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# Trends in Twin and Triplet Births: 1980–97

by Joyce A. Martin, M.P.H., and Melissa M. Park, B.S., Division of Vital Statistics

## Abstract

This report presents data from U.S. birth certificates on the numbers and rates of twin and triplet and other higher order multiple births for 1980–97. Over the study period, the number of twin births rose 52 percent (from 68,339 to 104,137) and triplet and other higher order multiple births (heretofore referred to as "triplet/+") climbed 404 percent (from 1,337 to 6,737 births). Comparable but less pronounced rises were observed in twin and triplet/+ birth rates.

Growth in twin and triplet/+ birth rates was most marked among women aged 30 years and over. Between 1980–82 and 1995–97, the twin rate rose 63 percent for women aged 40–44 years, and soared nearly 1,000 percent for women 45–49 years. (As one result, there were more twins born to women 45–49 years of age in 1997, than during the entire decade of the 1980's.) The triplet/+ birth rate rose nearly 400 percent for women in their thirties and exploded by more than 1,000 percent for women in their forties. The extraordinary rise in multiple births resulted in a shift in age-specific patterns, and the highest twin and triplet/+ birth rates now are for women 45–49 years of age.

Historical differences in twinning rates between non-Hispanic white and black mothers have been largely eliminated (28.8 per 1,000 non-Hispanic white compared with 30.0 for black women). Non-Hispanic white women were more than twice as likely as non-Hispanic black or Hispanic women to have a triplet/+ birth.

Rates of low birthweight, very low birthweight, and infant mortality were 4 to 33 times higher for twins and triplet/+ compared with singleton births. The risk for these adverse outcomes was lowest for twins and triplet/+ born to women 35–44 years of age.

Twin birth rates for Massachusetts and Connecticut were at least 25 percent higher than the U.S. rate; triplet/+ rates for Nebraska and New Jersey were twice the national level.

**Keywords:** twin births • triplet births • infant mortality

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## Introduction

The number and rate of twin and triplet and other higher order multiple births have climbed at an unprecedented pace over the last two decades. Between 1980 and 1997, the number of live births in twin deliveries rose 52 percent and the number of live births in triplet and other higher order multiple deliveries soared 404 percent. Singleton births, in contrast, rose 6 percent. During the 1990's twin births rose 11 percent and triplet and other higher order multiple births

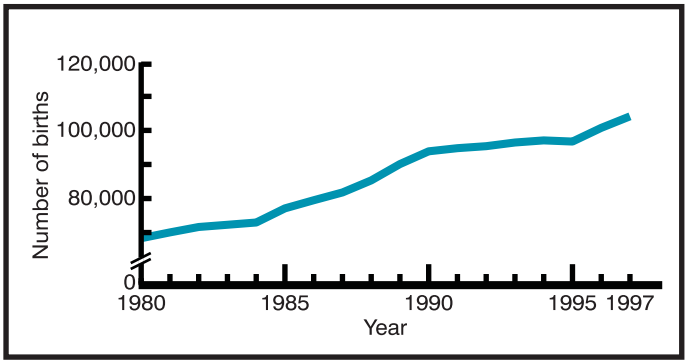


**Figure 1. Number of twin births: United States, 1980–97**

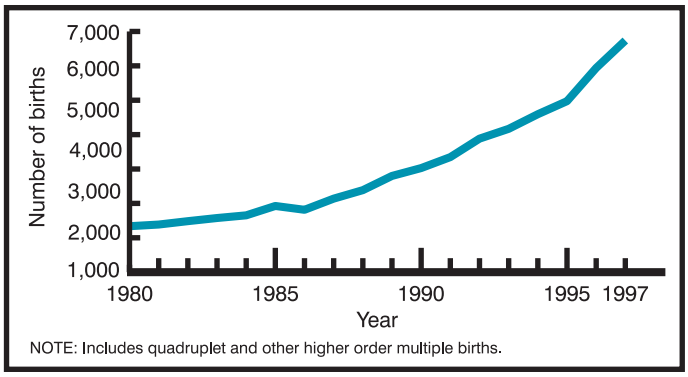


**Figure 2. Number of triplet/+ births: United States, 1980–97**

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more than doubled. In the last several years, a new aspect of this trend has emerged, a remarkable leap in multiples born to women 45–49 years of age, among whom these births had been comparatively rare.

The extraordinary rise in the incidence of multiple pregnancies is a public health concern because of the heightened risk to the mother and child; infants born in multiple deliveries are born earlier and smaller than singletons, are less likely to survive the first year of life, and are more likely to suffer life-long disability when they do survive (1,2,3). Accordingly, multiple births are exerting growing influence over important indicators of infant health such as low birthweight and preterm birth rates (4,5,6).

Data presented in this report are derived from U.S. certificates of live birth from the National Center for Heath Statistics' (NCHS) National Vital Statistics System. Twin and triplet and other higher order multiple births are **individual live births** in twin, triplet, quadruplet, etc., deliveries rather than **sets** of twins or triplets. The term "multiple birth" denotes births in twin, triplet, quadruplet, quintuplet, and other higher order multiple deliveries.

For brevity, triplet, quadruplet, and quintuplet and other higher order multiples are referred to collectively as "triplet/+," and the triplet and other higher order multiple birth rate is shortened to the "triplet/+ birth rate." Triplet births comprise the overwhelming majority of all triplet, quadruplet, and quintuplet and other higher order multiple births (90 to 91 percent for 1989–97) and, thus, the category "triplet/+" or the "triplet/+ birth rate" primarily represents triplets. (Triplet, quadruplet, and other higher order multiple births were not differentiated in vital statistics until 1989.)

Because of large differences between twin and triplet/+ births in trend and outcome, this report examines twin births separately from triplet/+ births. Where appropriate in the following discussion, 3 years of data for the periods 1980–82, 1989–91, and 1995–97 were combined to generate statistically reliable rates.

## Twin births rise by 52 percent; triplet/+ births climb 404 percent between 1980 and 1997

Between 1980 and 1997, the number of infants born in multiple deliveries rose at a remarkable pace. Most multiples were twins (94 percent in 1997), and twin births rose substantially, but the number of triplet/+ births skyrocketed. Since 1980 twin births have risen 52 percent, from 68,339 to 104,137 births, and the number of triplet/+ births has quadrupled, climbing from 1,337 to 6,737 births (table 1, figures 1 and 2). Increases in birth rates for twins (the number of births in twin deliveries per 1,000 live births) and triplet/+ (the number of births in triplet and other higher order multiple deliveries per 100,000 live births) are similar to, but slightly smaller than increases in the numbers of twin and triplet/+ births. Between 1980 and 1997, the twin birth rate increased 42 percent (from 18.9 to 26.8 per 1,000 births or from 1.9 to 2.7 percent of all births), and the triplet/+ birth rate more than quadrupled, climbing from 37.0 to 173.6 per 100,000 births (from 0.04 to 0.17 percent).

## Triplet births rising faster than quadruplet and quintuplet and other higher order multiples

Within the category of triplet/+, the number of triplet births has increased at a slightly greater pace (142 percent) than the number of quadruplet (123 percent) or quintuplet and other higher order births (98 percent) between 1989–97 (see table A). Moreover, births in triplet deliveries have consistently increased annually, while births in quadruplet and quintuplet and other higher order births have shown occasional decline. However, the trend in quadruplet and quintuplet and other higher order multiples has been generally upward during the 1990's and the number of these births has doubled since 1989 (from 269 to 589 births).

## More twins born to women 45–49 years of age in 1997 than during the entire decade of the 1980's

Twinning rates have risen for all age groups between 1980 and 1997, but increases were most pronounced among women 30 years of age and over. See table 2 and figure 3. Between 1980–82 and 1995–97, twin birth rates rose by 12 percent for teenaged mothers, by 41 percent for women in their thirties, by 63 percent for women 40–44 years, and by nearly 1,000 percent among women 45–49 years of age (figure 4).

Most of the increase in twin birth rates to mothers 45–49 years of age occurred during the 1990's (from 17.8 to 114.0 per 1,000 births between 1989–91 and 1995–97) (table 3). In 1990 only 39 twins were born to women in this age group; by 1997 there were 444 (table 2). For the years 1980–92, less than 3 percent of births to women 45–49 years were twins compared with 13 percent in 1997. Indeed, there were

**Table A. Numbers of twin, triplet, quadruplet, and quintuplet and other higher order multiple births: United States, 1989–97**

| Year | Twin | Triplet | Quadruplet | Quintuplet and other higher order multiple[1] |
|---|---|---|---|---|
| 1997 | 104,137 | 6,148 | 510 | 79 |
| 1996 | 100,750 | 5,298 | 560 | 81 |
| 1995 | 96,736 | 4,551 | 365 | 57 |
| 1994 | 97,064 | 4,233 | 315 | 46 |
| 1993 | 96,445 | 3,834 | 277 | 57 |
| 1992 | 95,372 | 3,547 | 310 | 26 |
| 1991 | 94,779 | 3,121 | 203 | 22 |
| 1990 | 93,865 | 2,830 | 185 | 13 |
| 1989 | 90,118 | 2,529 | 229 | 40 |

[1]Quintuplets, sextuplets, and higher order multiple births are not differentiated in the national data set.

