

# **Characteristics of Births**

**United States, 1973 - 1975**

A presentation of characteristics of live births, including educational attainment of parents, birth weight, period of gestation, prenatal care, sex ratio, month of birth, attendant at birth and place of delivery, plurality, illegitimacy, and interval since last live birth and last pregnancy, and outcome of last pregnancy. Emphasis is on births occurring in 1973; however, data for 1974 and 1975 are included in the summary and in the discussion of trends.

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# CHARACTERISTICS OF BIRTHS

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## INTRODUCTION

This report describes important characteristics of births occurring in the United States. Much of the analysis was completed before 1974 and 1975 data became available. Therefore, data for 1974 and 1975 are included in the next section, "Summary of Principal Findings," and throughout the remainder of the report whenever trends are discussed. The major data in this report, however, concern the characteristics of births occurring in 1973.

Birth statistics presented in this report are based on information obtained from the certificates of live birth filed throughout the United States. Data for a number of the characteristics—educational attainment of parents, interval since last live birth, interval since termination of last pregnancy, outcome of last pregnancy, legitimacy status, month of pregnancy prenatal care began, number of prenatal visits, and period of gestation—are based on items that are not reported on the birth certificates of all States. Because data on these characteristics are based only on information for residents of reporting States, caution should be used in extrapolating these statistics for the United States as a whole.<sup>a</sup> Moreover, there may be variations in a particular statistic from one table to the next, depending on the number of States in the reporting area for which the statistic is computed. For example, the incidence of low birth weight (2,500 grams

or less) was 7.6 percent for the entire United States in 1973. The incidence was 7.3 percent for the 41 areas which reported information from which the interval since the last live birth was derived, and 7.5 percent for the 43 areas which reported month of pregnancy prenatal care began. Table I in the appendix shows the reporting areas for each of the characteristics not reported by all States.

## SUMMARY OF PRINCIPAL FINDINGS

In areas reporting education, the majority of births occurred to mothers who had at least a high school education. In 1973, these were 69.4 percent of all births; by 1975 this proportion increased to 71.4 percent. Infants born to mothers with less than 12 years of schooling were more likely to be of low birth weight (2,500 grams or less) and to be premature (less than 37 weeks of gestation) than were infants born to mothers with more education. Moreover, these less educated mothers were less likely to receive prenatal care early in pregnancy and were more likely to have an illegitimate birth than their better educated counterparts.

The median birth weight for all infants born in 1975 was 3,320 grams, or 7 pounds, 5 ounces. Seven percent of all newborns were of low birth weight—that is, they weighed 2,500 grams (5 pounds, 8 ounces) or less. The median birth weight of black infants was somewhat lower than that of white infants, reflecting a considerably higher incidence of low birth weight among black infants than among white infants—13.1 percent compared with 6.3 percent

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<sup>a</sup>Although legitimacy status was not reported on the birth certificates for all States, national estimates of illegitimate births have been prepared on the basis of data for the reporting States.



in 1975. Failure by some investigators to eliminate the large racial differential after accounting for differences in maternal characteristics and other factors known to be associated with low birth weight suggests that genetic as well as environmental factors may be affecting the observed differences.

Premature births (born before 37 weeks of gestation) comprised 9.2 percent of all live births in reporting areas in 1973. There was a large racial differential: 16.7 percent of black babies compared with 7.7 percent of white babies were classified as premature. In 1975, 8.9 percent of all live births were premature, and most of the decline was among black infants.

In 1973, among States that reported the month of pregnancy prenatal care began, nearly 71 percent of all births were to mothers who started care during the first 3 months of pregnancy and only 1.5 percent of all births were to mothers who received no care; there was little change in these figures between 1973 and 1975. For all mothers who received care and resided in areas reporting this item, the median number of prenatal visits per birth was 10.6. The comparable numbers for white and black births were 10.9 and 8.6 visits, respectively. By 1975, the median number of prenatal visits had increased to 10.8, and there was a larger increase for black than for white births.

The sex ratio at birth varies little from year to year; it was 1,054 male births per 1,000 female births in 1975.

Almost all (99 percent) infants born in the United States during 1975 were classified as having been delivered by physicians in hospitals. The gap between the proportion of white births and black births occurring in hospitals continued to narrow in 1975—98.9 percent of white babies compared with 98.0 percent of black babies.

In 1973, of 57,721 live births that occurred in plural deliveries, the overwhelming majority were twin deliveries. The multiple birth ratio was 18.4 live births in multiple deliveries per 1,000 total live births. The ratio was 22.2 for black births compared with 17.7 for white births. In 1975 these ratios were slightly higher (19.2 for all live births).

For all second and higher order births to residents of States reporting the date of last

live birth, the mean interval since the last live birth was 43.3 months in 1973. The mean interval since termination of the last pregnancy for all births resulting from second and higher order pregnancies was 40.4 months. This interval was approximately 1½ years longer when the last pregnancy ended in a live birth than when it ended in a fetal death. By 1975, the interval since last live birth had increased to 44.6 months and the interval since termination of last pregnancy had increased to 41.4 months.

The estimated illegitimacy rate was 24.8 illegitimate births per 1,000 unmarried women aged 15-44 years in 1975, a decline from the rate of 26.4 in 1970. In spite of the decline in the rate, the illegitimacy ratio had increased from 106.9 to 142.5 illegitimate births per 1,000 total live births between 1970 and 1975, a result of both the decrease in marital fertility and the increase in the number of unmarried women.

## EDUCATION

The educational attainment of both parents was first tabulated in 1969. It is defined as the number of years of school completed in public or accredited private or parochial schools and is useful as a measure of socioeconomic status. The 1973 data presented in this report were obtained from 41 States and the District of Columbia.

### Education of Mother

The proportion of births whose mothers completed 12 or more years of school by age of mother, live-birth order, and race is shown in table 1. Mothers aged 15-19 years were more likely to have less than 12 years of education since most 15- and 16-year-olds have not yet completed high school. Of all births to mothers in this age group, 19 percent were to 15- and 16-year-old mothers who would very likely not yet have had the opportunity to complete high school. The proportion of births to mothers completing high school rose with age to a peak of 82.8 percent for the 25-29-year age group and then declined to 58.9 percent for the oldest age group. Similar age patterns were found for both race groups. The percent of births to

mothers completing at least 12 years of school was higher among white births than among black births for each age-of-mother group. The racial differential was not as great among younger women as among older women. For the 20-24-year age group, the proportion of births to mothers who had completed 12 or more years of school was 19 percent higher among whites than among blacks. This differential increased with age to 77 percent for women aged 40 years and over.

For each age-of-mother group the proportion of births to mothers with 12 or more years of school tended to be inversely related to birth order. For all ages combined, however, this proportion increased from 70.7 percent among first births to 76.1 percent among second births, a result of the fact that the distribution of births by age is not the same for all birth-order groups. For example, more than a third of first births are to mothers aged 15-19 years, but only a tenth of second births are to mothers in this age group.

Between 1973 and 1975, the percent of all births whose mothers had completed at least 12 years of school increased from 69.4 to 71.4 percent, reflecting an increase for both racial groups.

The use of educational attainment of mother as a measure of socioeconomic status in relation to birth weight, period of gestation, prenatal care, interval since last live birth, and illegitimacy are found in sections that follow.

### Education of Father

Table 2 shows the percent distribution of live births by educational attainment of father, age of father, and race. Among all births, 75.9 percent were born to fathers with at least a high school education. The age pattern of this proportion was identical to that for mothers.

A larger proportion of white than black infants were born to fathers with at least a high school education (77.5 percent and 64.1 percent, respectively). This was true for every age-of-father category except that of 15-19 years where the proportion was identical (48.6 percent) for both white and black births. The racial differential was greatest among infants born to older fathers.

A comparison with educational attainment of mother (table 3) shows that a greater proportion of fathers than of mothers had completed at least 12 years of schooling. Although the proportion who had completed just 12 years of school was greater for mothers than for fathers, this was more than offset by a much larger proportion of fathers than mothers who had completed 16 or more years of school.

### BIRTH WEIGHT

An infant's weight at birth has long been regarded as an indicator of his potential for survival and future growth. The greatest risks of mortality and morbidity exist for those babies who are of low birth weight. In 1975, 7.4 percent of all infants born were in this category.

Low birth weight is a function of intra-uterine growth retardation as well as duration of pregnancy. Statistics discussed in this section make no distinction between low-birth-weight infants who were born at term and those who were born prematurely (before 37 weeks of gestation). However, it has been pointed out that with regard to postnatal care for the infant, the distinction is of paramount importance, since the care appropriate for low-birth-weight infants who are premature may be inappropriate or even contraindicated for the full-term low-birth-weight infant.<sup>1</sup> Birth weight as it relates to duration of pregnancy is discussed at greater length in the section, "Period of Gestation," which follows.

Substantial differences between infants of the two major racial groups in weight at birth are well recognized. The median weight for black infants was 220 grams or about 8 ounces below the median weight for white infants in 1975 (table 4). Concomitantly, there was a considerably higher incidence of low birth weight among black infants than among white infants (13.1 percent compared with 6.3 percent) in 1975.

Some investigators have noted the persistence of this racial differential even after adjustments have been made for differences in such maternal characteristics as age and parity, socioeconomic status, cigarette smoking,<sup>2</sup> and prepregnant weight.<sup>3</sup> Failure to eliminate the

Table A. Percent of live births of 2,500 grams or less by age of mother and live-birth order: United States, 1973

[See Technical Notes]

Age of mother	Total	Live-birth order				
		1st	2d	3d	4th	5th and over
Total .....	7.6	7.6	6.8	7.5	8.2	8.8
Under 15 years .....	15.8	14.9	37.2	*	-	-
15-19 years .....	10.0	9.0	12.5	16.9	19.3	18.7
20-24 years .....	7.2	6.6	6.6	9.1	11.3	13.5
25-29 years .....	6.3	6.4	5.4	6.2	7.6	9.5
30-34 years .....	6.9	8.3	6.1	6.1	6.6	8.1
35-39 years .....	8.4	11.1	8.2	7.6	7.9	8.3
40-44 years .....	9.1	13.3	10.1	8.6	9.4	8.4
45-49 years .....	9.7	20.6	9.8	10.3	6.1	9.5

racial difference after accounting for these factors known to be associated with birth-weight differences suggests that genetic as well as environmental factors may be affecting the observed differences.

Information from a national study of matched birth and infant death certificates for the 1960 birth cohort shows that in each birth-weight category below 2,001 grams white babies have higher neonatal death rates than do babies of all other races.<sup>4,b</sup> This survival advantage at lower birth weights supports the hypothesis that infants of other races mature more rapidly at these lower weights than do white infants. (See the section, "Period of Gestation" for further discussion of this hypothesis.) It appears that the average birth weight of infants of races other than white may be intrinsically lower than that of white infants, but a lower average birth weight involves less risk for all other infants.

