.9	56.6	17.7	3.5	0.2			
1977 <sup>2</sup>	1,703.0	0.6	44.1	26.1	70.5	107.7	110.9	55.3	18.0	3.8	0.2			
1976 <sup>2</sup>	1,652.0	0.6	44.1	26.3	70.2	105.3	105.9	52.6	17.8	3.9	0.2			
1975 <sup>2</sup>	1,686.0	0.6	46.4	28.0	74.0	108.2	108.1	51.3	18.2	4.2	0.2			
1974 <sup>2</sup>	1,748.5	0.6	47.9	28.7	77.3	113.0	111.8	52.9	18.9	4.4	0.2			
1973 <sup>2</sup>	1,783.0	0.6	49.0	29.2	79.3	114.4	112.3	54.4	20.7	4.9	0.3			
1972 <sup>2</sup>	1,906.5	0.5	51.0	29.3	84.3	124.8	117.4	58.4	23.3	5.6	0.3			
1971 <sup>3</sup>		0.5	53.6	28.5	92.3	144.9	134.0	65.4	26.9	6.4	0.4			
1970 <sup>3</sup>		0.5	57.4	29.2	101.5	163.4	145.9	71.9	30.0	7.5	0.4			
Black														
Race of mother:														
1994	2,300.0	4.6	104.5	76.3	148.3	146.0	104.0	65.8	28.9	5.9	0.3			
1993	2,384.5	4.6	108.6	79.8	151.9	152.6	108.4	67.3	29.2	5.9	0.3			
1992	2,442.0	4.7	112.4	81.3	157.9	158.0	111.2	67.5	28.8	5.6	0.2			
1991	2,480.0	4.8	115.5	84.1	158.6	160.9	113.1	67.7	28.3	5.5	0.2			
1990	2,480.0	4.9	112.8	82.3	152.9	160.2	115.5	68.7	28.1	5.5	0.2			
1989	2,432.5	5.1	111.5	81.9	151.9	156.8	114.4	66.3	26.7	5.4	0.3			
1988	*			75.7					25.7 25.6					
	2,298.0	4.9	102.7		142.7	149.7	108.2	63.1		5.1	0.3			
1987	2,198.0	4.8	97.6	72.1	135.8	142.7	104.3	60.6	24.6	4.8	0.2			
1986	2,135.5	4.7	95.8	69.3	135.1	137.3	101.1	59.3	23.8	4.8	0.3			
1985	2,109.0	4.5	95.4	69.3	132.4	135.0	100.2	57.9	23.9	4.6	0.3			
1984 <sup>2</sup>	2,070.5	4.4	94.1	69.2	128.1	132.2	98.4	56.7	23.3	4.8	0.2			
1983 <sup>2</sup>	2,066.0	4.1	93.9	69.6	127.1	131.9	98.4	56.2	23.3	5.1	0.3			
1982 <sup>2</sup>	2,106.5	4.0	94.3	69.7	128.9	135.4	101.3	57.5	23.3	5.1	0.4			
1981 <sup>2</sup> 1980 <sup>2</sup>		4.0 4.3	94.5 97.8	69.3 72.5	131.0 135.1	136.5 140.0	102.3 103.9	57.4 59.9	23.1 23.5	5.4 5.6	0.3 0.3			
Race of child:	·													
1980 <sup>2</sup>	2,266.0	4.3	100.0	73.6	138.8	146.3	109.1	62.9	24.5	5.8	0.3			
1979 <sup>2</sup>		4.6	100.0	75.7	140.4	146.3	108.2	60.7	24.7	6.1	0.4			
1978 <sup>2</sup>		4.4	100.9	75.7 75.0	139.7	143.8	105.4	58.3	24.7	6.1	0.4			
1976 1977 <sup>2</sup>		4.4 4.7	100.9	79.6	142.9	143.6	105.4	56.5 57.5	24.3 25.4	6.6	0.4			
1976 <sup>2</sup>														
		4.7 5.1	104.9	80.3	142.5	140.5	101.6	53.6	24.8	6.8 7.5	0.5			
		5.1	111.8	85.6	152.4	142.8	102.2	53.1	25.6	7.5	0.5			
1974 <sup>2</sup>		5.0	116.5	90.0	158.7	146.7	102.2	54.1	27.0	7.6	0.6			
1973 <sup>2</sup>		5.4	123.1	96.0	166.6	153.1	103.9	58.1	29.4	8.6	0.6			
1972 <sup>2</sup>		5.1	129.8	99.5	179.5	165.0	112.4	64.0	33.4	9.8	0.7			
1971 3	*	5.1	134.5	99.4	192.6	186.6	128.0	74.8	38.9	11.6	0.9			
1970 <sup>3</sup>	3,099.5	5.2	140.7	101.4	204.9	202.7	136.3	79.6	41.9	12.5	1.0			

See footnotes at end of table.

Table 4. Total fertility rates and birth rates by age of mother and race: United States, 1970-94-Con.

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1970, 1980 and 1990, and estimated as of July 1 for all other years]

						Age of	mother				
Year and race	Total fertility	10.11		15-19 years	3	20.24	25-29	20.24	25.20	40.44	45.40
	rate	10-14 years	Total	15-17 years	18-19 years	20-24 years	years	30-34 years	35-39 years	40-44 years	45-49 years
American Indian <sup>4</sup>											
Race of mother:											
1994	2,080.0	1.9	80.8	51.3	130.3	134.2	104.1	61.2	27.5	5.9	0.4
1993	2,141.0	1.4	83.1	53.7	130.7	139.8	107.6	62.8	27.6	5.9	*
1992	2,190.0	1.6	84.4	53.8	132.6	145.5	109.4	63.0	28.0	6.1	*
1991	2,169.0	1.6	85.0	52.7	134.3	144.9	106.9	61.9	27.2	5.9	0.4
1990	2,183.0	1.6	81.1	48.5	129.3	148.7	110.3	61.5	27.5	5.9	*
1989	2.247.0	1.5	82.7	51.6	128.9	152.4	114.2	64.8	27.4	6.4	*
1988	2,153.5	1.7	77.5	49.7	121.1	145.2	110.9	64.5	25.6	5.3	*
1987	2.099.0	1.7	77.2	48.8	122.2	140.0	107.9	63.0	24.4	5.6	*
1986	2,082.0	1.8	78.1	48.7	125.3	138.8	107.9	60.7	23.8	5.3	*
1985	2,128.0	1.7	79.2	47.7	124.1	139.1	107.5	62.6	27.4	6.0	*
1984 <sup>2</sup>	2,126.0	1.7	81.5	50.7	124.1	142.4	109.0	60.5	26.3	5.6	*
1983 <sup>2</sup>	2,180.5	1.7	84.2	55.2	121.4	145.5	113.7	58.9	25.5	6.4	*
1982 <sup>2</sup>	2,160.5	1.9	83.5	52.6	121.4	143.3	115.7	60.9	26.9	6.0	*
	,										*
1981 <sup>2</sup> 1980 <sup>2</sup>	2,090.0 2,162.5	2.1 1.9	78.4 82.2	49.7 51.5	121.5 129.5	141.2 143.7	105.6 106.6	58.9 61.8	25.2 28.1	6.6 8.2	*
Asian or Pacific Islander	•										
Race of mother:											
1994	1.943.0	0.7	27.1	16.1	44.1	73.1	118.6	105.2	51.3	11.6	1.0
1993	1,935.5	0.6	27.0	16.0	43.3	73.3	119.9	103.9	50.2	11.3	0.9
1992	1,942.0	0.7	26.6	15.2	43.1	74.6	121.0	103.0	50.2	11.0	0.9
1991	1,956.0	0.7	27.4	16.1	43.1	75.2	121.0	103.0	49.0	11.2	1.1
1990	2,002.5	0.0	26.4	16.0	40.2	79.2	126.3	106.5	49.6	10.7	1.1
1989	1.947.5	0.7	25.6	15.0	40.4	78.8	124.0	100.3	47.0	10.7	1.0
1988	1,983.5	0.6	24.2	13.6	39.6	80.7	124.0	102.3	47.5	10.2	1.0
1987	1,963.5	0.6	24.2	12.6	37.0	79.7	120.0	97.0	47.3 44.2	9.5	1.1
1986	1,836.0	0.6	22.4 22.8	12.0		79.7 79.2	119.9	97.0	44.2 41.9	9.5 9.3	1.1
	,		23.8		38.8	79.2 83.6	123.0		41.9	9.3 8.7	1.0
1985 1984 <sup>2</sup>	1,885.0	0.4	23.8 24.2	12.5 12.6	40.8 40.7	83.6 86.7		93.6	42.7 40.6	8.7 8.7	1.2
1983 <sup>2</sup>	1,892.0	0.5		_	_		124.3	92.4		-	_
	1,943.5	0.5	26.1	12.9	44.5	94.0	126.2	93.3	39.4	8.2	1.0
	2,015.5	0.4	29.4	14.0	50.8	98.9	130.9	94.4	39.2	8.8	1.1
1981 <sup>2</sup>	1,976.0	0.3	28.5	13.4	49.5	96.4	129.1	93.4	38.0	8.6	0.9
1980 <sup>2</sup>	1,953.5	0.3	26.2	12.0	46.2	93.3	127.4	96.0	38.3	8.5	0.7

<sup>1</sup> For 1970-91 includes births to races not shown separately.

<sup>2</sup> Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

<sup>3</sup> Based on a 50-percent sample of births.

<sup>4</sup> Includes births to Aleuts and Eskimos.

Table 5. Birth rates by live-birth order and race of mother: United States, 1980-94

[Rates are live births per 1,000 women aged 15-44 years, enumerated as of April 1 for 1980 and 1990, and estimated as of July 1 for all other years. Figures for live-birth order not stated are distributed]

				L	ive-birth order			
Year and race of mother	Total	1	2	3	4	5	6 and 7	8 and over
All races <sup>1</sup>								
1994	66.7	27.5	21.5	10.7	4.2	1.6	1.0	0.3
1993	67.6	27.5	21.9	11.0	4.3	1.6	1.0	0.3
1992	68.9	27.8	22.3	11.3	4.4	1.7	1.0	0.3
1991	69.6	28.3	22.4	11.4	4.5	1.7	1.0	0.3
1990	70.9	29.0	22.8	11.7	4.5	1.7	1.0	0.3
1989	69.2	28.4	22.4	11.3	4.3	1.6	0.9	0.3
1988	67.3	27.6	22.0	10.9	4.1	1.5	0.9	0.3
1987	65.8	27.2	21.6	10.5	3.9	1.4	0.8	0.3
1986	65.4	27.2	21.6	10.3	3.8	1.4	0.8	0.3
1985	66.3	27.6	22.0	10.4	3.8	1.4	0.8	0.3
1984 <sup>2</sup>	65.5	27.4	21.7	10.1	3.7	1.4	0.9	0.3
1983 <sup>2</sup>	65.7	27.8	21.5	10.1	3.7	1.4	0.9	0.3
1982 <sup>2</sup>	67.3	28.6	22.0	10.1	3.8	1.4	0.9	0.3
1981 <sup>2</sup>	67.3	29.0	21.6	10.2	3.8	1.5	0.9	0.3
1980 <sup>2</sup>	68.4	29.5	21.8	10.1	3.9	1.5	1.0	0.4
1500	00.4	25.5	21.0	10.5	3.5	1.0	1.0	0.4
White								
1994	64.9	27.0	21.4	10.4	3.8	1.3	0.8	0.2
1993	65.4	27.0	21.7	10.5	3.9	1.4	0.8	0.2
1992	66.5	27.3	22.0	10.8	4.0	1.4	0.8	0.2
1991	67.0	27.8	22.0	10.8	4.0	1.4	0.8	0.2
1990	68.3	28.4	22.4	11.1	4.0	1.4	0.8	0.2
1989	66.4	27.6	21.9	10.7	3.8	1.3	0.7	0.2
1988	64.5	26.8	21.6	10.4	3.6	1.2	0.7	0.2
1987	63.3	26.5	21.3	10.0	3.5	1.2	0.7	0.2
1986	63.1	26.6	21.3	9.8	3.4	1.2	0.7	0.2
1985	64.1	27.0	21.8	9.9	3.4	1.2	0.7	0.2
1984 2	63.2	26.8	21.4	9.6	3.3	1.2	0.7	0.2
1983 2	63.4	27.2	21.2	9.5	3.3	1.2	0.7	0.2
1982 <sup>2</sup>	64.8	28.0	21.6	9.6	3.4	1.2	0.7	0.3
1981 <sup>2</sup>	64.8	28.4	21.1	9.5	3.4	1.2	8.0	0.3
1980 <sup>2</sup>	65.6	28.8	21.3	9.6	3.4	1.3	8.0	0.3
Black								
1994	76.9	29.8	22.2	13.1	6.3	2.9	2.0	0.6
1993	80.5	30.2	23.4	14.1	6.9	3.1	2.2	0.7
1992	83.2	30.6	24.3	15.0	7.2	3.3	2.2	0.6
1991	85.2	31.5	25.0	15.4	7.4	3.3	2.1	0.6
1990	86.8	32.4	25.6	15.6	7.4	3.2	2.0	0.6
1989	86.2	32.9	25.4	15.3	7.1	3.0	1.9	0.6
1988	82.6	31.8	24.6	14.4	6.6	2.8	1.8	0.5
1987	80.1	31.2	23.8	13.9	6.3	2.7	1.7	0.5
1986	78.9	31.0	23.4	13.5	6.1	2.6	1.7	0.5
1985	78.8	31.0	23.4	13.4	6.1	2.6	1.7	0.5
1984 <sup>2</sup>	78.1	30.9	23.4	13.4	6.0	2.6	1.7	0.6
1983 <sup>2</sup>	78.7	31.1	23.0	13.2	6.1	2.0	1.7	0.6
1982 <sup>2</sup>	80.9	31.7				2.7		0.6
1981 <sup>2</sup>	80.9 82.0	31.7	23.9	13.8	6.3	2.7 2.8	1.8	0.7
1980 <sup>2</sup>			24.2	13.7	6.3	2.8	1.9	0.8
1900	84.9	33.7	24.7	14.0	6.5	2.9	2.1	0.9

 <sup>1</sup> Includes race other than white and black
 2 Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States: see Technical notes.

Table 6. Live births by age of mother, live-birth order, Hispanic origin of mother and by race of mother for mothers of non-Hispanic origin: United States, 1994

[Live-birth order refers to number of children born alive to mother. Includes births with stated origin of mother only]

	Age of mother													
Live-birth order and	All	Under			15-19	years								
origin of mother	ages	15 years	Total	15 years	16 years	17 years	18 years	19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
Hispanic														
Total	665,026	3,147	115,232	7,924	15,740	23,680	30,538	37,350	205,732	176,031	111,461	44,370	8,686	367
First child	255,654	3,014	86,457	7,334	13,749	18,999	22,151	24,224	90,745	47,473	20,671	6,197	1,047	50
Second child Third child	194,326 115,309	74 2	22,445 4,145	452 23	1,623 108	3,881 427	6,670 1,193	9,819 2,394	70,660 29,792	58,765 40,340	31,239 28,609	9,613 10,718	1,482 1,655	48 48
Fourth child	54,027	-	590	-	8	28	143	411	9,418	17,933	16,674	7,880	1,490	42
Fifth child	22,481	-	78	1	1	5	17	54	2,568	6,718	7,536	4,441	1,078	62
Sixth child	9,586	-	9	-	1	-	3 1	5	610	2,353	3,404	2,497	676	37
Seventh child Eighth child and over	4,296 3,940	-	2	-	-	- 1	1	2	126 52	850 443	1,511 1,185	1,317 1,466	473 730	16 62
Not stated	5,407	57	1,503	114	250	339	359	441	1,761	1,156	632	241	55	2
Mexican	454,536	2,183	82,330	5,568	11,146	16,793	21,820	27,003	148,075	118,987	69,973	27,295	5,450	243
First child	171,161 130,320	2,105 48	61,713 16,185	5,173	9,738	13,438	15,841	17,523	64,185 51,845	29,007	10,612	3,025 4,834	491 717	23 27
Second child Third child	79,809	40	2,902	300 19	1,143 76	2,793 310	4,771 840	7,178 1,657	51,845 21,816	39,238 28,915	17,426 18,872	6,369	908	27 26
Fourth child	39,185	-	395	-	5	14	90	286	6,717	13,405	12,241	5,411	988	28
Fifth child	16,790	-	47	1	1	4	10	31	1,779	5,015	5,742	3,358	805	44
Sixth child	7,385	-	6	-	1	-	1	4	420	1,769	2,678	1,947	535	30
Seventh child	3,316	-	3	-	-	- ,	1	2	85	629	1,158	1,048	381	12
Eighth child and over Not stated	3,139 3,431	29	2 1,077	75	182	1 233	1 265	322	35 1,193	327 682	926 318	1,194 109	604 21	51 2
Puerto Rican	57,240	409	12,867	1,011	1,943	2,820	3,316	3,777	17,821	13,764	8,475	3,316	567	21
First child	22,747	388	9,293	923	1,664	2,181	2,313	2,212	6,869	3,777	1,746	582	84	8
Second child	16,772	12	2,689	75	230	517	768	1,099	5,884	4,440	2,724	888	131	4
Third child	9,536	-	610	2	21	63	176	348	3,075	2,890	1,999	838	119	5
Fourth child	4,310 1,733	-	90 16	-	1	7 1	23 3	59 12	1,207 400	1,417 605	1,005 452	493 211	97 47	1
Sixth child	754	-	1	-	-		-	1	102	276	213	128	34	-
Seventh child	342	-	-	-	-	-	-	-	21	113	124	62	21	1
Eighth child and over	271	-	-	-	-	-	-	-	7	56	109	78	21	-
Not stated	775	9	168	11	27	51	33	46	256	190	103	36	13	-
Cuban	11,889	21	845	45	94	194	219	293	2,347	3,641	3,606	1,185	236	8
First child	5,154	21	715	40	89	180	183	223	1,426	1,610	1,061	273	45	3
Second child Third child	4,191 1,758	-	111	3	5	13 1	28 6	62 7	706 161	1,364 498	1,481 719	445 300	82	2 1
Fourth child	531	-	15 2	1	-	_'	1	1	34	122	227	120	64 25	1
Fifth child	146	-	-	-	-	_		- '	12	27	73	26	8	
Sixth child	43	-	-	-	-	-	-	-	2	9	17	10	5	-
Seventh child	25	-	-	-	-	-	-	-	-	3	13	6	3	-
Eighth child and over	19	-	-	-	-	-	- ,	-	-	4	10	1	3	1
Not stated	22	-	2	1	-	-	1	-	6	4	5	4	1	-
Central and South American	93,485	204	9,563	556	1,149	1,873	2,563	3,422	23,208	27,820	21,274	9,451	1,890	75
First child	37,062	197	7,631	526	1,032	1,611	1,973	2,489	12,147	9,626	5,364	1,745	342	10
Second child	28,605	5	1,563	26	100	227	496	714	7,324	9,698	6,984	2,597	422	12
Third child	16,351	-	267	-	8	23	78	158	2,663	5,430	5,089	2,445	444	13
Fourth child	6,632	-	41	-	-	5	6	30	737	1,977	2,213	1,368	286	10
Fifth child	2,570	-	5	-	-	-	1	4	165	683	899	632	172	14
Sixth child	930	-	1	-	-	-	1	-	31	166	344	303	79	6
Seventh child Eighth child and over	401 350	-	-	-	-	-	-	-	5 4	47 33	147 87	144 146	55 73	3 7
Not stated	584	2	55	4	9	7	8	27	132	160	147	71	17	-
Other and unknown			:						:					
Hispanic	47,876	330	9,627	744	1,408	2,000	2,620	2,855	14,281	11,819	8,133	3,123	543	20
First child	19,530	303	7,105	672	1,226	1,589	1,841	1,777	6,118	3,453	1,888	572	85	6
Second child	14,438	9	1,897	48	145	331	607	766	4,901	4,025	2,624	849	130	3
Third child	7,855	1	351	1	3 2	30 2	93	224	2,077	2,607	1,930	766	120	3 2
Fourth child	3,369 1,242	-	62 10	-			23 3	35 7	723 212	1,012 388	988 370	488 214	94 46	2
Sixth child	474	-	10	-	-	-	3 1	-	55	133	152	109	23	1
Seventh child	212	-	- '	-	-	-		-	15	58	69	57	13	-
Eighth child and over	161	-	-	-	-	-	-	-	6	23	53	47	29	3
Not stated	595	17	201	23	32	48	52	46	174	120	59	21	3	-

See footnotes at end of table.

36 MANUAL Monthly Vital Statistics Report • Vol. 44, No. 11(S) • June 24, 1996

Table 6. Live births by age of mother, live-birth order, Hispanic origin of mother and by race of mother for mothers of non-Hispanic origin: United States, 1994 -Con.

[Live-birth order refers to number of children born alive to mother. Includes births with stated origin of mother only]

	Age of mother													
Live-birth order and origin of mother	All	Under			15-19	years			00.04	05.00	00.04	05.00	10.11	45.40
	ages	15 years	Total	15 years	16 years	17 years	18 years	19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
Non-Hispanic														
Total <sup>1</sup>	3,245,115	9,642	385,647	22,574	46,804	76,717	105,739	133,813	786,203	901,204	784,147	322,323	53,857	2,092
First child	1,346,858 1,058,902 509,952 189,184	9,388 214 9	300,045 68,094 13,185 2,204	21,258 1,148 44 4	42,009 4,195 368 17	64,168 10,675 1,370 129	80,657 20,336 3,665 534	91,953 31,740 7,738 1,520	379,120 259,663 100,415 31,415	350,516 318,517 147,058 51,683	222,747 290,992 163,397 61,851	72,913 106,018 74,447 35,401	11,691 14,990 11,102 6,385	438 414 339 245
Fifth child	69,604 28,813 13,250 14,023	- - -	321 36 5	1 - -	2 - - -	11 3 -	58 8 2 1	249 25 3	9,168 2,510 620 226	18,166 6,969 2,774 1.662	22,888 9,843 4,566 4,147	15,401 7,330 3,913 5,193	3,508 2,014 1,287 2,509	152 111 85 285
Not stated	14,529	31	1,756	119	213	361	478	585	3,066	3,859	3,716	1,707	371	23
White	2,438,855	2,858	232,731	9,625	24,509	45,088	65,975	87,534	556,019	708,577	637,244	257,984	41,917	1,525
First child Second child Third child Fourth child Fifth child Sixth child Seventh child Eighth child and over Not stated	1,028,398 822,478 379,338 128,194 41,438 15,313 6,614 7,127 9,955	2,809 41 - - - - - 8	191,749 34,891 4,589 464 61 5 - 1 971	9,309 264 7 - - - - 45	23,080 1,265 70 3 1 - - - 90	40,177 4,357 324 21 4 - - 205	54,156 10,314 1,115 102 7 1 - 1 279	65,027 18,691 3,073 338 49 4 - - - 352	288,670 186,769 60,913 14,212 2,864 569 106 53 1,863	289,365 258,170 110,907 33,997 9,456 2,717 846 389 2,730	185,099 243,102 133,926 47,110 15,389 5,772 2,317 1,733 2,796	60,633 87,014 60,124 27,382 11,120 4,821 2,456 3,141 1,293	9,719 12,163 8,607 4,840 2,455 1,364 845 1,649 275	354 328 272 189 93 65 44 161
Black	619,198	6,365	137,907	12,048	20,409	28,780	35,695	40,975	192,939	137,891	96,016	40,733	7,115	232
First child	238,491 177,607 104,760 50,407 23,281 10,854 5,156 4,891 3,751	6,178 159 5 - - - - 23	96,841 30,489 7,960 1,603 234 25 5	11,121 821 31 3 1 - - - 71	17,271 2,735 273 10 1 - - - 119	21,626 5,910 983 102 7 3 -	23,482 9,201 2,369 402 44 7 2 -	23,341 11,822 4,304 1,086 181 15 3	71,580 61,979 34,972 15,372 5,658 1,725 460 144 1,049	36,196 43,597 29,202 14,730 7,232 3,492 1,556 1,017 869	20,097 29,209 21,573 11,640 6,072 3,190 1,747 1,813 675	6,523 10,661 9,522 5,986 3,305 1,919 1,086 1,417 314	1,045 1,469 1,492 1,049 751 481 288 472 68	31 44 34 27 29 22 14 28 3

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

Table 7. Birth rates by age of mother, live-birth order, Hispanic origin of mother, and by race of mother for mothers of non-Hispanic origin: United States, 1994

[Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

						Age of	f mother				
Live-birth order and	15-44	10.11		15-19 years		20.24	25.22	20.24	25.20	40.44	45.40
origin of mother	years <sup>1</sup>	10-14 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
Hispanic											
Total	105.6	2.7	107.7	74.0	158.0	188.2	153.2	95.4	44.3	10.7	0.6
First child	40.9	2.7	81.9	63.6	109.2	83.7	41.6	17.8	6.2	1.3	0.1
Second child	31.1	0.1	21.3	9.4	38.8	65.2	51.5	26.9	9.6	1.8	0.1
Third child	18.5	*	3.9	0.9	8.4	27.5	35.3	24.6	10.8	2.0	0.1
Fourth child	8.7	*	0.6	0.1	1.3	8.7	15.7	14.4	7.9	1.8	0.1
Fifth child	3.6	*	0.1	*	0.2	2.4	5.9	6.5	4.5	1.3	0.1
Sixth and seventh child	2.2	*	*	*	*	0.7	2.8	4.2	3.8	1.4	0.1
Eighth child and over	0.6	*	*	*	*	0.0	0.4	1.0	1.5	0.9	0.1
Mexican	115.4	2.8	116.2	78.0	175.0	202.6	165.2	96.9	46.2	11.7	0.7
First child	43.8	2.7	88.2	66.9	121.0	88.5	40.5	14.8	5.1	1.1	0.1
Second child	33.4	0.1	23.1	10.0	43.4	71.5	54.8	24.2	8.2	1.6	0.1
Third child	20.4	*	4.1	1.0	9.1	30.1	40.4	26.3	10.8	2.0	0.1
Fourth child	10.0	*	0.6	*	1.4	9.3	18.7	17.0	9.2	2.1	0.1
Fifth child	4.3	*	0.0	*	0.1	2.5	7.0	8.0	5.7	1.7	0.1
Sixth and seventh child	2.7	*	*	*	V. 1 *	0.7	3.3	5.3	5. <i>1</i>	2.0	0.1
Eighth child and over	0.8	*	*	*	*	0.0	0.5	1.3	2.0	1.3	0.2
Puerto Rican	81.9	3.2	106.0	72.8	168.4	181.0	111.7	62.3	28.0	5.6	0.2
First child	33.0	3.1	77.6	61.1	108.7	70.8	31.1	13.0	5.0	0.8	*
Second child	24.3	*	22.5	10.5	44.8	60.6	36.5	20.3	7.6	1.3	*
Third child	13.8	*	5.1	1.1	12.6	31.7	23.8	14.9	7.2	1.2	*
Fourth child	6.3	*	0.7	*	2.0	12.4	11.7	7.5	4.2	1.0	*
Fifth child	2.5	*	0. <i>1</i> *	*	2.0	4.1	5.0	3.4	1.8	0.5	*
Sixth and seventh child	1.6	*	*	*	*	1.3		2.5		0.5	*
Eighth child and over	0.4	*	*	*	*	1.3	3.2 0.5	2.5 0.8	1.6 0.7	0.6	*
Cuban	55.9	0.6	40.2	23.1	77.4	72.5	98.4	87.6	31.3	5.5	*
First child	24.3	0.6	34.1	21.5	61.5	44.2	43.5	25.8	7.2	1.0	*
Second child	19.7	*	5.3	1.5	13.6	21.9	36.9	36.0	11.8	1.9	*
Third child	8.3	*	*	*	*	5.0	13.5	17.5	7.9	1.5	*
Fourth child	2.5	*	*	*	*	1.1	3.3	5.5	3.2	0.6	*
Fifth child	0.7	*	*	*	*	*	0.7	1.8	0.7	*	*
Sixth and seventh child	0.3	*	*	*	*	*	*	0.7	*	*	*
Eighth child and over	*	*	*	*	*	*	*	*	*	*	*
Other Hispanic <sup>2</sup>	97.7	2.6	87.9	66.4	112.4	162.0	147.4	109.3	49.4	11.9	0.6
First child	39.4	2.5	68.4	58.1	80.2	79.6	49.0	27.2	9.2	2.1	*
Second child	30.0	*	16.1	7.6	25.6	53.3	51.4	36.0	13.6	2.7	*
Third child	16.9	*	2.9	0.6	5.5	20.7	30.1	26.3	12.7	2.8	*
Fourth child	7.0	*	0.5	*	0.9	6.4	11.2	12.0	7.3	1.9	*
Fifth child	2.7	*	*	*	*	1.6	4.0	4.8	3.3	1.1	*
Sixth and seventh child	1.4	*	*	*	*	0.5	1.5	2.7	2.4	0.8	*
Eighth child and over	0.4	*	*	*	*	*	0.2	0.5	0.8	0.5	*
Eighti office and over	0.7						0.2	0.0	0.0	0.0	

See footnotes at end of table.