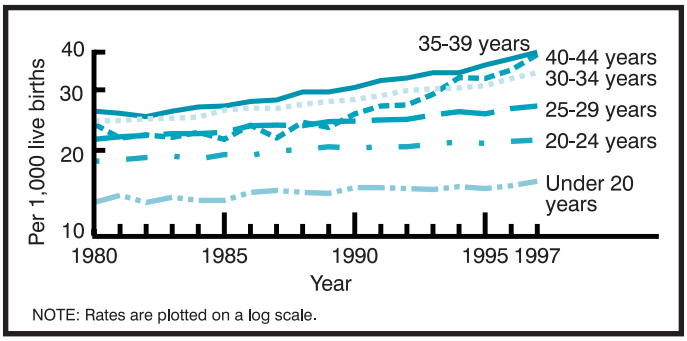


**Figure 3. Twin birth rates by age of mother, 1980–97**

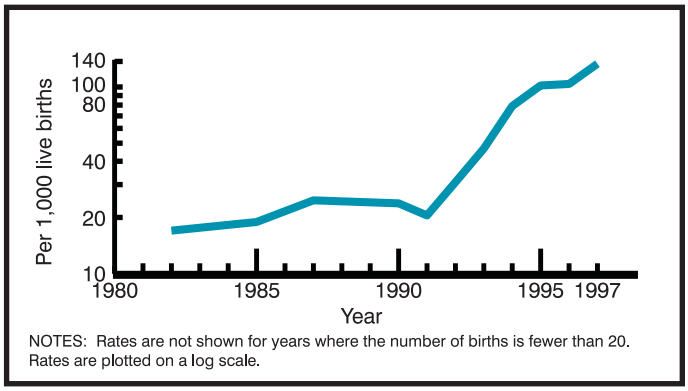


**Figure 4. Twin birth rates for women 45–49 years of age, 1980–97**

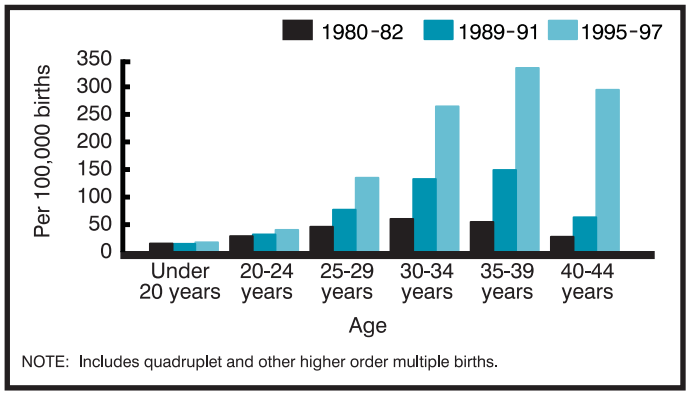


**Figure 5. Triplet/+ birth rates by age of mother: 1980–82, 1989–91, 1995–97**

many more twins born to women aged 45–49 years in 1997 (444) than during the entire decade of the 1980's (174).

## The early 1990's mark an important shift in age-specific twin birth patterns

Historically, age-specific twin birth rates (the number of twin births per 1,000 births to women in a specified age group) have risen steadily through the age group 35–39 years and declined for women in their forties. However, the extraordinary surge in twin births to women 45–49 years of age has brought about a shift in this long observed trend. Beginning with 1992, and continuing through the current year, age-specific twin birth rates rose steadily for the age group 35–39 years, were slightly lower for women aged 40–44 years, but then were dramatically higher than any other age group for women aged 45–49 years (table 2, figures 3 and 4). In 1997 the twin birth rate for women aged 45–49 years (133.2 per 1,000 births) was more than 3 times as high as that for women aged 35–39 years (39.3).

Beginning with data year 1997, information on births to women aged 50–54 years became available (see Technical notes). Of the 144 births to women aged 50–54 years, 1 of every 3 (34.7 percent) was reported to have been born in a twin delivery. Thus, for 1997, women 50–54 years of age were most likely to have a twin birth.

It is important to note that despite the recent remarkable rise in twinning among women 45–54 years, in general, these women are less likely to give birth than their younger counterparts. Thus, twins born to women aged 45 years and over comprise only a small proportion of all twin births (0.5 percent for 1997); the majority of twins, 71 percent, are born to women aged 25–39 years.

## Triplet/+ rates up 400 percent for women in their thirties and 1,000 percent for women in their forties

Over the study period, the growth in triplet/+ birth rates and for women aged 30 years of age was remarkable. Rates for women in their thirties rose nearly 400 percent (from 59.3 per 100,000 for 1980–82 to 286.0 for 1995–97), while levels for women in their forties increased more than 1,000 percent (from 28.1 to 346.9) (table 3, figure 5). In contrast, triplet/+ birth rates for mothers under age 20 years rose only 13 percent (from 15.9 to 18.0) between 1980–82 and 1995–97. (There were too few triplet/+ births to women 45–49 years of age during the 1980's for trends in these births to be analyzed.)

Age-specific birth rates for triplets/+ follow a pattern similar to that for twins except that the differentials between younger and older women are much wider. For 1997 the triplet/+ birth rate for mothers aged 45–49 years (2,100.2 per 100,000) was 100 times higher than that for teenaged mothers (20.7) and 4 times higher than that for women aged 35–39 years (403.2) (table 2). Indeed, women 45–54 years of age were more likely to have a triplet/+ birth (2.4 percent) than women under 30 years were to have a twin birth (2.2 percent).

## Historical differences in twin birth rates between white and black mothers now largely erased

Although twinning levels have risen substantially among white and black women for 1980–97, rates have increased more rapidly among white mothers (48 compared with 25 percent). As a result differences in twin birth rates between white and black mothers evident in earlier years (in 1980, 18.1 and 24.0 per 1,000 births, respectively) have been largely erased; for 1997 twin birth rates were similar for the two groups (28.8 for non-Hispanic white and 30.0 for black mothers). See table 1 and figure 6.

The twin birth rate for Hispanic women rose 7 percent during 1989–97 compared with increases of 28 and 13 percent for non-Hispanic white, and non-Hispanic black women (table 1). Accordingly, women of Hispanic origin continued to be substantially less likely than non-Hispanic white or black mothers to have a twin birth (in 1997, 19.5 compared with 28.8 and 30.0 per 1,000 births, respectively).

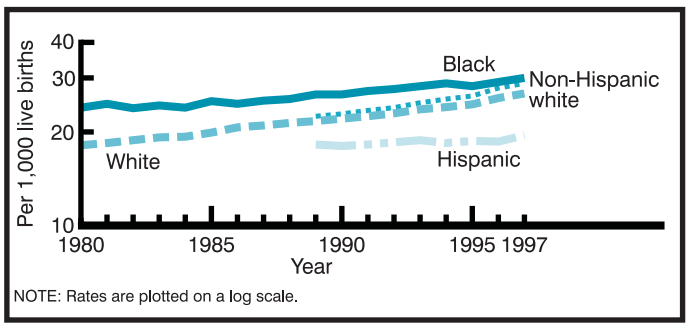


**Figure 6. Twin birth rates by race and Hispanic origin of mother, 1980–97**

The overall rise in twinning among women in their mid-to-late forties is primarily attributable to increases among non-Hispanic white mothers among whom the rate jumped more than sevenfold between 1989–91 and 1995–97 (from 20.2 to 149.8 per 1,000 births) (table 3). Non-Hispanic white mothers accounted for 85 percent of all twin births to women in this age group for the most current 3-year period.

## Non-Hispanic white mothers more than twice as likely to have a triplet/+ birth

In the early 1980's triplet/+ birth rates for white and black mothers were essentially the same (37.6 and 37.1 per 100,000 births for 1980), but by 1988 the rate for white births had doubled while the rate among black mothers had risen only 21 percent. Steep rises for 1989–97 were observed for the three major racial/ethnic groups (168 percent for non-Hispanic white, 124 percent for non-Hispanic black, and 105 percent for Hispanic mothers). However, in 1997 non-Hispanic white mothers were more than twice as likely as non-Hispanic black and Hispanic mothers to have a triplet/+ birth (230.8 compared with 90.0 and 72.7, respectively) (table 1).

Triplet/+ birth rates for women under 25 years of age continue to be very comparable among the three groups, but wide differences emerge at older ages. For 1995–97 among women aged 30 years and over, triplet/+ birth rates for non-Hispanic white were more than twice those of non-Hispanic black or Hispanic mothers. For example, the rate for non-Hispanic white mothers aged 40–49 years was 439.1 per 100,000 births compared with levels of 181.6 for non-Hispanic black and 143.2 for Hispanic mothers. See table 3 and figure 7.

The peak age group for triplet/+ childbearing among non-Hispanic white mothers was 45–49 years compared with a peak at 40–44 years for non-Hispanic black and 35–39 years for Hispanic women. This later peak among non-Hispanic white mothers represents a change from earlier years when the highest age-specific triplet/+ birth rate for non-Hispanic white occurred at 35–39 years of age. In 1997, 3.4 percent of all births to non-Hispanic white mothers aged 45–54 years were triplet/+ births (77 total triplet/+ births); there were no triplet/+ births to black mothers of this age group and only six triplet/+ were born to Hispanic mothers.

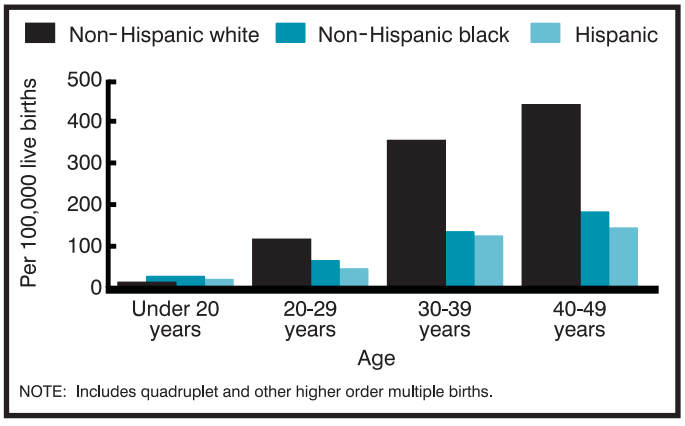


**Figure 7. Triplet/+ birth rates by race and Hispanic origin of mother: 1995–97**

## Twin and triplet/+ rates of very low birthweight and low birthweight were lowest for women aged 35–44 years

Twins are 8 times and triplet/+ 33 times more likely than singletons to be born at a weight of less than 1,500 grams or very low birthweight (VLBW). More than one-half of all twins and nearly all triplet/+, compared with only 6 percent of singletons, are born low birthweight (LBW) (less than 2,500 grams). See table 4 and figure 8. LBW, and especially VLBW births, are at greater risk of early death and life-long morbidity than heavier infants (7).