Still, among white and all other infants alike, death rates are higher among those with low birth weight than among heavier babies. At the same time, many more infants of races other than white are in the lighter categories. Therefore, as a population, all other infants are subject to higher average death rates. It has been shown that elimination of the effects of birth-weight distribution differences between white

and all other births reduces much of the overall observed mortality differential.<sup>4-6</sup>

There were no striking changes in the proportion of low-birth-weight infants in the period from 1960 to 1975. This proportion increased from 7.7 percent in 1960 to a high of 8.3 during the mid-1960's and has since declined to a level close to that of 1960 (7.4 percent in 1975). The patterns of change in the level of low birth weight among white and all other births during this time were similar to that for total births.

Weight-at-birth data for black infants, available since 1969, have generally approximated the levels observed for all other infants. In general, the incidence of low birth weight for black births is slightly higher than that for all other births. This is reflected in a somewhat lower median birth weight for black infants.

Table 4 shows that there is a substantial difference in weight at birth according to the sex of the child. Regardless of race, the median weight of male infants is higher than that of female infants. However, the median birth weight for white females is higher than that of black infants of either sex.

Maternal age and live-birth order also are associated with variations in birth weight. The incidence of low birth weight is greatest among mothers under 20 years of age, and to a lesser extent among mothers in the later reproductive years. Variations in the incidence of low birth weight by age of mother are also related to the birth-order distribution within each age group. As can be seen from table A, high-order births

<sup>b</sup>As used throughout this report the term "all other" refers to the combined grouping of all races other than white.

to young mothers and low-order births to older mothers are subject to the highest incidences of low birth weight. Birth weights are generally most favorable when age of mother and birth order are highly correlated.

Over the years, place of residence has persisted as a factor in variations in the levels of low birth weight. Table 5 shows that the highest levels of low birth weight occurred among babies born to mothers residing in urban places with populations of 10,000 or more within metropolitan counties, while the lowest levels were among infants born to mothers residing in the balance of these counties. This pattern holds for all other births during recent years and for white births in all years except 1975 when the percent of low birth weight was higher in urban areas of nonmetropolitan counties. However, for the earlier years, the lowest incidence of low birth weight among the all other group was for infants born to mothers residing in the balance of nonmetropolitan counties. In attempting to interpret these statistics, it must be noted that a substantial proportion of all other births in the balance of nonmetropolitan counties during the early to mid-1960's occurred outside of hospitals and, therefore, probably lacked the more precise measuring and reporting procedures available in hospitals.

### Education of Mother

The proportion of low-birth-weight infants among those born to mothers with less than 12 years of education was 61 percent higher than the comparable proportion among infants born to mothers with 12 or more years of schooling in 1973 (table 6). In general, for each age-of-mother group (with the exception of those at the extremes of the childbearing ages) the proportion of low birth weight declined as educational attainment levels rose.

Among white births it can be seen that by age of mother the levels were 29 to 56 percent higher among mothers who were not high school graduates than among mothers with more education. Differences by educational attainment were not as great for black births where, with the exception of the 45-49-year age group, the levels of low birth weight were 6 to 25 percent higher among births to mothers who had less than 12 years of schooling.

Although an increase in educational attainment was generally accompanied by a decline in the proportion of low birth weight among white as well as black babies, the racial differential in these proportions generally widened as educational attainment increased for both racial groups (table 6). This indicates that increased educational attainment is a more important factor in the reduction of low birth weight among white than among black babies. For births to mothers with less than 12 years of school, the level was 70 percent higher for black babies than for white babies (14.8 compared with 8.7 percent). Among births to mothers who were at least high school graduates, the difference was greater (the proportion among black births was 111 percent higher than among white births—11.8 compared with 5.6 percent).

The relationship between birth weight and factors such as interval and outcome of last pregnancy, legitimacy status, period of gestation, plurality, and prenatal care are discussed in subsequent sections of this report.

### PERIOD OF GESTATION

Period of gestation was determined from the date of the mother's last normal menstrual period (LMP) as reported in 40 States and the District of Columbia in 1973. The remaining States reported gestation in terms of weeks or months, as determined by the physician's estimate of length of pregnancy. The result of this latter method is often a substantial heaping at 40 weeks of gestation due to the tendency to assume that an infant of normal size has had a gestation period of 40 weeks. The gestation data presented in this report are based entirely on data from the LMP reporting areas since these are assumed to be the more accurate gestation data.

From the percent distribution of births shown in table B, it can be seen that a very large majority of births occurred between 37 and 42 weeks of gestation. The proportion of births classified as premature (born before 37 weeks of gestation) was more than 2 times as great for black infants (16.7 percent) as for white infants (7.7 percent).

The incidence of prematurity was highest among infants born to mothers under 15 years

Table B. Percent distribution of live births by period of gestation and race: total of 40 reporting States and the District of Columbia, 1973

[See Technical Notes]

Period of gestation	All races <sup>1</sup>	White	Black
Total .....	100.0	100.0	100.0
Under 20 weeks .....	0.0	0.0	0.1
20-27 weeks .....	0.6	0.5	1.3
28-31 weeks .....	1.1	0.8	2.2
32-35 weeks .....	4.5	3.7	8.4
36 weeks .....	3.0	2.7	4.7
37-39 weeks .....	35.5	34.4	40.0
40 weeks .....	22.4	23.2	18.6
41-42 weeks .....	24.5	26.0	17.3
43 weeks and over .....	8.4	8.6	7.4

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

of age (25.2 percent). It decreased to a low of 7.3 percent among infants born to mothers aged 25-29 years, and then increased slowly to 11.5 percent among those born to mothers 40 years and over. The same pattern by age of

mother is seen for both major race groups (figure 1). The proportion of births that were classified as premature was higher among black than among white births for all age-of-mother groups.

Birth weight is directly related to period of gestation (see figure 2). Median birth weight increased with increasing gestation to 41-42 weeks of gestation and then decreased slightly for 43 weeks or more. Of those births that were premature, 40.6 percent were also of low birth weight while only 3.6 percent of full-term infants were of low birth weight.

Although black babies, in general, weigh less at birth than do white babies, this was not true for babies born at gestation intervals of less than 36 weeks. The median birth weight of black infants born at these shorter gestation intervals was 80 grams higher than that of white infants; at the longer gestation intervals, the median weight of white infants was 190 grams higher than that of black infants. This finding has been corroborated by other investigators, some of whom have hypothesized that at these early

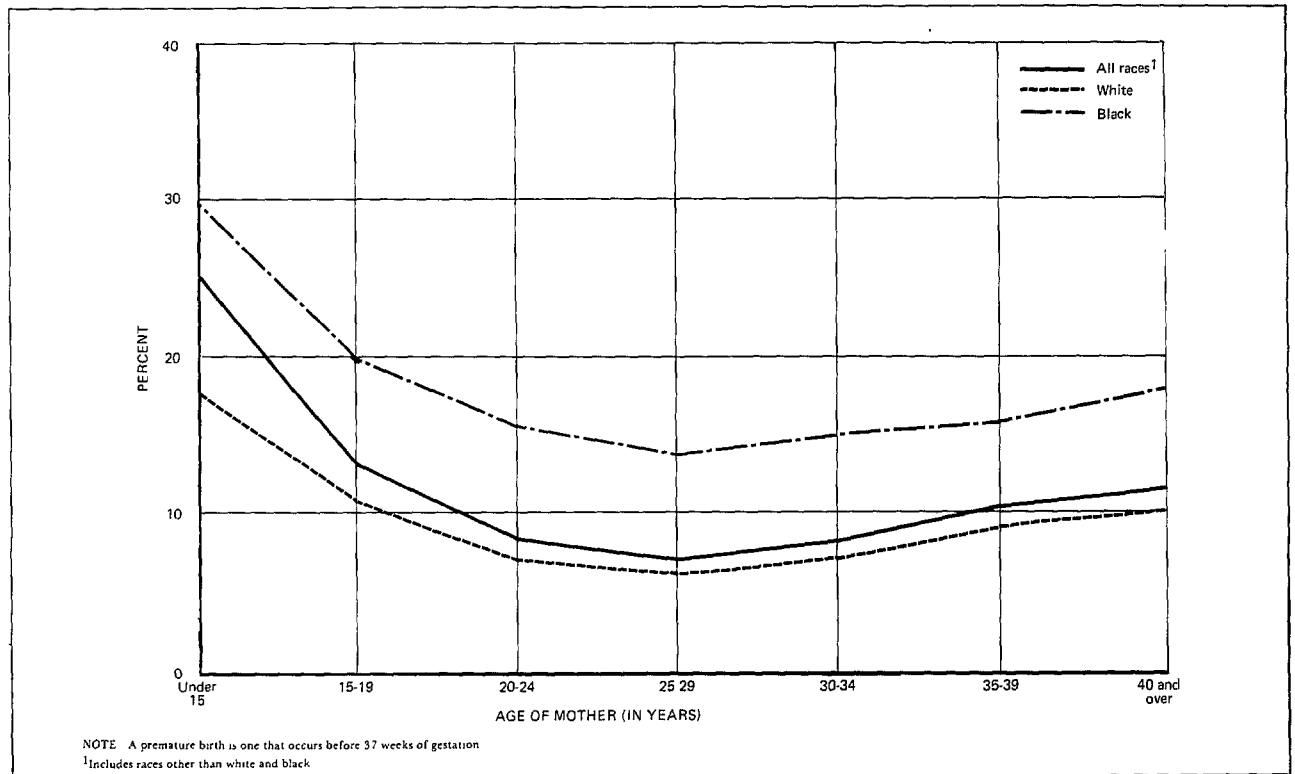


Figure 1. Percent of live births premature by age of mother and race: total of 40 reporting States and the District of Columbia, 1973

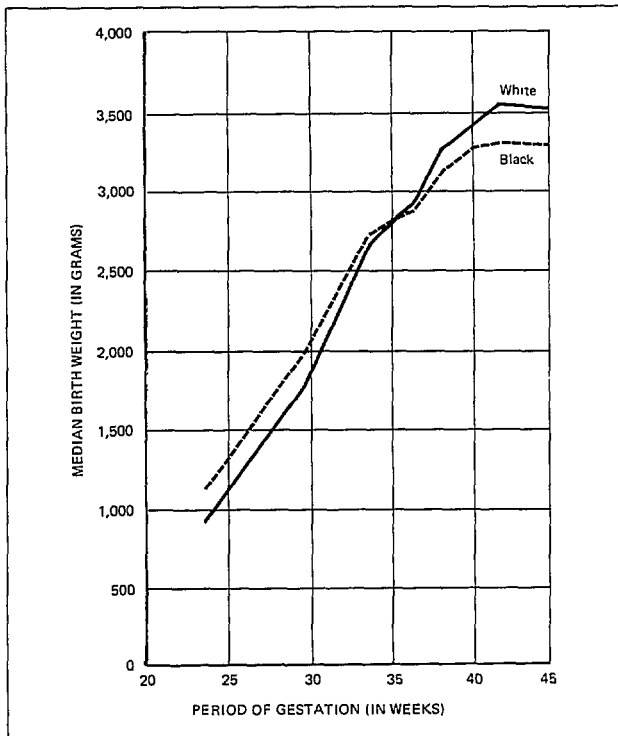


Figure 2. Median birth weight by period of gestation and race: total of 40 reporting States and the District of Columbia, 1973

gestation intervals the black fetus matures more rapidly.<sup>7</sup>

Between 1973 and 1975, there was a decline in the percent of births that were premature, from 9.2 to 8.9 percent. Although most of this was due to the decline in prematurity among black births, the large racial difference remained.