Table 7. Birth rates by age of mother, live-birth order, Hispanic origin of mother, and by race of mother for mothers of non-Hispanic origin: United States, 1994 -Con.

[Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

						Age of	f mother				
Live-birth order and	15-44	40.44		15-19 years	1	00.04	05.00	00.04	05.00	10.11	45.40
origin of mother	years <sup>1</sup>	10-14 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
Non-Hispanic <sup>3</sup>											
Total <sup>4</sup>	62.0	1.2	52.0	32.5	81.8	100.4	108.6	79.9	32.6	6.0	0.3
First child	25.9	1.2	40.6	28.5	59.2	48.6	42.4	22.8	7.4	1.3	0.1
Second child	20.3	0.0	9.2	3.6	17.9	33.3	38.5	29.8	10.8	1.7	0.1
Third child	9.8	*	1.8	0.4	3.9	12.9	17.8	16.7	7.6	1.2	0.0
Fourth child	3.6	*	0.3	0.0	0.7	4.0	6.3	6.3	3.6	0.7	0.0
Fifth child	1.3	*	0.0	*	0.1	1.2	2.2	2.3	1.6	0.4	0.0
Sixth and seventh child	0.8	*	0.0	*	0.0	0.4	1.2	1.5	1.1	0.4	0.0
Eighth child and over	0.3	*	*	*	*	0.0	0.2	0.4	0.5	0.3	0.0
White	58.3	0.5	40.4	22.8	67.4	90.9	107.9	80.7	32.1	5.7	0.2
First child	24.7	0.5	33.4	21.0	52.5	47.3	44.2	23.6	7.6	1.3	0.1
Second child	19.7	0.0	6.1	1.7	12.8	30.6	39.4	30.9	10.9	1.7	0.1
Third child	9.1	*	0.8	0.1	1.9	10.0	17.0	17.0	7.5	1.2	0.0
Fourth child	3.1	*	0.1	0.0	0.2	2.3	5.2	6.0	3.4	0.7	0.0
Fifth child	1.0	*	0.0	*	0.0	0.5	1.5	2.0	1.4	0.3	0.0
Sixth and seventh child	0.5	*	*	*	*	0.1	0.6	1.0	0.9	0.3	0.0
Eighth child and over	0.2	*	*	*	*	0.0	0.1	0.2	0.4	0.2	0.0
Black	79.0	4.7	107.7	78.6	152.9	150.3	107.0	67.5	29.5	6.0	0.3
First child	30.6	4.6	76.1	64.6	93.9	56.1	28.3	14.2	4.8	0.9	0.0
Second child	22.8	0.1	23.9	12.2	42.2	48.6	34.0	20.7	7.8	1.3	0.1
Third child	13.4	*	6.2	1.7	13.4	27.4	22.8	15.3	6.9	1.3	0.0
Fourth child	6.5	*	1.3	0.1	3.0	12.0	11.5	8.3	4.4	0.9	0.0
Fifth child	3.0	*	0.2	*	0.4	4.4	5.6	4.3	2.4	0.6	0.0
Sixth and seventh child	2.1	*	0.0	*	0.1	1.7	3.9	3.5	2.2	0.7	0.0
Eighth child and over	0.6	*	*	*	*	0.1	0.8	1.3	1.0	0.4	0.0

<sup>1</sup> Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

<sup>2</sup> Includes Central and South American and other and unknown Hispanic.

<sup>3</sup> Includes origin not stated.

<sup>4</sup> Includes races other than white and black.

Table 8. Live births by race of mother, birth rates, and fertility rates: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1994

[By place of residence. Birth rates per 1,000 estimated population in each area; fertility rates per 1,000 women aged 15-44 years estimated in each area]

			Number				
State	All races	White	Black	American Indian <sup>1</sup>	Asian or Pacific Islander	Birth rate	Fertility rate
United States <sup>2</sup>	3,952,767	3,121,004	636,391	37,740	157,632	15.2	66.7
Alahama	60 030	20,600	20.640	00	F10	111	62.0
AlabamaAlaska	60,939 10,678	39,690 7,440	20,649 499	90 2,318	510 421	14.4 17.6	62.9 75.2
Arizona	70,846	61,570	2,485	5,518	1,273	17.0	79.7
Arkansas	34,718	26,378	7,836	201	303	14.2	64.9
California	567,930	462.719	42,807	3,355	59,049	18.1	78.3
Colorado	54,071	49,292	2,773	505	1,501	14.8	63.3
Connecticut	45,655	38,520	5,735	163	1,237	13.9	62.1
Delaware	10,411	7,774	2,396	25	216	14.7	62.7
District of Columbia	9,930	1,481	8,032	7	410	17.4	68.5
Florida	190,654	143,449	43,267	487	3,451	13.7	65.8
Georgia	111,011	69,641	39,070	142	2,158	15.7	64.9
Hawaii	19,517	5,435	627	188	13,267	16.6	74.7
Idaho	17,526	16,952	62	284	228	15.5	70.3
Illinois	189,257	142,348	40,971	220	5,718	16.1	70.5
Indiana	82,595	72,711	8,978	97	809	14.4	62.4
lowa	37,079	35,226	1,055	176	622	13.1	60.8
Kansas	37,379	33,180	3,142	313	744	14.6	66.7
Kentucky	52,983	47,641	4,895	49	398	13.8	60.1
Louisiana	67,817	37,925	28,645	266	981 456	15.7	67.6
Maine	14,441	14,118	77	90	156	11.6	51.4
Maryland	73,971	46,497	24,615	182	2,677	14.8	61.9
Massachusetts	83,787	72,107	8,121	150	3,409	13.9	59.3
Michigan	138,028	107,783	27,175	843	2,227	14.5	63.1
Minnesota	64,305	57,617	3,015	1,142	2,531	14.1	61.9
Mississippi	41,954	21,541	19,955	156	302	15.7	68.2
Missouri	73,543	60,489	11,875	235	944	13.9	62.6
Montana	11,067	9,733	32	1,205	97	12.9	60.9
Nebraska	23,156 23,911	21,148 20,429	1,273 2,079	376 385	359	14.3	64.9 74.5
New Hampshire	15,106	14,840	104	20	1,018 142	16.4 13.3	56.2
New Jersey	117,501	88,343	23,185	469	5,504	14.9	65.9
New Mexico	27,591	23,053	521	3,646	371	16.7	74.8
New York	278,392	204,271	58,901	631	14,589	15.3	66.8
North Carolina	101,420	70,295	27,882	1,554	1,689	14.3	62.1
North Dakota	8,584	7,700	68	703	113	13.5	62.6
Ohio	155,944	130,279	23,615	239	1,811	14.0	61.8
Oklahoma	45,703	35,812	4,769	4,370	752	14.0	64.6
Oregon	41,837	38,819	947	624	1,447	13.6	61.3
Pennsylvania	157,071	130,326	23,397	218	3,130	13.0	59.6
Rhode Island	13,466	11,839	1,085	113	429	13.5	59.6
South Carolina	52,043	32,016	19,409	109	509	14.2	60.6
South Dakota	10,507	8,777	76	1,535	119	14.6	68.6
Tennessee	73,191	55,613	16,603	153	822	14.1	61.4
Texas	321,114	272,308	40,276	703	7,827	17.5	75.0
Utah	38,279	36,333	287	654	1,005	20.1	85.9
Vermont	7,377	7,263	27	10	77	12.7	54.6
Virginia	95,039 77,359	69,315	22,331	141	3,252	14.5	60.5
Washington	77,358	67,600 20,451	3,065 798	1,681 13	5,012 113	14.5 11.7	62.9 53.3
West Virginia	21,375 68,282	20,451 58,813	6,843	779	1,847	13.4	53.3 59.9
Wyoming	6,428	6,104	6,643	207	1,847	13.4	61.2
Puerto Rico	<sup>3</sup> 64,213	50.062	4,040				
Virgin Islands	2,396	59,962 368	4,040 2,001	8	19		
Guam	4,410	538	73	4	1,912		
	1, 1.15			T	1,012		

Includes births to Aleuts and Eskimos.
 Excludes data for Puerto Rico, Virgin Islands, and Guam.
 Includes races other than white and black.

Table 9. Live births by Hispanic origin of mother and by race of mother for mothers of non-Hispanic origin: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1994

[By place of residence]

					(	Origin of mo	ther				
				Hispa	anic			Ν	on-Hispanic		
State	All origins	Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>1</sup>	White	Black	Not stated
United States <sup>2</sup>	3,952,767	665,026	454,536	57,240	11,889	93,485	47,876	3,245,115	2,438,855	619,198	42,626
Alabama	60.939	579	337	60	15	92	75	60,320	39,132	20,615	40
Alaska	10,678	580	200	58	4	42	276	9,905	6,897	461	193
Arizona	70,846	24,135	23,194	190	41	507	203	45,135	36,597	2,322	1,576
Arkansas	34,718	782	650	32	6	63	31	33,893	25,594	7,806	43
California	567,930	257,750	219,046	2,064	837	28,508	7,295	306,435	204,476	41,510	3,745
Colorado	54,071	10,667	6,695	154	34	211	3,573	43,391	38,930	2,679	13
Connecticut	45,655	5,297	267	3,786	53	908	283	37,751	31,684	4,836	2,607
Delaware District of Columbia	10,411 9,930	526 850	204 40	204 11	8	93 751	17 48	9,870 9,040	7,324 1,260	2,315 7,618	15 40
	•								•		
Florida	190,654	32,895	6,179	5,866	8,032	11,179	1,639	157,640	111,500	42,299	119
Georgia	111,011	4,363	3,028	356 663	90	625	264	106,400	65,309	38,852	248
HawaiiIdaho	19,517 17,526	2,176 1,978	418 1,695	663 10	10 2	60 45	1,025 226	17,334 15,512	4,728 14,972	601 59	7 36
Illinois	189,257	30,350	24,086	3,068	189	863	2,144	158,799	112,066	40,798	108
Indiana	82,595	2,324	1,759	253	20	105	187	80,004	70,172	8,941	267
lowa	37,079	1,060	843	23	7	39	148	35,985	34,177	1,047	34
Kansas	37,379	2,694	2,224	75	18	109	268	34,321	30,194	3,102	364
Kentucky	52,983	466	285	70	14	52	45	52,479	47,179	4,876	38
Louisiana	67,817	1,413	401	385	60	159	408	66,340	36,808	28,432	64
Maine	14,441	107	30	19	2	10	46	14,124	13,819	69	210
Maryland	73,971	3,090	560	290	54	1,797	389	70,319	44,019	23,641	562
Massachusetts	83,787	8,435	260	4,563	95	3,133	384	75,033	64,821	6,667	319
Michigan	138,028	4,454	2,827	415	57	223	932	127,222	97,473	26,876	6,352
Minnesota	64,305	1,661	1,150	55	12	117	327	57,784	52,141	2,554	4,860
Mississippi	41,954	182	86 909	16 56	1 17	19 125	60 117	41,757	21,347	19,953 11,813	15
Missouri Montana	73,543 11,067	1,224 250	158	6	2	7	117 77	72,253 10,457	59,289 9,172	24	66 360
Nebraska	23,156	1,382	1,105	11	4	79	183	21,393	19,399	1,265	381
Nevada	23,911	5,227	4,270	112	96	492	257	18,619	15,231	2,042	65
New Hampshire	15,106	187	39	74	5	22	47	14,090	13,848	87	829
New Jersey	117,501	18,083	1,782	7,877	877	7,334	213	99,215	71,802	21.546	203
New Mexico	27,591	12,984	4,331	47	83	53	8,470	14,601	10,185	505	6
New York	278,392	53,216	5,504	17,543	488	23,551	6,130	212,247	144,340	53,155	12,929
North Carolina	101,420	3,135	2,063	358	73	411	230	98,260	67,272	27,807	25
North Dakota	8,584	116	63	4	1	9	39	8,392	7,513	67	76
Ohio	155,944	2,717	1,269	1,047	43	155	203	152,952	127,425	23,505	275
Oklahoma	45,703	2,260	1,664	130	7	51	408	43,381	33,595	4,734	62
Oregon	41,837	4,357	4,012	44	16 94	166 635	119 539	37,450 150,492	34,499	931	30 291
PennsylvaniaRhode Island	157,071 13,466	6,288 1,623	635 77	4,385 529	13	899	105	10,682	124,230 9,231	22,956 946	1,161
	52.042	•	240	115	24		00		•		•
South CarolinaSouth Dakota	52,043 10,507	643 124	318 102	115 3	24 2	87 8	99 9	51,357 10,377	31,397 8,661	19,380 76	43 6
Tennessee	73,191	845	516	108	27	87	107	72,319	54,783	16,576	27
Texas	321,114	133,125	117,586	888	229	6,113	8,309	187,415	139,105	39,907	574
Utah	38,279	2,704	1,876	61	12	362	393	35,538	33,714	201	37
Vermont	7,377	38	12	12	1	5	8	6,864	6,758	25	475
Virginia	95,039	4,609	858	445	70	2,708	528	90,323	64,824	22,176	107
Washington	77,358	8,108	6,853	177	27	249	802	66,599	57,511	2,880	2,651
West Virginia	21,375	106	34	11	1	7	53	21,260	20,377	794	9
Wisconsin	68,282	2,401	1,641	502	15	156	87	65,823	56,419	6,814	58
Wyoming	6,428	460	395	9	1	4	51	5,963	5,656	57	5
Puerto Rico	64,213										64,213
Virgin Islands	2,396	405	55	198	2	81	69	1,899	139	1,738	92
Guam	4,410	66	44	10	-	3	9	4,294	486	72	50

Includes races other than white and black.
 Excludes data for Puerto Rico, Virgin Islands, and Guam.

Table 10. Total number of births, rates, and percent of births with selected demographic characteristics, by specified race of mother: United States, 1994

Q1	All	140.5	D/ /	American			Asian or Pa	cific Islander		
Characteristic	races	White	Black	Indian <sup>1</sup>	Total	Chinese	Japanese	Hawaiian	Filipino	Other
					Nur	nber				
Births	3,952,767	3,121,004	636,391	37,740	157,632	26,578	9,230	5,955	30,495	85,374
					Ra	ate				
Birth rate <sup>2</sup> Fertility rate <sup>3</sup> Total fertility rate <sup>4</sup>	15.2 66.7 2,036.0	14.4 64.9 1,985.0	19.5 76.9 2,300.0	17.1 70.9 2,080.0	17.5 66.8 1,943.0	 	  	 	 	  
Sex Ratio <sup>5</sup>	1,048	1,051	1,028	1,031	1,064	1,093	1,048	1,034	1,051	1,064
					Per	cent				
Births to mothers under 20 years	13.1	11.3	23.2	21.0	5.7	1.0	2.8	19.6	6.0	6.4
Fourth- and higher-order births Births to unmarried mothers	10.5 32.6	9.5 25.4	15.3 70.4	20.6 57.0	9.5 16.2	2.8 7.2	4.2 11.2	15.2 48.6	7.2 18.5	12.7 16.4
Mothers completing 12 years or more of school	77.1	78.3	70.7	66.0	82.6	86.3	97.2	81.5	91.1	76.7
and D.C	81.5	82.9	90.4	95.7	15.5	8.7	46.6	97.1	15.1	8.7

<sup>1</sup> Includes births to Aleuts and Eskimos.
2 Rate per 1,000 population.
3 Rate per 1,000 women aged 15-44 years.
4 Rates are sums of birth rates for 5-year age groups multiplied by 5.
5 Male live births per 1,000 female live births.

Table 11. Total number of births, rates, and percent of births with selected demographic characteristics, by Hispanic origin of mother and by race of mother for mothers of non-Hispanic origin: United States, 1994

				Hispa	anic				Non-Hispanic	:
Characteristic	All origins <sup>1</sup>	Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
					Nui	mber				
Births	3,952,767	665,026	454,536	57,240	11,889	93,485	47,876	3,245,115	2,438,855	619,198
					R	ate				
Birth rate <sup>3</sup>	15.2 66.7 2,036.0	25.5 105.6 3,014.0	27.0 115.4 3,211.5	21.4 81.9 2,490.0	10.8 55.9 1,680.5	<sup>7</sup> 25.7 <sup>7</sup> 97.7 <sup>7</sup> 2,855.5		14.0 62.0 1,905.0	12.8 58.3 1,792.0	20.0 79.0 2,365.0
Sex Ratio <sup>6</sup>	1,048	1,041	1,040	1,042	1,021	1,045	1,038	1,050	1,054	1,029
					Pe	rcent				
Births to mothers under 20 years Fourth- and higher-order births Births to unmarried mothers	13.1 10.5 32.6	17.8 14.3 43.1	18.6 15.5 40.8	23.2 13.1 60.2	7.3 6.4 22.9	10.4 11.7 45.9	20.8 11.5 43.5	12.2 9.7 30.5	9.7 8.2 20.8	23.3 15.4 70.7
Mothers completing 12 years or more of school	77.1	47.3	40.5	60.4	85.0	58.0	66.1	83.1	86.5	70.9
and D.C	81.5	37.3	37.0	59.8	34.6	6.7	74.4	90.5	94.9	91.6

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

Includes origin not stated.

Includes races other than white and black.

Rate per 1,000 population.

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

<sup>5</sup> Rates are sums of birth rates for 5-year age groups multiplied by 5.

Male live births per 1,000 female live births.

Includes Central and South American and other and unknown Hispanic.

Table 12. Live births by race of mother and observed and seasonally adjusted birth and fertility rates, by month: United **States, 1994** 

[Rates on an annual basis per 1,000 population for specified month. Birth rates based on the total population. Fertility rates based on women aged 15-44 years]

Marit		Number		Obs	served	Seasonall	y adjusted <sup>1</sup>
Month	All races <sup>2</sup>	White	Black	Birth rate	Fertility rate	Birth rate	Fertility rate
Total	3,952,767	3,121,004	636,391	15.2	66.7		
January	320,705	248,719	56,076	14.6	63.8	15.3	66.9
February	301,327	235,632	50,869	15.1	66.4	15.4	67.6
March	339,736	268,831	54,365	15.4	67.6	15.6	68.3
April	317,392	253,202	48,505	14.9	65.2	15.0	65.9
May	330,295	263,865	50,005	15.0	65.6	15.1	66.3
June	329,737	262,277	51,183	15.4	67.7	15.1	66.5
July	345,862	273,171	56,039	15.6	68.7	15.1	66.2
August	352,173	278,347	56,852	15.9	69.9	15.2	66.9
September	339,223	268,085	54,528	15.8	69.6	15.0	66.2
October	330,172	260,862	52,795	14.9	65.5	15.0	66.0
November	319,397	251,561	51,297	14.9	65.5	15.4	67.7
December	326,748	256,452	53,877	14.7	64.8	15.0	66.0

<sup>1</sup> The method of seasonal adjustment, developed by the U.S. Bureau of the Census, is described in The X11 Variant of the Census Method II Seasonal Adjustment Program, Technical Paper No. 15 (1967 revision).
Includes races other than white and black.

Table 13. Live births by day of week and index of occurrence by method of delivery, day of week, and race of mother: United States, 1994

			In	dex of occurrenc	re <sup>1</sup>	
Day of week and	Average number			Method	of delivery	
race of mother	of births	Total <sup>2</sup>	Varinal		Cesarean	
			Vaginal	Total	Primary	Repeat
I races <sup>3</sup>	10,829	100.0	100.0	100.0	100.0	100.0
unday	8,245	76.1	81.6	55.9	66.2	38.6
onday	10,936	101.0	99.9	105.0	97.5	117.7
uesday	12,131	112.0	109.7	120.3	116.4	126.8
ednesday	11,908	110.0	108.1	116.8	113.9	121.7
nursday	11,845	109.4	107.6	116.1	113.0	121.2
iday	11,820	109.1	105.9	120.8	115.4	129.8
aturday	8,957	82.7	87.4	65.8	78.0	45.2
hite	8,551	100.0	100.0	100.0	100.0	100.0
unday	6,340	74.1	79.8	53.5	64.3	35.8
onday	8,675	101.5	100.3	105.8	98.0	118.6
uesday	9,661	113.0	110.6	121.6	117.5	128.3
ednesday	9,475	110.8	109.0	117.7	114.7	122.6
nursday	9,424	110.2	108.4	116.8	113.8	121.7
iday	9,395	109.9	106.4	122.3	116.3	132.0
aturday	6,916	80.9	85.8	63.1	75.9	42.1
ack	1,744	100.0	100.0	100.0	100.0	100.0
ınday	1,457	83.6	88.6	65.7	73.9	50.9
onday	1,724	98.9	98.0	102.0	95.7	113.4
esday	1,894	108.6	106.8	115.0	111.9	120.5
ednesday	1,862	106.8	104.9	113.8	111.3	118.2
ursday	1,853	106.3	104.6	112.6	109.2	118.7
iday	1,856	106.5	103.9	115.4	112.5	120.7
aturday	1,562	89.6	93.4	76.0	85.8	58.6

Index is the ratio of the average number of births by a specified method of delivery on a given day of the week to the average daily number of births by a specified method of delivery for the year, multiplied by 100.
 Includes method of delivery not stated.
 Includes races other than white and black.