For 1995–97 the risk of having an LBW or VLBW twin or triplet/+ was highest for mothers under age 20 years and lowest among mothers aged 35–44 years. Rates of VLBW and LBW for women 45–49 years of age were lower than or similar to those of women in their twenties. Low birthweight patterns by maternal age were quite different among singletons; levels were lowest among mothers aged 25–34 years and highest among mothers under ages 20 and 45–49 years. Age-specific infant mortality rates were also lowest for twins and triplet/+ born to women aged 35–44 years; the number of infant deaths to women aged 45–49 years was too small to compute a reliable rate. See table B.

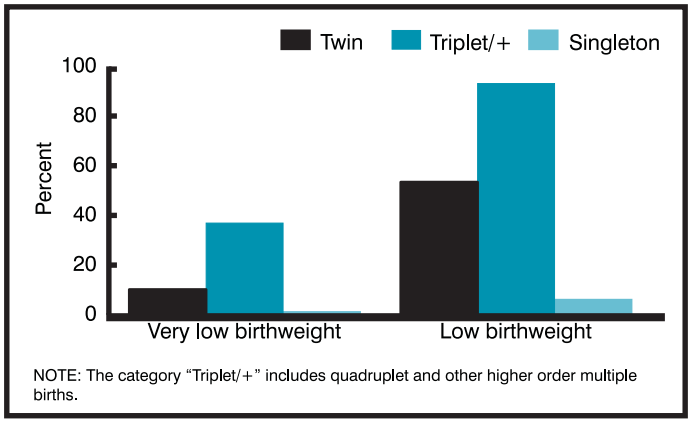


**Figure 8. Percent very low and low birthweight by plurality: United States, 1995–97**

**Table B. Infant mortality rates by plurality and age of mother: United States, 1995–97**

| Age of mother | Twin | Triplet/+[1] | Singleton |
|---|---|---|---|
| | Infant deaths per 1,000 live births | | |
| All ages | 32.0 | 71.8 | 6.6 |
| Under 20 years | 63.1 | 172.2 | 9.8 |
| 20–24 years | 42.0 | 133.8 | 7.4 |
| 25–29 years | 30.1 | 96.4 | 5.5 |
| 30–34 years | 25.2 | 60.7 | 5.2 |
| 35–39 years | 22.6 | 46.7 | 6.2 |
| 40–44 years | 20.4 | 38.5 | 8.1 |
| 45–49 years[2] | * | * | 10.0 |

* Figure does not meet standards of reliability or precision.
[1]Includes quadruplets and other higher order multiple births.
[2]For 1997, births to women aged 50–54 years were not included in the calculation of rates. See Technical notes.

NOTE: Unpublished data from the linked birth/infant death data set, 1995, 1996, and 1997 birth cohorts.

The only statistically significant change in VLBW or LBW between 1980–82 and 1995–97 was for triplet/+ births, among whom the LBW rate increased from 87.98 to 93.08 percent (table 4). This rise may be at least partly explained by an increased proportion of quadruplet and other higher order multiples (LBW risk rises with plurality). Unfortunately, it is not possible to directly measure this influence because quadruplets, quintuplets, and other higher order multiples were not differentiated from triplet births in vital statistics data before 1989.

Although the rise in twin LBW was not statistically significant, it is important to note that the increase in multiple births has not only influenced overall LBW rates but has had a large impact on the numbers of at-risk infants born each year (4,5,6). For example, had twin and triplet/+ rates not risen from levels reported for 1980, there would have been at least 20,000 fewer LBW infants born in 1997.

## Nebraska and New Jersey triplet/+ birth rates were twice the national rate

Twin and triplet/+ birth rates for the 50 States and the District of Columbia for 1995–97 ranged widely; the twin birth rate for Massachusetts and Connecticut (32.6 per 1,000 births), was at least 25 percent higher than the rate for the entire United States, and 75 percent higher than that for Hawaii (18.4) (table 5, figure 9). Triplet/+ birth rates for Nebraska (323.6 per 100,000 births) and New Jersey (306.6) were twice the U.S. level (151.2). See table 5 and figure 10. (For State-specific twin and triplet/+ birth rates for 1992–94, see *State-Specific Variation in Rates of Twin Birth—United States 1992–1994* (8) and *Triplet Births: Trends and Outcomes, 1971–94* (9).)

Among the factors influencing variation in State twin and triplet/+ birth rates are State differences in maternal age distributions, racial and ethnic compositions, and access to fertility therapies. For example, the States with the highest triplet/+ birth rates were also among the States with the highest proportions of births to older, non-Hispanic white women; fertility clinics are found throughout the United States, but are concentrated mostly in the North East where twin and triplet/+ birth rates tend to be higher (10,11).

## The steep climb in multiple births coincides with two overlapping and related trends: Older age at childbearing and the increasing use of fertility enhancing therapies

Two overlapping and related trends have been associated with the rise in twin and triplet/+ births: Older age at childbearing (older women are physiologically more likely to have a multiple birth) and the increasing availability and use of fertility enhancing therapies (e.g., fertility drugs such as Clomid and Pergonal and assisted reproductive technologies such as in-vitro fertilization), which more often result in a plural pregnancy (12). An estimated one-third of the increase in multiple births since the late 1970's and early 1980's has been attributed to the shift in the maternal age distribution; the remainder is likely the result of these therapies (9,12,13,14). If this estimate is reliable, it translates to more than 225,000 multiple births associated with fertility therapy over this study period (1980–97).

Older women are also more likely to avail themselves of fertility treatment (15,16). According to data from the NCHS' National Survey of Family Growth (NSFG), among fecundity-impaired women aged 15–44 years, the overall prevalence of fertility drug treatment