### Education of Mother

As shown in table C, premature births were more likely to occur to mothers with fewer years of education than to mothers who had completed 12 or more years of education. A premature birth was more than twice as likely to occur to a mother who had less than a high school education than to a mother with a college degree. The lower education categories are more heavily weighted with mothers from the lowest and highest age groups who are themselves more prone to give birth prematurely than are women of the intermediate childbearing ages.

Table C. Percent of live births premature by race and educational attainment of mother: total of 37 reporting States and the District of Columbia, 1973

[See Technical Notes]

Years of school completed by mother	All races <sup>1</sup>	White	Black
Total .....	9.3	7.8	16.9
0-8 years .....	13.6	11.5	21.0
9-11 years .....	12.9	10.4	19.6
12 years .....	8.3	7.2	15.0
13-15 years .....	7.1	6.3	13.3
16 years or more .....	5.8	5.4	10.5
Less than 12 years .....	13.1	10.7	19.8
12 years or more .....	7.7	6.7	14.4

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

NOTE: A premature birth is one that occurs before 37 weeks of gestation.

There appears to be no appreciable reduction in the racial differential in the percent premature among births to mothers of similar socio-economic status. Overall, this percent was 2.2 times as great among black as among white births; among births to mothers with 12 or more years of schooling and with less than 12 years, the percent was 2.1 and 1.9 times as great, respectively.

### MONTH OF PREGNANCY PRENATAL CARE BEGAN

Adequate care received during pregnancy is generally accepted as a relevant factor in the reduction of pediatric and obstetric problems such as low birth weight, congenital anomalies, fetal and neonatal mortality, and maternal mortality.

Since early care is highly correlated with more care and the detection of obstetrical problems during early gestation stages can possibly avert certain adverse pregnancy outcomes, early pregnancy is generally held to be the optimum time for initiating prenatal care.

In 1973, the month of pregnancy prenatal care began was reported on the birth certificates of 42 States and the District of Columbia. For these areas, the largest proportion of all infants (43.8 percent) were born to mothers who began care in the first 2 months of pregnancy. Nearly

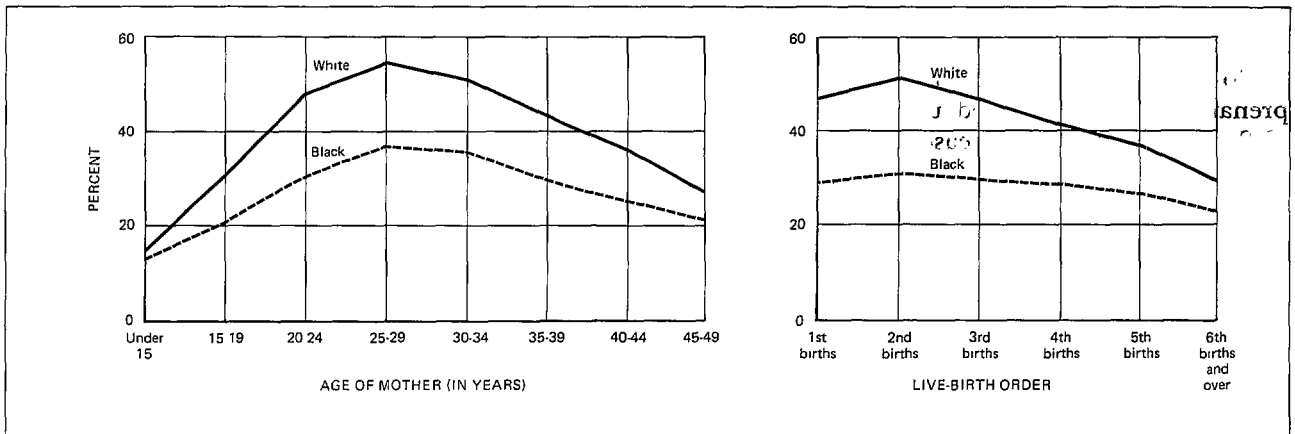


Figure 3. Percent of births to mothers beginning prenatal care during the first 2 months of pregnancy, by age of mother and race and live-birth order and race: total of 42 reporting States and the District of Columbia, 1973

71 percent of all infants were born to mothers who initiated care during the first 3 months of pregnancy and only 1.5 percent of all infants were born to mothers who received no care (table 7). By 1975, there had been only slight changes in these figures—72 percent of all mothers began care in the first trimester and 1.3 percent received no care.

Examination of the distribution of births by the month of pregnancy prenatal care began for the two major race groups shows that there was a substantial difference between the groups with regard to the proportion of births to mothers who started care in the first 2 months of pregnancy—47.1 percent of white births compared with 28.2 percent of black births. Moreover, the proportion of black births to mothers who began care in the last 3 months of pregnancy was more than twice the comparable proportion of white births (table 7).

In addition to the greater delay by mothers of black births in obtaining prenatal care, the total lack of prenatal care was higher for this group as well. The proportion of mothers with no prenatal care for black births was slightly more than 3 times that observed for white births—3.4 percent as compared with 1.1 percent.

Table 7 shows that age of mother is an important factor associated with the time of initiating prenatal care. For all infants, the proportion of births to mothers initiating care during the first 2 months of pregnancy in-

creased with age of mother through the group aged 25-29 years; over half (52.5 percent) of the births to women in this age group were to those who initiated care at this time. For women 30 years of age and over, as age increased there was a steady decline in the proportion of births to women who started care early. Very young mothers experienced the highest percent of no prenatal care, and, to a lesser extent, so did mothers at the older reproductive ages. These patterns of initiation of prenatal care according to age of mother were similar for both major race groups (figure 3).

As can be seen from table 8, for each birth order after the second there was a steady decline in the proportion of births to mothers who started care during the first 2 months of pregnancy. While there was a considerable difference between white and black mothers in the time of initiating prenatal care, both groups tended to delay care as parity increased (figure 3). Moreover, as parity increased, there was a generally higher percent of mothers reporting no prenatal care. It has been suggested that this is possibly the result of increasing home responsibilities and perhaps greater demand on limited financial resources.<sup>8</sup>

### Percent Low Birth Weight

Among all resident births in States reporting month of pregnancy prenatal care began, the incidence of low birth weight was lowest when

mothers initiated care during the first 2 months of pregnancy (6.4 percent). (See table D.) Levels of low birth weight increased as initiation of prenatal care was delayed until the 6th month (9.2 percent) then decreased for mothers beginning care in the last 2 months of pregnancy (about 8.0 percent). The pattern for white births was the same as for total births. Although there was no consistent pattern among black births, the lowest levels of low birth weight for this group were among births to mothers who started care in the last 2 months of pregnancy.

There are large differences in the proportion of low-birth-weight babies born to mothers who received some care and to mothers who received no care. The percentage of low-birth-weight infants born to mothers who had received some care was 7.2 as compared with 21.1 percent for mothers who had received no care. Examination of gestation data for mothers who had received some care and mothers who had received no care (available for the 39 States and the District of Columbia which reported both date of last normal menses and month of pregnancy prenatal care began) shows that a large proportion of infants in the no-care group were born prior to 37 weeks of gestation. Slightly more than one-quarter (26.1 percent) of all births to mothers receiving no care occurred at gestation ages of less than 37 weeks, compared with 8.9 percent of births to mothers receiving some care. For the

two major racial groups the percent of births that were born at less than 37 weeks of gestation are shown below.

	White	Black
Some care.....	7.6	16.3
No care.....	22.2	31.2

It has been noted that the "no-care" category is likely to include mothers who would have obtained some care had not the early birth of the child intervened.<sup>9</sup>

### Education of Mother

As can be seen from table 9, earlier prenatal care is associated with increased levels of educational attainment. When births are examined with regard to those born to mothers who received less than 12 years of education and to mothers who were at least high school graduates, considerable differences can be seen. The proportion of births to mothers who began care in the first 2 months of pregnancy was 69 percent higher for mothers who were at least high school graduates than for mothers who were not. The proportion of births to mothers who had no care was 2.6 percent for those who completed less than 12 years of school compared with 0.7 percent for those with 12 or more years of school.

A similar association was evident among white and black births, although differences in the time of initiation of care according to educational attainment were generally greater for white mothers. This was particularly true for care initiated during the second and third trimesters and for no prenatal care. The proportions of births to white mothers beginning care in the last two trimesters and to mothers with no care were nearly 2 to 5 times as great for those who had less than 12 years of school; the comparable proportions for black births were less than twice as great.

The proportion of births to mothers beginning care in the first 2 months of pregnancy was higher among white than among black births (1.7 times as great). The racial difference was reduced appreciably only among births to mothers with 16 or more years of school where the proportion for white births was 1.2 times that for black births. When these proportions

Table D. Percent of live births of 2,500 grams or less for each month of pregnancy prenatal care began, by race: total of 42 reporting States and the District of Columbia, 1973

[See Technical Notes]

Month of pregnancy prenatal care began	All races <sup>1</sup>	White	Black
Total .....	7.5	6.4	13.3
1st-2d month .....	6.4	5.8	12.0
3d month .....	7.0	6.1	12.4
4th month .....	8.4	6.9	13.4
5th month .....	9.0	7.3	13.1
6th month .....	9.2	7.5	13.1
7th month .....	9.0	7.1	13.4
8th month .....	8.0	6.7	11.9
9th month .....	8.1	7.0	11.3
No prenatal care.....	21.1	17.5	27.4

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



are considered for births to mothers with less than 12 years of school as opposed to mothers who were at least high school graduates, the racial difference is the same (1.6 times as great for white births).

There were greater variations in racial differences according to education of mother for mothers who began care in the last 2 trimesters of pregnancy and for mothers who had no care. Among births to mothers with less than 12 years of school, these proportions were 1.4 to 2.4 times as great. These differences widened to 2.1 to 5.8 times as great among births to mothers with 12 or more years of school.

### NUMBER OF PRENATAL VISITS

Another measure of prenatal care, available from the birth certificates of 38 States and the District of Columbia in 1973, is the number of visits for prenatal care made by the mother. The median number of prenatal visits per birth for all mothers residing in these areas who received some care was 10.6. The comparable figures for visits made by white and black mothers were 10.9 and 8.6, respectively (table 7).

The median number of prenatal visits was highly correlated with the month of pregnancy prenatal care began in the 38 areas that reported both items. The median number of prenatal visits declined as initiation of care was delayed, as can be seen from table E. The relative difference between the median number of visits for white and black mothers was greater for the total than for any individual month in which care began. Therefore, much of the racial differential in the total median number of visits can be attributed to the fact that white mothers began care earlier than did black mothers.