Monthly Vital Statistics Report • Vol. 44, No. 11(S) • June 24, 1996

Table 14. Number, rate, and ratio of births to unmarried women by age, race, and Hispanic origin of mother: United States, 1994

Ago of mother		Nun	nber			ate per 1,0 romen in s <sub>i</sub>			Ratio per 1,000 live births				
Age of mother	All races 1	White	Black	Hispanic <sup>2</sup>	All races 1	White	Black	Hispanic <sup>2</sup>	All races 1	White	Black	Hispanic <sup>2</sup>	
All ages	1,289,592	794,261	448,315	286,469	<sup>3</sup> 46.9	<sup>3</sup> 38.3	<sup>3</sup> 82.1	<sup>3</sup> 101.2	326.3	254.5	704.5	430.8	
Under 15 years	12,186	5,407	6,404	2,805					944.6	904.5	990.6	891.3	
15-19 years	381,499	235,263	134,371	80,319	46.4	36.2	100.9	82.6	754.7	675.9	953.2	697.0	
15 years	27,898	14,915	12,154	6,613 )	1				907.5	855.1	988.4	834.6	
16 years	54,210	32,107	20,428	12,366	32.0	24.1	75.1	59.0	858.8	798.7	979.6	785.6	
17 years	82,027	50,947	28,592	17,468					809.7	741.1	972.1	737.7	
18 years	102,862	64,912	34,770	20,889	70.1	56.4	141.6	123.6	747.8	671.9	952.9	684.0	
19 years	114,502	72,382	38,427	22,983					662.7	578.6	916.8	615.3	
20-24 years	449,246	277,364	156,304	96,594	72.2	58.1	138.1	154.8	448.6	363.0	790.0	469.5	
25-29 years	237,636	146,527	81,599	58,474	59.0	49.7	93.6	141.6	218.2	164.7	573.2	332.2	
30-34 years	136,991	83,870	47,044	31,899	40.1	34.2	57.2	95.5	151.1	111.1	474.4	286.2	
35-39 years	59,701	37,594	19,242	13,437	19.8	17.3	26.3	48.4	160.7	123.1	457.8	302.8	
40 years and over	12,333	8,236	3,351	2,941	<sup>4</sup> 4.7	<sup>4</sup> 4.3	<sup>4</sup> 5.9	<sup>4</sup> 14.0	186.8	155.1	442.2	324.9	

NOTE: For 45 States and the District of Columbia, marital status of mother is reported on the birth certificate; for 5 States, mother's marital status is inferred; see Technical

Includes races other than white and black.
 Persons of Hispanic origin may be of any race.
 Rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.
 Rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40-44 years.

Table 15. Birth rates for unmarried women by age of mother and race: United States, 1970, 1975, and 1980-94

[Rates are live births to unmarried women per 1,000 unmarried women in specified group, estimated as of July 1]

				,	Age of Mothe	er			
Year and race	15-44		15-19 years		20-24	25-29	30-34	35-39	40-44
	years <sup>1</sup>	Total	15-17 years	18-19 years	years	years	years	years	years <sup>2</sup>
All races <sup>3</sup>									
994 4	46.9	46.4	32.0	70.1	72.2	59.0	40.1	19.8	4.7
993 4	45.3	44.5	30.6	66.9	69.2	57.1	38.5	19.0	4.4
992 <sup>4</sup>	45.2	44.6	30.4	67.3	68.5	56.5	37.9	18.8	4.1
991 <sup>4</sup>	45.2	44.8	30.9	65.7	68.0	56.5	38.1	18.0	3.8
990 <sup>4</sup>	43.8	42.5	29.6	60.7	65.1	56.0	37.6	17.3	3.6
989 4	41.6	40.1	28.7	56.0	61.2	52.8	34.9	16.0	3.4
988 <sup>4</sup>	38.5	36.4	26.4	51.5	56.0	48.5	32.0	15.0	3.2
987 <sup>4</sup>	36.0	33.8	24.5	48.9	52.6	44.5	29.6	13.5	2.9
986 <sup>4</sup>	34.2	32.3	22.8	48.0	49.3	42.2	27.2	12.2	2.7
985 4	32.8	31.4	22.4	45.9	46.5	39.9	25.2	11.6	2.5
984 4, 5	31.0	30.0	21.9	42.5	43.0	37.1	23.3	10.9	2.5
983 4, 5	30.3	29.5	22.0	40.7	41.8	35.5	22.4	10.2	2.6
982 4, 5	30.0	28.7	21.5	39.6	41.5	35.1	21.9	10.0	2.7
981 <sup>4, 5</sup>	29.5	27.9	20.9	39.0	41.1	34.5	20.8	9.8	2.6
980 4, 5	29.4	27.6	20.6	39.0	40.9	34.0	21.1	9.7	2.6
980 5, 6	28.4	27.5	20.7	38.7	39.7	31.4	18.5	8.4	2.3
975 <sup>5, 6</sup>	24.5	23.9	19.3	32.5	31.2	27.5	17.9	9.1	2.6
970 6, 7	26.4	22.4	17.1	32.9	38.4	37.0	27.1	13.6	3.5
White									
Race of mother:									
994 4	38.3	36.2	24.1	56.4	58.1	49.7	34.2	17.3	4.3
993 4	35.9	33.6	22.1	52.4	54.2	46.7	32.2	16.4	3.9
992 4	35.2	33.0	21.6	51.5	52.7	45.4	31.5	16.2	3.6
991 4	34.6	32.8	21.8	49.6	51.5	44.6	31.1	15.2	3.2
990 4	32.9	30.6	20.4	44.9	48.2	43.0	29.9	14.5	3.2
989 4	30.2	28.0	19.3	40.2	43.8	39.1	26.8	13.1	2.9
988 <sup>4</sup>	27.4	25.3	17.6	36.8	39.2	35.4	24.2	12.1	2.7
987 4	25.3	23.2	16.2	34.5	36.6	32.0	22.3	10.7	2.4
986 <sup>4</sup>	23.9	21.8	14.9	33.5	34.2	30.5	20.1	9.7	2.2
985 <sup>4</sup>	22.5	20.8	14.5	31.2	31.7	28.5	18.4	9.0	2.0
984 4, 5	20.6	19.3	13.7	27.9	28.5	25.5	16.8	8.4	2.0
983 4, 5	19.8	18.7	13.6	26.4	27.1	23.8	15.9	7.8	2.0
982 4, 5	19.3	18.0	13.1	25.3	26.5	23.1	15.3	7.4	2.1
981 4, 5	18.6	17.2	12.6	24.6	25.8	22.3	14.2	7.2	1.9
980 4, 5	18.1	16.5	12.0	24.1	25.1	21.5	14.1	7.1	1.8
Race of child:									
980 5, 6	16.2	15.9	11.7	22.8	22.4	17.3	10.5	5.3	1.4
975 5, 6	12.4	12.0	9.6	16.5	15.5	14.8	9.8	5.4	1.5
970 6, 7	13.9	10.9	7.5	17.6	22.5	21.1	14.2	7.6	2.0

See footnotes at end of table.

Table 15. Birth rates for unmarried women by age of mother and race: United States, 1970, 1975, and 1980-94-Con.

[Rates are live births to unmarried women per 1,000 unmarried women in specified group, estimated as of July 1]

				,	Age of Mothe	r			
Year and race	45.44		15-19 years			05.00	00.04	25.22	40.44
	15-44 years <sup>1</sup>	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years <sup>2</sup>
Black									
Race of mother:									
994 4	82.1	100.9	75.1	141.6	138.1	93.6	57.2	26.3	5.9
993 4	84.0	102.4	76.8	141.6	142.2	94.5	57.3	25.9	5.8
992 4	86.5	105.9	78.0	147.8	144.3	98.2	57.7	25.8	5.4
991 <sup>4</sup>	89.5	108.5	80.4	148.7	147.5	100.9	60.1	25.6	5.4
990 4	90.5	106.0	78.8	143.7	144.8	105.3	61.5	25.5	5.1
989 4	90.7	104.5	78.9	140.9	142.4	102.9	60.5	24.9	5.0
988 <sup>4</sup>	86.5	96.1	73.5	130.5	133.6	97.2	57.4	24.1	5.0
987 <sup>4</sup>	82.6	90.9	69.9	123.0	126.1	91.6	53.1	22.4	4.7
986 <sup>4</sup>	79.0	88.5	67.0	121.1	118.0	84.6	50.0	20.6	4.4
985 <sup>4</sup>	77.0	87.6	66.8	117.9	113.1	79.3	47.5	20.4	4.3
984 <sup>4, 5</sup>	75.2	86.1	66.5	113.6	107.9	77.8	43.8	19.4	4.3
983 4, 5	76.2	85.5	66.8	111.9	107.2	79.7	43.8	19.4	4.8
982 <sup>4, 5</sup>	77.9	85.1	66.3	112.7	109.3	82.7	44.1	19.5	5.2
981 <sup>4, 5</sup>	79.4	85.0	65.9	114.2	110.7	83.1	45.5	19.6	5.6
980 <sup>4, 5</sup>	81.1	87.9	68.8	118.2	112.3	81.4	46.7	19.0	5.5
Race of child:									
980 5, 6	83.2	90.3	70.6	121.8	116.0	82.9	47.0	18.5	5.5
975 5, 6	84.2	93.5	76.8	123.8	108.0	75.7	50.0	20.5	7.2
970 6, 7	95.5	96.9	77.9	136.4	131.5	100.9	71.8	32.9	10.4

<sup>1</sup> Rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.

<sup>2</sup> Rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40-44 years.

<sup>3</sup> Includes races other than white and black.

<sup>4</sup> Data for States in which marital status was not reported have been inferred and included with data from the remaining States; see Technical notes.

<sup>5</sup> Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

<sup>6</sup> Births to unmarried women are estimated for the United States from data for registration areas in which marital status of mother was reported; see Technical notes.

<sup>7</sup> Based on a 50-percent sample of births.

Table 16. Number and percent of births to unmarried women and number and percent of births of low birthweight, by race of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1994

[By place of residence]

		Births to	unmarried	women 1				Lo	w birthweig	ıht <sup>2</sup>		
State		Number			Percent			Number			Percent	
	All races 3	White	Black	All races 3	White	Black	All races 3	White	Black	All races <sup>3</sup>	White	Black
United States <sup>4</sup>	1,289,592	794,261	448,315	32.6	25.4	70.4	287,607	190,388	84,095	7.3	6.1	13.2
Alabama	21,003	6,229	14,677	34.5	15.7	71.1	5,504	2,721	2,733	9.0	6.9	13.2
Alaska	3,125	1,588	194	29.3	21.3	38.9	588	372	53	5.5	5.0	10.7
Arizona	27,162	21,615	1,616	38.3	35.1	65.0	4,797	4,050	317	6.8	6.6	12.8
Arkansas	11,310	5,365	5,828	32.6	20.3	74.4	2,833	1,799	999	8.2	6.8	12.8
California	202,803	166,220	27,040	35.7	35.9	63.2	34,937	25,562	5,335	6.2	5.5	12.5
Colorado	13,510	11,409	1,574	25.0	23.1	56.8	4,617	3,991	428	8.5	8.1	15.5
Connecticut	13,914	9,394	4,035	30.5	24.4	70.4	3,146	2,305	727	6.9	6.0	12.7
Delaware	3,614	1,803	1,779	34.7	23.2	74.2	770	469	278	7.4	6.0	11.6
District of Columbia	6,831	221	6,401	68.8	14.9	79.7	1,403	79	1,294	14.2	5.3	16.1
Florida	68,127	37,513	29,892	35.7	26.2	69.1	14,753	9,055	5,394	7.7	6.3	12.5
Georgia	39,429	12,591	26,514	35.5	18.1	67.9	9,557	4,410	5,002	8.6	6.3	12.8
Hawaii	5,533	892	125	28.3	16.4	19.9	1,369	310	74	7.2	5.8	11.9
Idaho	3,273	3,080	25	18.7	18.2	40.3	958	927		5.5	5.5	
Illinois	64,933	32,034	32,387	34.3	22.5	79.0	14,931	8,421	6,048	7.9	5.9	14.8
Indiana	26,044	18,914	7,014	31.5	26.0	78.1	5,638	4,490	1,106	6.8	6.2	12.4
lowa	9,211	8,205	790	24.8	23.3	74.9	2,172	1,980	139	5.9	5.6	13.2
Kansas	9,709	7,343	2,086	26.0	22.1	66.4	2,417	1,966	394	6.5	5.9	12.5
Kentucky	14,646	11,005	3,567	27.6	23.1	72.9	4,056	3,429	607	7.7	7.2	12.4
Louisiana	28,918	7,865	20,746	42.6	20.7	72.4	6,521	2,424	4,024	9.6	6.4	14.1
Maine	4,067	3,943	36	28.2	27.9	46.8	822	810	2	5.7	5.8	*
Maryland	24,943	8,897	15,643	33.7	19.1	63.6	6,260	2,874	3,194	8.5	6.2	13.0
Massachusetts	22,291	16,378	5,079	26.6	22.7	62.5	5,332	4,206	891	6.4	5.8	11.0
Michigan	48,339	26,255	21,425	35.0	24.4	78.8	10,708	6,610	3,885	7.8	6.1	14.4
Minnesota	15,430	11,789	2,206	24.0	20.5	73.2	3,634	2,999	373	5.7	5.2	12.4
Mississippi	19,067	3,973	14,945	45.4	18.4	74.9	4,133	1,451	2,647	9.9	6.7	13.3
Missouri	23,913	14,337	9,331	32.5	23.7	78.6	5,569	3,882	1,596	7.6	6.4	13.5
Montana	2,822	1,987	9	25.5	20.4	*	691	610	-	6.2	6.3	*
Nebraska	5,739	4,461	940	24.8	21.1	73.8	1,416	1,206	164	6.1	5.7	12.9
Nevada	8,359	6,418	1,456	35.0	31.4	70.0	1,808	1,408	295	7.6	6.9	14.2
New Hampshire	3,338	3,284	35	22.1	22.1	33.7	772	754	4	5.1	5.1	*
New Jersey	33,043	16,990	15,536	28.1	19.2	67.0	8,900	5,355	3,131	7.6	6.1	13.5
New Mexico	11,496	8,569	318	41.7	37.2	61.0	2,018	1,716	47	7.3	7.5	9.1
New York	104,732	60,124	41,329	37.6	29.4	70.2	21,086	12,584	7,426	7.6	6.2	12.6
North Carolina	32,321	12,408	18,872	31.9	17.7	67.7	8,784	4,730	3,790	8.7	6.7	13.6
North Dakota	1,971	1,444	16	23.0	18.8	*	465	391	3	5.4	5.1	*
Ohio	51,363	32,756	18,322	32.9	25.1	77.6	11,622	8,286	3,201	7.5	6.4	13.6
Oklahoma	13,616	8,277	3,340	29.8	23.1	70.0	3,206	2,336	578	7.0	6.6	12.2
Oregon	12,012	10,709	676	28.7	27.6	71.4	2,214	1,998	96	5.3	5.1	10.2
Pennsylvania	51,518	32,318	18,563	32.8	24.8	79.3	11,630	8,029	3,344	7.4	6.2	14.4
Rhode Island	4,327	3,360	753	32.1	28.4	69.4	864	703	124	6.5	6.0	11.6
South Carolina	19,172	5,992	13,084	36.8	18.7	67.4	4,761	2,149	2,568	9.2	6.7	13.2
South Dakota	2,914	1,787	16	27.7	20.4	*	615	493	7	5.9	5.6	*
Tennessee	24,480	11,916	12,391	33.4	21.4	74.6	6,444	3,965	2,424	8.8	7.1	14.6
Texas	92,721	66,187	25,354	28.9	24.3	63.0	22,486	16,765	5,150	7.0	6.2	12.8
Utah	6,005	5,383	130	15.7	14.8	45.3	2,248	2,132	29	5.9	5.9	10.1
Vermont	1,864	1,837	9	25.3	25.3	*	439	428	4	6.0	5.9	*
Virginia	27,760	13,085	14,268	29.2	18.9	63.9	7,124	4,124	2,775	7.5	6.0	12.5
Washington	20,090	16,427	1,692	26.0	24.3	55.2	4,080	3,378	308	5.3	5.0	10.1
West Virginia	6,454	5,836	603	30.2	28.5	75.6	1,596	1,490	96	7.5	7.3	12.0
Wisconsin	18,565	12,245	5,620	27.2	20.8	82.1	4,349	3,232	978	6.4	5.5	14.3
Wyoming	1,765	1,603	28	27.5	26.3	45.9	564	534	10	8.8	8.8	*
Puerto Rico	26,891	24,476	2,311	41.9	40.8	57.2	6,353	5,899	437	9.9	9.8	10.8
Virgin Islands	1,597	166	1,422	66.7	45.4	71.1	201	34	162	8.4	9.2	8.1
Guam	2,054	86	17	46.6	16.0	*	285	18	5	6.5	*	*

For 45 States and the District of Columbia, marital status of mother is reported on the birth certificate; for 5 States, mother's marital status is inferred, see Technical notes. For 45 States and the District of Columbia, Market 2
Less than 2,500 grams (5 lb 8 oz).

Includes races other than white and black.
Excludes data for Puerto Rico, Virgin Islands, and Guam.

Table 17. Birth rates by age and race of father: United States, 1980-94

[Rates are live births per 1,000 men in specified group, enumerated as of April 1 for 1980 and 1990 and estimated as of July 1 for all other years. Figures for age of father not stated are distributed]

Voor and rose of	1E E 1					Age of father				
Year and race of father	15-54 years <sup>1</sup>	15-19 years <sup>2</sup>	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55 years
All races 3										
994	53.2	25.0	87.3	108.8	93.3	50.9	20.2	7.2	2.6	0.3
1993	54.4	24.8	87.1	110.8	93.5	51.1	20.2	7.3	2.7	0.4
1992	55.8	24.6	87.7	113.1	94.2	51.3	20.4	7.3	2.7	0.4
1991	57.1	24.8	88.0	114.7	95.1	51.8	20.2	7.5	2.7	0.4
990	58.4	23.5	88.0	116.4	97.8	53.0	21.0	7.5	2.8	0.4
989	57.2	21.9	85.4	114.3	94.8	51.3	20.4	7.4	2.7	0.6
988	55.8	19.6	82.4	111.6	93.2	49.9	19.9	7.1	2.7	0.4
987	55.0	18.3	80.5		91.2	48.6	19.0	6.9	2.6	0.4
				109.9						
986	54.8	17.9	80.3	109.6	90.3	46.8	18.3	6.7	2.6	0.4
985	55.6	18.0	81.2	112.3	91.1	47.3	18.1	6.6	2.5	0.4
984 4	55.0	17.8	80.7	111.4	89.9	46.0	17.8	6.3	2.4	0.4
983 4	55.1	18.2	82.6	113.0	89.1	45.2	17.4	6.4	2.3	0.4
982 4	56.4	18.6	86.5	117.3	90.3	44.5	17.5	6.4	2.3	0.4
981 4	56.3	18.4	88.4	119.1	88.7	43.3	17.0	6.2	2.3	0.4
980 4	57.0	18.8	92.0	123.1	91.0	42.8	17.1	6.1	2.2	0.3
White										
994	50.0	19.8	78.5	106.4	92.5	49.3	18.9	6.3	2.2	0.3
993	50.9	19.2	77.9	108.0	92.4	49.2	18.6	6.4	2.2	0.2
992	52.2	18.9	78.2	110.1	93.2	49.3	18.8	6.4	2.2	0.3
991	53.3	19.1	78.4	111.5	93.6	49.7	18.5	6.5	2.2	0.3
990	54.6	18.1	78.3	113.2	96.1	50.9	19.2	6.5	2.2	0.3
989	53.3	16.7	75.9	110.8	93.0	49.1	18.7	6.3	2.1	0.4
988	52.2	14.8	73.7	108.3	91.2	47.6	18.1	6.1	2.1	0.3
987	51.6	13.9	72.8	107.0	89.5	46.2	17.3	5.9	2.0	0.3
986	51.7	13.8	73.3	107.0	88.7	44.4	16.6	5.7	2.0	0.3
985	52.6		73.3 74.7	107.0	89.5			5.6	1.9	0.3
		14.0				44.8	16.3			
984 <sup>4</sup>	51.8	14.0	74.3	108.8	87.9	43.5	16.0	5.3	1.9	0.3
983 4	52.0	14.4	76.3	110.2	86.8	42.6	15.5	5.3	1.8	0.3
982 4	53.1	14.9	80.1	114.2	87.5	41.7	15.6	5.3	1.9	0.3
981 4	52.9	15.0	81.7	115.8	85.8	40.3	15.0	5.2	1.8	0.3
980 4	53.4	15.4	84.9	119.4	87.8	39.7	15.0	5.1	1.8	0.3
Black										
994	74.9	54.6	150.5	131.9	92.9	54.2	26.4	13.0	6.0	1.1
993	78.3	56.6	153.8	136.0	95.3	56.6	27.7	13.5	6.4	1.3
992	81.0	57.4	158.0	140.1	96.8	56.9	28.4	13.9	6.2	1.4
991	83.4	58.0	158.5	143.3	100.1	58.8	29.4	14.2	6.7	1.4
990	84.9	55.2	158.2	144.9	103.2	60.4	31.1	15.0	7.1	1.4
989	84.1	52.9	153.4	143.5	101.4	59.9	31.1	14.9	6.9	2.7
988	80.7	48.1	144.1	137.9	100.0	58.0	30.6	14.3	6.9	1.4
987	78.3	44.6	136.1	133.9	97.4	58.0	30.0	13.8	6.6	1.3
986	77.2	42.6	131.4	131.6	97.4	58.0	29.1	13.5	6.7	1.3
985	77.2	41.8	129.5	131.0	97.3	59.4	29.5	13.3	6.5	1.2
984 <sup>4</sup>	77.2 76.7									1.2
		40.9	128.0	132.2	98.3	58.4	29.3	13.3	6.1	
983 4	77.2	40.7	129.1	134.4	99.0	59.6	29.6	13.5	6.0	1.2
982 4	79.5	40.3	133.4	141.2	103.6	61.1	29.6	13.9	6.0	1.2
981 4	80.4	38.9	138.4	145.6	104.3	61.3	29.7	13.3	5.7	1.2
980 4	83.0	40.1	145.3	152.8	109.6	62.0	31.2	13.6	5.9	1.1

<sup>1</sup> Rates computed by relating total births, regardless of age of father, to men aged 15-54 years.
Rates computed by relating births of fathers under 20 years of age to men aged 15-19 years.
Includes races other than white and black.
Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

Table 18. Live births by educational attainment, age, and race of mother: United States, 1994

	_		Year	s of school com	pleted by mothe	er	
Age and race of mother	Total	0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated
All races <sup>1</sup>							
All ages	3,952,767	247,285	644,894	1,364,436	845,172	793,827	57,153
Under 15 years	12,901	9,972	2,530	_	_	_	399
15-19 years	505,488	49,223	269,873	156,156	22,212	_	8,024
15 years	30,742	10,431	19,411	100,100		_	900
16 years	63,125	9,029	51,389	1,570	_	_	1,137
•	•	8,694	76,461	14,201	306	_	,
17 years	101,302	•	•			-	1,640
18 years	137,547	9,511	66,755	55,541	3,795	-	1,945
19 years	172,772	11,558	55,857	84,844	18,111	40.070	2,402
20-24 years	1,001,418	67,487	197,468	450,743	223,962	48,078	13,680
25-29 years	1,088,845	56,049	100,667	386,327	280,173	250,713	14,916
30-34 years	906,498	39,088	52,201	259,190	219,421	323,809	12,789
35-39 years	371,608	19,782	18,756	96,496	85,542	145,132	5,900
40 years and over	66,009	5,684	3,399	15,524	13,862	26,095	1,445
White							
All ages	3,121,004	209,550	460,295	1,052,684	673,546	685,328	39,601
Under 15 years	5,978	4,589	1,205	-	_	_	184
15-19 years	348,081	39,243	179,954	108,865	14,997	-	5,022
15 years	17,443	6,297	10,667	,	-	-	479
16 years	40,198	6,732	31,757	1,032	_	_	677
17 years	68,747	7,329	50,507	9,625	226	-	1,060
18 years	96,605	8,445	46,448	37,960	2,499	_	1,253
19 years	125,088	10,440	40,575	60,248	12,272	_	1,553
20-24 years	764,085	60,973	148,713	338,271	168,387	38,509	9,232
25-29 years	889,581	49,709	77,325	307,889	228,103	216,033	10,522
*	754,871	33,942	38,071	209,671	181,143	282,651	9,393
30-34 years	305,291	16,702	12,783	76,235	69,722	125,616	4,233
35-39 years40 years and over	53,117	4,392	2,244	11,753	11,194	22,519	1,015
Black							
All ages	636,391	22,741	160,197	253,759	132,460	54,312	12,922
Under 15 years	6 165	5,043	1,227				105
Under 15 years	6,465	•	·	42 OSE	6244	-	195
15-19 years	140,968	8,605	81,340	42,065	6,344	-	2,614
15 years	12,297	3,854	8,065	400	-	-	378
16 years	20,853	2,054	17,892	483	-	-	424
17 years	29,413	1,152	23,568	4,118	70	-	505
18 years	36,489	779	18,234	15,741	1,142	=	593
19 years	41,916	766	13,581	21,723	5,132	-	714
20-24 years	197,841	3,187	42,134	95,850	46,440	6,834	3,396
25-29 years	142,355	2,412	18,903	61,499	39,077	17,424	3,040
30-34 years	99,155	1,930	11,117	36,918	27,755	19,125	2,310
35-39 years	42,029	1,166	4,659	14,781	11,033	9,274	1,116
40 years and over	7,578	398	817	2,646	1,811	1,655	251

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

Table 19. Number of live births and percent distribution by weight gain of mother during pregnancy and median weight gain, according to period of gestation and race of mother: Total of 49 reporting States and the District of Columbia, 1994

					Wei	ght gain du	ring pregna	ncy			
Period of gestation <sup>1</sup> and race of mother	All births	Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated	Mediar weight gain in pounds
						Number					
All gestation periods <sup>2</sup>											
All races <sup>3</sup>	3,384,837	320,008	337,489	452,750	598,473	448,282	388,355	201,233	328,519	309,728	
Vhite	2,658,285 593,584	221,595 86,100	250,625 71,936	358,522 74,848	485,483 89,043	372,541 58,988	318,938 55,892	166,584 28,035	262,842 56,435	221,155 72,307	
Under 37 weeks											
ıll races <sup>3</sup>	377,000	59,264	49,005	50,869	56,869	37,271	32,033	15,930	29,070	46,689	
VhiteBlack	255,033 107,720	33,784 23,404	31,580 15,368	35,739 13,086	40,898 13,871	27,887 7,933	23,604 7,343	12,112 3,347	21,252 7,038	28,177 16,330	
37-39 weeks											
All races <sup>3</sup>	1,485,574	136,397	151,976	208,606	272,050	200,029	169,217	85,059	133,784	128,456	
Vhite Black	1,163,219 259,897	95,584 35,213	113,214 31,578	164,695 34,308	219,778 40,634	164,881 27,153	137,831 25,141	69,599 12,526	105,595 24,241	92,042 29,103	
40 weeks and over											
All races <sup>3</sup>	1,509,585	123,313	135,783	192,494	268,495	210,267	186,532	99,928	165,141	127,632	
Vhite Black	1,231,431 223,102	91,601 27,140	105,362 24,813	157,575 27,316	224,059 34,373	179,273 23,800	157,099 23,328	84,640 12,110	135,622 25,058	96,200 25,164	
					Perc	ent distribu	tion				
All gestation periods <sup>2</sup>											
All races <sup>3</sup>	100.0	10.4	11.0	14.7	19.5	14.6	12.6	6.5	10.7		30.4
Vhite	100.0 100.0	9.1 16.5	10.3 13.8	14.7 14.4	19.9 17.1	15.3 11.3	13.1 10.7	6.8 5.4	10.8 10.8		30.6 28.7
Under 37 weeks											
All races <sup>3</sup>	100.0	17.9	14.8	15.4	17.2	11.3	9.7	4.8	8.8		26.8
Vhite Black	100.0 100.0	14.9 25.6	13.9 16.8	15.8 14.3	18.0 15.2	12.3 8.7	10.4 8.0	5.3 3.7	9.4 7.7		28.3 25.0
37-39 weeks											
ıll races <sup>3</sup>	100.0	10.1	11.2	15.4	20.0	14.7	12.5	6.3	9.9		30.3
Vhitelack	100.0 100.0	8.9 15.3	10.6 13.7	15.4 14.9	20.5 17.6	15.4 11.8	12.9 10.9	6.5 5.4	9.9 10.5		30.5 29.1
40 weeks and over											
All races <sup>3</sup>	100.0	8.9	9.8	13.9	19.4	15.2	13.5	7.2	11.9		30.8
White	100.0 100.0	8.1 13.7	9.3 12.5	13.9 13.8	19.7 17.4	15.8 12.0	13.8 11.8	7.5 6.1	11.9 12.7		30.9 30.3

Expressed in completed weeks.
 Includes births with period of gestation not stated.
 Includes races other than white and black.