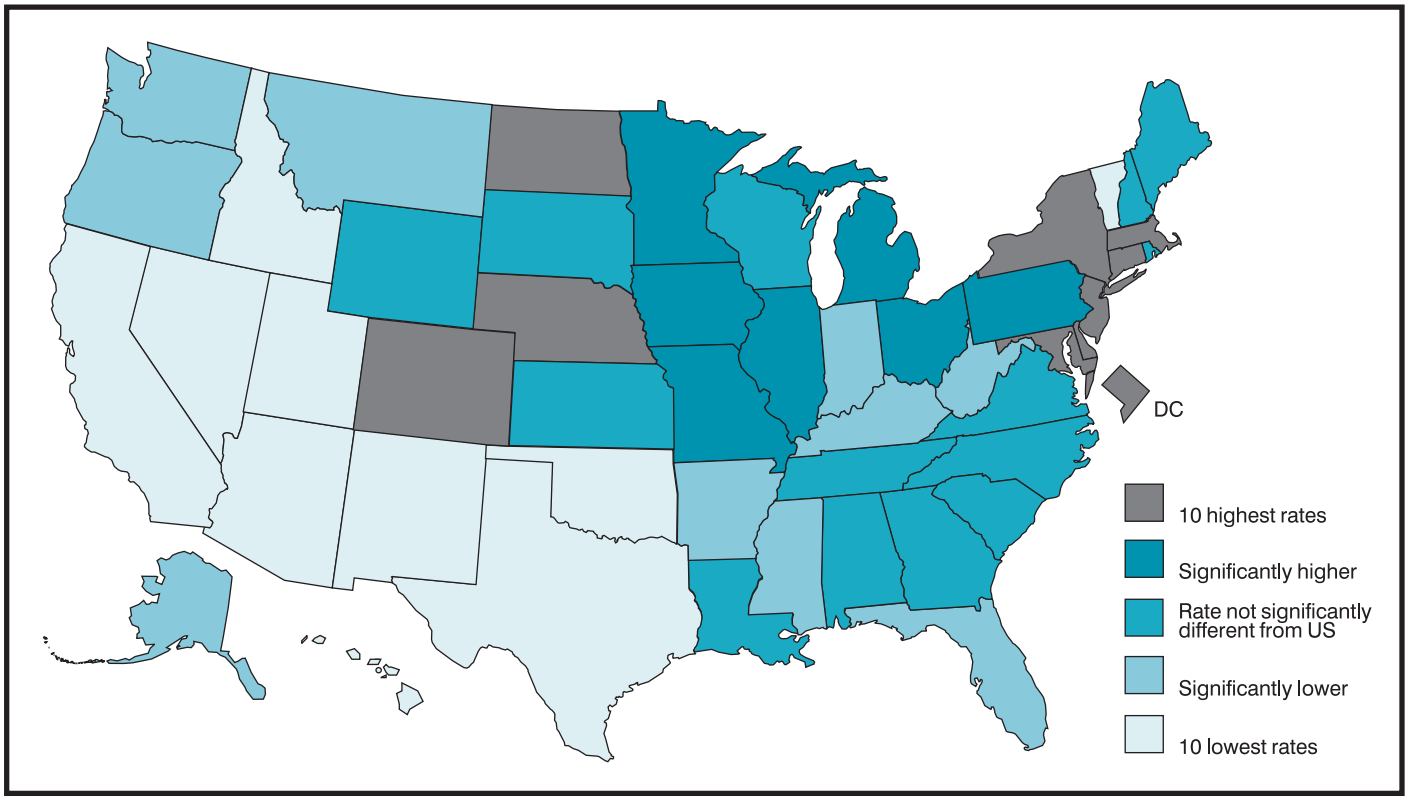


**Figure 9. Twin birth rates by State, 1995–97**

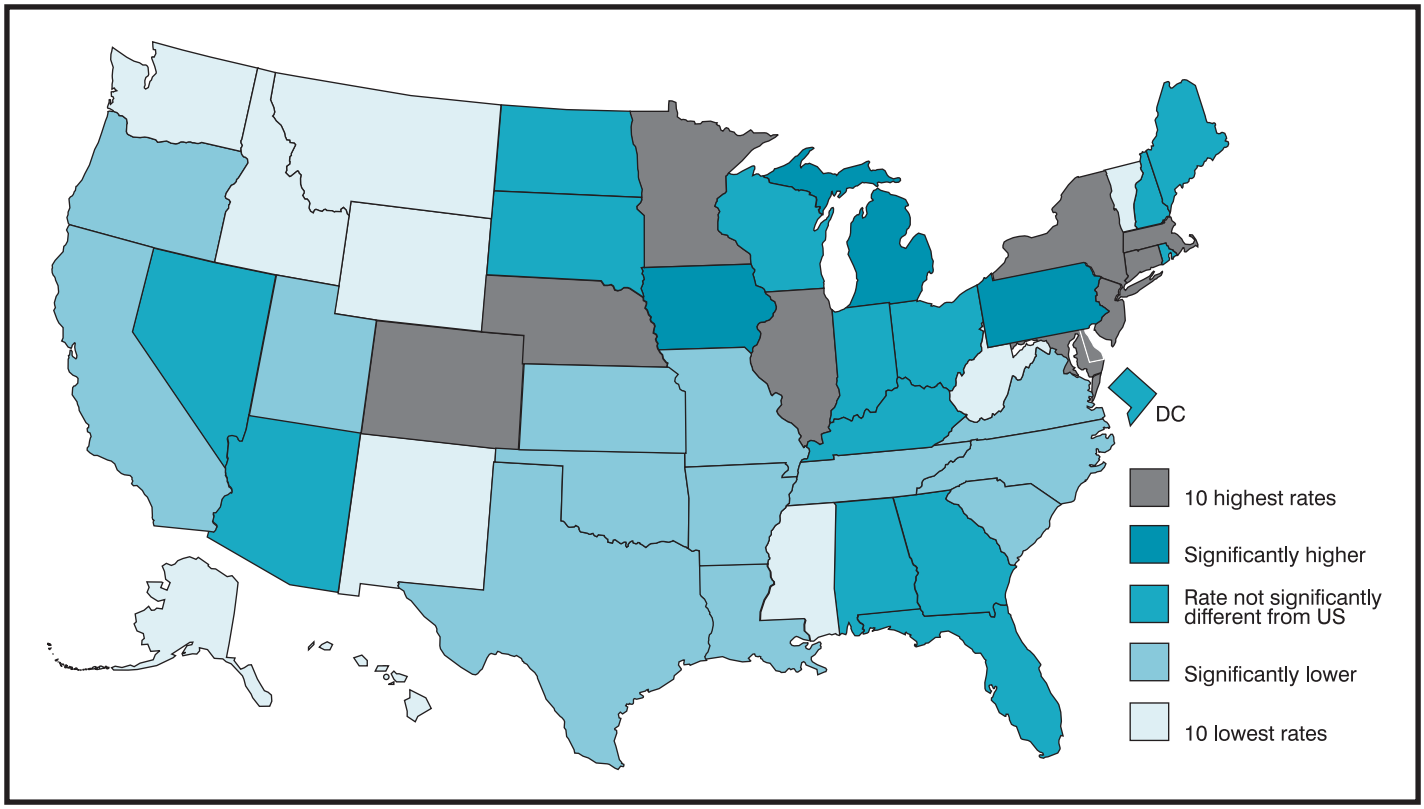


**Figure 10. Triplet/+ birth rates by State, 1995–97**

nearly doubled from 9 percent in 1982 to 15 percent in 1995. Among fecundity-impaired women aged 40–44 years, the prevalence of fertility drug treatment rose from 6 to 16 percent between 1982 and 1995 (17). Although comparable data are not available because the NSFG's age range is 15–44 years, the extraordinary rise in multiple birthing among women aged 45–49 years of age and over shown in this report, suggests increased use of fertility therapies among this group. The high proportion of multiples born to women aged 50–54 years in 1997 (44 percent), especially to non-Hispanic white women (50 percent), strongly suggests a similar influence.

Based on rates of LBW and infant mortality, multiple births born to women in their forties do not appear to be at significantly greater risk of poor birth outcome than are multiples born to much younger women. (It is not yet possible, because of the small numbers of births, to assess the increased risk, if any, of multiples born to women 50–54 years of age.) Multiple births born to women of any age are high-risk births, however: Twins are 4 times; triplets, 10 times; quadruplets, 13 times; and quintuplets, 30 times more likely than singletons to die within the first month of life (18). These births are also having a greater impact on overall measures of maternal and infant health such as LBW. Between 1980 and 1997, the overall LBW rate rose 10 percent; singleton LBW rose a comparatively modest 2 percent.

A recent American College of Gynecology and Obstetrics Committee Opinion states that the first approach to the problem of multiple gestation pregnancies resulting from fertility therapies should be prevention, and that this can be accomplished by techniques such as withholding ovulation inducing drugs if ultrasound indicates the presence of many mature follicles, and limiting the number of embryos transferred in fertility procedures (19). It is thus probable that fertility therapy will become more efficacious, particularly in the limiting of quadruplet and higher order multiple pregnancies. As of 1997 there is little indication of an easing in the upward trend in multiple births. In fact, growth has been more rapid during the 1990's than during the early or mid-1980's. Although there were fewer quadruplet and higher order multiples born in 1997 compared with 1996, these births have more than doubled since the early 1990's. Given continued trends toward delayed childbearing (10) and the increased availability of fertility therapies, it is likely that, at least for the near future, multiple birth rates, particularly among older women, will continue to climb.

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## List of detailed tables

## Table 1. Number and rate of twin and triplet/+ births by race and Hispanic origin of mother, United States, 1980–97

| Race, Hispanic origin, and year | Total births | Twin | Triplet/+[1] | Twin | Triplet/+[1] |
|---|---|---|---|---|---|
| | Number | | | Rate per 1,000 live births | Rate per 100,000 live births |
| All races[2] | | | | | |
| 1997 | 3,880,894 | 104,137 | 6,737 | 26.8 | 173.6 |
| 1996 | 3,891,494 | 100,750 | 5,939 | 25.9 | 152.6 |
| 1995 | 3,899,589 | 96,736 | 4,973 | 24.8 | 127.5 |
| 1994 | 3,952,767 | 97,064 | 4,594 | 24.6 | 116.2 |
| 1993 | 4,000,240 | 96,445 | 4,168 | 24.1 | 104.2 |
| 1992 | 4,065,014 | 95,372 | 3,883 | 23.5 | 95.5 |
| 1991 | 4,110,907 | 94,779 | 3,346 | 23.1 | 81.4 |
| 1990 | 4,158,212 | 93,865 | 3,028 | 22.6 | 72.8 |
| 1989 | 4,040,958 | 90,118 | 2,798 | 22.3 | 69.2 |
| 1988 | 3,909,510 | 85,315 | 2,385 | 21.8 | 61.0 |
| 1987 | 3,809,394 | 81,778 | 2,139 | 21.5 | 56.2 |
| 1986 | 3,756,547 | 79,485 | 1,814 | 21.2 | 48.3 |
| 1985 | 3,760,561 | 77,102 | 1,925 | 20.5 | 51.2 |
| 1984 | 3,669,141 | 72,949 | 1,653 | 19.9 | 45.1 |
| 1983 | 3,638,933 | 72,287 | 1,575 | 19.9 | 43.3 |
| 1982 | 3,680,537 | 71,631 | 1,484 | 19.5 | 40.3 |
| 1981 | 3,629,238 | 70,049 | 1,385 | 19.3 | 38.2 |
| 1980 | 3,612,258 | 68,339 | 1,337 | 18.9 | 37.0 |
| White, total[3] | | | | | |
| 1997 | 3,072,640 | 82,090 | 6,018 | 26.7 | 195.9 |
| 1996 | 3,093,057 | 79,677 | 5,383 | 25.8 | 174.0 |
| 1995 | 3,098,885 | 76,196 | 4,505 | 24.6 | 145.4 |
| 1994 | 3,121,004 | 75,318 | 4,127 | 24.1 | 132.2 |
| 1993 | 3,149,833 | 74,643 | 3,748 | 23.7 | 119.0 |
| 1992 | 3,201,678 | 73,547 | 3,444 | 23.0 | 107.6 |
| 1991 | 3,241,273 | 73,045 | 2,905 | 22.5 | 89.6 |
| 1990 | 3,290,273 | 72,617 | 2,639 | 22.1 | 80.2 |
| 1989 | 3,192,355 | 69,373 | 2,483 | 21.7 | 77.8 |
| 1988 | 3,102,083 | 66,383 | 2,048 | 21.4 | 66.0 |
| 1987 | 3,043,828 | 64,005 | 1,821 | 21.0 | 59.8 |
| 1986 | 3,019,175 | 62,396 | 1,585 | 20.7 | 52.5 |
| 1985 | 3,037,913 | 60,351 | 1,648 | 19.9 | 54.2 |
| 1984 | 2,967,100 | 57,274 | 1,416 | 19.3 | 47.7 |
| 1983 | 2,946,468 | 56,604 | 1,319 | 19.2 | 44.8 |
| 1982 | 2,984,817 | 56,035 | 1,199 | 18.8 | 40.2 |
| 1981 | 2,947,679 | 54,341 | 1,188 | 18.4 | 40.3 |
| 1980 | 2,936,351 | 53,104 | 1,104 | 18.1 | 37.6 |
| Non-Hispanic white | | | | | |
| 1997 | 2,333,363 | 67,191 | 5,386 | 28.8 | 230.8 |
| 1996 | 2,358,989 | 65,523 | 4,885 | 27.8 | 207.1 |
| 1995 | 2,382,638 | 62,370 | 4,050 | 26.2 | 170.0 |
| 1994 | 2,438,855 | 62,476 | 3,721 | 25.6 | 152.6 |
| 1993 | 2,472,031 | 61,525 | 3,360 | 24.9 | 135.9 |
| 1992[4] | 2,527,207 | 60,640 | 3,115 | 24.0 | 123.3 |
| 1991[4] | 2,589,878 | 60,904 | 2,612 | 23.5 | 100.9 |
| 1990[5] | 2,626,500 | 60,210 | 2,358 | 22.9 | 89.8 |
| 1989[6] | 2,526,367 | 56,798 | 2,172 | 22.5 | 86.0 |

See footnotes at end of table.