Differences in the median number of visits by age of mother and by live-birth order (tables 7 and 8) are also related to the differences in the time of initiating care. The increase in the median number of visits with increase in age for mothers under age 30 is associated with the fact that these mothers started care earlier as age increased. The slight but steady decline in the median number of visits per birth as age ad-

Table E. Median number of prenatal visits, by month of pregnancy prenatal care began and race: total of 37 reporting States and the District of Columbia, 1973

[See Technical Notes]

Month of pregnancy prenatal care began	All races <sup>1</sup>	White	Black
Total .....	10.6	10.9	8.6
1st month .....	12.6	12.7	11.8
2d month .....	12.1	12.2	10.7
3d month .....	10.7	10.8	9.8
4th month .....	9.2	9.5	8.2
5th month .....	7.8	8.2	7.0
6th month .....	6.5	6.9	5.9
7th month .....	5.4	5.7	4.8
8th month .....	4.0	4.2	3.6
9th month .....	2.6	2.7	2.3

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

vanced for mothers 30 years of age and over is also related to patterns of prenatal care initiation for these women. In addition, for all births after the second, there was a decline in the median number of visits as birth order increased. This is related to the decline in the proportion of births to mothers starting care early for each birth order after the second. These relationships by age of mother and birth order were generally true for both major race groups.

By 1975, the median number of prenatal visits had increased to 10.8; there was a larger increase for black than for white mothers (9.1 and 11.1 visits, respectively, in 1975).

### Percent Low Birth Weight

Variations in proportions of low-birth-weight babies according to the amount of prenatal care received by the mother are shown in table F. The proportion of low-birth-weight infants declined as the amount of care increased from no visits to 13 and 14 visits. The proportion then rose somewhat for visit levels above 14.

It has been suggested that the logical nature of the relationship between prenatal care and the levels of low birth weight is not as direct as casual examination of the data would indicate.<sup>10</sup> The association may be a secondary one since factors known to be associated with low

Table F. Percent of live births of 2,500 grams or less by number of prenatal visits and race: total of 38 reporting States and the District of Columbia, 1973

[See Technical Notes]

Number of prenatal visits	All races <sup>1</sup>	White	Black
Total visits.....	7.5	6.3	13.3
No visits.....	22.5	19.5	26.6
1-2 visits.....	21.7	19.8	25.1
3-4 visits.....	18.2	17.3	20.3
5-6 visits.....	13.8	13.5	15.0
7-8 visits.....	9.4	8.8	11.8
9-10 visits.....	6.0	5.4	9.5
11-12 visits.....	3.9	3.5	7.5
13-14 visits.....	3.3	2.9	6.6
15-16 visits.....	4.0	3.5	8.3
17-18 visits.....	3.8	3.3	7.5
19 visits or more.....	6.3	5.5	10.5

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

birth weight (such as socioeconomic status, age of mother, and parity) also influence the receipt of prenatal care.

### Education of Mother

The median number of prenatal visits rose as the level of educational attainment increased for white mothers as well as for black mothers as shown in table G. While the relative difference between the races in the median number of visits was the same for mothers who completed less than 12 years of school as it was for all mothers, this difference nearly disappeared

Table G. Median number of prenatal visits by educational attainment of mother and race: total of 37 reporting States and the District of Columbia, 1973

[See Technical Notes]

Years of school completed by mother	All races <sup>1</sup>	White	Black
Total.....	10.5	10.9	8.6
0-8 years.....	8.4	8.9	7.0
9-11 years.....	9.3	9.9	7.8
12 years.....	10.8	11.1	9.1
13-15 years.....	11.4	11.5	10.0
16 years or more.....	11.6	11.7	11.2

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

as the educational attainment level advanced from 12 years to 16 years or more.

### SEX RATIO OF BIRTHS

In 1975, the sex ratio of live births was 1,054 males per 1,000 females. It has varied little from year to year from 1940 to 1975, ranging from 1,047 to 1,059.

It has been estimated that the primary sex ratio (defined as the ratio of males per 1,000 females at the moment of conception), has a minimum value of 1,100<sup>11</sup> and may be as high as 1,600.<sup>12</sup> The sex ratio of fetal deaths of 20 weeks or more gestation (1,126 in 1973) is higher than that of live births. A higher ratio for early fetal deaths (20-27 weeks) than for late fetal deaths (28 weeks or more) implies an even higher sex ratio for fetal deaths of less than 20 weeks of gestation. These high ratios for fetal deaths result in a lower sex ratio at birth than at conception.

The sex ratio varies widely by race as indicated by the average sex ratio for the years 1970-73 as shown in table H. The ratio ranged from 1,080 for Filipino births to 1,020 for American Indian births. The ratios for the two major race groups were 1,058 for white births and 1,028 for black births. The ratio for each of these two groups varied little from year to year and was consistently higher for white than for black births.

As shown in table J, the sex ratio was higher among single than among plural deliveries. One

Table H. Sex ratio by race: United States, 4-year average, 1970-73

Race	Males per 1,000 females
All races.....	1,053
White.....	1,058
Black.....	1,028
American Indian.....	1,020
Chinese.....	1,069
Japanese.....	1,048
Filipino.....	1,080
Other.....	1,059

Table J. Sex ratio at birth by race and plurality: United States, 1971-75

[See Technical Notes]

Race and plurality	1975	1974	1973	1972	1971
	Males per 1,000 females				
All races <sup>1</sup> .....	1,054	1,055	1,052	1,051	1,052
Single live births.....	1,055	1,056	1,053	1,052	1,053
Plural live births.....	1,005	1,007	999	1,016	1,014
White.....	1,059	1,059	1,057	1,057	1,056
Single live births.....	1,059	1,060	1,058	1,058	1,057
Plural live births.....	1,018	1,011	1,005	1,018	1,022
Black.....	1,030	1,030	1,028	1,024	1,028
Single live births.....	1,032	1,031	1,030	1,025	1,029
Plural live births.....	965	982	972	1,000	992

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

possible causal factor is the higher sex ratio of fetal deaths in plural pregnancies compared to single pregnancies (1,197 and 1,121, respectively, in 1973).

In general, the sex ratio was inversely related to birth order and age of mother (table K). However, when these two variables were cross-classified, no consistent pattern emerged by birth order or age of mother. Previous studies showed that birth order has a definite effect on sex ratio at birth; the maternal-age effect, however, results from the correlation between birth order and age of mother.<sup>12, 13</sup>

Although the sex ratio varies little on a yearly basis, it varies a great deal from month to month, especially among black births. For example, during 1973 the sex ratio for black births ranged from 1,000 in March to 1,055 in October. The sex ratio for white births ranged from 1,044 in September to 1,067 in November. Figure 4 shows an average of the sex ratio by month for white and black births for the years 1970-73. Although a large variation exists, no seasonal pattern can be identified. These figures show that the ratio was always higher for white than for black births.

Table K. Sex ratio at birth by live-birth order and age of mother: United States, 1973

[See Technical Notes]

Age of mother	Total	Live-birth order					
		1st	2d	3d	4th	5th	6th and over
		Males per 1,000 females					
Total <sup>1</sup> .....	1,052	1,055	1,059	1,049	1,036	1,026	1,030
15-19 years.....	1,052	1,051	1,059	1,002	<sup>2</sup> 1,128	2,975	<sup>2</sup> 1,087
20-24 years.....	1,055	1,056	1,058	1,053	1,051	994	1,036
25-29 years.....	1,055	1,059	1,060	1,054	1,034	1,031	1,054
30-34 years.....	1,046	1,075	1,066	1,043	1,021	1,031	1,023
35-39 years.....	1,041	1,053	1,058	1,037	1,067	1,034	1,020
40-44 years.....	1,021	<sup>2</sup> 1,123	990	1,079	961	1,001	1,023

<sup>1</sup>Includes births to women under age 15 and age 45 and over.<sup>2</sup>Ratio based on fewer than 1,000 births.

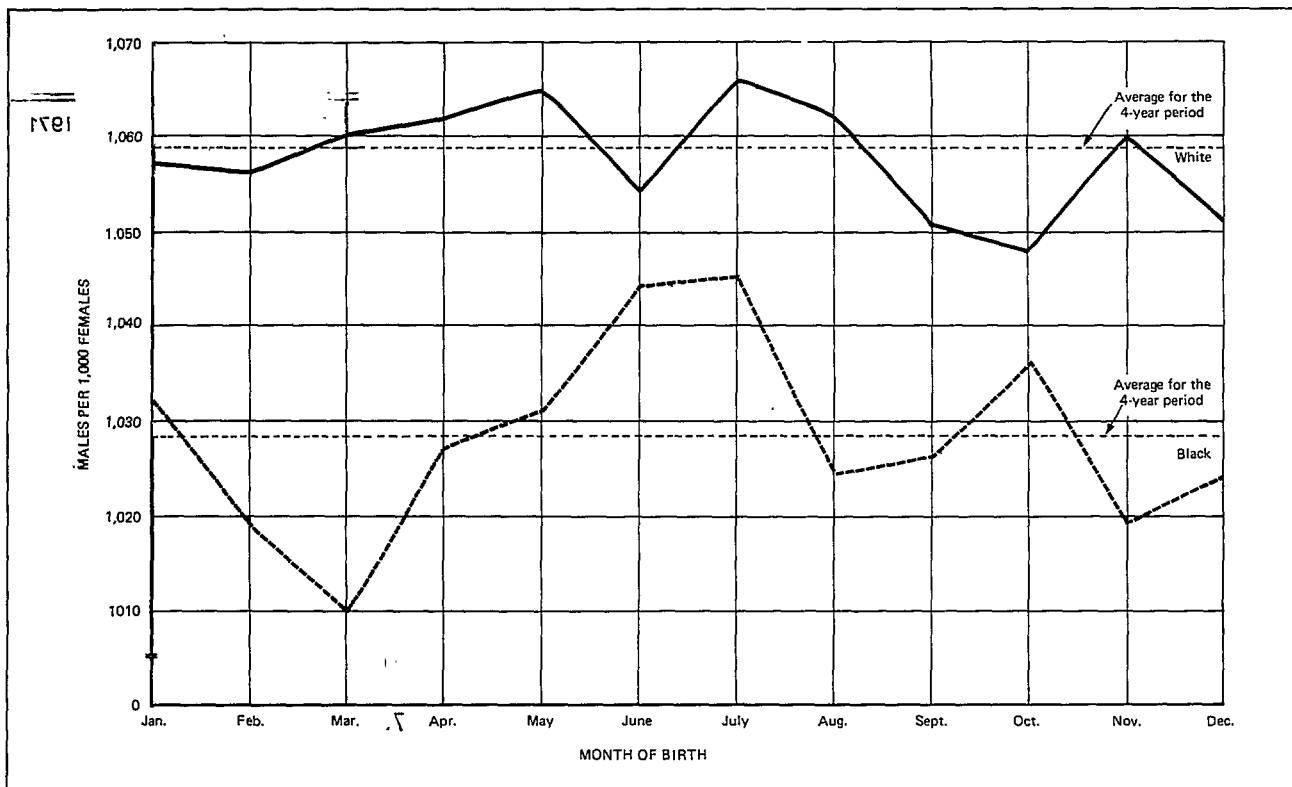


Figure 4. Sex ratio by month of birth and race: United States, 4-year average, 1970-73

## MONTH OF BIRTH

The monthly indexes of births occurring in the United States during 1960, 1970, 1973, and 1975 are shown in table L. These indexes are the ratios of the actual number of births in a month to the average monthly number for the calendar year multiplied by 100 and adjusted for the varying number of days in each month.