Table 20. Percent low birthweight by weight gain of mother during pregnancy, period of gestation, and race of mother: Total of 49 reporting States and the District of Columbia, 1994

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

Destinated association 1					Weight (	gain during pi	regnancy			
Period of gestation <sup>1</sup> and race of mother	Total	Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated
All gestation periods <sup>2</sup>										
All races 3	7.5	15.3	10.7	7.6	5.8	4.8	4.6	4.4	4.8	11.4
WhiteBlack	6.2 13.3	12.3 23.3	9.2 16.5	6.5 12.7	5.0 10.3	4.2 8.2	4.0 7.6	4.0 6.9	4.4 6.9	9.1 18.6
Under 37 weeks										
All races <sup>3</sup>	43.1	58.4	48.4	41.5	36.5	33.7	32.7	33.3	33.8	51.8
WhiteBlack	41.2 48.4	56.4 62.0	47.5 51.2	40.3 45.3	35.3 40.6	33.1 36.7	32.4 34.7	33.6 33.6	34.3 33.4	49.2 57.0
37-39 weeks										
All races <sup>3</sup>	4.5	7.6	6.1	4.7	3.8	3.3	3.2	3.1	3.3	5.7
WhiteBlack	3.8 7.3	6.3 11.4	5.3 9.1	4.1 7.6	3.3 6.2	2.9 5.2	2.9 5.1	2.9 4.6	3.0 4.6	4.6 9.2
40 weeks and over										
All races 3	1.5	3.1	2.3	1.7	1.3	1.1	1.0	0.9	0.9	2.2
WhiteBlack	1.2 3.2	2.4 5.6	1.9 4.4	1.4 3.5	1.1 2.8	1.0 2.2	0.8 1.9	0.8 1.8	0.7 1.6	1.6 4.3

NOTE: Excludes data for California, which did not require reporting of weight gain during pregnancy.

Expressed in completed weeks.
 Includes births with period of gestation not stated.
 Includes races other than white and black.

Table 21. Number of live births and percent distribution by weight gain of mother during pregnancy and median weight gain, according to period of gestation, Hispanic origin of mother, and race of mother for mothers of non-Hispanic origin: Total of 49 reporting States and the District of Columbia, 1994

					We	ight gain du	ıring pregna	ancy			
Period of gestation <sup>1</sup> and race of mother	Number of births	Total	Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Median weight gain in pounds
					Pe	rcent distribu	ition				
All gestation periods <sup>2</sup>											
All origins <sup>3</sup>	3,384,837	100.0	10.4	11.0	14.7	19.5	14.6	12.6	6.5	10.7	30.4
Hispanic	407,276	100.0	12.3	13.2	15.6	19.3	13.4	11.3	5.7	9.1	29.6
Mexican	235,490	100.0	13.4	13.9	16.0	19.2	13.0	10.8	5.3	8.3	28.5
Puerto Rican	55,176	100.0	11.8	12.4	14.7	17.9	13.3	11.8	6.3	11.6	30.3
Cuban	11,052	100.0	7.4	9.6	13.6	20.5	15.5	14.4	6.7	12.3	30.9
Central and South American	64,977	100.0	10.3	13.0	16.0	20.7	14.1	11.7	5.6	8.5	30.1
Other and unknown Hispanic	40,581	100.0	11.2	11.7	15.1	19.5	13.8	11.8	6.5	10.3	30.2
Non-Hispanic <sup>4</sup>	2,938,680	100.0	10.2	10.7	14.6	19.5	14.7	12.8	6.6	10.9	30.5
White	2,234,379	100.0	8.6	9.8	14.6	20.0	15.6	13.4	7.0	11.0	30.7
Black	577,688	100.0	16.6	13.8	14.4	17.1	11.3	10.7	5.4	10.8	28.7
Under 37 weeks											
All origins <sup>3</sup>	377,000	100.0	17.9	14.8	15.4	17.2	11.3	9.7	4.8	8.8	26.8
Hispanic	46,172	100.0	18.7	16.2	16.0	17.6	10.6	9.0	4.6	7.3	25.9
Mexican	26,096	100.0	19.5	16.7	16.1	17.2	10.3	8.9	4.5	6.8	25.6
Puerto Rican	7,347	100.0	19.5	16.5	15.3	16.5	10.7	9.0	4.3	8.2	25.8
Cuban	1,113	100.0	12.3	13.8	15.1	20.3	12.2	10.6	5.5	10.1	29.5
Central and South American	6,888	100.0	17.3	15.4	16.2	19.1	10.5	9.6	4.5	7.4	26.5
Other and unknown Hispanic	4,728	100.0	17.3	14.8	16.3	18.2	12.0	8.9	4.9	7.7	26.6
Non-Hispanic <sup>4</sup>	326,627	100.0	17.9	14.7	15.3	17.2	11.4	9.8	4.9	9.0	27.0
White	207,559	100.0 100.0	14.2 25.7	13.5 16.8	15.7 14.3	18.1 15.2	12.6 8.7	10.7 8.0	5.5 3.6	9.7 7.7	28.7 25.0
37-39 weeks	105,582	100.0	25.7	10.0	14.3	15.2	0.7	6.0	3.0	7.7	25.0
All origins <sup>3</sup>	1,485,574	100.0	10.1	11.2	15.4	20.0	14.7	12.5	6.3	9.9	30.3
_											
Hispanic	181,668	100.0	12.0	13.5	16.1	19.9	13.5	11.2	5.4	8.4	29.1
Mexican	104,935	100.0	13.2	14.2	16.4	19.7	13.1	10.6	5.1	7.8	28.3
Puerto Rican	24,477	100.0	11.2	12.6	15.3	18.6	13.5	11.9	6.0	10.9	30.2
Cuban	5,210	100.0	7.9	9.2	14.3	20.7	15.6	14.9	5.8	11.6	30.8
Central and South American	29,014	100.0	10.0	13.4	16.8	21.3	14.0	11.6	5.2	7.6	29.9
Other and unknown Hispanic	18,032	100.0	11.4	12.2	15.1	20.0	14.1	11.7	6.3	9.2	30.1
Non-Hispanic <sup>4</sup>	1,287,916	100.0	9.8	10.9	15.3	20.1	14.9	12.6	6.4	10.0	30.4
WhiteBlack	975,257 253,039	100.0 100.0	8.4 15.3	10.1 13.7	15.3 14.9	20.6 17.6	15.7 11.7	13.1 10.9	6.7 5.4	10.1 10.5	30.6 29.0
40 weeks and over											
All origins <sup>3</sup>	1,509,585	100.0	8.9	9.8	13.9	19.4	15.2	13.5	7.2	11.9	30.8
Hispanic	177,359	100.0	10.9	12.2	15.1	19.2	14.0	12.0	6.2	10.3	30.2
Mexican	103,322	100.0	12.2	12.9	15.5	19.1	13.7	11.5	5.7	9.3	29.9
Puerto Rican	22,959	100.0	10.2	11.1	13.9	17.6	13.7	12.7	7.3	13.4	30.7
Cuban	4,707	100.0	5.8	9.1	12.5	20.2	16.2	14.6	7.9	13.7	32.4
Central and South American Other and unknown Hispanic	28,864 17,507	100.0 100.0	9.0 9.5	12.0 10.4	15.3 14.7	20.5 19.4	15.1 14.1	12.3 12.6	6.3 7.1	9.5 12.2	30.4 30.6
Non-Hispanic <sup>4</sup>	1,314,546	100.0	8.7	9.6	13.8	19.4	15.4	13.7	7.3	12.1	30.9
	, ,	100.0	7.6	8.9	13.7	19.8	16.0	14.1	7.6	12.2	31.0
White	1,045,723										

<sup>1</sup> Expressed in completed weeks.

Includes births with period of gestation not stated.
Includes origin not stated.
Includes races other than white and black.

Table 22. Percent low birthweight by weight gain of mother during pregnancy and Hispanic origin of mother, and by race of mother for mothers of non-Hispanic origin: Total of 49 reporting States and the District of Columbia, 1994

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

ispanic lexican uerto Rican uban		Weight gain during pregnancy											
Origin of mother	Total	Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated			
All origins <sup>1</sup>	7.5	15.3	10.7	7.6	5.8	4.8	4.6	4.4	4.8	11.4			
Hispanic	6.7	11.8	8.4	6.3	5.1	4.4	4.3	4.3	4.0	9.0			
Mexican	6.1 9.2 6.3 6.0 7.8	10.3 17.5 13.3 11.6 13.3	7.7 12.0 10.0 7.4 9.9	5.6 8.8 7.7 5.6 8.4	4.5 7.4 5.0 4.9 6.2	4.0 5.8 3.9 4.3 5.5	4.2 5.4 4.0 3.7 4.3	4.2 5.0 5.0 3.8 4.2	3.8 4.7 4.1 3.8 4.3	8.1 12.8 11.6 7.8 12.2			
Non-Hispanic <sup>2</sup>	7.6	15.8	11.1	7.7	5.9	4.8	4.6	4.4	4.9	12.1			
White	6.1 13.4	12.4 23.5	9.3 16.6	6.6 12.9	5.0 10.4	4.2 8.3	4.0 7.7	4.0 6.9	4.4 6.9	9.1 18.7			

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

NOTE: Excludes data for California, which did not require reporting of weight gain during pregnancy.

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

Table 23. Percent of births with selected medical or health characteristics, by specified race of mother: United States, 1994

Oh avantavistia	All	14//-:4	Disale	American		,	Asian or Pa	cific Islande	r	
Characteristic	races	White 	Black	Indian <sup>1</sup>	Total	Chinese	Japanese	Hawaiian	Filipino	Other
Mother										
Prenatal care beginning in the first trimester Late or no prenatal care Smoker <sup>2</sup> Drinker <sup>3</sup> Weight gain of less than 16 lbs <sup>4</sup> Cesarean delivery rate	80.2 4.4 14.6 1.7 10.4 21.2	82.8 3.6 15.6 1.5 9.1 21.2	68.3 8.2 11.4 2.5 16.5 21.8	65.2 9.8 21.0 5.1 13.8 18.0	79.7 4.1 3.6 0.5 9.4 18.7	86.2 2.7 0.9 0.2 6.5 18.7	89.2 1.9 5.4 1.0 8.3 17.8	77.0 4.7 16.0 1.6 7.7 17.3	81.3 3.6 3.7 0.5 7.6 22.9	76.2 4.8 2.9 0.4 10.9 17.5
Infant										
Preterm births <sup>5</sup> Birthweight Very low birthweight <sup>6</sup>	11.0	9.6 1.0	3.0	12.1 1.1	10.1 0.9	7.2 0.6	0.9	12.2	11.4	10.7 0.9
Low birthweight 7	7.3 10.4 1.4 8.4	6.1 11.7 1.2 7.9	13.2 5.3 2.5 10.7	6.4 12.5 1.5 8.7	6.8 6.1 1.0 6.6	4.8 6.4 0.7 4.7	6.9 5.4 0.7 5.1	7.2 8.8 1.6 8.2	7.8 6.4 1.1 7.7	7.1 5.7 1.1 6.8

<sup>1</sup> Includes births to Aleuts and Eskimos.
2 Excludes data for California, Indiana, New York State (but includes New York city), and South Dakota, which did not report tobacco use on the birth certificate.

Excludes data for California and South Dakota, which did not report alcohol use on the birth certificate.

Excludes data for California, which did not report weight gain on the birth certificate.

<sup>5</sup> Born prior to 37 completed weeks of gestation.

<sup>6</sup> Birthweight of less than 1,500 grams (3 lb 4 oz).

<sup>7</sup> Birthweight of less than 2,500 grams (5 lb 8 oz).

Birthweight of less than 2,300 grains to 5.5 c.s.

Equivalent to 8 lb 14 oz.

Excludes data for California and Texas, which did not report either 1- or 5-minute Apgar score on the birth certificate.

Table 24. Percent of births with selected medical or health characteristics, by Hispanic origin of mother and by race of mother for mothers of non-Hispanic origin: United States, 1994

						Origin of	mother			
				Hisp	anic		_	٨	lon-Hispanic	;
Characteristic	All origins <sup>1</sup>	Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
Mother										
Prenatal care beginning in the first trimester	80.2	68.9	67.3	71.7	90.1	71.2	72.1	82.5	86.5	68.3
Late or no prenatal care	4.4	7.6	8.3	6.5	1.6	6.5	6.2	3.7	2.5	8.2
Smoker <sup>3</sup>	14.6	4.6	3.4	10.9	4.8	1.8	8.1	16.0	17.7	11.5
Drinker 4	1.7	8.0	0.7	1.0	0.4	0.3	1.3	1.8	1.7	2.6
Weight gain of less than 16 lbs 5	10.4	12.3	13.4	11.8	7.4	10.3	11.2	10.2	8.6	16.6
Cesarean delivery rate	21.2	20.5	20.0	20.5	30.9	21.6	20.8	21.4	21.5	21.9
Infant										
Preterm births 6	11.0	10.9	10.6	13.4	10.1	10.7	11.6	11.0	9.3	18.2
Very low birthweight 7	1.3	1.1	1.0	1.6	1.3	1.1	1.3	1.4	1.0	3.0
Very low birthweight <sup>7</sup> Low birthweight <sup>8</sup>	7.3	6.2	5.8	9.1	6.3	6.0	7.5	7.5	6.1	13.3
4.000 grams or more 9	10.4	9.1	9.4	7.1	10.4	9.3	7.6	10.7	12.4	5.2
5-minute Apgar scores of less than 7 10	1.4	1.2	1.2	1.3	0.8	1.0	1.3	1.5	1.2	2.5
1-minute Apgar scores of less than 7 10	8.4	7.2	7.9	7.0	4.4	6.0	7.9	8.5	8.0	10.8

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

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

Excludes data for California, Indiana, New York State (but includes New York city), and South Dakota, which did not report tobacco use on the birth certificate.

Excludes data for California and South Dakota, which did not report alcohol use on the birth certificate.

<sup>5</sup> Excludes data for California, which did not report weight gain on the birth certificate.

Born prior to 37 completed weeks of gestation.

<sup>7</sup> Birthweight of less than 1,500 grams (3 lb 4 oz).

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

<sup>&</sup>lt;sup>9</sup> Equivalent to 8 lb 14 oz.

<sup>10</sup> Excludes data for California and Texas, which did not report either 1- or 5-minute Apgar score on the birth certificate.

Table 25. Live births to mothers with selected medical risk factors and rates by age of mother, by race of mother: United **States, 1994** 

[Rates are number of live births with specified medical risk factor per 1,000 live births in specified group]

Madical sight factor and	A 11	Medical			A	ge of moth	er			Mad
Medical risk factor and race of mother	All births <sup>1</sup>	risk factor reported	All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	Not stated
All races <sup>2</sup>										
Anemia	3,952,767	78,173	20.0	29.4	24.0	17.7	15.4	15.4	15.3	52,805
Cardiac disease	3,952,767	17,603	4.5	2.8	3.5	4.4	5.6	6.8	7.3	52,805
Acute or chronic lung disease	3,952,767	22,105	5.7	7.6	6.0	5.0	5.0	5.4	6.3	52,805
Diabetes	3,952,767	99,492	25.5	8.3	16.4	25.3	34.0	47.0	64.9	52,805
Genital herpes <sup>3</sup>	3,631,653	29,531	8.2	5.7	7.2	8.0	9.6	11.2	11.1	48,775
Hydramnios/Oligohydramnios	3,952,767	39,850	10.2	11.5	10.2	9.6	9.8	10.8	14.2	52,805
Hemoglobinopathy	3,952,767	2,513	0.6	0.9	0.7	0.6	0.6	0.5	0.4	52,805
Hypertension, chronic	3,952,767	26,567	6.8	2.8	4.3	5.9	8.5	14.4	26.0	52,805
Hypertension, pregnancy-associated	3,952,767	125,683	32.2	37.7	32.5	30.7	29.4	33.4	41.9	52,805
Eclampsia	3,952,767	13,463	3.5	5.3	3.6	2.9	2.8	3.4	4.7	52,805
Incompetent cervix	3,952,767	8,925	2.3	1.0	1.7	2.2	3.1	3.8	3.9	52,805
Previous infant 4000+ grams	3,952,767	40,392	10.4	1.3	6.4	11.0	15.1	18.1	21.9	52,805
Previous preterm or small-for-										
gestational-age infant	3,952,767	44,497	11.4	5.2	11.2	11.8	13.1	14.7	15.9	52,805
Renal disease	3,952,767	10,126	2.6	3.4	3.0	2.4	2.1	2.1	2.6	52,805
Rh sensitization 4	3,915,388	25,301	6.6	5.1	6.0	6.8	7.3	7.4	6.8	53,723
Uterine bleeding <sup>3</sup>	3,631,653	28,236	7.9	5.8	7.0	8.0	8.8	9.8	10.0	48,775
White										
Anemia	3,121,004	51,642	16.8	24.5	19.7	15.1	13.6	13.6	13.3	41,797
Cardiac disease	3,121,004	14,697	4.8	2.8	3.5	4.6	6.0	7.2	7.7	41,797
Acute or chronic lung disease	3,121,004	16,897	5.5	7.2	5.8	4.9	5.0	5.4	6.6	41,797
Diabetes	3,121,004	78,065	25.4	9.0	16.9	24.8	32.2	44.3	60.2	41,797
Genital herpes 3	2,848,696	23,663	8.4	4.7	6.5	8.1	10.3	12.5	13.0	38,261
Hydramnios/Oligohydramnios	3,121,004		9.7	10.8	9.7	9.2	9.3	10.1	13.9	41,797
Hemoglobinopathy	3,121,004	837	0.3	0.2	0.3	0.3	0.3	0.3		41,797
Hypertension, chronic	3,121,004	18,266	5.9	2.3	3.7	5.4	7.2	11.6	20.6	41,797
Hypertension, pregnancy-associated	3,121,004	100,890	32.8 3.2	38.3 4.5	33.9	31.6 2.8	29.6 2.6	33.1 3.1	42.0 4.4	41,797
Eclampsia	3,121,004 3,121,004	9,725 6,527	3.2 2.1		3.4 1.4	2.6 1.9	2.8	3.7	4.4	41,797 41,797
Previous infant 4000+ grams	3,121,004	36,275	11.8	0.9 1.5	7.2	12.1	2.6 16.6	20.0	24.2	41,797
Previous preterm or small-for-	3,121,004	30,273	11.0	1.5	1.2	12.1	10.0	20.0	24.2	41,797
gestational-age infant	3,121,004	33,507	10.9	4.6	10.3	11.1	12.5	14.2	15.8	41,797
Renal disease	3,121,004	8,240	2.7	3.8	3.2	2.4	2.1	2.2	2.6	41,797
Rh sensitization <sup>4</sup>	3,087,824	22,745	7.5	6.0	6.8	7.7	8.2	8.4	7.8	42,644
Uterine bleeding <sup>3</sup>	2,848,696	23,431	8.3	6.2	7.5	8.5	9.0	10.3	10.6	38,261
Black										
Anemia	636,391	21,781	34.7	39.4	38.4	31.5	28.3	27.2	28.1	8,287
Cardiac disease	636,391	2,367	3.8	2.8	3.5	3.9	4.9	5.0	6.0	8,287
Acute or chronic lung disease	636,391	4,541	7.2	9.0	7.4	6.2	6.0	6.8	6.1	8,287
Diabetes	636,391	14,338	22.8	6.4	13.8	26.5	40.9	56.6	84.7	8,287
Genital herpes <sup>3</sup>	596,115		8.8	8.2	10.2	8.9	8.0	6.6	3.7	7,886
Hydramnios/Oligohydramnios	636,391	8,026	12.8	13.0	12.0	12.1	13.6	15.2	16.8	8,287
Hemoglobinopathy	636,391	1,551	2.5	2.5	2.6	2.5	2.5	1.5	*	8,287
Hypertension, chronic	636,391	7,320	11.7	3.9	6.9	10.5	19.5	36.8	67.1	8,287
Hypertension, pregnancy-associated	636,391	20,492	32.6	37.0	29.1	29.7	33.1	40.5	44.5	8,287
Eclampsia	636,391	3,209	5.1	6.9	4.6	4.1	4.3	5.9	7.8	8,287
Incompetent cervix	636,391	2,139	3.4	1.2	2.7	4.2	5.8	5.7	5.1	8,287
Previous infant 4000+ grams	636,391	2,636	4.2	8.0	3.4	5.3	6.9	8.2	12.7	8,287
Previous preterm or small-for-										
gestational-age infant	636,391	9,105	14.5	6.4	14.9	17.4	19.3	19.6	17.9	8,287
Renal disease	636,391	1,481	2.4	2.4	2.6	2.1	2.6	1.7	*	8,287
Rh sensitization 4	633,249	2,205	3.5	3.0	3.4	3.6	3.9	4.1	4.3	8,347
Uterine bleeding <sup>3</sup>	596,115	3,594	6.1	5.1	5.9	6.3	7.3	7.1	7.3	7,886

Total number of births to residents of areas reporting specified medical risk factor.
 Includes races other than white and black.
 Texas does not report this risk factor.
 Kansas does not report this risk factor.

Table 26. Number and rate of live births to mothers with selected medical risk factors, complications of labor, and obstetric procedures, by specified race of mother: United States, 1994

[Rates are number of live births with specified risk factors, complications, or procedures per 1,000 live births in specified group]

Medical risk factor,				American			Asian or Pa	cific Islander		
complication, and obstetric procedure	All races	White	Black	Indian <sup>1</sup>	Total	Chinese	Japanese	Hawaiian	Filipino	Other
					Nun	nber				
Medical risk factors										
Anemia Diabetes	78,173 99,492	51,642 78,065	21,781 14,338	2,168 1,650	2,582 5,439	272 1,028	134 228	259 158	439 1,139	1,478 2,886
Hypertension, pregnancy-associated	125,683	100,890	20,492	1,565	2,736	324	175	190	747	1,300
Uterine bleeding <sup>2</sup>	28,236	23,431	3,594	296	915	185	74	24	173	459
Complications of labor and/or delivery										
Meconium,moderate/heavy	224,160	162,145	50,721	2,311	8,983	1,348	387	479	1,975	4,794
Premature rupture of membrane	121,549	92,975	22,346	1,623	4,605	861	353	240	846	2,305
Dysfunctional labor	116,670	95,203	16,054	1,241	4,172	816	256	191	749	2,160
Breech/Malpresentation	146,283	121,267	18,157	1,355	5,504	871	387	272	1,153	2,821
Cephalopelvic disproprtion	99,747	81,209	13,335	830	4,373	784	303	193	1,102	1,991
Fetal distress <sup>3</sup>	147,886	110,700	30,925	1,385	4,876	721	250	181	1,044	2,680
Obstetric procedures										
Amniocentesis	123,188	105,370	10,640	757	6,421	1,564	873	264	1,326	2,394
Electronic fetal monitoring	3,146,757	2,499,230	503,314	29,381	114,832	19,108	6,905	4,727	21,876	62,216
Induction of labor	574,905	487,516	66,655	5,477	15,257	2,424	1,098	773	2,724	8,238
Ultrasound		1,934,207	353,627	21,540	87,087	14,835	5,891	3,706	17,146	45,509
Stimulation of labor	594,063	480,580	85,768	5,297	22,418	4,046	1,364	864	3,883	12,261
					Ra	ate				
Medical risk factors										
Anemia	20.0	16.8	34.7	58.9	16.6	10.3	14.8	44.6	14.5	17.5
Diabetes	25.5	25.4	22.8	44.8	34.9	39.0	25.1	27.2	37.7	34.2
Hypertension, pregnancy-associated Uterine bleeding <sup>2</sup>	32.2 7.9	32.8 8.3	32.6 6.1	42.5 8.2	17.6 6.2	12.3 7.3	19.3 8.3	32.7 4.2	24.7 5.9	15.4 5.8
Oterine bleeding	7.9	0.3	0.1	0.2	0.2	7.3	0.3	4.2	5.9	5.6
Complications of labor and/or delivery										
Meconium, moderate/heavy	57.3	52.5	80.6	62.6	57.5	51.1	42.2	80.9	65.1	56.7
Premature rupture of membrane	31.1	30.1	35.5	44.0	29.5	32.7	38.5	40.6	27.9	27.3
Dysfunctional labor	29.8	30.8	25.5	33.6	26.7	31.0	27.9	32.3	24.7	25.6
Breech/Malpresentation	37.4	39.3	28.8	36.7	35.2	33.0	42.2	46.0	38.0	33.4
Cephalopelvic disproprtion	25.5	26.3	21.2	22.5	28.0	29.7	33.0	32.6	36.3	23.6
Fetal distress <sup>3</sup>	41.2	39.4	52.5	38.3	32.8	28.5	27.9	30.9	35.6	33.9
Obstetric procedures										
Amniocentesis	31.4	34.1	16.9	20.5	41.0	59.2	95.0	44.4	43.6	28.3
Electronic fetal monitoring	803.1	808.0	797.4	793.8	732.9	722.7	751.2	794.2	719.0	734.7
Induction of labor	146.7	157.6	105.6	148.0	97.4	91.7	119.5	129.9	89.5	97.3
Ultrasound		625.3	560.2	582.0	555.8	561.1	640.9	622.6	563.5	537.4
Stimulation of labor	151.6	155.4	135.9	143.1	143.1	153.0	148.4	145.2	127.6	144.8

Includes births to Aleuts and Eskimos.
 Texas does not report this risk factor.
 Texas does not report this complication.