**Table 1. Number and rate of twin and triplet/+ births by race and Hispanic origin of mother, United States, 1980–97—Con.**

| Race, Hispanic origin, and year | Total births | Twin | Triplet/+[1] | Twin | Triplet/+[1] |
|---|---|---|---|---|---|
| Black, total[3] | Number | | | Rate per 1,000 live births | Rate per 100,000 live births |
| 1997 | 599,913 | 17,989 | 530 | 30.0 | 88.3 |
| 1996 | 594,781 | 17,285 | 439 | 29.1 | 73.8 |
| 1995 | 603,139 | 17,000 | 352 | 28.2 | 58.4 |
| 1994 | 617,689 | 18,344 | 358 | 28.8 | 56.3 |
| 1993 | 658,875 | 18,551 | 327 | 28.2 | 49.6 |
| 1992 | 673,633 | 18,619 | 361 | 27.6 | 53.6 |
| 1991 | 682,602 | 18,593 | 368 | 27.2 | 53.9 |
| 1990 | 684,336 | 18,164 | 321 | 26.5 | 46.9 |
| 1989 | 673,124 | 17,844 | 262 | 26.5 | 38.9 |
| 1988 | 638,562 | 16,334 | 286 | 25.6 | 44.8 |
| 1987 | 611,173 | 15,450 | 246 | 25.3 | 40.3 |
| 1986 | 592,910 | 14,662 | 199 | 24.7 | 33.6 |
| 1985 | 581,824 | 14,646 | 240 | 25.2 | 41.2 |
| 1984 | 568,138 | 13,616 | 195 | 24.0 | 34.3 |
| 1983 | 562,624 | 13,711 | 216 | 24.4 | 38.4 |
| 1982 | 568,506 | 13,592 | 240 | 23.9 | 42.2 |
| 1981 | 564,955 | 13,928 | 172 | 24.7 | 30.4 |
| 1980 | 568,080 | 13,638 | 211 | 24.0 | 37.1 |
| Non-Hispanic black | | | | | |
| 1997 | 581,431 | 17,472 | 523 | 30.0 | 90.0 |
| 1996 | 578,099 | 16,873 | 425 | 29.2 | 73.5 |
| 1995 | 587,781 | 16,622 | 340 | 28.3 | 57.8 |
| 1994 | 619,198 | 17,934 | 357 | 29.0 | 57.7 |
| 1993 | 641,273 | 18,115 | 314 | 28.2 | 49.0 |
| 1992[4] | 657,450 | 18,294 | 346 | 27.8 | 52.6 |
| 1991[4] | 666,758 | 18,243 | 367 | 27.4 | 55.0 |
| 1990[5] | 661,701 | 17,646 | 306 | 26.7 | 46.2 |
| 1989[6] | 611,269 | 16,266 | 246 | 26.6 | 40.2 |
| Hispanic | | | | | |
| 1997 | 709,767 | 13,821 | 516 | 19.5 | 72.7 |
| 1996 | 701,339 | 13,014 | 409 | 18.6 | 58.3 |
| 1995 | 679,768 | 12,685 | 355 | 18.7 | 52.2 |
| 1994 | 665,026 | 12,206 | 348 | 18.4 | 52.3 |
| 1993 | 654,418 | 12,294 | 321 | 18.8 | 49.1 |
| 1992[4] | 643,271 | 11,932 | 239 | 18.5 | 37.2 |
| 1991[4] | 623,085 | 11,356 | 235 | 18.2 | 37.7 |
| 1990[5] | 595,073 | 10,713 | 235 | 18.0 | 39.5 |
| 1989[6] | 532,249 | 9,701 | 189 | 18.2 | 35.5 |

[1]Includes quadruplets and other higher order multiple births.
[2]Includes races other than white and black and origin not stated.
[3]Includes births to women of Hispanic origin.
[4]Excludes data for New Hampshire, which did not report Hispanic origin.
[5]Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.
[6]Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race.

## Table 2. Number and rate of twin and triplet/+ births by age of mother, 1980–97

| Plurality and year | All ages | Under 20 years | 20–24 years | 25–29 years | 30–34 years | 35–39 years | 40–44 years | 45–49 years | 50–54 years |
|---|---|---|---|---|---|---|---|---|---|
| Twin | | | | | Number | | | | |
| 1997 | 104,137 | 7,415 | 19,188 | 28,083 | 29,905 | 16,113 | 2,939 | 444 | 50 |
| 1996 | 100,750 | 7,300 | 19,134 | 27,612 | 28,963 | 14,958 | 2,467 | 316 | - - - |
| 1995 | 96,736 | 7,273 | 19,235 | 26,385 | 27,699 | 13,693 | 2,173 | 278 | - - - |
| 1994 | 97,064 | 7,483 | 20,106 | 27,418 | 27,275 | 12,523 | 2,061 | 198 | - - - |
| 1993 | 96,445 | 7,252 | 20,599 | 27,788 | 26,957 | 12,042 | 1,698 | 109 | - - - |
| 1992 | 95,372 | 7,361 | 20,790 | 28,089 | 26,434 | 11,159 | 1,477 | 62 | - - - |
| 1991 | 94,779 | 7,618 | 21,171 | 28,909 | 25,156 | 10,522 | 1,368 | 35 | - - - |
| 1990 | 93,865 | 7,605 | 20,945 | 30,020 | 24,466 | 9,587 | 1,203 | 39 | - - - |
| 1989 | 90,118 | 7,082 | 20,928 | 29,564 | 22,891 | 8,572 | 1,067 | 14 | - - - |
| 1988 | 85,315 | 6,742 | 20,258 | 28,156 | 21,388 | 7,870 | 882 | 19 | - - - |
| 1987 | 81,778 | 6,625 | 20,265 | 27,707 | 19,603 | 6,823 | 721 | 34 | - - - |
| 1986 | 79,485 | 6,507 | 20,044 | 27,268 | 18,709 | 6,260 | 680 | 17 | - - - |
| 1985 | 77,102 | 6,212 | 20,931 | 25,969 | 17,750 | 5,638 | 580 | 22 | - - - |
| 1984 | 72,949 | 6,228 | 20,211 | 24,890 | 15,920 | 5,106 | 581 | 13 | - - - |
| 1983 | 72,287 | 6,625 | 20,951 | 24,597 | 14,995 | 4,564 | 539 | 16 | - - - |
| 1982 | 71,631 | 6,717 | 21,530 | 24,300 | 14,459 | 4,082 | 522 | 21 | - - - |
| 1981 | 70,049 | 7,265 | 21,320 | 23,610 | 13,718 | 3,644 | 482 | 10 | - - - |
| 1980 | 68,339 | 7,212 | 21,374 | 22,712 | 12,944 | 3,559 | 530 | 8 | - - - |
| | | | | Rate per 1,000 live births in specified group | | | | | |
| 1997 | 26.8 | 15.0 | 20.4 | 26.3 | 33.7 | 39.3 | 38.6 | 133.2 | 347.2 |
| 1996 | 25.9 | 14.5 | 20.2 | 25.8 | 32.3 | 37.4 | 34.4 | 103.8 | - - - |
| 1995 | 24.8 | 14.2 | 19.9 | 24.8 | 30.6 | 35.7 | 32.3 | 101.9 | - - - |
| 1994 | 24.6 | 14.4 | 20.1 | 25.2 | 30.1 | 33.7 | 32.5 | 79.0 | - - - |
| 1993 | 24.1 | 14.1 | 19.8 | 24.6 | 29.9 | 33.7 | 28.7 | 46.8 | - - - |
| 1992 | 23.5 | 14.2 | 19.4 | 23.8 | 29.5 | 32.4 | 26.5 | 30.9 | - - - |
| 1991 | 23.1 | 14.3 | 19.4 | 23.7 | 28.4 | 31.8 | 26.3 | 20.5 | - - - |
| 1990 | 22.6 | 14.3 | 19.2 | 23.5 | 27.6 | 30.2 | 24.7 | 23.8 | - - - |
| 1989 | 22.3 | 13.7 | 19.4 | 23.4 | 27.2 | 29.2 | 24.0 | * | - - - |
| 1988 | 21.8 | 13.8 | 19.0 | 22.7 | 26.6 | 29.2 | 22.4 | * | - - - |
| 1987 | 21.5 | 14.0 | 18.8 | 22.8 | 25.8 | 27.5 | 20.7 | 24.7 | - - - |
| 1986 | 21.2 | 13.8 | 18.2 | 22.7 | 25.9 | 27.2 | 22.8 | * | - - - |
| 1985 | 20.5 | 13.0 | 18.3 | 21.6 | 25.5 | 26.3 | 20.5 | 18.9 | - - - |
| 1984 | 19.9 | 13.0 | 17.7 | 21.4 | 24.2 | 26.1 | 21.6 | * | - - - |
| 1983 | 19.9 | 13.3 | 18.1 | 21.4 | 24.0 | 25.3 | 20.8 | * | - - - |
| 1982 | 19.5 | 12.8 | 17.9 | 21.1 | 23.9 | 24.3 | 21.2 | 17.0 | - - - |
| 1981 | 19.3 | 13.5 | 17.6 | 20.9 | 23.6 | 24.9 | 20.7 | * | - - - |
| 1980 | 18.9 | 12.8 | 17.4 | 20.5 | 23.5 | 25.3 | 23.0 | * | - - - |
| Triplet/+[1] | | | | | Number | | | | |
| 1997 | 6,737 | 102 | 441 | 1,615 | 2,604 | 1,652 | 240 | 70 | 13 |
| 1996 | 5,939 | 80 | 372 | 1,455 | 2,546 | 1,242 | 210 | 34 | - - - |
| 1995 | 4,973 | 90 | 341 | 1,258 | 1,965 | 1,095 | 184 | 40 | - - - |
| 1994 | 4,594 | 76 | 335 | 1,223 | 1,913 | 874 | 143 | 30 | - - - |
| 1993 | 4,168 | 81 | 364 | 1,031 | 1,858 | 714 | 113 | 7 | - - - |
| 1992 | 3,883 | 74 | 412 | 1,118 | 1,462 | 731 | 77 | 9 | - - - |
| 1991 | 3,346 | 82 | 400 | 1,019 | 1,262 | 555 | 28 | – | - - - |
| 1990 | 3,028 | 85 | 354 | 944 | 1,119 | 498 | 28 | – | - - - |
| 1989 | 2,798 | 76 | 299 | 938 | 1,089 | 353 | 36 | 7 | - - - |
| 1988 | 2,385 | 48 | 356 | 862 | 740 | 346 | 33 | – | - - - |
| 1987 | 2,139 | 69 | 312 | 876 | 665 | 196 | 21 | – | - - - |
| 1986 | 1,814 | 68 | 282 | 718 | 582 | 158 | 6 | – | - - - |
| 1985 | 1,925 | 66 | 400 | 797 | 496 | 150 | 16 | – | - - - |
| 1984 | 1,653 | 55 | 365 | 589 | 480 | 152 | 11 | 1 | - - - |
| 1983 | 1,575 | 91 | 336 | 624 | 410 | 114 | – | – | - - - |
| 1982 | 1,484 | 79 | 369 | 524 | 406 | 103 | 3 | – | - - - |
| 1981 | 1,385 | 96 | 309 | 566 | 323 | 80 | 11 | – | - - - |
| 1980 | 1,337 | 83 | 385 | 474 | 321 | 67 | 6 | 1 | - - - |