In 1975, the monthly indexes showed minor peaks in February and December, and a major one in September. Indexes for 1960 showed a more prominent peak for September and a deeper trough for the spring months than was exhibited for more recent years. The reduction in the degree of seasonality can be seen in the decline of the standard deviation of the monthly indexes. In 1975, the standard deviation was 3.3 compared with 5.8 in 1960.

The distribution of births by month of occurrence tends to be bimodal in the United States, but there are variations in the amplitude of the seasonal curve by race and by region. Figure 5 shows the variations by race in the

Table L. Monthly indexes of live births and standard deviations: United States, 1960, 1970, 1973, and 1975

[See Technical Notes]

Month of occurrence	1975	1973	1970	1960
Monthly indexes				
Total.....	100.0	100.0	100.0	100.0
January .....	97.1	99.8	95.3	95.8
February .....	98.7	100.2	98.2	97.7
March .....	98.0	100.9	96.9	97.0
April.....	97.1	96.0	93.5	93.8
May .....	98.0	95.5	93.9	92.4
June .....	99.0	98.6	98.7	95.3
July .....	104.8	103.3	104.1	103.8
August.....	104.8	105.6	104.4	108.8
September.....	105.9	105.0	108.2	111.0
October.....	100.3	99.6	102.2	102.7
November.....	96.7	97.7	100.8	100.2
December.....	99.5	97.8	103.8	101.4
Standard deviation				
Total.....	3.3	3.3	4.7	5.8

NOTE: Index is the ratio of the actual number of births in a month to the average monthly number for the year multiplied by 100. Adjustment has been made for the varying number of days per month.

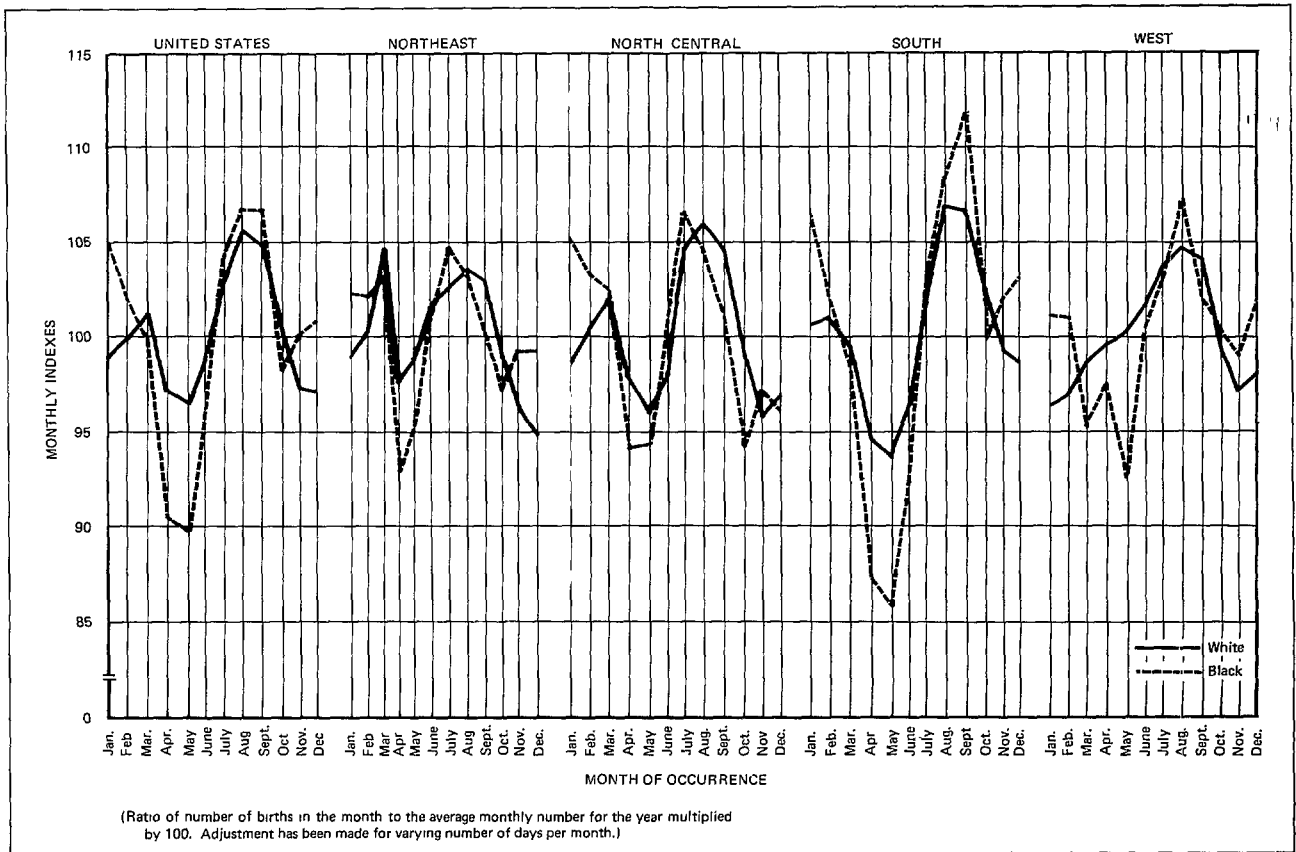


Figure 5. Monthly indexes of live births, by race: United States and each region, 1973

seasonal patterns for the four geographic regions in 1973, using the monthly index. In all four regions the distribution of black births by month shows greater variation, as evidenced by more prominent peaks and deeper troughs, than does that of white births. The standard deviations for both groups in each of these regions in 1973 are shown below.

	White	Black
Northeast .....	3.0	3.5
North Central .....	3.5	4.6
South .....	4.1	8.0
West .....	2.9	3.8

The seasonal patterns for white and black births resembled each other in shape in all regions except the West where the seasonality of white and black births differed considerably during the first half of the year.

## ATTENDANT AT BIRTH AND PLACE OF DELIVERY

The vast majority of live births occurring in the United States are delivered in hospitals. Of all live births delivered in 1975, 98.7 percent were classified as having been delivered by physicians in hospitals. These deliveries included all live births occurring in hospitals or other institutions and births attended by physicians in clinics.

The gap between the proportion of white births and all other births occurring in hospitals continued to narrow in 1975 (figure 6). Comparison of the two major racial groups shows that 98.9 percent of white births and 98.0 percent of black births were delivered by physicians in hospitals.

Over the years, the increase in hospital utilization for obstetrical care has resulted in a decline in the proportion of births occurring

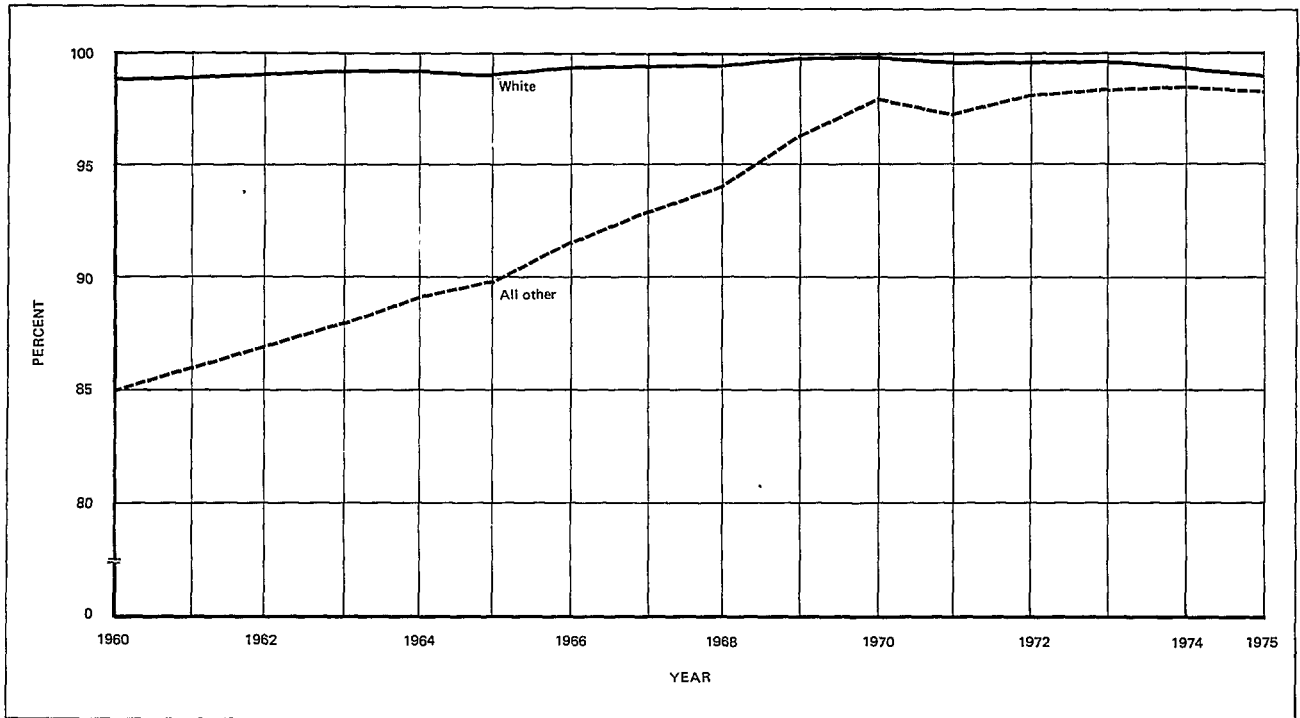


Figure 6. Percent of live births occurring in hospitals, by color: United States, 1960-75

outside these facilities. Physicians outside of hospitals delivered only 0.4 percent of all live births in 1975. The comparable proportions for white and black births were 0.3 and 0.6 percent, respectively. The proportions of midwife-attended births are also at relatively low levels—0.4 percent of all births, 0.2 percent of white births, and 1.0 percent of black births in 1975 (table 10).

Much of the differential that has existed between the rates of hospital utilization for white and all other births could be attributed to differences among all other births by place of residence. In 1960, 99.1 percent of white births and 94.5 percent of all other births in urban places with populations of 10,000 or more were delivered by physicians in hospitals. In contrast, during the same year, 98.3 percent of white births and only 68.0 percent of births of all other races in the balance of the country were delivered by physicians in hospitals. However, place of residence has assumed diminishing importance as a factor in the distribution of all other births by attendant. In 1975, 98.8 percent of all other births in urban places of 10,000

residents or more were delivered in hospitals, compared with 96.3 percent of all other births in the balance of the country.