Table 27. Number and rate of live births to mothers with selected medical risk factors, complications of labor, and obstetric procedures, by Hispanic origin of mother and by race of mother for mothers of non-Hispanic origin: United States, 1994

[Rates are number of live births with specified risk factors, complications or procedures per 1,000 live births in specified group]

						Origin of m	other			
Medical risk factor, complication,	All			His	spanic			٨	lon-Hispanic	
and obstetric procedure	origins <sup>1</sup>	Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
					١	Number				
Medical risk factors										
Anemia	-, -	12,538	7,652	1,630	234	1,362	1,660	64,668	38,943	21,237
Diabetes  Hypertension, pregnancy-associated	, -	15,935 14,816	10,361 9,560	1,756 1,458	276 292	2,302 1,983	1,240 1,523	82,369 109,528	61,671 85,480	13,866 19,977
Uterine bleeding <sup>3</sup>		2,966	1,803	299	62	520	282	24,817	20,185	3,495
Complications of labor and/or delivery										
Meconium,moderate/heavy		38,416	25,366	3,531	555	6,138	2,826	183,206	123,042	49,384
Premature rupture of membrane	,	14,224	8,175	1,931	312	2,366	1,440	105,309	77,738	21,656
Dysfunctional labor  Breech/Malpresentation		18,053 19,575	11,360 13,022	1,729 1,869	600 459	2,743 2,685	1,621 1,540	96,888 125,048	76,231 100,886	15,454 17,643
Cephalopelvic disproprtion	99,747	11,190	7,004	1,179	322	1,714	971	87,615	69,657	13,022
Fetal distress <sup>4</sup>	147,886	19,261	12,229	1,860	386	3,192	1,594	127,044	90,827	30,249
Obstetric procedures										
Amniocentesis		10,139	5,447	1,190	368	2,014	1,120	110,631	93,429	10,294
Electronic fetal monitoring		487,305	324,162	46,954	9,386	68,578	38,225	2,626,621	1,999,248	489,368
Induction of laborUltrasound	,	60,686 317,046	39,752 205,569	5,755 33,342	1,627 7,108	7,834 43,015	5,718 28,012	507,581 2,051,122	423,024 1,602,815	64,810 344,473
Stimulation of labor		85,852	55,517	9,535	1,576	11,829	7,395	501,247	391,626	83,053
						Rate				
Medical risk factors										
Anemia	20.0	19.1	17.0	29.4	10.9	110	35.3	20.2	16.2	34.7
Diabetes		24.2	23.0	29.4 31.7	19.8 23.3	14.8 25.0	35.3 26.4	20.2 25.7	25.6	34.7 22.7
Hypertension, pregnancy-associated	32.2	22.5	21.2	26.3	24.7	21.5	32.4	34.2	35.5	32.7
Uterine bleeding <sup>3</sup>	7.9	5.6	5.4	5.5	5.3	6.0	7.3	8.2	8.9	6.1
Complications of labor and/or delivery										
Meconium,moderate/heavy	57.3	58.2	56.0	63.7	46.8	66.6	59.9	57.1	51.0	80.6
Premature rupture of membrane		21.6	18.0	34.8	26.3	25.7	30.5	32.8	32.2	35.3
Dysfunctional labor  Breech/Malpresentation		27.4 29.7	25.1 28.7	31.2 33.7	50.6 38.7	29.8 29.1	34.3 32.6	30.2 39.0	31.6 41.8	25.2 28.8
Cephalopelvic disproprtion	25.5	17.0	15.5	21.3	27.2	18.6	20.6	27.3	28.9	21.2
Fetal distress <sup>4</sup>	41.2	36.6	36.5	34.1	33.2	37.1	41.0	42.1	40.0	52.8
Obstetric procedures										
Amniocentesis		15.3	12.0	21.3	31.0	21.7	23.6	34.4	38.7	16.8
Electronic fetal monitoring		737.1	715.1	839.6	791.3	740.1	806.9	816.8	827.5	796.4
Induction of laborUltrasound		91.8 479.5	87.7 453.5	102.9 596.2	137.2 599.3	84.5 464.2	120.7 591.3	157.8 637.8	175.1 663.4	105.5 560.6
Stimulation of labor		129.9	122.5	170.5	132.9	127.7	156.1	155.9	162.1	135.2

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

Includes origin not stated.
Includes races other than white and black.
Texas does not report this factor.
Texas does not report this complication.

Table 28. Number of live births by smoking status of mother, percent smokers, and percent distribution by average number of cigarettes smoked by mothers per day, according to age and race of mother: Total of 46 reporting States, the District of Columbia, and New York city, 1994

					Αg	ge of mothe	er			
Smoking status, smoking			1	5-19 years						
measure, and race of mother	All ages	Under 15 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years
					Num	ber				
All races 1										
Total	3,141,027	10,764	412,274	159,608	252,666	806,326	863,640	712,343	286,428	49,252
Smoker	2,643,656	9,929	67,825 338,790 5,659	22,711 134,717 2,180	45,114 204,073 3,479	141,400 653,628 11,298	114,900 735,625 13,115	86,327 614,920 11,096	34,270 247,433 4,725	4,967 43,331 954
White										
Total	2,446,329	4,454	272,561	98,154	174,407	600,217	700,591	593,208	235,582	39,716
Smoker	2,033,083		59,617 208,951 3,993	19,817 76,878 1,459	39,800 132,073 2,534	121,478 470,146 8,593	95,044 595,102 10,445	69,493 514,799 8,916	26,702 205,095 3,785	3,798 35,174 744
Black										
Total	568,502	5,995	127,809	56,984	70,825	178,348	125,925	87,001	36,753	6,671
Smoker	496,831	5,842	6,341 120,093 1,375	2,190 54,191 603	4,151 65,902 772	16,774 159,452 2,122	17,566 106,390 1,969	15,118 70,329 1,554	6,868 29,224 661	1,020 5,501 150
	-				Perc	ent				
Smoker <sup>1</sup>	14.6	6.7	16.7	14.4	18.1	17.8	13.5	12.3	12.2	10.3
WhiteBlack			22.2 5.0	20.5 3.9	23.2 5.9	20.5 9.5	13.8 14.2	11.9 17.7	11.5 19.0	9.7 15.6
					Percent di	stribution				
All races <sup>1</sup>										
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes	23.7	46.2	30.3	34.4	28.3	23.5	22.3	21.8	20.5	19.9
6-10 cigarettes			42.9 4.7	42.8 4.1	42.9 5.0	41.9 6.0	39.7 6.8	38.2 7.2	36.5 6.8	33.4 7.0
16-20 cigarettes			19.3	16.5	20.7	24.6	26.1	26.9	28.5	30.2
21-30 cigarettes			2.0	1.6	2.2	2.8	3.5	4.1	4.9	6.1
31-40 cigarettes41 cigarettes or more			0.6 0.1	0.4 0.1	0.7 0.1	1.1 0.1	1.4 0.2	1.7 0.2	2.4 0.4	3.0 0.5
White										
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes	21.0	42.5	27.5	31.5	25.6	20.7	19.6	19.3	17.8	16.4
6-10 cigarettes		38.8	43.8	44.1	43.7	42.0	39.2	37.0	35.0	31.3
11-15 cigarettes			5.1 20.6	4.5 17.7	5.4 22.0	6.5 26.4	7.5 28.2	8.1 29.0	7.6 30.8	7.7 33.4
21-30 cigarettes			2.1	1.7	2.3	3.1	3.9	4.6	5.7	7.4
31-40 cigarettes	1.4		0.7	0.4	0.8	1.1	1.4	1.8	2.7	3.3
41 cigarettes or more	0.2		0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.6
Black Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes			52.4	56.5	50.3	42.1	36.2	32.6	30.1	32.6
6-10 cigarettes			35.3	32.9	36.6	40.8	42.6	43.1	42.3	40.5
11-15 cigarettes	3.0	*	1.8	1.7	1.9	2.6	2.8	3.5	3.8	4.5
16-20 cigarettes			9.3	7.5	10.2	13.0	15.7	18.0	20.2	18.8
21-30 cigarettes			0.8	*	0.8	0.8 0.7	1.5 1.0	1.7 1.0	1.9 1.4	*
41 cigarettes or more			*	*	*	V.1 *	0.2	1.0	1+	*

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

Monthly Vital Statistics Report • Vol. 44, No. 11(S) • June 24, 1996

Table 29. Number of live births by smoking status of mother and percent of mothers who smoked cigarettes during pregnancy, by age and Hispanic origin of mother and by race of mother for mothers of non-Hispanic origin: Total of 46 reporting States, the District of Columbia, and New York city, 1994

		Smoking	g status					Α	ge of m	other				
Origin of mother							1:	5-19 yea	nrs					
	Total births	Smoker	Non- smoker	Not stated	All ages	Under 15 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years
All origins <sup>1</sup>	3,141,027	450,403	2,643,656	46,968	14.6	6.7	16.7	14.4	18.1	17.8	13.5	12.3	12.2	10.3
Hispanic	394,565	17,805	371,438	5,322	4.6	3.1	4.8	4.5	4.9	4.7	4.2	4.6	5.0	4.3
Mexican  Puerto Rican  Cuban  Central and South American  Other and unknown Hispanic	232,718 52,386 10,866 61,388 37,207	7,742 5,532 516 1,067 2,948	222,962 45,286 10,298 59,255 33,637	2,014 1,568 52 1,066 622	3.4 10.9 4.8 1.8 8.1	2.1 * * *	3.5 9.2 5.8 1.8 7.3	3.5 7.9 * 2.1 6.4	3.6 10.2 6.4 1.6 8.0	3.3 11.5 5.5 1.5 8.8	3.0 11.2 4.4 1.7 8.0	3.7 11.6 4.3 1.9 7.7	4.1 11.9 5.1 2.5 8.5	3.7 10.4 * 2.2 6.2
Non-Hispanic <sup>2</sup>	2,717,749	427,776	2,250,844	39,129	16.0	7.5	19.1	16.6	20.6	20.1	14.7	13.1	12.9	11.0
WhiteBlack	2,043,069 554,496	355,743 62,763	1,657,825 484,389	29,501 7,344	17.7 11.5	21.1 1.7	28.1 5.0	27.2 3.8	28.6 5.9	24.4 9.6	15.3 14.4	12.8 18.0	12.3 19.3	10.5 15.8

<sup>&</sup>lt;sup>1</sup> Includes origin not stated.

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

Table 30. Number of live births, percent of mothers who smoked cigarettes during pregnancy, and percent distribution of average number of cigarettes smoked by mothers per day, according to educational attainment and race of mother: Total of 46 reporting States, the District of Columbia, and New York city, 1994

Constinue recognized	_		Year	rs of school com	pleted by mothe	er	
Smoking measure, and race of mother	Total	0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated
-				All births			
All races <sup>1</sup>	3,141,027	149,852	508,381	1,110,639	681,747	641,003	49,405
WhiteBlack	2,446,329 568,502	120,806 21,172	344,758 146,210	843,874 226,298	542,523 115,794	560,540 47,531	33,828 11,497
-				Percent			
Smoker <sup>1</sup>	14.6	13.6	27.0	18.2	10.7	2.8	13.9
WhiteBlack	15.6 11.4	14.7 9.5	31.8 16.7	20.4 11.3	11.5 7.9	2.9 3.4	13.8 16.4
-			Pe	rcent distribution	ı		
All races <sup>1</sup>							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	63.9 31.3 4.8	58.7 33.2 8.1	62.9 31.6 5.5	63.5 32.0 4.5	66.4 29.7 3.9	71.7 25.4 2.9	66.5 28.8 4.7
White							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	61.1 33.7 5.2	56.3 35.1 8.7	59.2 34.7 6.1	60.7 34.3 4.9	64.2 31.5 4.2	70.5 26.5 3.0	63.3 31.6 5.1
Black							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	79.3 18.3 2.4	76.3 20.2 3.5	78.5 18.8 2.8	80.1 17.7 2.2	80.3 17.9 1.8	81.8 16.5 1.7	72.7 23.4 3.9

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

Table 31. Percent low birthweight by smoking status, age, and race of mother: Total of 46 reporting States, the District of Columbia, and New York city, 1994

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

					P	Age of mothe	er			
Smoking status and	A.U	Heden 45		15-19 years	;	- 00.04	05.00	00.04	05.00	40.40
race of mother	All ages	Under 15 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years
All races <sup>1</sup>										
Total	7.6	14.3	9.7	10.5	9.1	7.6	6.6	6.9	8.2	9.7
Smoker Nonsmoker Not stated	12.3 6.7 9.7	17.1 14.1 20.2	11.4 9.3 12.4	12.0 10.2 13.5	11.1 8.7 11.7	10.6 6.9 9.4	11.9 5.8 9.0	13.9 5.9 8.4	17.0 7.0 10.8	19.0 8.5 13.3
White										
Total	6.2	11.6	8.1	8.8	7.7	6.2	5.5	5.8	6.9	8.3
Smoker	10.6 5.4 8.2	16.3 10.8 *	10.9 7.2 10.7	11.5 8.0 11.9	10.6 6.8 9.9	9.6 5.3 8.0	9.9 4.8 7.7	11.2 5.0 6.9	13.9 6.0 9.3	16.1 7.3 11.3
Black										
Total	13.3	16.5	13.2	13.7	12.9	12.2	12.9	14.6	16.4	18.0
Smoker	22.8 12.1 16.8	20.6 16.4 *	16.8 13.0 17.2	17.3 13.5 16.8	16.6 12.6 17.5	18.3 11.5 15.9	23.1 11.1 15.6	26.5 12.0 17.1	29.3 13.3 19.3	30.6 15.4 27.7

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

Table 32. Number of live births by drinking status of mother, percent of mothers who drank during pregnancy, and percent distribution by average number of drinks per week, according to age and race of mother: Total of 48 reporting States and the District of Columbia, 1994

					Ag	ge of mothe	er			
Drinking status, drinking measure,	A.U	Heden 45	1	15-19 years		00.04	05.00	00.04	05.00	10.10
and race of mother	All ages	Under 15 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years
					Num	nber				
All races <sup>1</sup>										
Total	3,374,330	11,201	435,964	168,354	267,610	858,177	930,843	773,920	311,080	53,145
Drinker	3,262,567	70 10,992 139	3,964 425,544 6,456	1,387 164,523 2,444	2,577 261,021 4,012	11,329 833,969 12,879	14,941 900,859 15,043	17,100 743,413 13,407	8,256 297,164 5,660	1,396 50,626 1,123
White										
Total	2,649,508	4,677	290,536	104,365	186,171	643,812	760,370	649,089	257,828	43,196
Drinker	2,566,617	44 4,556 77	2,809 283,210 4,517	974 101,771 1,620	1,835 181,439 2,897	7,547 626,553 9,712	9,936 738,483 11,951	12,596 625,565 10,928	6,177 247,006 4,645	1,054 41,244 898
Black										
Total	593,508	6,208	133,280	59,446	73,834	185,799	131,707	91,098	38,459	6,957
Drinker	14,808 569,512 9,188	,	871 130,784 1,625	290 58,456 700	581 72,328 925	3,186 180,096 2,517	4,490 124,896 2,321	4,066 85,231 1,801	1,881 35,867 711	297 6,505 155
					Perd	cent				
Drinker <sup>1</sup>	1.7	0.6	0.9	0.8	1.0	1.3	1.6	2.2	2.7	2.7
WhiteBlack	_	1.0	1.0 0.7	0.9 0.5	1.0 0.8	1.2 1.7	1.3 3.5	2.0 4.6	2.4 5.0	2.5 4.4
					Percent di	istribution				
All races <sup>1</sup>										
Drinker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 drink or less	19.4 13.0	62.9	55.6 18.4 12.3 13.7	57.1 17.7 11.7 13.6	54.9 18.8 12.6 13.7	52.0 19.3 13.4 15.3	51.6 19.2 13.4 15.8	53.9 19.3 12.7 14.1	52.4 20.3 12.4 14.8	49.9 19.7 15.2 15.2
White										
Drinker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 drink or less	18.1 11.3	*	57.4 16.9 12.0 13.7	59.0 16.7 11.5 12.8	56.6 17.0 12.3 14.1	57.4 17.6 12.1 12.9	60.3 17.6 11.1 10.9	61.5 18.2 10.9 9.4	59.4 19.3 11.1 10.2	55.8 18.9 13.4 12.0
Black										
Drinker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 drink or less	23.5 17.7	*	48.0 24.1 14.3 13.7	46.3 25.1 13.1 15.4	48.8 23.6 14.8 12.9	39.6 23.7 16.7 20.0	32.4 23.3 18.5 25.9	29.3 22.9 18.5 29.3	27.8 24.9 16.8 30.6	27.2 22.3 22.8 27.7

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

NOTE: Excludes data for California, and South Dakota, which did not require reporting of alcohol use during pregnancy.

Table 33. Live births by month of pregnancy prenatal care began and percent of mothers beginning care in the first trimester and percent with late or no care, by age and race of mother: United States, 1994

					Month of pre	gnancy pren	atal care beg	an			
Age and race of mother	All births		1st trimester		2d trimester	La	te or no care		Not	Perc	ent
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	stated	1st trimester	Late or no care
All races 1	3,952,767	3,098,806	2,312,452	786,354	593,932	169,961	117,271	52,690	90,068	80.2	4.4
Under 15 years	12,901	5,652	3,289	2,363	4,749	1,968	1,410	558	532	45.7	15.9
15-19 years	505,488	316,655	200,041	116,614	136,241	39,351	28,404	10,947	13,241	64.3	8.0
15 years	30,742	16.322	9.567	6.755	10,171	3.310	2.361	949	939	54.8	11.1
16 years	63.125	36.376	21,901	14.475	19.101	5.827	4.168	1.659	1.821	59.3	9.5
17 years	101,302	62,393	38,828	23,565	27,995	8,216	5,916	2,300	2,698	63.3	8.3
18 years	137,547	87,617	55,772	31,845	36,212	10,215	7,407	2,808	3,503	65.4	7.6
19 years	172,772	113,947	73,973	39,974	42,762	11,783	8,552	3,231	4,280	67.6	7.0
20-24 years	1,001,418	729,445	513,122	216,323	193,383	55,029	38,742	16,287	23,561	74.6	5.6
	1,088,845	900,061	692,620	207,441	128,887	36,554	24,481	12,073	23,343	84.5	3.4
25-29 years	, ,	,			,	,	,		,		2.7
30-34 years	906,498	778,735	615,083	163,652	85,070	23,803	15,634	8,169	18,890	87.7	
35-39 years	371,608	315,027	247,437	67,590	37,306	10,664	6,922	3,742	8,611	86.8	2.9
40 years and over	66,009	53,231	40,860	12,371	8,296	2,592	1,678	914	1,890	83.0	4.0
White	3,121,004	2,534,574	1,916,630	617,944	415,937	109,868	79,515	30,353	60,625	82.8	3.6
Under 15 years	5,978	2,870	1,679	1,191	2,009	875	645	230	224	49.9	15.2
15-19 years	348,081	227,516	144,392	83,124	88,190	24,467	18,114	6,353	7,908	66.9	7.2
15 years	17,443	9,921	5,819	4,102	5,312	1,774	1,278	496	436	58.3	10.4
16 years	40,198	24,309	14,711	9,598	11,337	3,508	2,527	981	1,044	62.1	9.0
17 years	68,747	44,021	27,526	16,495	17,987	5,119	3,785	1,334	1,620	65.6	7.6
18 years	96,605	64,002	40,806	23,196	24,096	6,428	4,798	1,630	2,079	67.7	6.8
19 years	125,088	85,263	55,530	29,733	29,458	7,638	5,726	1,912	2,729	69.7	6.2
20-24 years	764.085	575.244	408,285	166.959	136.728	36.499	26.756	9.743	15.614	76.9	4.9
25-29 years	889,581	755,448	587,633	167,815	93,990	24,065	17,153	6,912	16.078	86.5	2.8
30-34 years	754,871	663,988	529,493	134,495	62,206	15,311	10,841	4,470	13,366	89.5	2.1
35-39 years	305,291	265,446	210,885	54,561	26,853	6,910	4,844	2,066	6,082	88.7	2.3
40 years and over	53,117	44,062	34,263	9,799	5,961	1,741	1,162	579	1,353	85.1	3.4
40 years and over	,			•		,	,		•		
Black	636,391	418,374	290,069	128,305	143,916	50,272	30,029	20,243	23,829	68.3	8.2
Under 15 years	6,465	2,602	1,511	1,091	2,579	997	696	301	287	42.1	16.1
15-19 years	140,968	79,903	49,966	29,937	42,854	13,302	9,048	4,254	4,909	58.7	9.8
15 years	12,297	5,928	3,465	2,463	4,478	1,420	994	426	471	50.1	12.0
16 years	20,853	10,985	6,534	4,451	7,051	2,093	1,459	634	724	54.6	10.4
17 years	29,413	16,693	10,285	6,408	8,945	2,768	1,880	888	1,007	58.8	9.7
18 years	36,489	21,044	13,370	7,674	10,738	3,388	2,295	1,093	1,319	59.8	9.6
19 years	41,916	25,253	16,312	8,941	11,642	3,633	2,420	1,213	1,388	62.3	9.0
20-24 years	197,841	127,669	86,985	40,684	47,598	15,803	9,889	5,914	6,771	66.8	8.3
25-29 years	142,355	100,943	73,051	27,892	25,909	9,966	5,349	4,617	5,537	73.8	7.3
30-34 years	99,155	72,205	53,338	18,867	16,211	6,688	3,309	3,379	4,051	75.9	7.0
35-39 years	42.029	29,890	21,576	8,314	7.333	2.917	1,424	1,493	1.889	74.5	7.3
40 years and over	7,578	5,162	3,642	1,520	1,432	599	314	285	385	71.8	8.3

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

Table 34. Percent of mothers beginning prenatal care in the first trimester and percent of mothers with late or no prenatal care by race of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1994

[By place of residence]

_	Percent be	ginning care in 1	st trimester	Perd	cent late <sup>1</sup> or no d	care
State	All races <sup>2</sup>	White	Black	All races <sup>2</sup>	White	Black
United States 3	80.2	82.8	68.3	4.4	3.6	8.2
Nabama	81.3	87.6	69.2	3.9	2.3	7.1
Alaska	84.6	86.3	85.6	2.8	2.4	*
Arizona	71.6	73.0	69.3	7.4	6.9	8.3
Arkansas	75.0	79.1	61.2	6.1	4.6	11.3
California	77.7	77.5	75.5	4.9	5.0	5.5
Colorado	80.7	81.6	69.9	4.6	4.3	8.4
Connecticut	88.5	90.4	76.3	2.2	1.7	5.4
Delaware	83.0	87.3	68.5	3.6	2.2	8.0
District of Columbia	57.3	84.3	53.1	15.4	5.8	17.0
lorida	81.2	84.8	69.4	3.6	2.8	6.5
Georgia	81.9	87.1	72.6	3.8	2.5	6.3
ławaii	84.3	87.3	84.3	3.1	2.0	*
daho	78.9	79.2	80.6	4.5	4.4	*
linois	80.3	84.3	66.0	4.4	3.0	9.3
ndiana	80.6	82.5	64.7	3.7	3.2	8.3
owa	87.3	87.9	71.4	2.4	2.2	6.9
Cansas	84.6	85.9	73.1	3.1	2.7	6.6
Centucky	83.0	84.4	69.3	3.0	2.6	7.1
ouisiana	79.2	87.0	68.7	4.2	2.1	7.0
laine	89.4	89.6	75.0	1.4	1.4	*
laryland	86.5	91.3	76.8	3.5	1.8	7.0
Massachusetts	89.0	90.6	78.0	1.9	1.5	4.9
lichigan	82.5	86.0	68.1	3.7	2.6	8.3
finnesota	83.0	86.0	58.0	3.0	2.1	12.3
Mississippi	75.9	85.7	65.1	5.0	2.6	7.6
lissouri	83.9	86.6	70.1	3.2	2.2	8.2
Nontana	81.6	84.0	84.4	3.4	2.5	*
lebraska	83.4	84.6	69.4	3.0	2.6	7.1
levada	75.1	76.3	64.6	7.6	7.1	11.8
lew Hampshire	88.6	88.7	73.3	1.9	1.8	*
lew Jersey	82.2	86.5	65.0	4.5	2.8	11.1
lew Mexico	66.9	69.5	58.9	7.9	6.6	11.4
lew York	75.6	79.8	61.3	6.1	4.8	10.7
lorth Carolina	81.9	87.4	68.4	3.8	2.2	7.6
North Dakota	83.0	84.5	88.2	2.0	1.6	*
Ohio	84.0	86.7	69.1	3.5	2.6	8.8
Oklahoma	76.1	79.1	63.4	6.1	4.9	11.4
Oregon	79.1	79.6	71.2	4.3	4.2	5.6
Pennsylvania	81.8	85.6	61.4	4.4	2.9	12.6
Rhode Island	89.4	90.8	77.3	1.6	1.4	3.2
outh Carolina	76.1	84.2	62.9	5.6	3.1	9.6
outh Dakota	81.8	85.2	70.0	3.9	2.3	*
ennessee	81.8	85.5	69.3	3.8	2.6	7.7
exas	75.5	76.1	70.4	6.1	5.9	7.4
Itah	85.5	86.4	70.3	2.8	2.4	8.8
ermont	86.0	86.3	*	2.1	2.1	*
irginia	82.9	87.0	70.8	3.5	2.3	7.0
Vashington	82.5	83.4	75.6	3.4	3.1	6.0
Vest Virginia	80.0	80.6	65.0	3.4	3.1	9.7
Visconsin	83.3	86.8	63.1	3.5	2.4	11.1
Vyoming	82.3	83.2	63.9	3.6	3.2	*
uerto Rico	76.8	77.4	67.7	3.9	3.6	7.4
irgin Islands	55.7	58.9	55.0	13.4	13.4	13.5
Guam	66.4	76.5	78.1	8.0	*	

<sup>1</sup> Care beginning in 3d trimester.
2 Includes races other than white and black.
3 Excludes data for Puerto Rico, Virgin Islands, and Guam.