See footnotes at end of table.

## Table 2. Number and rate of twin and triplet/+ births by age of mother, 1980–97—Con.

| Plurality and year | All ages | Under 20 years | 20–24 years | 25–29 years | 30–34 years | 35–39 years | 40–44 years | 45–49 years | 50–54 years |
|---|---|---|---|---|---|---|---|---|---|
| Triplet/+[1]—Con. | Rate per 100,000 live births in specified group | | | | | | | | |
| 1997 | 173.6 | 20.7 | 46.8 | 151.0 | 293.6 | 403.2 | 315.4 | 2,100.2 | * |
| 1996 | 152.6 | 15.9 | 39.4 | 135.8 | 283.5 | 310.9 | 292.5 | 1,116.6 | - - - |
| 1995 | 127.5 | 17.6 | 35.3 | 118.3 | 217.2 | 285.3 | 273.6 | 1,466.8 | - - - |
| 1994 | 116.2 | 14.7 | 33.5 | 112.3 | 211.0 | 235.2 | 225.2 | 1,196.6 | - - - |
| 1993 | 104.2 | 15.8 | 35.1 | 91.3 | 206.2 | 200.0 | 191.3 | * | - - - |
| 1992 | 95.5 | 14.3 | 38.5 | 94.8 | 163.3 | 212.1 | 138.2 | * | - - - |
| 1991 | 81.4 | 15.4 | 36.7 | 83.5 | 142.6 | 167.7 | 53.7 | * | - - - |
| 1990 | 72.8 | 15.9 | 32.4 | 73.9 | 126.3 | 156.8 | 57.6 | * | - - - |
| 1989 | 69.2 | 14.7 | 27.7 | 74.3 | 129.3 | 120.1 | 81.1 | * | - - - |
| 1988 | 61.0 | 9.8 | 33.3 | 69.6 | 92.1 | 128.4 | 83.9 | * | - - - |
| 1987 | 56.2 | 14.6 | 29.0 | 72.0 | 87.4 | 79.0 | 60.4 | * | - - - |
| 1986 | 48.3 | 14.4 | 25.6 | 59.9 | 80.7 | 68.6 | * | * | - - - |
| 1985 | 51.2 | 13.8 | 35.0 | 66.3 | 71.2 | 70.0 | * | * | - - - |
| 1984 | 45.1 | 11.5 | 32.0 | 50.5 | 72.9 | 77.6 | * | * | - - - |
| 1983 | 43.3 | 18.2 | 29.0 | 54.4 | 65.7 | 63.2 | * | * | - - - |
| 1982 | 40.3 | 15.1 | 30.6 | 45.5 | 67.1 | 61.3 | * | * | - - - |
| 1981 | 38.2 | 17.9 | 25.5 | 50.2 | 55.6 | 54.8 | * | * | - - - |
| 1980 | 37.0 | 14.8 | 31.4 | 42.8 | 58.3 | 47.6 | * | * | - - - |

* Figure does not meet standards of reliability or precision.
- - - Data not available.
– Quantity zero.
[1]Includes births in quadruplet and quintuplet and other higher order multiple births.

## Table 3. Twin and triplet/+ birth rates by age, race, and Hispanic origin of mother: United States, 1980–82, 1989–91, and 1995–97

| Plurality and age | 1995–97[1] | 1989–91 | 1980–82 | Percent change 1989–91 to 1995–97 | Percent change 1980–82 to 1995–97 |
|---|---|---|---|---|---|
| Twin | Rate per 1,000 live births in specified group | | | | |
| All races[2]: | | | | | |
| All ages | 25.8 | 22.6 | 19.2 | 14 | 34 |
| Under 20 years | 14.6 | 14.1 | 13.1 | 3 | 12 |
| 20–29 years | 23.1 | 21.6 | 19.2 | 7 | 20 |
| 20–24 | 20.2 | 19.3 | 17.6 | 4 | 14 |
| 25–29 | 25.6 | 23.5 | 20.8 | 9 | 23 |
| 30–39 years | 33.8 | 28.5 | 23.9 | 19 | 41 |
| 30–34 | 32.2 | 27.7 | 23.7 | 16 | 36 |
| 35–39 | 37.5 | 30.4 | 24.8 | 23 | 51 |
| 40–49 years | 38.4 | 24.8 | 21.1 | 55 | 82 |
| 40–44 | 35.2 | 25.1 | 21.6 | 41 | 63 |
| 45–49 | 114.0 | 17.8 | 10.8 | 541 | 960 |
| White, total: | | | | | |
| All ages | 25.7 | 22.1 | 18.4 | 16 | 39 |
| Under 20 years | 13.1 | 12.6 | 11.9 | 3 | 10 |
| 20–29 years | 22.0 | 20.5 | 18.2 | 7 | 21 |
| 20–24 | 18.5 | 17.7 | 16.4 | 4 | 12 |
| 25–29 | 24.9 | 22.8 | 20.0 | 9 | 25 |
| 30–39 years | 34.4 | 28.4 | 23.2 | 21 | 48 |
| 30–34 | 32.5 | 27.6 | 23.0 | 18 | 41 |
| 35–39 | 38.8 | 30.7 | 24.1 | 26 | 61 |
| 40–49 years | 41.6 | 25.4 | 20.9 | 63 | 98 |
| 40–44 | 37.9 | 25.7 | 21.6 | 48 | 76 |
| 45–49 | 130.1 | 18.1 | 8.0 | 619 | 1,526 |
| Non-Hispanic white: | | | | | |
| All ages | 27.6 | 23.0 | . . . | 20 | . . . |
| Under 20 years | 13.4 | 13.0 | . . . | 3 | . . . |
| 20–29 years | 23.3 | 21.2 | . . . | 10 | . . . |
| 20–24 | 19.3 | 18.1 | . . . | 7 | . . . |
| 25–29 | 26.2 | 23.4 | . . . | 12 | . . . |
| 30–39 years | 36.0 | 29.0 | . . . | 24 | . . . |
| 30–34 | 34.0 | 28.3 | . . . | 20 | . . . |
| 35–39 | 40.6 | 31.3 | . . . | 30 | . . . |
| 40–49 years | 45.0 | 26.3 | . . . | 71 | . . . |
| 40–44 | 40.6 | 26.5 | . . . | 53 | . . . |
| 45–49 | 149.8 | 20.2 | . . . | 642 | . . . |
| Black, total: | | | | | |
| All ages | 29.1 | 26.8 | 24.2 | 9 | 20 |
| Under 20 years | 18.7 | 17.5 | 16.1 | 7 | 16 |
| 20–29 years | 30.5 | 28.1 | 25.9 | 8 | 18 |
| 20–24 | 28.0 | 26.3 | 24.0 | 6 | 17 |
| 25–29 | 33.8 | 30.5 | 28.7 | 11 | 18 |
| 30–39 years | 36.3 | 33.8 | 31.7 | 7 | 14 |
| 30–34 | 36.6 | 33.5 | 31.7 | 9 | 15 |
| 35–39 | 35.6 | 34.7 | 31.7 | 3 | 12 |
| 40–49 years | 26.2 | 24.8 | 24.4 | 5 | 7 |
| 40–44 | 25.8 | 25.3 | 24.8 | 2 | 4 |
| 45–49 | 36.5 | * | * | * | * |
| Non-Hispanic black: | | | | | |
| All ages | 29.2 | 26.9 | . . . | 8 | . . . |
| Under 20 years | 18.8 | 17.6 | . . . | 7 | . . . |
| 20–29 years | 30.6 | 28.3 | . . . | 8 | . . . |
| 20–24 | 28.1 | 26.5 | . . . | 6 | . . . |
| 25–29 | 33.9 | 30.6 | . . . | 11 | . . . |
| 30–39 years | 36.5 | 34.0 | . . . | 7 | . . . |
| 30–34 | 36.7 | 33.6 | . . . | 9 | . . . |
| 35–39 | 35.9 | 35.0 | . . . | 2 | . . . |
| 40–49 years | 26.1 | 25.2 | . . . | 3 | . . . |
| 40–44 | 25.6 | 25.7 | . . . | –0 | . . . |
| 45–49 | 38.3 | * | . . . | * | . . . |

See footnotes at end of table.