Rates of utilization of midwives as attendants for all other births have also varied a great deal by type of residence and geographic division, and while fairly substantial differences still exist, there have been large declines for all areas. As can be seen from table 10, for the balance of the country the proportion of births of all other races delivered by midwives declined from 25.7 percent in 1960 to 2.3 percent in 1975. The comparable proportions for urban areas of 10,000 residents or more were 2.8 in 1960 and 0.3 in 1975. The proportion of all other births attended by midwives is highest in the East South Central Division where, in 1973, 4.7 percent of all other births were delivered by midwives. As recently as 1967, the proportion was as high as 21.8 percent.

Comparisons of the two major racial groups with regard to differences by place of residence are not possible before 1969; data on black births by attendant are available only for 1969 and later years. However, distributions of black

births for more recent years have been very similar to the distribution for all other births.

Geographic variations in the proportion of births occurring in hospitals are somewhat greater for black births than for white births (table 11). During 1973, in all divisions except the West South Central over 99 percent of white births occurred in hospitals. The proportion of black births occurring in hospitals was over 99 percent in six of the nine geographic divisions. In the three divisions of the South Region, rates of hospital utilization for blacks ranged from 94.6 percent (East South Central) to 98.3 percent (West South Central).

### MULTIPLE BIRTHS

Of the 57,721 live births that occurred in multiple deliveries in 1973, the overwhelming majority were twin births (98.4 percent). The multiple birth ratio is the ratio of live births in multiple deliveries per 1,000 total live births. This ratio has decreased only slightly since the early 1960's, from 20.4 in 1960 to 18.4 in 1973. In 1975, the ratio was 19.2.

As in other years, black mothers were more likely than white mothers to have a multiple birth. The multiple birth ratios in 1973 were 22.2 for black mothers and 17.7 for white mothers (table M).

Table M. Ratio of plural live births to total live births by age of mother and race: United States, 1973

[See Technical Notes]

Age of mother	Plural births per 1,000 live births		
	All races <sup>1</sup>	White	Black
Total <sup>2</sup> .....	18.4	17.7	22.2
15-19 years .....	12.1	11.1	14.7
20-24 years .....	16.8	15.7	22.8
25-29 years .....	21.0	20.2	28.8
30-34 years .....	24.5	23.6	32.0
35-39 years .....	26.2	25.2	32.8
40-44 years .....	21.8	21.6	23.6

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

<sup>2</sup>Includes births to women under age 15 and age 45 and over.

The proportion of multiple births increased as age of mother increased through the 35-39-year age group and then decreased slightly for mothers aged 40 years and over. In fact, for both the white and black population the chances of a 35-39-year-old mother having a multiple birth in 1973 were over twice as great as for a 15-19-year-old mother.

Both white and black births occurring in plural deliveries have a shorter gestation period and are of lower birth weight than are births occurring in single deliveries. Of single white births, 7.2 percent were classified as premature (gestational age of less than 37 weeks) as opposed to 38.0 percent of plural white births. Comparable proportions for black births were 16.1 and 45.0 percent, respectively. A premature infant is more likely to be a low-birth-weight infant and, since a large proportion of multiple births are premature, it follows that a large proportion are of low birth weight. Of those white infants in multiple deliveries, 52.6 percent were of low birth weight, more than 9 times the proportion of white infants in single

births

Table N. Median birth weight and percent of live births of 2,500 grams or less, by plurality and race: United States, 1973

[See Technical Notes]

Race	Plurality	
	Single	Plural
	Median birth weight in grams <sup>1</sup>	
All races .....	3,330	2,430
White .....	3,360	2,460
All other .....	3,160	2,290
Black .....	3,150	2,280
	Percent of live births of 2,500 grams or less	
All races .....	6.7	54.8
White .....	5.6	52.6
All other .....	11.4	63.1
Black .....	12.1	63.9

<sup>1</sup>Computed to nearest 10 grams on exact conversion of interval limits from pounds and ounces.

deliveries (5.6 percent), as shown in table N. Low-birth-weight infants also were predominant among black infants born in plural deliveries (63.9 percent). Of black infants in single deliveries, only 12.1 percent weighed 2,500 grams or less. The median weight of infants in single deliveries was 3,330 grams compared with 2,430 grams for infants in plural deliveries, a difference of about 2 pounds.

### INTERVAL SINCE LAST LIVE BIRTH

The item "date of last live birth" was added to the U.S. Standard Certificate of Live Birth to provide information on child spacing. The information provided by this item makes it possible to compute intervals between successive births, which is valuable in health and fertility research.

In 1973, the date of last live birth was reported on the birth certificates of 40 States and the District of Columbia. This item was used to compute the interval since last live birth for all second and higher order births to mothers residing in these areas.

The mean interval since the last live birth for all second and higher order births was 43.3 months. Table O shows that the length of this interval was similar for white (43.6 months) and black (42.4 months) births. Between 1973 and 1975, the mean interval increased 1.0 month for white births and 2.7 months for black births. As a result, in 1975 the direction of the racial difference was reversed; the mean interval was 44.6 months for white births compared with 45.1 months for black births.

Examination of the mean interval since the previous live birth according to birth order shows that the interval was shortest for second births (39.2 months), increased with birth order through fifth births (51.2 months), and then declined through the eighth and higher orders. This pattern was the same for white births as for total births but varied slightly for black births where the mean interval increased through the seventh birth order and then declined for eighth and higher orders. These patterns remained the same through 1975. In 1973, the differences between the two major racial groups in the mean interval since the last live birth for a second and seventh

Table O. Mean interval since last live birth, by live-birth order, age of mother, and race: total of 40 reporting States and the District of Columbia, 1973

[See Technical Notes]

Live-birth order and age of mother	All races <sup>1</sup>	Mean interval in months	
		White	Black
All second and higher order births.....	43.3	43.6	42.4
<u>Live-birth order</u>			
Second births.....	39.2	39.2	39.8
Third births.....	46.5	47.3	43.0
Fourth births.....	49.6	50.7	44.9
Fifth births.....	51.2	52.6	46.4
Sixth births.....	49.8	51.0	46.8
Seventh births.....	48.4	49.1	47.2
Eighth births and over.....	42.6	42.9	42.6
<u>Age of mother</u>			
Under 15 years.....	20.7	29.1	16.4
15-19 years.....	21.9	21.7	22.3
20-24 years.....	31.8	31.7	32.8
25-29 years.....	42.7	42.3	47.8
30-34 years.....	57.0	56.7	61.9
35-39 years.....	73.7	74.6	72.0
40-44 years.....	86.6	88.1	81.0
45-49 years.....	101.5	105.5	86.9

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

and higher order births were less than 2 months. For the remainder of the birth orders, however, the mean intervals were 4 to 6 months longer for white births than for black births.

The mean interval since last live birth generally increased with age of mother in both major racial groups. During 1973, for mothers aged 15-34 years these intervals were up to 6 months longer for black births than for white births. At the remaining age groups, the mean intervals were 3 to 19 months longer for white births.

At the younger ages, racial differences in interval since last live birth may reflect a greater incidence of induced abortion among black women than among white women. For even though black women are more likely to be non-contraceptors, the length of their birth intervals is somewhat longer, as mentioned above. According to estimates of numbers of legal abortions in the United States during the period



1972-74,<sup>14</sup> the abortion ratio for women of races other than white was 1.5 times as great as the ratio for white women. At ages 20-34 years, the ratios were 1.6 to 2.5 times as great for women of races other than white.

On the other hand, at ages 35 and above a more important factor in the racial difference may be the higher proportion of noncontraceptors among black women. There is not as much difference between abortion ratios for white and all other women at older ages (0.9 to 1.4) as at the ages mentioned above. In addition, information from the National Survey of Family Growth<sup>15</sup> indicates that 32.4 percent of currently married white women 35-44 years of age compared with 48.2 percent of their black counterparts were noncontraceptors in 1973. This difference in the use of contra-

ceptives was not as great for younger women and in addition to the abortion differences mentioned above may explain, in part, the reversal in the direction of the differential.

Between 1973 and 1975, the increases in the interval since the last live birth were greater for black births than for white births of all birth orders and for mothers in all age groups. Although the direction of the racial difference remained the same for most birth orders and age groups, it reversed for seventh and higher order births and for mothers under 15, and 35-39 years of age. In 1975, the intervals for these groups were longer for black births than for white births, but in 1973 they were longer for white births.

When the mean interval since the previous live birth is examined by birth order in conjunc-

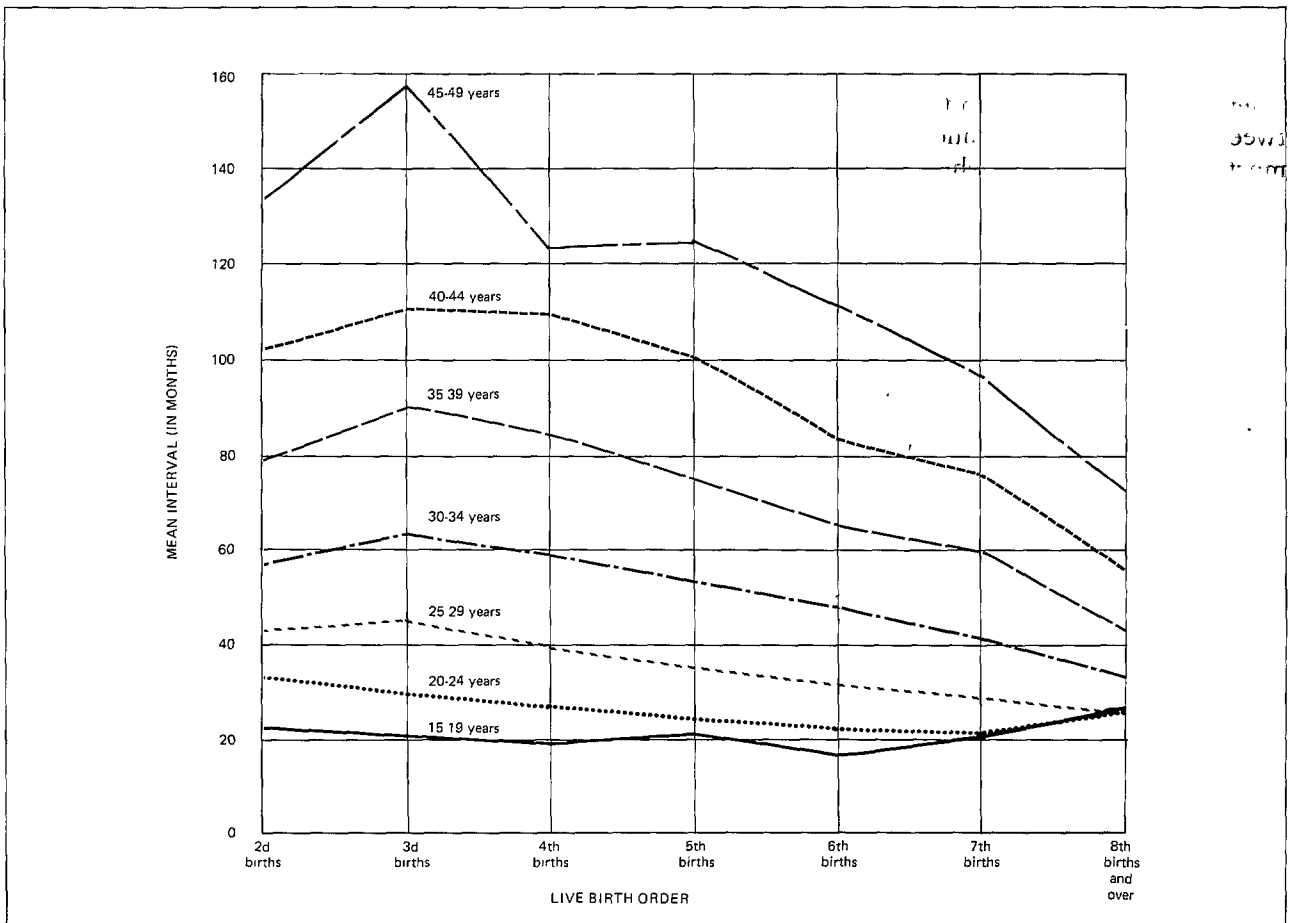


Figure 7. Mean interval since last live birth, by age of mother and live-birth order: total of 40 reporting States and the District of Columbia, 1973

tion with age of mother, as in figure 7, it can be seen that for each birth order the length of the interval generally increased with age of mother. For mothers 25 years of age and over, the length of the interval decreased as parity increased after the third birth. For mothers 20-24 years of age, the length of interval decreased from the second to seventh order, then increased for eighth and higher orders.