Table 35. Live births by month of pregnancy prenatal care began, number of prenatal visits, and median number of visits, by race of mother: United States, 1994

				Month of p	regnancy pro	enatal care	began		
Number of prenatal visits and race of mother	All births		1st trimester		2d trimester	La	ate or no care		Not
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	stated
All races 1	3,952,767	3,098,806	2,312,452	786,354	593,932	169,961	117,271	52,690	90,068
No visits	52,690					52,690		52,690	
1-2 visits	46,975	10,259	6,321	3,938	11,786	22,658	22,658		2,272
3-4 visits	93,583	24,146	13,087	11.059	36,537	30,756	30,756		2,144
5-6 visits	196,655	78,313	42,907	35,406	86,237	28,978	28,978		3,127
7-8 visits	350,779	203,156	119,937	83,219	126,924	17,008	17,008		3,691
							•		
9-10 visits	759,056	578,510	376,082	202,428	164,540	9,126	9,126	•••	6,880
11-12 visits	1,033,482	933,459	699,634	233,825	91,806	3,322	3,322		4,895
13-14 visits	646,957	608,789	496,917	111,872	34,324	1,365	1,365		2,479
15-16 visits	422,955	399,764	337,015	62,749	20,511	862	862		1,818
17-18 visits	96,033	91,550	77,869	13,681	3,862	191	191		430
19 visits or more	133,436	125,151	108,072	17,079	6,978	465	465		842
Not stated	120,166	45,709	34,611	11,098	10,427	2,540	2,540		61,490
Median number of visits	12.2	12.6	12.8	11.6	9.5	5.3	5.3		10.3
White	3,121,004	2,534,574	1,916,630	617,944	415,937	109,868	79,515	30,353	60,625
No visits	30,353		•••			30,353		30,353	
1-2 visits	27,912	6,180	3,879	2,301	6,172	14,268	14,268		1,292
3-4 visits	58,834	15,093	8,173	6,920	22,025	20,423	20,423		1,293
5-6 visits	133,948	54,765	30,184	24,581	57,142	20,042	20,042		1,999
7-8 visits	261,900	157,574	94,556	63,018	89,644	12,104	12,104		2,578
9-10 visits	593,060	463,673	305,227	158,446	118,042	6,456	6,456		4,889
11-12 visits	853,911	779,503	590,078	189,425	68,121	2,506	2,506		3,781
13-14 visits	543,940	515,191	423,467	91,724	25,816	1,007	1,007		1,926
15-16 visits	346,067	329,120	279,472	49,648	14,893	647	647		1,407
17-18 visits	79,681	76,333	65,223	11,110	2,858	152	152		338
19 visits or more						322	322		608
	109,071	103,314	90,175	13,139	4,827				
Not stated	82,327	33,828	26,196	7,632	6,397	1,588	1,588		40,514
Median number of visits	12.3	12.6	12.8	11.7	9.7	5.4	5.4		10.4
Black	636,391	418,374	290,069	128,305	143,916	50,272	30,029	20,243	23,829
No visits	20,243		•••			20,243		20,243	
1-2 visits	16,150	3,530	2,093	1,437	4,943	6,817	6,817		860
3-4 visits	28,861	7,724	4,177	3,547	12,184	8,233	8,233		720
5-6 visits	50,574	19,071	10,415	8,656	23,477	7,060	7,060		966
7-8 visits	68,118	34,101	18,950	15,151	29,310	3,819	3,819		888
9-10 visits	125,970	84,878	51,862	33,016	37,396	2,106	2,106		1,590
11-12 visits	129,915	109,712	76,930	32,782	18,745	613	613		845
13-14 visits	75,288	67,733	52,424	15,309	6,842	290	290		423
15-16 visits	58,345	53,121	43,025	10,096	4,712	171	171		341
17-18 visits	12,033	11,105	9,098	2,007	821	35	35		72
		17,351							
19 visits or more Not stated	19,580 31,314	10,048	14,071 7,024	3,280 3,024	1,918 3,568	119 766	119 766		192 16,932
Median number of visits	11.1	12.3	12.6	11.1	9.0	4.9	4.9		9.0

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

Table 36. Live births to mothers with selected obstetric procedures and rates by age of mother, by race of mother: United **States, 1994** 

[Rates are number of live births with specified procedure per 1,000 live births in specified group]

Obatatria ana and una and	Δ.ΙΙ	Obstetric			Α	ge of moth	ner			Not
Obstetric procedure and race of mother	All births <sup>1</sup>	procedure reported	All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	Not stated
All races <sup>2</sup>										
Amniocentesis Electronic fetal monitoring Induction of labor Stimulation of labor Tocolysis Ultrasound	3,952,767 3,952,767 3,952,767 3,952,767 3,952,767	123,188 3,146,757 574,905 594,063 66,628 2,396,461	31.4 803.1 146.7 151.6 17.0 611.6	9.5 814.1 128.5 157.0 18.8 594.2	11.3 808.1 142.3 154.7 17.1 605.9	15.0 805.9 152.5 154.3 16.6 617.4	27.7 798.7 153.2 147.9 16.4 619.3	145.1 783.6 150.5 139.8 17.0 616.9	192.9 767.4 153.0 136.4 17.0 607.0	34,676 34,676 34,676 34,676 34,676 34,676
White										
Amniocentesis	3,121,004 3,121,004 3,121,004 3,121,004 3,121,004 3,121,004	105,370 2,499,230 487,516 480,580 53,976 1,934,207	34.1 808.0 157.6 155.4 17.5 625.3	10.3 818.7 140.6 164.5 20.0 611.7	11.8 812.7 154.3 159.7 17.6 620.5	15.4 811.6 162.9 157.6 17.1 630.1	29.0 804.3 162.0 150.5 16.6 630.1	154.2 788.5 159.1 142.2 17.3 628.4	208.2 771.7 160.8 138.7 17.1 619.1	27,841 27,841 27,841 27,841 27,841
Black										
Amniocentesis  Electronic fetal monitoring Induction of labor Stimulation of labor Tocolysis Ultrasound	636,391 636,391 636,391 636,391 636,391	10,640 503,314 66,655 85,768 9,501 353,627	16.9 797.4 105.6 135.9 15.1 560.2	7.7 809.0 101.6 140.8 15.8 556.7	9.5 802.1 103.1 137.7 14.8 560.0	13.0 792.9 106.8 135.4 14.5 560.8	18.6 786.1 109.7 130.3 15.2 564.7	77.3 780.5 113.4 126.5 14.8 562.7	101.9 773.0 129.6 125.5 14.8 552.7	5,168 5,168 5,168 5,168 5,168 5,168

<sup>1</sup> Total number of births.2 Includes races other than white and black.

Table 37. Live births to mothers with selected complications of labor and/or delivery and rates by age of mother, by race of mother: United States, 1994

[Rates are number of live births with specified complication per 1,000 live births in specified group]

Complication and race of mother   All births   Complication reported   All ages   Under 20 years   20-24 years   25-29 years   30-34 years   35-39 years   40-49 years	Not stated  43,818 43,818
Febrile       3,952,767       60,564       15.5       19.4       16.4       15.2       13.9       12.7       13.8         Meconium, moderate/heavy       3,952,767       224,160       57.3       61.7       58.4       55.4       55.3       58.4       61.8         Premature rupture of membrane       3,952,767       121,549       31.1       30.6       29.4       30.4       31.7       35.4       39.1         Abruptio placenta       3,952,767       22,721       5.8       5.6       5.5       5.5       6.0       7.1       7.8	
Meconium, moderate/heavy       3,952,767       224,160       57.3       61.7       58.4       55.4       55.3       58.4       61.8         Premature rupture of membrane       3,952,767       121,549       31.1       30.6       29.4       30.4       31.7       35.4       39.1         Abruptio placenta       3,952,767       22,721       5.8       5.6       5.5       5.5       6.0       7.1       7.8	
Premature rupture of membrane       3,952,767       121,549       31.1       30.6       29.4       30.4       31.7       35.4       39.1         Abruptio placenta       3,952,767       22,721       5.8       5.6       5.5       5.5       6.0       7.1       7.8	43,818
Abruptio placenta	
	43,818
	43,818
Placenta previa	43,818
Other excessive bleeding       3,952,767       21,678       5.5       5.2       5.2       5.3       5.8       6.6       7.9         Seizures during labor       3,952,767       1,683       0.4       0.8       0.5       0.4       0.3       0.4       0.5	43,818 43,818
Precipitous labor	43,818
Prolonged labor	43,818
Dysfunctional labor	43,818
Breech/Malpresentation	43,818
Cephalopelvic disproportion	43,818
Cord prolapse	43,818
Anesthetic complication 3	45,754
Fetal distress <sup>3</sup>	45,754
White	
Febrile	34,848
Meconium, moderate/heavy	34,848
Premature rupture of membrane	34,848
Abruptio placenta	34,848
Placenta previa	34,848
Other excessive bleeding       3,121,004       17,425       5.6       5.6       5.4       5.7       6.6       7.7         Seizures during labor       3,121,004       1,055       0.3       0.7       0.4       0.3       0.2       0.3       0.5	34,848
Seizures during labor	34,848 34,848
Prolonged labor	34,848
Dysfunctional labor	34,848
Breech/Malpresentation	34,848
Cephalopelvic disproportion	34,848
Cord prolapse	34,848
Anesthetic complication 3	36,492
Fetal distress <sup>3</sup>	36,492
Black	
Febrile	6,770
Meconium, moderate/heavy	6,770
Premature rupture of membrane	6,770
Abruptio placenta	6,770
Placenta previa	6,770
Other excessive bleeding	6,770
Seizures during labor	6,770 6,770
Prolonged labor	6,770
Dysfunctional labor	6,770
Breech/Malpresentation	6,770
Cephalopelvic disproportion	6,770
Cord prolapse	6,770
Anesthetic complication 3	7,045
Fetal distress <sup>3</sup>	7,045

Total number of births to residents of areas reporting specified complication.
 Includes races other than white and black.
 Texas does not report this complication.

Table 38. Live births by attendant, place of delivery, and race of mother: United States, 1994

			Physician			Midwife			
Place of delivery and race of mother	All births	Total	Doctor of medicine	Doctor of osteopathy	Total	Certified nurse midwife	Other midwife	Other	Unspecified
All races <sup>1</sup>									
Total	3,952,767	3,707,606	3,569,518	138,088	218,466	205,049	13,417	24,173	2,522
In hospital <sup>2</sup>	3,912,195 40,119 11,787 923 24,694 2,715 453	3,700,399 6,979 1,813 376 3,924 866 228	3,563,502 5,794 1,200 303 3,473 818 222	136,897 1,185 613 73 451 48 6	196,977 21,476 9,765 316 11,033 362 13	195,410 9,630 6,686 139 2,591 214 9	1,567 11,846 3,079 177 8,442 148	13,283 10,856 201 208 9,073 1,374	1,536 808 8 23 664 113 178
White									
Total	3,121,004	2,932,993	2,815,091	117,902	168,056	155,279	12,777	18,033	1,922
In hospital <sup>2</sup> Not in hospital Freestanding birthing center Clinic or doctor's office Residence Other Not specified	3,086,394 34,229 11,194 726 20,556 1,753 381	2,928,009 4,792 1,699 296 2,375 422 192	2,811,209 3,695 1,091 228 1,988 388 187	116,800 1,097 608 68 387 34 5	147,521 20,523 9,303 287 10,601 332 12	146,279 8,992 6,286 119 2,398 189 8	1,242 11,531 3,017 168 8,203 143 4	9,710 8,303 187 126 7,068 922 20	1,154 611 5 17 512 77 157
Black									
Total	636,391	595,609	579,677	15,932	35,768	35,396	372	4,565	449
In hospital <sup>2</sup> Not in hospital Freestanding birthing center Clinic or doctor's office Residence Other Not specified	631,725 4,599 388 134 3,291 786 67	593,665 1,910 77 51 1,396 386 34	577,804 1,840 76 48 1,340 376 33	15,861 70 1 3 56 10	35,217 550 301 16 212 21	34,967 428 269 15 125 19	250 122 32 1 87 2	2,530 2,022 7 61 1,602 352 13	313 117 3 6 81 27 19

 <sup>1</sup> Includes races other than white and black.
 2 Includes births occurring en route to or on arrival at hospital.

Table 39. Live births by method of delivery and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by race of mother: United States, 1989-1994

			Births by	method of a	lelivery			Cesarean	delivery rate	D-11
Van and san af math as		Vag	inal		Cesarean					Rate of vaginal
Year and race of mother	All births	Total	After previous cesarean	Total	Primary	Repeat	Not stated	Total <sup>1</sup>	Primary <sup>2</sup>	birth after previous cesarean
All races <sup>4</sup>										
1994	3,952,767	3,087,576	110,341	830,517	520,647	309,870	34,674	21.2	14.9	26.3
1993	4,000,240	3,098,796	103,581	861,987	539,251	322,736	39,457	21.8	15.3	24.3
1992	4,065,014	3,100,710	97,549	888,622	554,662	333,960	75,682	22.3	15.6	22.6
1991	4,110,907	3,100,891	90,690	905,077	569,195	335,882	104,939	22.6	15.9	21.3
1990 <sup>5</sup> 1989 <sup>6</sup>	4,110,563 3,798,734	3,111,421 2,793,463	84,299 71,019	914,096 826,955	575,066 521,873	339,030 305,082	85,046 178,316	22.7 22.8	16.0 16.1	19.9 18.9
White	, , , ,	,,	,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	-,-		-	
1994	3,121,004	2,435,965	88,471	656,400	407,946	248,454	28,639	21.2	14.8	26.3
1993	3,149,833	2,435,229	82,995	682,355	423,540	258,815	32,249	21.9	15.3	24.3
1992	3,201,678	2,434,959	77,977	705,841	437,398	268,443	60,878	22.5	15.7	22.5
1991	3,241,273	2,434,900	72,564	723,088	452,534	270,554	83,285	22.9	16.1	21.1
1990 5	3,252,473	2,453,857	67,191	732,713	458,656	274,057	65,903	23.0	16.1	19.7
1989 <sup>6</sup>	3,022,537	2,212,843	56,851	667,114	418,177	248,937	142,580	22.8	16.1	18.9
Black										
1994	636,391	493,879	16,970	138,067	88,636	49,431	4,445	21.8	15.7	25.6
1993	658,875	509,816	16,179	143,452	91,677	51,775	5,607	22.0	15.7	23.8
1992	673,633	514,929	15,382	146,480	93,165	53,315	12,224	22.1	15.7	22.4
991	682,602	519,047	14,213	145,583	92,645	52,938	17,972	21.9	15.5	21.2
1990 5	679,236	516,581	13,496	146,472	93,476	52,996	16,183	22.1	15.7	20.3
1989 <sup>6</sup>	611,147	452,291	11,104	127,907	82,695	45,212	30,319	22.0	15.8	19.7

Percent of all live births by cesarean delivery.
 Number of primary cesareans per 100 live births to women who have not had a previous cesarean.
 Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.

<sup>4</sup> Includes races other than white and black.

Excludes data for Oklahoma, which did not report method of delivery on the birth certificate.
 Excludes data for Louisiana, Maryland, Nebraska, Nevada, and Oklahoma, which did not report method of delivery on the birth certificate.

Table 40. Live births by method of delivery, and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by age and race of mother: United States, 1994

			Births by	method of a	lelivery			Cesarean	delivery rate	5
Ann and an an after them		Vagi	inal		Cesarean					Rate of vaginal
Age and race of mother	All births	Total	After previous cesarean	Total	Primary	Repeat	Not stated	Total <sup>1</sup>	Primary <sup>2</sup>	birth after previous cesarean <sup>3</sup>
All races <sup>4</sup>	3,952,767	3,087,576	110,341	830,517	520,647	309,870	34,674	21.2	14.9	26.3
Jnder 20 years	518,389	437,183	4,134	77,194	68,070	9,124	4,012	15.0	13.6	31.2
20-24 years	1,001,418	811,377	22,419	181,680	125,077	56,603	8,361	18.3	13.7	28.4
25-29 years	1,088,845	847,290	32,994	231,809	141,917	89,892	9,746	21.5	14.8	26.8
30-34 years	906,498	680,678	34,379	217,469	118,532	98,937	8,351	24.2	15.5	25.8
35-39 years	371,608	266,276	14,304	101,796	54,812	46,984	3,536	27.7	17.9	23.3
10-49 years	66,009	44,772	2,111	20,569	12,239	8,330	668	31.5	22.3	20.2
White	3,121,004	2,435,965	88,471	656,400	407,946	248,454	28,639	21.2	14.8	26.3
Jnder 20 years	354,059	299,439	2,441	51,740	46,242	5,498	2,880	14.7	13.5	30.7
20-24 years	764,085	618,917	16,263	138,477	96,523	41,954	6,691	18.3	13.8	27.9
25-29 years	889,581	692,748	26,853	188,617	115,537	73,080	8,216	21.4	14.8	26.9
30-34 years	754,871	568,610	29,030	179,003	96,429	82,574	7,258	23.9	15.2	26.0
35-39 years	305,291	220,088	12,140	82,187	43,561	38,626	3,016	27.2	17.3	23.9
10-49 years	53,117	36,163	1,744	16,376	9,654	6,722	578	31.2	21.9	20.6
Black	636,391	493,879	16,970	138,067	88,636	49,431	4,445	21.8	15.7	25.6
Jnder 20 years	147,433	122,944	1,577	23,560	20,137	3,423	929	16.1	14.2	31.5
20-24 years	197,841	158,536	5,407	37,987	24,667	13,320	1,318	19.3	13.9	28.9
25-29 years	142,355	107,845	4,790	33,472	19,534	13,938	1,038	23.7	15.9	25.6
30-34 years	99,155	70,948	3,670	27,473	15,231	12,242	734	27.9	18.5	23.1
35-39 years	42,029	28,676	1,315	12,989	7,458	5,531	364	31.2	21.4	19.2
10-49 years	7,578	4,930	211	2,586	1.609	977	62	34.4	25.4	17.8

Percent of all live births by cesarean delivery.
 Number of primary cesareans per 100 live births to women who have not had a previous cesarean.
 Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.
 Includes races other than white and black.

Table 41. Rates of cesarean delivery and vaginal birth after previous cesarean delivery, by selected maternal medical risk factors, complications of labor and/or delivery, and obstetric procedures: United States, 1994

	All births to mothers	Cesarean	Rate of	
Medical risk factor, complication, and obstetric procedure	with specified condition and/or procedure	Total <sup>1</sup>	Primary <sup>2</sup>	vaginal birth after previous cesarean <sup>3</sup>
Medical risk factors				
Anemia	78,173	23.2	16.5	29.2
Cardiac disease	17,603	24.5	17.7	27.2
cute or chronic lung disease	22,105	25.7	18.5	27.7
iabetes	99,492	35.4	25.5	19.2
enital herpes <sup>4</sup>	29,531	38.4	32.7	30.0
lydramnios/Oligohydramnios	39,850	38.8	33.5	23.3
lemoglobinopathy	2,513	24.2	18.5	31.9
lypertension, chronic	26,567	39.6	30.8	18.3
lypertension, pregnancy-associated	125,683	37.4	32.7	19.5
clampsia	13,463	49.5	45.6	16.2
•	•			-
ncompetent cervix	8,925	30.4	23.0	26.8
lenal disease	10,126	26.1	19.0	24.6
th sensitization 5	25,301	21.6	15.1	31.1
Iterine bleeding <sup>4</sup>	28,236	31.1	24.2	24.8
Complications of labor and/or delivery				
ebrile	60,564	31.4	29.4	47.2
leconium, moderate/heavy	224,160	21.2	18.3	45.7
remature rupture of membrane	121,549	26.0	22.9	38.8
bruptio placenta	22,721	57.9	53.4	16.8
lacenta previa	13,231	82.8	78.8	3.9
Other excessive bleeding	21,678	28.3	22.3	31.8
eizures during labor	1,683	44.1	41.2	25.2
Precipitous labor (less than 3 hours)	74,169	1.7	1.2	87.0
Prolonged labor (more than 20 hours)	35,343	36.9	35.5	45.3
hysfunctional labor	116,670	65.2	62.8	16.8
reech/Malpresentation	146,283	85.5	83.9	4.8
ephalopelvic disproportion	99,747	97.4	97.1	1.2
	•	97.4 61.8	97.1 59.1	16.0
ord prolapsenesthetic complication <sup>6</sup>	9,454			
	2,185	45.0 50.5	35.6	19.0
etal distress <sup>6</sup>	147,886	56.5	53.9	21.4
Obstetric procedures				
mniocentesis	123,188	33.1	23.1	21.2
lectronic fetal monitoring	3,146,757	20.6	14.9	30.0
nduction of labor	574,905	18.4	16.5	56.1
timulation of labor	594,063	14.5	12.9	62.8
ocolysis	66,628	28.4	23.0	27.4
Utrasound	2,396,461	23.0	16.2	26.1

Percent of all live births by cesarean delivery.

Number of primary cesareans per 100 live births to women who have not had a previous cesarean.

Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.

Texas does not report this risk factor.

Kansas does not report this risk factor.

Texas does not report this complication.