**Table 3. Twin and triplet/+ birth rates by age, race, and Hispanic origin of mother: United States, 1980–82, 1989–91, and 1995–97—Con.**

| Plurality and age | 1995–97[1] | 1989–91 | 1980–82 | Percent change 1989–91 to 1995–97 | Percent change 1980–82 to 1995–97 |
|---|---|---|---|---|---|
| Twin—Con. | Rate per 1,000 live births in specified group | | | | |
| Hispanic: | | | | | |
| All ages | 18.9 | 18.2 | . . . | 4 | . . . |
| Under 20 years | 12.6 | 11.8 | . . . | 7 | . . . |
| 20–29 years | 17.9 | 17.8 | . . . | 1 | . . . |
| 20–24 | 16.2 | 16.4 | . . . | –1 | . . . |
| 25–29 | 19.9 | 19.4 | . . . | 3 | . . . |
| 30–39 years | 25.4 | 23.8 | . . . | 7 | . . . |
| 30–34 | 24.5 | 22.7 | . . . | 8 | . . . |
| 35–39 | 27.6 | 26.5 | . . . | 4 | . . . |
| 40–49 years | 23.8 | 21.3 | . . . | 12 | . . . |
| 40–44 | 23.4 | 21.7 | . . . | 8 | . . . |
| 45–49 | 32.8 | * | . . . | * | . . . |
| Triplet/+[3] | Rate per 100,000 live births in specified group | | | | |
| All races[2]: | | | | | |
| All ages | 151.2 | 74.5 | 38.5 | 103 | 293 |
| Under 20 years | 18.0 | 15.3 | 15.9 | 17 | 13 |
| 20–29 years | 90.5 | 56.3 | 37.4 | 61 | 142 |
| 20–24 | 40.5 | 32.3 | 29.2 | 25 | 39 |
| 25–29 | 135.1 | 77.2 | 46.2 | 75 | 192 |
| 30–39 years | 286.0 | 137.1 | 59.3 | 109 | 382 |
| 30–34 | 264.6 | 132.8 | 60.4 | 99 | 338 |
| 35–39 | 334.4 | 149.2 | 55.0 | 124 | 508 |
| 40–49 years | 346.9 | 66.0 | 28.1 | 426 | 1,135 |
| 40–44 | 294.7 | 63.4 | 28.1 | 365 | 949 |
| 45–49 | 1,581.5 | * | * | * | * |
| White, total: | | | | | |
| All ages | 171.7 | 82.5 | 39.4 | 108 | 336 |
| Under 20 years | 14.7 | 12.1 | 14.6 | 22 | 1 |
| 20–29 years | 99.1 | 59.6 | 37.5 | 66 | 164 |
| 20–24 | 41.0 | 31.0 | 28.7 | 32 | 43 |
| 25–29 | 147.6 | 82.7 | 46.5 | 78 | 217 |
| 30–39 years | 318.6 | 151.8 | 61.3 | 110 | 420 |
| 30–34 | 297.5 | 147.2 | 62.3 | 102 | 378 |
| 35–39 | 366.4 | 164.8 | 57.4 | 122 | 538 |
| 40–49 years | 392.3 | 68.9 | * | 469 | * |
| 40–44 | 325.8 | 65.0 | * | 401 | * |
| 45–49 | 1,980.2 | * | * | * | * |
| Non-Hispanic white: | | | | | |
| All ages | 202.4 | 90.0 | . . . | 125 | . . . |
| Under 20 years | 12.9 | 11.7 | . . . | 10 | . . . |
| 20–29 years | 116.1 | 70.0 | . . . | 66 | . . . |
| 20–24 | 46.9 | 30.0 | . . . | 56 | . . . |
| 25–29 | 168.3 | 90.0 | . . . | 87 | . . . |
| 30–39 years | 353.4 | 160.0 | . . . | 121 | . . . |
| 30–34 | 330.3 | 160.0 | . . . | 106 | . . . |
| 35–39 | 405.5 | 180.0 | . . . | 125 | . . . |
| 40–49 years | 439.1 | 80.0 | . . . | 449 | . . . |
| 40–44 | 359.5 | 80.0 | . . . | 349 | . . . |
| 45–49 | 2,352.1 | * | . . . | * | . . . |
| Black, total: | | | | | |
| All ages | 73.5 | 46.6 | 36.6 | 58 | 101 |
| Under 20 years | 27.9 | 23.5 | 16.5 | 19 | 69 |
| 20–29 years | 63.4 | 46.6 | 40.2 | 36 | 58 |
| 20–24 | 42.4 | 32.3 | 34.4 | 31 | 23 |
| 25–29 | 92.0 | 77.2 | 48.9 | 19 | 88 |
| 30–39 years | 134.9 | 72.8 | 57.3 | 85 | 135 |
| 30–34 | 113.5 | 62.9 | 60.0 | 80 | 89 |
| 35–39 | 181.3 | 100.2 | 48.3 | 81 | 275 |
| 40–49 years | 175.0 | * | * | * | * |
| 40–44 | 181.4 | * | * | * | * |
| 45–49 | – | – | – | – | – |

See footnotes at end of table.

## Table 3. Twin and triplet/+ birth rates by age, race, and Hispanic origin of mother: United States, 1980–82, 1989–91, and 1995–97—Con.

| Plurality and age | 1995–97[1] | 1989–91 | 1980–82 | Percent change 1989–91 to 1995–97 | Percent change 1980–82 to 1995–97 |
|---|---|---|---|---|---|
| Triplet/+[3]—Con. | Rate per 100,000 live births in specified group | | | | |
| Non-Hispanic black: | | | | | |
| All ages | 73.7 | 50.0 | . . . | 47 | . . . |
| Under 20 years | 27.0 | 24.6 | . . . | 10 | . . . |
| 20–29 years | 64.7 | 50.0 | . . . | 29 | . . . |
| 20–24 | 43.1 | 40.0 | . . . | 8 | . . . |
| 25–29 | 94.2 | 60.0 | . . . | 57 | . . . |
| 30–39 years | 134.1 | 70.0 | . . . | 92 | . . . |
| 30–34 | 115.0 | 60.0 | . . . | 92 | . . . |
| 35–39 | 175.6 | 110.0 | . . . | 60 | . . . |
| 40–49 years | 181.6 | * | . . . | * | . . . |
| 40–44 | 188.2 | * | . . . | * | . . . |
| 45–49 | – | – | . . . | – | . . . |
| Hispanic: | | | | | |
| All ages | 61.2 | 40.0 | . . . | 53 | . . . |
| Under 20 years | 19.8 | 12.8 | . . . | 54 | . . . |
| 20–29 years | 45.2 | 30.0 | . . . | 51 | . . . |
| 20–24 | 25.1 | 20.0 | . . . | 26 | . . . |
| 25–29 | 68.4 | 50.0 | . . . | 37 | . . . |
| 30–39 years | 124.0 | 70.0 | . . . | 77 | . . . |
| 30–34 | 114.5 | 70.0 | . . . | 64 | . . . |
| 35–39 | 146.9 | 60.0 | . . . | 145 | . . . |
| 40–49 years | 143.2 | * | . . . | * | . . . |
| 40–44 | 128.9 | – | . . . | – | . . . |
| 45–49 | * | * | . . . | * | . . . |

. . . Category not applicable.
* Figure does not meet standards of reliability or precision.
– Quantity zero.
[1]For 1997, births to women aged 50–54 years are not included in the calculation of rates for 1995–97. See Technical notes.
[2]Includes races other than white and black.
[3]Includes births in quadruplet and quintuplet and other higher order multiple births.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race.

## Table 4. Percent very low and low birthweight by plurality and age of mother: United States, 1980–82 and 1995–97

| Age and race of mother | Twin | | Triplet /+[1] | | Singleton | |
|---|---|---|---|---|---|---|
| | 1995–97 | 1980–82 | 1995–97 | 1980–82 | 1995–97 | 1980–82 |
| | Very low birthweight[2] | | | | | |
| All ages | 10.20 | 10.36 | 36.92 | 36.42 | 1.09 | 0.97 |
| Under 20 years | 16.96 | 17.64 | 55.35 | 50.40 | 1.54 | 1.51 |
| 20–24 years | 11.91 | 11.84 | 47.07 | 46.33 | 1.10 | 0.94 |
| 25–29 years | 9.93 | 8.86 | 42.39 | 35.60 | 0.92 | 0.79 |
| 30–34 years | 8.76 | 7.82 | 35.15 | 26.46 | 0.94 | 0.84 |
| 35–39 years | 8.34 | 7.56 | 31.44 | 29.20 | 1.22 | 1.02 |
| 40–44 years | 8.02 | 6.85 | 27.17 | * | 1.57 | 1.18 |
| 45–49 years | 8.49 | * | 40.14 | * | 1.71 | 1.65 |
| | Low birthweight[3] | | | | | |
| All ages | 53.44 | 50.80 | 93.08 | 87.98 | 6.05 | 5.91 |
| Under 20 years | 68.08 | 65.07 | 96.31 | 93.55 | 8.59 | 8.74 |
| 20–24 years | 58.72 | 55.82 | 95.37 | 91.40 | 6.29 | 6.02 |
| 25–29 years | 53.16 | 47.34 | 94.72 | 88.46 | 5.17 | 4.89 |
| 30–34 years | 49.33 | 43.80 | 92.90 | 83.70 | 5.16 | 4.89 |
| 35–39 years | 48.65 | 43.73 | 91.31 | 82.80 | 6.30 | 5.99 |
| 40–44 years | 49.24 | 43.80 | 89.57 | * | 7.81 | 7.58 |
| 45–49 years | 54.19 | * | 93.66 | * | 9.18 | 9.59 |

* Figure does not meet standards of reliability or precision.
[1]Includes quadruplet and other higher order multiple births.
[2]Very low birthweight is less than 1,500 grams.
[3]Low birthweight is less than 2,500 grams.