### Education of Mother

The relationship between the mean interval since last live birth and educational attainment of the mother is different for white than for black births (table 12). With increasing years of school completed from 12 to 16 or more, the mean interval for white births decreased; for black births, it increased. This was true for all birth orders.

Spacing has been identified as an important factor associated with fetal and infant mortality rates. These rates have been found to be lowest when the interval between two pregnancies is between 2 and 3 years, and the highest infant mortality rates occur when the birth interval is less than 2 years.<sup>16</sup> Nearly 40 percent of all low-birth-weight infants compared with slightly more than one-fourth of heavier babies in the States reporting date of last live birth were born less than 2 years after a previous birth.

The relatively high incidence of low-birth-weight infants among young mothers of high parity suggests that the interval between births may be a factor associated with low birth weight. Data in table 13 show that the incidence of low birth weight for each age group was highest among births that occurred less than a year after a previous birth. On the other hand, the incidence also increased for intervals of 4 years or more since the previous live birth. These variations were generally the same for white births, but among black births the incidence decreased as the interval length increased up to 6 years and then rose for intervals of 6 years or more.

The proportion of births occurring less than 2 years after a previous live birth was 1.4 times as great among births to mothers who completed less than 12 years of school as to mothers who were at least high school graduates. The difference between these two educational groups in

the proportion of births occurring within 2 years of the previous birth was smaller for higher birth orders, declining from 1.6 for second births to 1.2 for fourth and higher births. This pattern was the same for white and black births, but there were somewhat smaller differences for white births (table 14).

With few exceptions, the proportion of infants born less than 24 months after a previous live birth was higher for black births than for white births at all birth orders and educational attainment levels in 1973. By 1975, this proportion was lower for black births than for white births among mothers with 13 or more years of school.

### INTERVAL SINCE TERMINATION OF LAST PREGNANCY AND OUTCOME OF LAST PREGNANCY

The mother's previous pregnancy experience has been found to be a major factor associated with the infant's chance for survival.<sup>8,17</sup> In 1973, data on the outcome of the last pregnancy of the mother were available for the 39 States and the District of Columbia which reported the dates of last live birth and fetal death. For all births resulting from second and higher order pregnancies, the mean interval since termination of last pregnancy was 40.4 months. The length of this interval was similar for white (40.6 months) and black (39.6 months) births.

The mean interval since termination of the last pregnancy was approximately 1½ years longer when that pregnancy ended in a live birth than when it ended in a fetal death. Table P shows that this was generally true for all birth orders. By age of mother, the interval since termination of the last pregnancy was from 4 months to 3 years longer when the last pregnancy ended in a live birth than when it ended in a fetal death. This difference increased with age of mother. Although these patterns were the same for births to mothers in both major racial groups, the difference between the two pregnancy outcomes was slightly smaller for black births.

Between 1973 and 1975, there was an increase of 1 month in the interval since termination of the last pregnancy, from 40.4 to 41.4 months.

Table P. Mean interval since termination of last pregnancy by outcome of last pregnancy, live-birth order, and age of mother: total of 39 reporting States and the District of Columbia, 1973

[See Technical Notes]

Live-birth order and age of mother	Total	Last pregnancy	
		Live birth	Fetal death
Mean interval in months			
All second and higher order pregnancies.....	40.4	42.0	24.2
<u>Live-birth order</u>			
First births.....	24.3	...	24.3
Second births.....	37.2	38.1	21.7
Third births.....	44.1	45.2	25.5
Fourth births.....	46.8	47.9	27.9
Fifth births and over.....	46.4	47.4	28.6
<u>Age of mother</u>			
Under 20 years.....	21.1	21.6	17.7
20-24 years.....	30.4	31.4	20.6
25-29 years.....	40.4	41.9	24.0
30-34 years.....	53.7	55.8	29.9
35-39 years.....	68.8	71.4	38.7
40 years and over.....	81.2	83.9	47.7

### Percent Low Birth Weight

The proportion of low-birth-weight infants was about a third higher among births to women whose last pregnancy ended in a fetal death (9.3 percent) than among births to women whose last pregnancy ended in a live birth (7.0 percent). The figures below show that this was true for both major racial groups.

	<i>White</i>	<i>Black</i>
Live birth.....	6.0	12.9
Fetal death.....	8.1	17.2

Table 15 shows proportions of low-birth-weight infants according to interval since termination of the last pregnancy. These data indicate that a longer interval is more favorable for births following a previous live birth than for births following a fetal death. Although the proportions of low-birth-weight infants were highest for births occurring less than a year since a previous pregnancy regardless of the outcome of that pregnancy, the proportion among those occurring subsequent to a live birth was over 1½

times the proportion among those occurring subsequent to a fetal death.

It may be that the amount of time required for the mother's reproductive system to recover from pregnancy and childbirth and for the body to build up its reserves in preparation for another pregnancy is greater following a live birth than a fetal death. In that case, births following a previous live birth after a relatively short time would probably be more likely to have an unfavorable outcome than births closely succeeding a fetal death.

Among births occurring subsequent to a previous live birth, the proportion of low-birth-weight infants *decreased* as the interval increased from 12-17 months to 36-47 months and increased for intervals of 4 years or more. In contrast, among births occurring subsequent to a previous fetal death the level of low birth weight *increased* as the interval increased from 12-17 months to 5 years or more.

The range in the level of low birth weight according to intervals was greater among births following a live birth than following a fetal death. When the previous pregnancy ended in a live birth, the proportion of low birth weight among infants born less than a year since that birth was 4 times as great as among infants born at the most favorable interval, 36-47 months (20.4 compared with 5.1 percent). On the other hand, for births occurring subsequent to a fetal death the percent of low birth weight among infants born within a year since the fetal death was less than twice the percent among those born at the most favorable interval, 12-17 months (13.0 compared with 7.3 percent).

The relationships for white births were similar to those for total births, but for black births there were some differences. The level of low birth weight among black infants born less than a year after a previous pregnancy was nearly the same for infants born subsequent to a fetal death (27.4 percent) as for those following a live birth (29.5 percent). In addition, there were slight differences in the pattern of low birth weight occurring 4 years or more after both a previous live birth and fetal death.

### ILLEGITIMACY

In 1973, an estimated 407,300 illegitimate births occurred in the United States, accounting

for approximately 13 percent of the 3,136,965 live births recorded in that year.

National estimates of the number of illegitimate births have been prepared annually since 1938. These estimates are based on information entered on the birth certificates of the States that require the reporting of legitimacy status. In 1973, 38 States and the District of Columbia required this information. For discussion of the procedure used in making national estimates of illegitimacy, see the "Technical Appendix" of volume I of *Vital Statistics of the United States*.

Illegitimacy data have been tabulated by race (white and black) since 1969. For years prior to 1969, illegitimacy data were tabulated by color only, necessitating use of the broader category "all other" which consists of all races other than white.

The estimated number of illegitimate births has increased steadily each year since 1940, with the exception of 1948. By 1975, the estimated number had increased to 5 times the number in 1940 (table 16). During the two 10-year periods 1940-1950 and 1950-1960, there was a 58-percent increase; between 1960 and 1970 the increase was even greater, 78 percent. Since 1970, the estimated number of illegitimate births has increased at a slower pace, only 12 percent (to 1975); however, the majority of this increase has occurred since 1973 (10 percent between 1973 and 1975). The number of illegitimate births among the white population increased between 1973 and 1975, following a decrease between 1970 and 1972. The number of illegitimate births among all other races continued to increase during this period, but at a slower pace than in previous years.

Two measures commonly used to describe the incidence of illegitimacy are the illegitimacy rate and the illegitimacy ratio. The rate is defined as the number of illegitimate births per 1,000 unmarried women aged 15-44 years. It is a measure of the probability that an unmarried woman will bear a child. The illegitimacy ratio, defined as the number of illegitimate births per 1,000 total births, is a measure of the proportion of total births that are classified as illegitimate.

The illegitimacy rate increased from 7.1 illegitimate births per 1,000 unmarried women aged 15-44 years in 1940 to 26.4 in 1970 (table

16). It decreased slightly since then to 24.1 in 1974; however, the rate increased to 24.8 in 1975. Although the illegitimacy rate for white women followed the pattern just described, the rate for all other women has decreased each year since 1971.

Estimated illegitimacy rates by age of mother and color for the period 1940-75 are shown in figure 8 and by age of mother and race for 1970-75 in table Q. Women in the prime childbearing ages—20-24 and 25-29 years—had the highest illegitimacy rates, followed by women 15-19 years old; among women 30 years and over the rate decreased with age. A similar pattern was found for both racial groups.

In 1940, the rate for all other women was nearly 10 times as great as the rate for white women (35.6 and 3.6, respectively). During the 1940's, the color differential increased until, by 1950, the rate for all other women was nearly 12 times as great as the rate for white women. The differential decreased between 1950 and 1969, when it was more than 6, due both to the more rapid increase in the rate for white women during the 1950's and to the decline in the rate for all women after 1960. Between 1969 and 1971, the differential increased slightly to just over 7; it remained relatively stable until 1975 when it declined to 6.4.

A leveling off or slight decline in illegitimacy rates for white women occurred in the mid- to late 1960's for all but the 15-19-year age group (see figure 8). Even greater decreases occurred between 1970 and 1974, especially for age groups having the highest rates. However, during 1975 rates increased for all white women except for those aged 35 years and over. Rates for all other women have leveled off or declined slightly in the late 1950's or early 1960's for all age groups and generally remained stable up to the mid-1960's (except for the 30-34-year age group in which the increase resumed). Beginning in 1965, sharp declines occurred for all age groups except ages 15-19 years old.