Table 42. Live births by birthweight and percent very low and low birthweight, by period of gestation and race of mother: United States, 1994

						Perio	od of gestat	ion <sup>2</sup>				
Birthweight <sup>1</sup> and	All			Preterm				Tern	า		Postterm	
race of mother	births	Total under 37 weeks	Under 28 weeks	28-31 weeks	32-35 weeks	36 weeks	Total 37-41 weeks	37-39 weeks	40 weeks	41 weeks	42 weeks and over	Not stated
						Nu	mber					
All races 3	3,952,767	431,613	28,126	46,815	203,052	153,620	3,130,482	1,731,367	887,144	511,971	355,585	35,087
Less than 500 grams 500-999 grams	5,550 20,708	5,379 20,061	5,126 15,059	230 4,358	23 611	33	6 189	2 127	4 38	- 24	3 18	162 440
1,000-1,499 grams	26,373	24,325	3,932	13,665	6,126	602	1,428	1,059	262	107	225	395
1,500-1,999 grams	55,158	44,517	1,157	10,841	27,877	4,642	9,053	7,419	1,064	570	912	676
2,000-2,499 grams	179,818	88,159	845	4,644	56,043	26,627	83,448	66,659	11,375	5,414	6,319	1,892
2,500-2,999 grams	647,165	113,658	1,314	4,782	51,537	56,025	487,127	347,135	95,283	44,709	40,556	5,824
3,000-3,499 grams	1,453,730	88,357	-	5,483	38,466	44,408	1,225,876	718,304	333,388	174,184	127,569	11,928
3,500-3,999 grams	1,147,438	36,924	-	2,683	17,487	16,754	976,560	458,462	322,350	195,748	125,121	8,833
1,000-4,499 grams	347,048	7,699	-	-	3,980	3,719	291,712	112,267	104,305	75,140	44,948	2,689
1,500-4,999 grams	58,443	1,184	-	-	575	609	48,091	16,881	16,931	14,279	8,685	483
5,000 grams or more	6,782 4,554	187	693	129	95 232	92 109	5,464 1,528	2,182 870	1,755 389	1,527 269	1,040 189	91
Not stated	4,554	1,163	093	129	232			670	309	209	109	1,674
						Pe	rcent					
Very low birthweight 4 Low birthweight 5	1.3 7.3	11.6 42.4	87.9 95.2	39.1 72.3	3.3 44.7	0.4 20.8	0.1 3.0	0.1 4.3	0.0 1.4	0.0 1.2	0.1 2.1	3.0 10.7
						Nu	mber					
White	3,121,004	297,471	15,651	29,210	139,575	113,035	2,510,633	1,360,675	724,711	425,247	286,629	26,271
Less than 500 grams	2,921	2,825	2,683	128	14	-	5	2	3	-	1	90
500-999 grams	12,188	11,773	8,599	2,741	415	18	130	87	23	20	13	272
1,000-1,499 grams	16,818	15,512	2,311	8,722	4,066	413	906	664	174	68	140	260
1,500-1,999 grams	36,569	29,543	588	7,106	18,709	3,140	6,007	4,971	681	355	579	440
2,000-2,499 grams	121,892	60,310	390	2,647	38,923	18,350	56,184	45,058	7,537	3,589	4,175	1,223
2,500-2,999 grams	458,341	79,501	687	2,576	35,304	40,934	346,423	246,596	67,816	32,011	28,469	3,948
3,000-3,499 grams	1,134,177	62,652	-	3,368	25,724	33,560	963,454	561,367	263,097	138,990	99,108	8,963
3,500-3,999 grams	970,739 306,408	27,601 6,003	-	1,847	12,727 3,034	13,027 2,969	830,242 258,427	386,490 98,169	275,437 92,905	168,315 67,353	105,621 39,680	7,275 2,298
4,000-4,499 grams	52,078	923		_	445	478	42,955	14,796	15,204	12,955	7,772	428
4,500-4,999 grams 5,000 grams or more	5,900	140	-	-	70	70	42,933	1,839	1,531	1,372	939	79
Not stated	2,973	688	393	75	144	76	1,158	636	303	219	132	995
							rcent					
/	4.0	40.4	00.4	20.0	2.0	0.4	0.0	0.4	0.0	0.0	0.4	0.5
Very low birthweight 4 Low birthweight 5	1.0 6.1	10.1 40.4	89.1 95.5	39.8 73.3	3.2 44.6	0.4 19.4	0.0 2.5	0.1 3.7	0.0 1.2	0.0 0.9	0.1 1.7	2.5 9.0
						Nu	mber					
Black	636,391	113,999	11,577	15,710	53,745	32,967	463,742	278,093	120,658	64,991	53,509	5,141
Less than 500 grams	2,478	2,411	2,309	93	9	-	1	-	1	-	2	64
500-999 grams	7,808	7,623	5,974	1,465	171	13	51	36	12	3	4	130
1,000-1,499 grams	8,544	7,891	1,484	4,447	1,799	161	469	352	80	37	78	106
1,500-1,999 grams	16,244	13,140	532	3,340	8,006	1,262	2,624	2,102	341	181	297	183
2,000-2,499 grams	49,021	23,977	423	1,818	14,810	6,926	22,677	17,896	3,220	1,561	1,875	492
2,500-2,999 grams	149,556	28,562	577	1,960	13,702	12,323	109,856	78,092	21,619	10,145	9,949	1,189
3,000-3,499 grams	239,892 128,187	21,074 7,407	-	1,840	10,560	8,674	194,875	116,056 51.747	52,230	26,589	22,319 14,493	1,624
3,500-3,999 grams 4,000-4,499 grams	28,638	1,300	-	708 -	3,787 741	2,912 559	105,507 23,373	51,747 9,971	33,779 7,953	19,981 5,449	3,785	780 180
4,500-4,999 grams	4,367	1,300	_	-	88	100	3,542	1,432	1,202	908	615	22
5,000 grams or more	621	37	-	-	19	18	517	254	161	102	56	11
Not stated	1,035	389	278	39	53	19	250	155	60	35	36	360
						Pe	rcent					
Very low birthweight 4	3.0	15.8	86.4	38.3	3.7	0.5	0.1	0.1	0.1	0.1	0.2	6.3
	0.0	10.0										

<sup>1</sup> Equivalents of the gram weights in pounds and ounces are shown in the Technical notes.
2 Expressed in completed weeks.
3 Includes races other than white and black.
4 Birthweight of less than 1,500 grams.
5 Birthweight of less than 2,500 grams.

Table 43. Percent of live births preterm and percent of live births of low birthweight, by race of mother: United States, 1981-94

Verse		Preterm <sup>1</sup>		Low birthweight 3			
Year	All races <sup>2</sup>	White	Black	All races <sup>2</sup>	White	Black	
994	11.0	9.6	18.1	7.3	6.1	13.2	
993	11.0	9.5	18.5	7.2	6.0	13.3	
992	10.7	9.1	18.4	7.1	5.8	13.3	
991	10.8	9.1	18.9	7.1	5.8	13.6	
990	10.6	8.9	18.8	7.0	5.7	13.3	
989	10.6	8.8	18.9	7.0	5.7	13.5	
988	10.2	8.5	18.7	6.9	5.7	13.3	
987	10.2	8.5	18.4	6.9	5.7	13.0	
986	10.0	8.4	18.0	6.8	5.7	12.8	
985	9.8	8.2	17.8	6.8	5.7	12.6	
984 <sup>4</sup>	9.4	7.9	17.1	6.7	5.6	12.6	
983 <sup>4</sup>	9.6	8.0	17.7	6.8	5.7	12.8	
982 <sup>4</sup>	9.5	8.0	17.4	6.8	5.6	12.6	
981 <sup>4</sup>	9.4	7.9	17.3	6.8	5.7	12.7	

Births of less than 37 completed weeks gestation.
 Includes races other than white and black.
 Less than 2,500 grams.
 Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

Table 44. Number and percent low birthweight and number of live births by birthweight, by age and race of mother: United States, 1994

	Low birthw	reight 1			.,,.,.,.,.,.,.	,			Birthweight	2					
Age and race of mother	Number	Percent	Total	Less than 500 grams	500- 999 grams	1,000- 1,499 grams	1,500- 1,999 grams	2,000- 2,499 grams	2,500- 2,999 grams	3,000- 3,499 grams	3,500- 3,999 grams	4,000- 4,499 grams	4,500- 4,999 grams	5,000- grams or more	Not stated
All races <sup>3</sup>															
All ages	287,607	7.3	3,952,767	5,550	20,708	26,373	55,158	179,818	647,165	1,453,730	1,147,438	347,048	58,443	6,782	4,554
Under 15 years	1,766	13.7	12,901	43	200	201	349	973	3,297	4,968	2,388	423	43	1	15
15-19 years	47,091	9.3	505,488	855	3,548	4,408	8,858	29,422	106,949	201,558	119,027	26,428	3,499	315	621
15 years	3,527	11,5	30,742	59	329	383	693	2,063	7,282	12,337	6,244	1,180	115	7	50
16 years	6,502	10.3	63,125	151	536	637	1,232	3,946	14,307	25,388	13,706	2,787	338	30	67
17 years	9,685	9.6	101,302	180	739	920	1,803	6,043	22,036	40,792	23,176	4,854	577	48	134
18 years	12,526	9.1	137,547	212	890	1,129	2,345	7,950	28,831	54,588	32,840	7,479	1,010	106	167
19 years	14,851	8.6	172,772	253	1,054	1,339	2,785	9,420	34,493	68,453	43,061	10,128	1,459	124	203
20-24 years	72,565	7.3	1.001.418	1,449	5.289	6.171	13,287	46,369	178,254	385,510	276,138	75,312	11,328	1.232	1,079
25-29 years	69,850	6.4	1,088,845	1,416	4,879	6,228	13,273	44,054	164,488	396,897	333,653	103,445	17,414	1,918	1,180
30-34 years	60,645	6.7	906,498	1,154	4,214	5,703	11,965	37,609	129,308	316,700	284,504	95,106	17,105	2,080	1,050
35-39 years	29,447	7.9	371,608	525	2.097	2.968	6.071	17,786	54,516	126,254	112,675	39,477	7,674	1,044	521
40-44 years	5,922	9.3	63,502	107	457	651	1,282	3,425	9,910	21,053	18,411	6,615	1,324	185	82
45-49 years	321	12.8	2,507	107	24	43	73	180	443	790	642	242	56		6
White															
All ages	190,388	6.1	3,121,004	2,921	12,188	16,818	36,569	121,892	458,341	1,134,177	970,739	306,408	52,078	5,900	2,973
Under 15 years	661	11.1	5,978	15	67	79	151	349	1,312	2,345	1,358	269	29	1	3
15-19 years	27,314		348,081	378	1,888	2,477	5.116	17,455	66,113	138,952	90,789	21,408	2,912		342
15 years	1.638		17,443	19	144	176	333	966	3.615	7,092	4,128	857	85		23
16 years	3,538		40,198	66	274	345	678	2,175	8,100	16,296	9,821	2,120	270	-	30
	5,519		68,747	82	397	495	1,032	3.513	13,385	27,767	17,635	3,866	461		76
17 years 18 years	7,460		96,605	96	486	657	1,390	4,831	18,344	38,373	25,279	6,108	856		98
19 years	9,159		125,088	115	587	804	1,683	5,970	22,669	49,424	33,926	8,457	1,240		115
	46,080		764,085	663	2.943	3,704	8,277	30,493	122,829	292,114	226,755	64,768	9,873		636
20-24 years	•					,		•	121,516	320,462	288.686		15,647		812
25-29 years	48,265		889,581	784	2,945	4,129	9,230	31,177						,	
30-34 years	42,968		754,871	694	2,693	3,917	8,568		98,025	260,558	249,265	,	15,514		734
35-39 years	20,727		305,291	320	1,336	2,038	4,244		40,880	102,393	97,697	35,428	6,880		378
40-44 years	4,141		51,192	67	300	447	927	2,400	7,338	16,759	15,674		1,175		
45-49 years	232	12.1	1,925	0	16	27	56	133	328	594	515	198	48	6	4

See footnotes at end of table.

Table 44. Number and percent low birthweight and number of live births by birthweight, by age and race of mother: United States, 1994--Con.

	Low birthw	eight 1			eight 1 Birthweight 2										
Age and race of mother	Number	Percent	Total	Less than 500 grams	500- 999 grams	1,000- 1,499 grams	1,500- 1,999 grams	2,000- 2,499 grams	2,500- 2,999 grams	3,000- 3,499 grams	3,500- 3,999 grams	4,000- 4,499 grams	4,500- 4,999 grams	5,000- grams or more	Not stated
Black															
All ages	84,095	13.2	636,391	2,478	7,808	8,544	16,244	49,021	149,556	239,892	128,187	28,638	4,367	621	1,035
Under 15 years	1,051	16.3	6,465	28	126	114	184	599	1,866	2,449	945	134	12	0	8
15-19 years	18,468	13.1	140,968	458	1,588	1,804	3,500	11,118	37,153	56,063	24,424	4,139	450		218
15 years	1,793	14.6	12,297	40	182	190	341	1,040	3,427	4,850	1,910	272	25	2	18
16 years	2,777	13.3	20,853	80	250	270	522	1,655	5,736	8,268	3,423	561	53	_	29
17 years	3,917	13.3	29,413	92	325	404	725	2,371	7,951	11,726	4,853	834	81	8	43
18 years	4,733	13.0	36,489	111	389	442	900	2,891	9,484	14,459	6,499	1,117	128	15	54
19 years	5,248	12.5	41,916	135	442	498	1,012	3,161	10,555	16,760	7,739	1,355	163	22	74
20-24 years	23,789	12.0	197,841	751	2,209	2,282	4,525	14,022	47,107	77,293	39,862	8,230	1,100	148	312
25-29 years	18,163	12.8	142,355	589	1,775	1,869	3,460	10,470	31,432	52,683	30,996	7,472	1,225	154	230
30-34 years	14,373	14.5	99,155	430	1,359	1,538	2,809	8,237	21,298	34,738	21,580	5,816	1,018	155	177
35-39 years	6,882	16.4	42,029	190	625	769	1,487	3,811	9,052	14,206	8,811	2,420	483		81
40-44 years	1,324		7,339	31	121	163	270	739	1,593	2,380	1,528	413	76	17	8
45-49 years	45		239	1	5	5	9	25	55	80	41	14	3	0	1

Less than 2,500 grams.
 Equivalents of gram weights in terms of pounds and ounces are shown in Technical notes.
 Includes races other than white and black.

Table 45. Live births with selected abnormal conditions of the newborn and rates by age of mother, by race of mother: United States, 1994

[Rates are number of live births with specified abnormal condition per 1,000 live births in specified group]

		<u> </u>			Ą	ge of moth	ner			
Abnormal condition and race of mother	All births <sup>1</sup>	Abnormal condition reported	All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	Not stated
All races <sup>2</sup>										
Anemia	3,952,767 3,524,710 3,884,485 3,952,767 3,952,767 3,825,083 3,825,083 3,952,767	4,322 9,129 26,16 26,166 9,693 69,333 30,445 3,185	1.1 2.6 0.1 6.7 2.5 18.4 8.1 0.8	1.3 2.6 0.0 8.3 2.6 19.4 9.9	1.1 2.8 0.1 7.1 2.4 18.5 8.3 0.9	1.1 2.8 0.1 6.3 2.5 18.4 7.5 0.8	1.0 2.5 0.1 6.0 2.4 18.0 7.2 0.7	1.1 2.4 0.1 6.6 2.7 18.1 8.3 0.7	1.0 2.1 * 7.5 3.0 19.3 11.1 0.9	66,098 57,880 67,167 66,098 66,098 65,359 65,359 66,098
White										
Anemia Birth injury <sup>3</sup> Fetal alcohol syndrome <sup>4</sup> Hyaline membrane disease/RDS Meconium aspiration syndrome Assisted ventilation less than 30 minutes <sup>5</sup> Assisted ventilation 30 minutes or longer <sup>5</sup> Seizures	3,121,004 2,755,441 3,062,191 3,121,004 3,121,004 3,047,201 3,047,201 3,121,004	3,079 7,754 141 20,494 7,139 55,145 23,281 2,330	1.0 2.9 0.0 6.7 2.3 18.4 7.8 0.8	1.2 3.1 * 8.2 2.5 19.0 9.5 1.0	1.0 3.0 0.0 7.1 2.2 18.3 8.1 0.8	1.0 3.0 0.0 6.3 2.3 18.6 7.3 0.7	1.0 2.6 0.1 6.0 2.2 18.1 7.0	1.0 2.5 * 6.6 2.6 18.2 7.8 0.7	0.9 2.1 * 7.3 2.9 19.4 10.8 0.8	53,541 47,424 54,579 53,541 53,541 53,841 53,841
Black										
Anemia Birth injury <sup>3</sup> Fetal alcohol syndrome <sup>4</sup> Hyaline membrane disease/RDS Meconium aspiration syndrome Assisted ventilation less than 30 minutes <sup>5</sup> Assisted ventilation 30 minutes or longer <sup>5</sup> Seizures	636,391 586,721 629,548 636,391 636,391 593,518 593,518 636,391	1,010 857 88 4,933 2,076 11,641 5,894 761	1.6 1.5 0.1 7.9 3.3 19.9 10.1 1.2	1.7 1.5 * 8.8 3.0 20.3 10.7 1.3	1.6 1.6 * 7.6 3.0 19.6 9.5 1.2	1.6 1.3 0.2 7.1 3.4 19.4 9.1	1.4 1.4 0.3 7.7 4.0 20.3 10.3 1.2	1.8 1.8 * 8.6 3.8 20.8 12.7	9.8 4.8 20.8 13.3	9,608 7,740 9,628 9,608 9,608 8,473 8,473 9,608

Total number of births to residents of areas reporting specified condition.

Table 46. Live births with selected congenital anomalies and rates by age of mother, by race of mother: Total of 49 reporting States (excluding New York City) and the District of Columbia, 1994

[Rates are number of live births with specified congenital anomaly per 100,000 live births in specified group]

		Congonital			A	ge of moti	her			
Congenital anomaly and race of mother	All births <sup>1</sup>	Congenital anomaly reported	All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	Not stated
All races <sup>2</sup>										
Anencephalus	3,797,492	412	11.0	11.8	11.8	10.1	10.8	10.4	*	61,633
Spina bifida/Meningocele <sup>3</sup>	3,646,823	955	26.5	27.2	26.9	25.8	26.1	27.8	*	46,413
Hydrocephalus	3,797,492	1,051	28.1	36.9	28.7	24.2	25.8	31.1	*	61,633
Microcephalus Other central nervous system anomalies	3,797,492 3,797,492	326 785	8.7 21.0	14.4 22.3	8.9 20.4	6.6 19.4	7.1 22.8	8.9 19.3	*	61,633 61,633
·									450.4	•
Heart malformations Other circulatory/respiratory anomalies	3,797,492 3,797,492	4,237 4,687	113.4 125.5	102.5 120.0	101.1 124.1	113.6 127.8	116.7 120.6	146.1 131.1	158.4 188.1	61,633 61,633
Rectal atresia/stenosis	3,797,492	410	11.0	9.1	11.2	12.3	9.6	12.4	*	61,633
Tracheo-esophageal fistula/Esophageal atresia	3,797,492	589	15.8	13.8	14.4	14.7	16.6	21.3	*	61,633
Omphalocele/Gastroschisis	3,797,492	1,031	27.6	57.9	33.8	19.8	17.3	16.4	*	61,633
Other gastrointestinal anomalies	3,797,492	1,076	28.8	27.8	30.9	27.1	28.3	30.5	*	61,633
Malformed genitalia	3,797,492	3,136	83.9	82.4	78.1	85.3	83.8	94.2	107.2	61,633
Renal agenesis	3,797,492	507	13.6	12.4	14.3	13.1	14.9	11.8	*	61,633
Other urogenital anomalies	3,797,492	3,977	106.5	95.0	102.3	113.2	108.7	105.5	123.7	61,633
Cleft lip/palate	3,797,492	3,280	87.8	87.9	94.3	91.0	77.6	83.3	100.6	61,633
Polydactyly/Syndactyly/Adactyly	3,797,492	3,331	89.2	125.6	98.7	80.3	75.1	70.0	100.6	61,633
Clubfoot	3,797,492	2,205	59.0	73.7	61.9	56.9	51.3	57.0	51.1	61,633
Diaphragmatic hernia Other musculoskeletal/integumental	3,797,492	479	12.8	14.0	11.9	14.2	11.1	13.5	*	61,633
anomalies	3,797,492	7,666	205.2	199.5	203.7	209.1	195.1	220.4	262.3	61,633
Down's syndrome	3,797,492	1,698	45.5	30.0	27.3	30.3	48.3	98.0	371.2	61,633
Other chromosomal anomalies	3,797,492	1,856	49.7	49.9	47.6	45.2	43.4	64.8	158.4	61,633
White										
Anencephalus	3,024,148	342	11.5	13.0	12.3	10.1	11.4	10.8	*	50,468
Spina bifida/Meningocele <sup>3</sup>	2,893,716	834	29.2	31.0	30.6	28.2	27.7	30.0	*	37,787
Hydrocephalus	3,024,148 3,024,148	856 230	28.8 7.7	38.5	30.0 8.1	23.9 5.8	26.4 6.5	34.3 8.0	*	50,468
Microcephalus Other central nervous system anomalies	3,024,148	601	20.2	12.7 23.1	20.3	17.4	22.5	18.4	*	50,468 50,468
Heart malformations	3,024,148	3,488	117.3	112.3	107.2	117.3	116.3	145.0	152.1	50,468
Other circulatory/respiratory anomalies	3,024,148		125.7	129.5	125.2	127.2	117.5	127.3	188.6	50,468
Rectal atresia/stenosis Tracheo-esophageal fistula/Esophageal	3,024,148	344	11.6	10.4	11.6	12.6	10.3	12.8	*	50,468
atresia	3,024,148	473	15.9	14.5	14.4	14.4	16.7	22.2	*	50,468
Omphalocele/Gastroschisis	3,024,148	816	27.4	63.4	35.6	18.7	16.8	16.7	*	50,468
Other gastrointestinal anomalies	3,024,148	842	28.3	28.7	30.8	26.6	27.1	29.1	*	50,468
Malformed genitalia	3,024,148	2,685	90.3	91.0	86.8	90.2	89.3	96.5	117.6	50,468
Renal agenesis	3,024,148	411	13.8	11.6	13.7	14.0	15.3	12.8	*	50,468
Other urogenital anomalies	3,024,148	3,393	114.1	102.8	111.6	120.8	114.2	111.0	129.8	50,468
Cleft lip/palate	3,024,148	2,896	97.4	108.1	107.5	98.9	83.9	86.0	111.5	50,468
Polydactyly/Syndactyly/Adactyly	3,024,148	1,885	63.4	79.4	66.7	59.7	59.3	54.5	81.1	50,468
Clubfoot  Diaphragmatic hernia	3,024,148 3,024,148	1,946 377	65.4 12.7	85.0 14.2	71.9 12.1	61.2 14.7	56.3 9.6	62.5 13.5	58.8 *	50,468 50,468
Other musculoskeletal/integumental	0,024,140	311	14.1	17.4	14.1	17.7	9.0	10.0		50,400
anomalies	3,024,148	5,953		192.6	198.9	201.3	193.2	213.7	275.8	50,468
Down's syndrome	3,024,148	1,490	50.1	35.0	30.0	32.5	52.2	107.2	391.4	50,468
Other chromosomal anomalies	3,024,148	1,470	49.4	49.5	49.3	43.5	42.8	65.6	154.1	50,468

Table 46. Live births with selected congenital anomalies and rates by age of mother, by race of mother: Total of 49 reporting States (excluding New York City) and the District of Columbia, 1994-Con.

[Rates are number of live births with specified congenital anomaly per 100,000 live births in specified group]

					A	ge of moti	her			
Congenital anomaly and race of mother	All births <sup>1</sup>	hirths 1 anomaly	All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	Not stated
Black										
2.60.1										
Anencephalus	592,997	58	9.9	*	*	*	*	*	*	7,555
Spina bifida/Meningocele 3	576,971	106	18.6	20.5	17.1	*	*	*	*	5,677
Hydrocephalus	592,997	173	29.6	35.1	25.9	31.8	28.3	*	*	7,555
Microcephalus	592,997	85	14.5	20.1	11.9	*	*	*	*	7,555
Other central nervous system anomalies	592,997	127	21.7	20.1	18.4	24.8	22.7	*	*	7,555
Heart malformations	592,997	526	89.8	76.7	72.9	91.4	109.9	154.2	*	7,555
Other circulatory/respiratory anomalies	592,997	584	99.8	83.1	94.5	108.5	117.8	108.2	*	7,555
Rectal atresia/stenosis  Tracheo-esophageal fistula/Esophageal	592,997	38	6.5	*	*	*	*	*	*	7,555
atresia	592,997	77	13.2	*	11.3	*	*	*	*	7,555
Omphalocele/Gastroschisis	592,997	175	29.9	43.7	28.6	25.6	23.8	*	*	7,555
Other gastrointestinal anomalies	592,997	171	29.2	22.9	28.6	28.7	39.6	*	*	7,555
Malformed genitalia	592,997	329	56.2	56.6	45.9	62.8	54.4	83.8	*	7,555
Renal agenesis	592,997	71	12.1	*	15.1	*	*	*	*	7,555
Other urogenital anomalies	592,997	411	70.2	73.8	64.8	66.6	75.9	70.3	*	7,555
Cleft lip/palate	592,997	242	41.3	38.0	48.1	41.1	35.1	*	*	7,555
Polydactyly/Syndactyly/Adactyly	592,997	1,337	228.4	238.0	227.9	224.7	223.2	213.7	*	7,555
Clubfoot	592,997	194	33.1	42.3	26.5	38.7	23.8	*	*	7,555
Diaphragmatic hernia	592,997	74	12.6	15.1	*	*	*	*	*	7,555
Other musculoskeletal/integumental	002,001	, ,	12.0	10.1						7,000
anomalies	592,997	1,123	191.8	195.7	191.1	205.4	168.8	197.4	*	7,555
Down's syndrome	592,997	140	23.9	15.8	14.6	19.4	30.6	54.1	*	7,555
Other chromosomal anomalies	592,997	299	51.1	48.7	41.6	55.8	49.8	70.3	*	7,555

<sup>1</sup> Total number of births.

NOTE: Excludes data for New Mexico and New York City, which did not require reporting of congenital anomalies.

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

<sup>3</sup> New York State does not report this anomaly

Table 47. Live births by plurality of birth and ratios, by age and race of mother: United States, 1994

						Age of n	nother				
Plurality and race	All	Under	1.	5-19 year:	s						
of mother	ages	15 years	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
						Number					
All live births 1	3,952,767	12,901	505,488	195,169	310,319	1,001,418	1,088,845	906,498	371,608	63,502	2,507
WhiteBlack	3,121,004 636,391	5,978 6,465	348,081 140,968	126,388 62,563	221,693 78,405	764,085 197,841	889,581 142,355	754,871 99,155	305,291 42,029	51,192 7,339	1,925 239
Live births in single deliveries 1	3,851,109	12,773	498,057	192,712	305,345	980,977	1,060,204	877,310	358,211	61,298	2,279
White	3,041,559 617,689	5,909 6,413	343,555 138,252	124,960 61,593	218,595 76,659	750,000 192,133	866,799 137,479	730,261 95,589	294,006 40,460	49,303 7,132	1,726 231
Live births in twin deliveries <sup>1</sup>	97,064	128	7,355	2,426	4,929	20,106	27,418	27,275	12,523	2,061	198
WhiteBlack	75,318 18,344	69 52	4,483 2,686	1,417 950	3,066 1,736	13,827 5,635	21,698 4,773	22,799 3,490	10,512 1,496	1,755 204	175 8
Live births in higher-order multiple deliveries $\ ^{1,2}$	4,594	-	76	31	45	335	1,223	1,913	874	143	30
White	4,127 358	-	43 30	11 20	32 10	258 73	1,084 103	1,811 76	773 73	134 3	24
					Ratio p	er 1,000 live	births				
All multiple births 1	25.7	9.9	14.7	12.6	16.0	20.4	26.3	32.2	36.1	34.7	90.9
White	25.5 29.4	11.5 8.0	13.0 19.3	11.3 15.5	14.0 22.3	18.4 28.9	25.6 34.3	32.6 36.0	37.0 37.3	36.9 28.2	103.4
Twin births <sup>1</sup>	24.6	9.9	14.6	12.4	15.9	20.1	25.2	30.1	33.7	32.5	79.0
White	24.1 28.8	11.5 8.0	12.9 19.1	11.2 15.2	13.8 22.1	18.1 28.5	24.4 33.5	30.2 35.2	34.4 35.6	34.3 27.8	90.9
					Ratio pe	r 100,000 live	births				
Higher-order multiple births 1, 2	116.2	*	15.0	15.9	14.5	33.5	112.3	211.0	235.2	225.2	1196.6
White	132.2 56.3	*	12.4 21.3	* 32.0	14.4	33.8 36.9	121.9 72.4	239.9 76.6	253.2 173.7	261.8	1246.8

<sup>1</sup> Includes races other than white and black.2 Births in greater than twin deliveries.