NOTES: For 1997, births to women aged 50–54 years are not included in the calculation of rates for 1995–97. See Technical notes.

## Table 5. Twin and triplet/+ birth rates by State: United States and each State, 1995–97

| State | Twin | | | | State | Triplet/+[1] | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Rate per 1,000 live births | 95-percent confidence limits | | | Number | Rate per 100,000 live births | 95-percent confidence limits | |
| | | | Lower | Upper | | | | Lower | Upper |
| United States | 301,623 | 25.8 | 25.7 | 25.9 | United States | 17,649 | 151.2 | 149.0 | 153.4 |
| Alabama | 4,643 | 25.5 | 24.8 | 26.3 | Alabama | 266 | 146.4 | 128.8 | 164.0 |
| Alaska | 722 | 23.9 | 22.1 | 25.6 | Alaska | 27 | 89.3 | 58.9 | 130.0 |
| Arizona | 5,134 | 23.0 | 22.3 | 23.6 | Arizona | 327 | 146.3 | 130.4 | 162.2 |
| Arkansas | 2,608 | 24.1 | 23.2 | 25.1 | Arkansas | 98 | 90.7 | 73.7 | 110.6 |
| California | 37,938 | 23.5 | 23.2 | 23.7 | California | 1,677 | 103.8 | 98.8 | 108.7 |
| Colorado | 4,733 | 28.4 | 27.6 | 29.2 | Colorado | 373 | 223.8 | 201.1 | 246.5 |
| Connecticut | 4,294 | 32.6 | 31.6 | 33.5 | Connecticut | 323 | 244.9 | 218.1 | 271.6 |
| Delaware | 898 | 29.3 | 27.3 | 31.2 | Delaware | 69 | 224.9 | 175.0 | 284.7 |
| District of Columbia | 714 | 28.2 | 26.0 | 30.3 | District of Columbia | 34 | 134.2 | 93.0 | 187.6 |
| Florida | 14,115 | 24.7 | 24.3 | 25.2 | Florida | 861 | 150.9 | 140.8 | 161.0 |
| Georgia | 8,798 | 25.5 | 25.0 | 26.1 | Georgia | 497 | 144.2 | 131.6 | 156.9 |
| Hawaii | 1,000 | 18.4 | 17.2 | 19.5 | Hawaii | 36 | 66.2 | 46.4 | 91.6 |
| Idaho | 1,185 | 21.5 | 20.2 | 22.7 | Idaho | 45 | 81.5 | 59.4 | 109.0 |
| Illinois | 15,447 | 28.1 | 27.6 | 28.5 | Illinois | 1,160 | 211.0 | 198.8 | 223.1 |
| Indiana | 6,273 | 25.1 | 24.5 | 25.7 | Indiana | 419 | 167.7 | 151.7 | 183.8 |
| Iowa | 3,022 | 27.3 | 26.3 | 28.3 | Iowa | 215 | 194.4 | 168.4 | 220.4 |
| Kansas | 2,902 | 26.1 | 25.1 | 27.1 | Kansas | 140 | 126.0 | 105.1 | 146.8 |
| Kentucky | 3,828 | 24.2 | 23.4 | 25.0 | Kentucky | 221 | 139.6 | 121.2 | 158.0 |
| Louisiana | 5,207 | 26.4 | 25.7 | 27.2 | Louisiana | 192 | 97.5 | 83.7 | 111.3 |
| Maine | 1,118 | 27.0 | 25.4 | 28.7 | Maine | 59 | 142.7 | 108.7 | 184.1 |
| Maryland | 6,211 | 29.0 | 28.3 | 29.7 | Maryland | 423 | 197.5 | 178.7 | 216.4 |
| Massachusetts | 7,904 | 32.6 | 31.9 | 33.4 | Massachusetts | 666 | 274.9 | 254.0 | 295.8 |
| Michigan | 11,071 | 27.6 | 27.0 | 28.1 | Michigan | 708 | 176.2 | 163.2 | 189.2 |
| Minnesota | 5,296 | 27.7 | 26.9 | 28.4 | Minnesota | 476 | 248.6 | 226.3 | 271.0 |
| Mississippi | 2,911 | 23.5 | 22.6 | 24.4 | Mississippi | 81 | 65.4 | 51.9 | 81.3 |
| Missouri | 5,886 | 26.6 | 26.0 | 27.3 | Missouri | 220 | 99.6 | 86.4 | 112.8 |
| Montana | 771 | 23.5 | 21.8 | 25.1 | Montana | 17 | 51.8 | 30.2 | 82.9 |
| Nebraska | 2,114 | 30.3 | 29.0 | 31.6 | Nebraska | 226 | 323.6 | 281.3 | 365.8 |
| Nevada | 1,754 | 22.5 | 21.4 | 23.5 | Nevada | 111 | 142.1 | 115.7 | 168.6 |
| New Hampshire | 1,159 | 26.6 | 25.1 | 28.2 | New Hampshire | 60 | 137.9 | 105.3 | 177.6 |
| New Jersey | 10,683 | 31.2 | 30.6 | 31.8 | New Jersey | 1,050 | 306.6 | 288.1 | 325.2 |
| New Mexico | 1,681 | 20.7 | 19.7 | 21.8 | New Mexico | 58 | 71.6 | 54.4 | 92.5 |
| New York | 22,729 | 28.7 | 28.3 | 29.1 | New York | 1,566 | 197.6 | 187.8 | 207.4 |
| North Carolina | 8,135 | 26.0 | 25.4 | 26.6 | North Carolina | 378 | 120.7 | 108.6 | 132.9 |
| North Dakota | 714 | 28.4 | 26.3 | 30.5 | North Dakota | 46 | 182.7 | 133.8 | 243.7 |
| Ohio | 12,214 | 26.7 | 26.2 | 27.2 | Ohio | 750 | 163.8 | 152.1 | 175.6 |
| Oklahoma | 3,112 | 22.2 | 21.4 | 23.0 | Oklahoma | 129 | 92.1 | 76.2 | 107.9 |
| Oregon | 3,069 | 23.6 | 22.7 | 24.4 | Oregon | 135 | 103.6 | 86.1 | 121.1 |
| Pennsylvania | 12,114 | 27.3 | 26.8 | 27.8 | Pennsylvania | 745 | 167.6 | 155.6 | 179.7 |
| Rhode Island | 1,020 | 26.9 | 25.3 | 28.6 | Rhode Island | 64 | 168.9 | 130.1 | 215.7 |
| South Carolina | 3,918 | 25.4 | 24.6 | 26.2 | South Carolina | 157 | 101.8 | 85.8 | 117.7 |
| South Dakota | 796 | 25.6 | 23.8 | 27.4 | South Dakota | 36 | 115.7 | 81.0 | 160.2 |
| Tennessee | 5,607 | 25.3 | 24.7 | 26.0 | Tennessee | 245 | 110.7 | 96.8 | 124.5 |
| Texas | 22,940 | 23.2 | 22.9 | 23.5 | Texas | 1,212 | 122.8 | 115.9 | 129.7 |
| Utah | 2,878 | 23.1 | 22.2 | 23.9 | Utah | 130 | 104.2 | 86.3 | 122.2 |
| Vermont | 437 | 21.7 | 19.6 | 23.7 | Vermont | 8 | 39.7 | 17.1 | 78.2 |
| Virginia | 7,213 | 26.1 | 25.4 | 26.7 | Virginia | 357 | 129.0 | 115.6 | 142.4 |
| Washington | 5,570 | 23.9 | 23.2 | 24.5 | Washington | 196 | 84.0 | 72.2 | 95.8 |
| West Virginia | 1,477 | 23.6 | 22.4 | 24.8 | West Virginia | 51 | 81.4 | 60.6 | 107.1 |
| Wisconsin | 5,171 | 25.7 | 25.0 | 26.4 | Wisconsin | 294 | 146.2 | 129.4 | 162.9 |
| Wyoming | 489 | 25.8 | 23.5 | 28.1 | Wyoming | 15 | 79.2 | 44.3 | 130.7 |
| Puerto Rico | 3,208 | 16.8 | 16.2 | 17.4 | Puerto Rico | 108 | 56.6 | 46.0 | 67.3 |
| Virgin Islands | 100 | 16.7 | 13.4 | 20.0 | Virgin Islands | 4 | 66.8 | 18.2 | 171.1 |
| Guam | 149 | 11.7 | 9.8 | 13.6 | Guam | 2 | 15.7 | 1.9 | 56.7 |

[1]Includes quadruplet and quintuplet and other higher order multiple births.

## Technical notes

Data for this report are based on 100 percent of birth certificates registered to U.S. residents for 1980–97. Tabulations by State include Puerto Rico, the Virgin Islands, and Guam but the totals for the United States do not include these areas. Data by plurality for American Samoa were not available.

For 1997 the editing procedures for maternal age were changed to include ages 50–54 years. For 1963–96 mother's age was edited for ages 10–49 years; births reported to have occurred to mothers younger than 10 and older than 49 were imputed according to the age of the mother from the previous record with the same race and total birth order. The number of births to women aged 50–54 years in 1997 was small (144) and, thus, this change results in essentially no discontinuity in age-specific birth rates for women aged 10–49 years (10).

Maternal race and Hispanic origin are reported separately on the birth certificate. Although most Hispanic births (97 percent) are to white mothers, there are important differences in twin and triplet/+ birth rates between Hispanic and non-Hispanic white women. Therefore, starting with data year 1989 when information for the vast majority of the Hispanic origin reporting area became available, data are shown separately for these groups.

Except where accompanied by 95-percent confidence limits (table 5), rates are not computed if fewer than 20 events occurred in the numerator or the denominator. Information on the calculation of random variation and relative standard error is provided in earlier reports (7,10).

## Contents




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Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782-2003

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