### **Technical notes**

### Source of data

Data shown in this report for 1994 are based on 100 percent of the birth certificates in all States and the District of Columbia. The data are provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program (VSCP). In 1984 and earlier years, the VSCP included varying numbers of States that provided data based on 100 percent of their birth certificates. Data for States not in the VSCP were based on a 50-percent sample of birth certificates filed in those States. Information on sampling procedures and sampling errors for 1984 and earlier years is provided in the annual report, Vital Statistics of the United States, Volume I, Natality.

#### Race

Beginning with the 1989 data year, NCHS is tabulating its birth data primarily by race of the mother. In 1988 and prior years, births were tabulated by the race of the child, which was determined from the race of the parents as entered on the birth certificate.

Trend data by race shown in this report are by race of mother for all years beginning with the 1980 data year. In order to facilitate continuity and analysis of the data, trend tables showing data for years prior to 1980 show data for both race of mother and race of child for 1980. This makes it possible to distinguish the effects of this change from real changes in the data. The text in this report focuses on data tabulated by race of mother. Text references to white births and white mothers or black births and black mothers are used interchangeably for ease in writing.

The factors influencing the decision to tabulate births by race of the mother have been discussed in detail in previous reports (4–8). They include the recent revision of the birth certificate, effective with the 1989 data year, which includes many more health questions that are directly associated with the mother in addition to many other items on the birth certificate for more than two decades. In all these instances, it is more appropriate

to tabulate births by the mother's race. A second factor has been the increasing incidence of interracial parentage. In 1994, 4.4 percent of births were to parents of different races compared with just 1.7 percent in 1974. The third factor influencing the decision to tabulate births by race of mother is the growing proportion of births with race of father not stated, 16 percent in 1994 compared with 9 percent in 1974. This reflects the increase in the proportion of births to unmarried women; in many such cases, no information is reported on the father. These births are already assigned the race of the mother because there is no alternative.

Tabulating all births by race of mother, therefore, provides for a more uniform approach, rather than a necessarily arbitrary combination of parental races. This topic is discussed elsewhere in greater detail (84, 85).

### **Marital status**

Beginning with the 1980 data year, national estimates of births to unmarried women have been derived from two sources. One is a direct question on the birth certificate asking for the mother's marital status, and the other is derived from inferring the mother's marital status by comparing the parents' and child's surnames and other information concerning the father. In 1994, marital status was reported directly on the birth certificates of 45 States and the District of Columbia. Mother's marital status was inferred in the remaining five States that lack such an item (California, Connecticut, Michigan, Nevada, and New York). This procedure represents a substantial departure from the method used before 1980 to prepare national estimates of births to unmarried women, which assumed that the incidence of births to unmarried women in States with no direct question on marital status was the same as the incidence in reporting States in the same geographic division (26).

In the five States that use inferential procedures to compile birth statistics by marital status, there are several basic criteria. A birth is inferred as nonmarital if any of these factors, listed in priorityof-use order, is present: a paternity acknowledgment was received, the father's name is missing, or the father's and mother's current surnames are different. In addition, criteria that are particularly applicable for a given State are also applied as necessary. For example, special procedures are used in California to compare the parents' surnames when they are hyphenated if the parents were born in countries where naming practices can identify the parents' marital status. In New York (excluding New York City) mother's marital status is determined by the presence or absence of the father's date of birth, or the filing of a paternity affidavit.

The current method represents an attempt to use related information on the birth certificate to improve the quality of national data as well as to provide data for the individual nonreporting States. An evaluation of this method and its validity for California (the largest nonreporting State) has been published (86). Because of the continued substantial increases in nonmarital childbearing throughout the 1980's, the data have been intensively evaluated by the Division of Vital Statistics, NCHS. There has been continuing concern that the current method might overstate the number of births to unmarried women because it incorporates data based on a comparison of surnames. This is because women who have retained their maiden surname after marriage and who are frequently older, well-educated women, would be classified as unmarried. Trends based on data incorporating inferential statistics can be compared with the trends based on the geographic estimates for the 1980-94 period to show the impact of the two methods. The trends for the two methods are similar for all races combined and for white and black births. Between 1980 and 1994, birth rates for unmarried white women increased 112 percent based on data incorporating inferential information and 116 percent based on the geographic estimates. Birth rates for unmarried black women increased 1 percent based on the inferential data and declined 2 percent based on the geographic estimates.

One consequence of using nonmarital birth data based on the inferential procedures is the need to monitor continuously the validity of the procedures used by the States to infer mother's marital status. In particular, in recent years, a number of States have extended their efforts to identify the fathers when the parents are not married in order to enforce child support obligations. When a paternity acknowledgment is made at the time of birth, information about the father may be included on the birth certificate. The inferential procedures may be more difficult to implement in these cases, and may result in undercounts of the numbers of nonmarital births, depending on the surnames of the parents and the child. During the early 1990's, paternity acknowledgments increased substantially, and one consequence was an apparent stabilization and then reduction in the number of births to unmarried women in two States, Michigan and Texas, because births with paternity acknowledgment were not coded as nonmarital by these States, and an increasing number of births to unmarried women were accompanied by paternity acknowledgments. The yearto-year trends in nonmarital births in the United States during the 1989-93 period were somewhat understated as a result of the undercounts in these States, and the increase from 1993 to 1994 was relatively large. However, the conclusion in NCHS reports (7, 8, and 26) that the pace of increase in the nonmarital birth rate in the United States has slowed down in recent years in comparison to the previous 5 years is still correct. The birth rate for unmarried women increased 13 percent from 1989 to 1994, or about 2 percent per year. Statistics for the years 1989 and 1994 are believed to accurately represent the incidence of nonmarital births, although data for the intervening years are not complete. The increase in the rate was much greater for the previous 5-year period—34 percent during 1984–89 (6 percent per year).

Michigan and Texas births—The number of births to unmarried women in Michigan was underreported during the years 1988–93, but the greatest undercount, numerically, was for 1990–93. Michigan had separate counts of the numbers of births with paternity

acknowledgments, but did not include them with the counts of unmarried women based on the general inferential procedures that they provided to the National Center for Health Statistics. The underreporting began in 1988, and was about 25 percent for the years 1988-93. In 1993 NCHS reported 36,326 births to unmarried women in Michigan, 26 percent below the number that included paternity affidavits (49,281 births) (87). Thus, there is a considerable discontinuity in the nonmarital birth data for Michigan from 1993 to 1994. The proportion of nonmarital births reported to NCHS increased from 26 percent to 35 percent.

The number of births to unmarried women in Texas was underreported during the years 1989-93. As a result of legislation passed in 1989, a birth was considered to have occurred to a married woman if the mother provides any information about the father, or if a paternity affidavit has been filed. The measurement of marital status for Texas births improved beginning with the 1994 data year because a direct question on marital status was added to the Texas birth certificate. However, there is a considerable discontinuity in the data for Texas from 1993 to 1994. The proportion of births to unmarried mothers increased from 17 percent to 29 percent.

### Gestation

The 1989 revision of the U.S. Standard Certificate of Live Birth includes a new item, "clinical estimate of gestation," that is being compared with length of gestation computed from the date the last normal menstrual period (LMP) began when the latter appears to be inconsistent with birthweight. This is done for normal weight births of apparently short gestations and very low birthweight births reported to be full term. The clinical estimate was also used if the LMP date was not reported. The period of gestation for 4.1 percent of the births in 1994 was based on the clinical estimate of gestation. For 96 percent of these records, the clinical estimate was used because the LMP date was not reported. For the remaining 4 percent, the clinical estimate was used because it was

compatible with the reported birthweight, whereas the LMP-based gestation was not. In cases where the reported birthweight was inconsistent with both the LMP-computed gestation and the clinical estimate of gestation, the LMP-computed gestation was used and birthweight was reclassified as "not stated." This was necessary for fewer than 400 births or 0.01 percent of all birth records in 1994. The levels of the adjustments in 1994 data were virtually the same as in 1991–93 (6–8).

### Birthweight

Birthweight is reported in some areas in pounds and ounces rather than in grams. However, the metric system has been used in tabulating and presenting the statistics to facilitate comparison with data published by other groups. Equivalents of the gram weights in terms of pounds and ounces are as follows:

Less than 500 grams = 1 lb 1 oz or less 500–999 grams = 1 lb 2 oz–2 lb 3 oz 1,000–1,499 grams = 2 lb 4 oz–3 lb 4 oz 1,500–1,999 grams = 3 lb 5 oz–4 lb 6 oz 2,000–2,499 grams = 4 lb 7 oz–5 lb 8 oz 2,500–2,999 grams = 5 lb 9 oz–6 lb 9 oz 3,000–3,499 grams = 6 lb 10 oz–7 lb 11 oz 3,500–3,999 grams = 7 lb 12 oz–8 lb 13 oz 4,000–4,499 grams = 8 lb 14 oz–9 lb 14 oz 4,500–4,999 grams = 9 lb 15 oz–11 lb 0 oz 5,000 grams or more = 11 lb 1 oz or more

### Method of delivery

Several rates are computed for method of delivery. The overall cesarean section rate or total cesarean rate is computed as the percent of all births that were delivered by cesarean section. The primary cesarean rate is a measure that relates the number of women having a first cesarean delivery to all women giving birth who have never had a cesarean delivery. The denominator for this rate includes all births less those with method of delivery classified as repeat cesarean, vaginal birth after previous cesarean, or method not stated. The rate for vaginal birth after previous cesarean (VBAC) delivery is computed by relating all VBAC deliveries to the sum of VBAC and repeat cesarean deliveries, that is, to women with a previous cesarean section.

# Computations of percents, percent distributions, and medians

Births for which a particular characteristic is unknown were subtracted from the figures for total births that were used as denominators before percents, percent distributions, and medians were computed. The median number of prenatal visits also excludes births to mothers who had no prenatal care. Computations of the median years of school completed and the median number of prenatal visits were based on ungrouped data. An asterisk is shown in place of any derived statistic based on fewer than 20 births in the numerator or denominator.

### **Population denominators**

Birth and fertility rates for 1994 shown in tables 1, 3–5, 7, 10, 11, 14, and 15 are based on populations estimated as of July 1, 1994. The population estimates have been published by the U.S. Bureau of the Census (9) and are based on the 1990 census counts by race and age that were modified to be consistent with Office of Management and Budget racial categories and historical categories for birth data, and in the case of age, to reflect age as of the census reference date. The modification procedures are described in detail in a census report (88).

Birth and fertility rates by month shown in table 12 are based on monthly population estimates also based on the 1994 estimates. Rates for unmarried women shown in tables 14 and 15 are based on distributions of the population by marital status as of March 1994 published by the U.S. Bureau of the Census (21) that have been adjusted to July 1994 population levels (9) by the Division of Vital Statistics, NCHS (26).

Birth and fertility rates for the Hispanic population, shown in tables 7 and 11, are based on estimates of the total Hispanic population as of July 1, 1994 (9). Rates for Hispanic subgroups are based on special population estimates. (89).

### **Computation of rates**

In computing birth rates by live-birth order, births with birth order not stated were distributed in the same proportion as births of known live-birth order. This procedure is done separately by race. For computing birth rates by age of father, births with age of father not stated are distributed first within each age-of-mother group. This procedure is followed because, while father's age is missing on 16 percent of the birth certificates, one third of these were on records where the mother is a teenager.

In computing birth and fertility rates for the Hispanic population, births with origin of mother not stated are included with non-Hispanic births rather than being distributed. Thus, rates for the U.S. Hispanic population are underestimates of the true rates to the extent that the births with origin not stated (1.1 percent) were actually to Hispanic mothers. The population with origin not stated was imputed. The effect on the rates is believed to be small.

### Random variation and relative standard error

Although the birth data in this report for births since 1985 are not subject to sampling error, they may be affected by random variation in the number of births involved. When the number of events is small (perhaps less than 100) and the probability of such an event is small, considerable caution must be observed in interpreting the data. More information on this topic is included in the Technical Appendix of the annual report, Vital Statistics of the United States, 1992, Volume I, Natality. In addition, the relative standard errors for birth rates for Hispanic subgroups, particularly Puerto Rican, Cuban, and "other" Hispanic women, may be somewhat higher than if based only on the number of births. This reflects the considerable sampling variability in the population estimates for these groups (89).

### **Definitions of medical terms**

The 1989 revision of the U.S. Standard Certificate of Live Birth includes several maternal and infant health items in checkbox format, including obstetric procedures, medical risk factors, complications of labor and delivery, abnormal conditions of the newborn, and congenital anomalies of the child (figure I). The definitions that follow are adapted

and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics (90).

## Medical risk factors for this pregnancy

Anemia—Hemoglobin level of less than 10.0 g/dL during pregnancy or a hematocrit of less than 30 percent during pregnancy.

Cardiac disease—Disease of the heart.

Acute or chronic lung disease—Disease of the lungs during pregnancy.

*Diabetes*—Metabolic disorder characterized by excessive discharge of urine and persistent thirst; includes juvenile onset, adult onset, and gestational diabetes during pregnancy.

Genital herpes—Infection of the skin of the genital area by herpes simplex virus.

Hydramnios/oligohydramnios—Any noticeable excess (hydramnios) or lack (oligohydramnios) of amniotic fluid.

Hemoglobinopathy—A blood disorder caused by alteration in the genetically determined molecular structure of hemoglobin (example, sickle cell anemia).

Hypertension, chronic—Blood pressure persistently greater than 140/90, diagnosed prior to onset of pregnancy or before the 20th week of gestation.

Hypertension, pregnancy-associated—An increase in blood pressure of at least 30 mm Hg systolic or 15 mm Hg diastolic on two measurements taken 6 hours apart after the 20th week of gestation.

Eclampsia—The occurrence of convulsions and/or coma unrelated to other cerebral conditions in women with signs and symptoms of preeclampsia.

Incompetent cervix—Characterized by painless dilation of the cervix in the second trimester or early in the third trimester of pregnancy, with premature expulsion of membranes through the cervix and ballooning of the membranes into the vagina, followed by rupture of the membranes and subsequent expulsion of the fetus.

Previous infant 4,000 grams or more—The birthweight of a previous

38a. MEDICAL RISK FACTORS FOR THIS PREGNANCY (Check all that apply)	40. COMPLICATIONS OF LABOR AND/OR DELIVERY (Check all that apply)	43. CONGENITAL ANOMALIES OF CHILD (Check all that apply)
Anemia (Hct. <30/Hgb. <10)	Febrile ( > 100 °F. or 38 °C. )	Anencephalus
Hypertension, chronic	Precipitous labor (<3 hours)	Heart malformations
infant 13 ☐ Renal disease 14 ☐ Rh sensitization 15 ☐ Uterine bleeding 16 ☐ None 00 ☐	Cord prolapse	Omphalocele/ Gastroschisis
Other 17 □	41. METHOD OF DELIVERY (Check all that apply)	Renal agenesis
38b. OTHER RISK FACTORS FOR THIS PREGNANCY (Complete all items)  Tobacco use during pregnancy	Vaginal       01 □         Vaginal birth after previous C-section       02 □         Primary C-section       03 □         Repeat C-section       04 □         Forceps       05 □         Vacuum       06 □	(Specify)       14         Cleft lip/palate       15         Polydactyly/Syndactyly/Adactyly       16         Club foot       17         Diaphragmatic henia       18         Other musculoskeletal/integumental anomalies
Weight gained during pregnancy lbs.	42. ABNORMAL CONDITIONS OF THE NEWBORN (Check all that apply)	(Specify)19
39. OBSTETRIC PROCEDURES (Check all that apply)  Amniocentesis	Anemia (Hct. <39/Hgb. < 13)	Down's syndrome
Electronic fetal monitoring	Hyaline membrane disease/RDS       04 □         Meconium aspiration syndrome       05 □         Assisted ventilation < 30 min	None

Figure I. New maternal and infant health items from the 1989 revision of the U.S. Standard Certificate of Live Birth.

live-born child was 4,000 grams or more (8 pounds 14 ounces).

Previous preterm or small-forgestational-age infant—Previous birth of an infant prior to term (before 37 completed weeks of gestation) or of an infant weighing less than the tenth percentile for gestational age using a standard weight for age chart.

Renal disease—Kidney disease.

Rh sensitization—The process or state of becoming sensitized to the Rh factor as when an Rh-negative woman is pregnant with an Rh-positive fetus.

Uterine bleeding—Any clinically significant bleeding during the pregnancy taking into consideration the stage of pregnancy; any second or third trimester bleeding of the uterus prior to the onset of labor.

### **Obstetric procedures**

Amniocentesis—Surgical transabdominal perforation of the uterus to obtain amniotic fluid to be used in the detection of genetic disorders, fetal abnormalities, and fetal lung maturity.

Electronic fetal monitoring—Monitoring with external devices applied to the maternal abdomen or with internal devices with an electrode attached to the fetal scalp and a catheter through the cervix into the uterus, to detect and record fetal heart tones and uterine contractions.

Induction of labor—The initiation of uterine contractions before the spontaneous onset of labor by medical and/or surgical means for the purpose of delivery.

Stimulation of labor—Augmentation of previously established labor by use of oxytocin.

Tocolysis—Use of medications to inhibit preterm uterine contractions to extend the length of pregnancy and, therefore, avoid a preterm birth.

*Ultrasound*—Visualization of the fetus and the placenta by means of sound waves.

# Complications of labor and/or delivery

*Febrile*—A fever greater than 100 degrees F. or 38 C. occurring during labor and/or delivery.

Meconium, moderate/heavy—Meconium consists of undigested debris from swallowed amniotic fluid, various products of secretion, excretion and shedding by the gastrointestinal tract; moderate to heavy amounts of meconium in the amniotic fluid noted during labor and/or delivery.

Premature rupture of membranes (more than 12 hours)—Rupture of the membranes at any time during pregnancy and more than 12 hours before the onset of labor.

Abruptio placenta—Premature separation of a normally implanted placenta from the uterus.

Placenta previa—Implantation of the placenta over or near the internal opening of the cervix.

Other excessive bleeding—The loss of a significant amount of blood from conditions other than abruptio placenta or placenta previa.

Seizures during labor—Maternal seizures occurring during labor from any cause.

Precipitous labor (less than 3 hours)—Extremely rapid labor and delivery lasting less than 3 hours.

Prolonged labor (more than 20 hours)—Abnormally slow progress of labor lasting more than 20 hours.

*Dysfunctional labor*—Failure to progress in a normal pattern of labor.

Breech/malpresentation—At birth, the presentation of the fetal buttocks rather than the head, or other malpresentation.

Cephalopelvic disproportion—The relationship of the size, presentation, and position of the fetal head to the maternal pelvis which prevents dilation of the cervix and/or descent of the fetal head.

Cord prolapse—Premature expulsion of the umbilical cord in labor before the fetus is delivered.

Anesthetic complications—Any complication during labor and/or delivery brought on by an anesthetic agent or agents.

Fetal distress—Signs indicating fetal hypoxia (deficiency in amount of oxygen reaching fetal tissues).

### Abnormal conditions of the newborn

Anemia—Hemoglobin level of less than 13.0 g/dL or a hematocrit of less than 39 percent.

Birth injury—Impairment of the infant's body function or structure due to adverse influences which occurred at birth.

Fetal alcohol syndrome—A syndrome of altered prenatal growth and development occurring in infants born of women who consumed excessive amounts of alcohol during pregnancy.

*Hyaline membrane disease/RDS*—A disorder primarily of prematurity,

manifested clinically by respiratory distress and pathologically by pulmonary hyaline membranes and incomplete expansion of the lungs at birth.

Meconium aspiration syndrome— Aspiration of meconium by the fetus or newborn, affecting the lower respiratory system.

Assisted ventilation (less than 30 minutes)—A mechanical method of assisting respiration for newborns with respiratory failure.

Assisted ventilation (30 minutes or more)—Newborn placed on assisted ventilation for 30 minutes or longer.

Seizures—A seizure of any etiology.

### Congenital anomalies of child

Anencephalus—Absence of the cerebral hemispheres.

Spina bifida/meningocele—Developmental anomaly characterized by defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not protrude.

Hydrocephalus—Excessive accumulation of cerebrospinal fluid within the ventricles of the brain with consequent enlargement of the cranium.

*Microcephalus*—A significantly small head.

Other central nervous system anomalies—Other specified anomalies of the brain, spinal cord, and nervous system.

Heart malformations—Congenital anomalies of the heart.

Other circulatory/respiratory anomalies—Other specified anomalies of the circulatory and respiratory systems.

Rectal atresia/stenosis—Congenital absence, closure, or narrowing of the rectum.

Tracheo-esophageal fistula/esophageal atresia—An abnormal passage between the trachea and the esophagus; esophageal atresia is the congenital absence or closure of the esophagus.

Omphalocele/gastroschisis—An omphalocele is a protrusion of variable amounts of abdominal viscera from a midline defect at the base of the umbilicus. In gastroschisis, the abdominal viscera protrude through an

abdominal wall defect, usually on the right side of the umbilical cord insertion.

Other gastrointestinal anomalies— Other specified congenital anomalies of the gastrointestinal system.

*Malformed genitalia*—Congenital anomalies of the reproductive organs.

Renal agenesis—One or both kidneys are completely absent.

Other urogenital anomalies—Other specified congenital anomalies of the organs concerned in the production and excretion of urine, together with organs of reproduction.

Cleft lip/palate—Cleft lip is a fissure or elongated opening of the lip; cleft palate is a fissure in the roof of the mouth. These are failures of embryonic development.

Polydactyly/syndactyly/adactyly—
Polydactyly is the presence of more than five digits on either hands and/or feet; syndactyly is having fused or webbed fingers and/or toes; adactyly is the absence of fingers and/or toes.

*Club foot*—Deformities of the foot, which is twisted out of shape or position.

Diaphragmatic hernia—Herniation of the abdominal contents through the diaphragm into the thoracic cavity usually resulting in respiratory distress.

Other musculoskeletal/integumental anomalies—Other specified congenital anomalies of the muscles, skeleton, or skin.

*Down's syndrome*—The most common chromosomal defect with most cases resulting from an extra chromosome (trisomy 21).

Other chromosomal anomalies—All other chromosomal aberrations.

### Related reports

Many of the topics discussed in this report are covered in more analytic detail in other reports published by NCHS. Topics of reports published in the past 5 years include twin births (91), cesarean deliveries (92), birth rates for States (93), births to unmarried mothers (26), characteristics of births in Asian or Pacific Islander subgroups (23), and trends in pregnancies and pregnancy rates (13).

This report presents summary tabulations from the final natality statistics for 1994. More detailed tabulations for 1994 will be published in *Vital Statistics of the United States, Volume I—Natality*. Prior to the publication of that volume, the National Center for Health Statistics will respond to requests for unpublished data whenever possible.

	Contents	
Abstract	Births to unmarried	Attendant at birth and
Highlights 1	women 8	place of delivery 15
Introduction 3	Age of father 10	Method of delivery 16
Methods 3	Educational attainment 10	Infant health
Results and discussion 3	Maternal lifestyle and health	characteristics 17
Demographic characteristics 3	characteristics 10	Period of gestation 17
Births and birth rates 3	Maternal weight gain 10	Birthweight 18
Age of mother 3	Medical risk factors 11	Apgar score 19
Live-birth order 5	Tobacco use during	Abnormal conditions
Race 5	pregnancy12	of the newborn 19
Hispanic origin 6	Alcohol use during	Congenital anomalies 20
Total fertility rate 6	pregnancy13	Multiple births 20
Births by State 7	Medical services utilization 14	References
Sex ratio 7	Prenatal care 14	List of tables 24
Month of birth 7	Obstetric procedures 15	Guide to tables
Day of week of birth 7	Complications of labor	Technical notes 82
•	and/or delivery 15	

**Keywords:** Birth certificate, maternal and infant health, birth rates, and maternal characteristics

### Suggested citation

Ventura SJ, Martin JA, Mathews TJ, Clarke SC. Advance report of final natality statistics, 1994. Monthly vital statistics report; vol 44 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics. 1996.

### Copyright information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

### **National Center for Health Statistics**

Director Edward J. Sondik, Ph.D.

> Deputy Director Jack R. Anderson

### **Division of Vital Statistics**

Director Mary Anne Freedman

### DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service Centers for Disease Control and Prevention National Center for Health Statistics 6525 Belcrest Road Hyattsville, Maryland 20782

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

To receive this publication regularly, contact the National Center for Health Statistics by calling 301-436-8500 E-mail:nchsquery@nch10a.em.cdc.gov Internet:http://www.cdc.gov/nchswww/nchshome.htm

DHHS Publication No. (PHS) 96-1120 6-0361 (6/96)

FIRST CLASS MAIL POSTAGE & FEES PAID PHS/NCHS PERMIT NO. G-281