The second commonly used measure of illegitimacy, the illegitimacy ratio, is a measure of the proportion of births classified as illegitimate. It is easier to compute than the illegitimacy rate because the population data for unmarried women needed to calculate the rate are often difficult to obtain. However, the ratio has num-

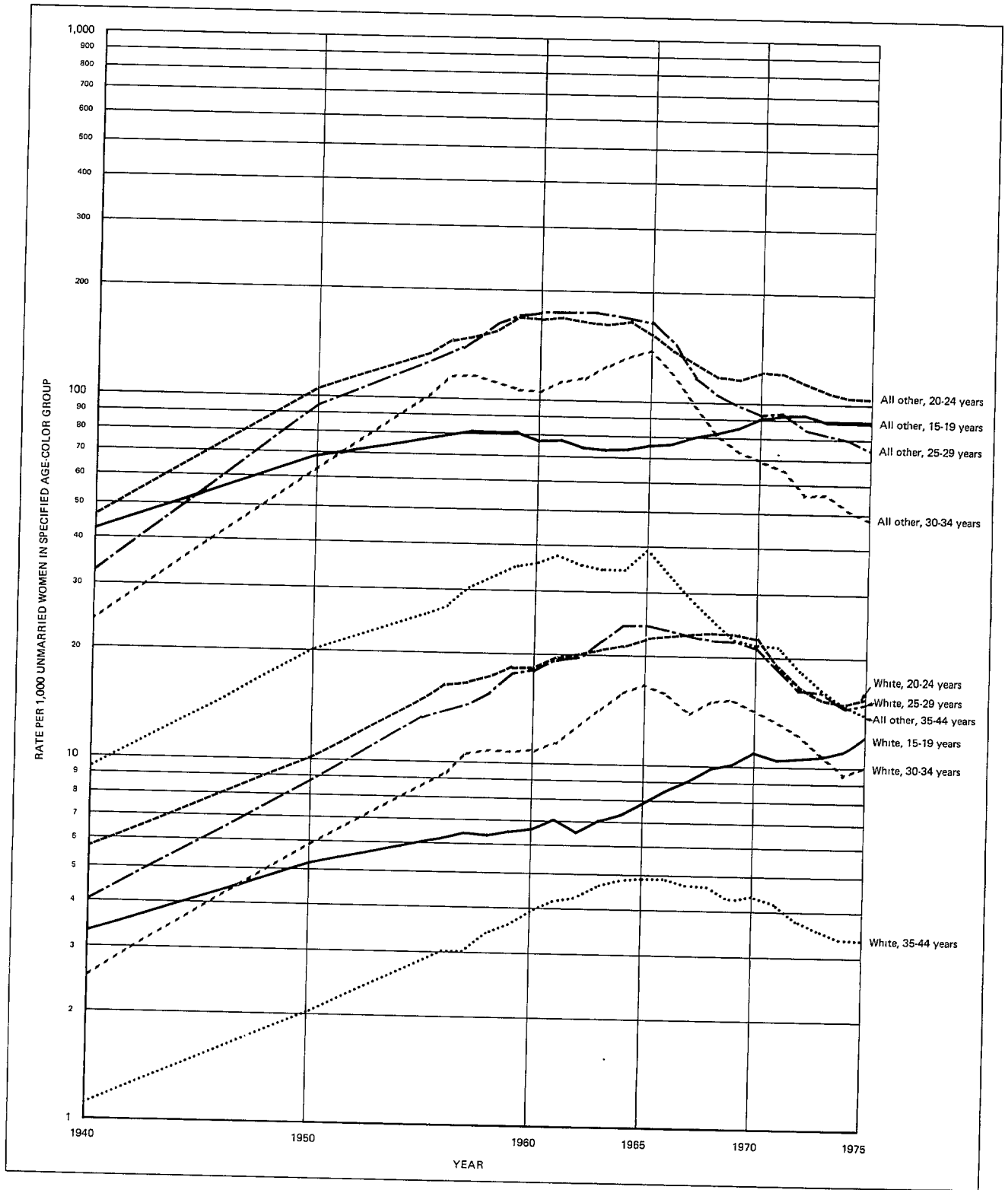


Figure 8. Estimated illegitimacy rates, by age of mother and color: United States, 1940-75

Table Q. Estimated illegitimacy rates by age of mother and race: United States, 1970-75

[See Technical Notes]

Race and age of mother	1975	1974	1973	1972	1971	1970
<u>All races</u> <sup>1</sup>	Rate per 1,000 unmarried women					
All ages, 15-44 years <sup>2</sup> .....	24.8	24.1	24.5	24.9	25.6	26.4
15-19 years .....	24.2	23.2	22.9	22.9	22.4	22.4
20-24 years .....	31.6	30.9	31.8	33.4	35.6	38.4
25-29 years .....	28.0	28.4	30.0	31.1	34.7	37.0
30-34 years .....	18.1	18.6	20.5	22.8	25.3	27.1
35-39 years .....	9.1	10.0	10.8	12.0	13.3	13.6
40-44 years <sup>3</sup> .....	2.6	2.6	3.0	3.1	3.5	3.5
<u>White</u>						
All ages, 15-44 years <sup>2</sup> .....	12.6	11.8	11.9	12.0	12.5	13.9
15-19 years .....	12.1	11.1	10.7	10.5	10.3	10.9
20-24 years .....	15.7	15.2	15.6	16.7	18.8	22.5
25-29 years .....	15.1	14.9	16.1	16.6	18.6	21.1
30-34 years .....	10.0	9.6	10.7	12.1	13.3	14.2
35-39 years .....	5.4	5.5	5.9	6.4	7.2	7.6
40-44 years <sup>3</sup> .....	1.5	1.5	1.7	1.6	1.9	2.0
<u>Black</u>						
All ages, 15-44 years <sup>2</sup> .....	85.6	86.6	89.5	92.2	96.5	95.5
15-19 years .....	95.1	95.1	96.0	98.8	99.1	96.9
20-24 years .....	109.9	111.2	117.2	122.0	131.1	131.5
25-29 years .....	78.1	82.5	86.0	89.7	100.4	100.9
30-34 years .....	51.0	52.3	58.1	57.7	69.0	71.8
35-39 years .....	20.3	24.2	27.4	30.2	32.7	32.9
40-44 years <sup>3</sup> .....	7.2	6.7	7.7	8.5	9.4	10.4

<sup>1</sup>Includes races other than white and black.<sup>2</sup>Rates were computed by relating total illegitimate births regardless of age of mother to unmarried women aged 15-44 years.<sup>3</sup>Rates were computed by relating illegitimate births to mothers aged 40 years and over to unmarried women aged 40-44 years.

erous shortcomings when used as an analytic tool. The numerator and denominator of the illegitimacy ratio are affected by two independent sets of factors. The numerator, the number of illegitimate births, is determined by the rate of illegitimacy and the number of unmarried women. The denominator, the total number of births, is influenced primarily by factors that affect the level of marital fertility, such as changes in timing of births and completed family size. Obviously, if these factors change, the ratio will change even if the numerator remains the same.

The illegitimacy ratio has increased substantially from 37.9 in 1940 to 142.5 in 1975 (table 16). Between 1970 and 1975 alone, there has been a 33-percent increase in the ratio. The increase has taken place in spite of a leveling off

or, in some cases, a decrease in the illegitimacy rate since the mid-1960's. A factor responsible for the increase in the illegitimacy ratio during this period is one that does not itself determine the incidence of illegitimacy. This factor is the decline in total, mainly marital, fertility (affecting the denominator). Also responsible for the increase in the illegitimacy ratio is the rising number of unmarried women, a factor that affects the numerator.

There was a large racial differential in the illegitimacy ratio in 1973 as in previous years: the ratios for white and black births were 63.9 and 457.5, respectively. The racial differential has increased since 1969, following a decline during the early 1960's.

Table R shows the estimated illegitimacy

Table R. Estimated illegitimacy ratios by age of mother and race: United States, 1973

[See Technical Notes]

Age of mother	All races <sup>1</sup>	White	Black
	Ratio per 1,000 total live births		
Total .....	129.8	63.9	457.5
Under 15 years.....	847.5	652.1	964.3
15-19 years .....	339.2	190.9	709.8
15 years .....	661.8	442.6	914.6
16 years .....	508.4	312.2	849.2
17 years .....	387.2	221.0	769.8
18 years .....	293.1	166.9	648.5
19 years .....	224.0	122.8	560.7
20-24 years .....	108.2	53.4	386.3
25-29 years .....	48.5	23.6	257.0
30-34 years .....	50.0	24.3	233.4
35-39 years .....	64.7	33.0	229.0
40 years and over .....	76.9	41.1	231.8

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

ratios by age of mother for 1973. The highest ratios were found among births to mothers under age 20 and particularly under age 15, when the proportion of married women and the number of legitimate births are both small. The ratio decreased with increasing age of mother up to and including the age group 25-29 years even though the illegitimacy rate shows these mothers to be at greater risk of having an illegitimate birth. The small ratio for births to mothers of these ages is a reflection of the larger proportion of married women and the high level of marital fertility to these women who are in their prime childbearing years. Thus, although the "risk" of illegitimacy as measured by the illegitimacy rate is high at ages 25-29, the proportion of births that are illegitimate to women of those ages is low. Age patterns by race are, for the most part, similar to those for all women. However, ratios for black women are nearly constant for those aged 30 or older.

### Education of Mother

About 1 out of 4 live births to women reporting less than 12 years of education was illegitimate (table S). This high proportion is related to the fact that, for the United States as a whole, about 40 percent of mothers in this education group were under 20 years old, com-

Table S. Percent of live births illegitimate by educational attainment of mother and race: total of 33 reporting States and the District of Columbia, 1973

[See Technical Notes]

Years of school completed by mother	All races <sup>1</sup>	White	Black
Total .....	13.6	6.3	46.9
0-8 years .....	24.2	13.4	57.4
9-11 years .....	27.2	13.7	59.9
12 years .....	9.6	4.4	38.3
13-15 years .....	5.7	2.6	28.9
16 years or more.....	1.1	0.7	7.7

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

pared with 10 percent of those with 12 or more years of education. As previously noted, there are fewer married women in this age group and thus fewer legitimate births. The proportion of illegitimate births decreased as educational attainment increased, reaching a low of 1.1 percent for mothers reporting 16 or more years of school.

The proportion of illegitimate births was higher among black than among white women for all levels of education. However, the racial differential increased as education increased, ranging from 4.3 times as great for black women at the lowest level of educational attainment (57.4 percent versus 13.4 percent) to 11.0 times as great at the highest level (7.7 percent versus 0.7 percent).

### Percent Low Birth Weight

Illegitimate births are more likely to be of low birth weight than are legitimate births (table T). In 1973, as in previous years, nearly twice as great a proportion of illegitimate (12.8 percent) as legitimate births (6.8 percent) weighed 2,500 grams or less at birth. Although the proportion of low birth weight is greater for illegitimate than for legitimate births for both major race groups, the difference among black births is less than one-half that among white births (24 percent versus 60 percent). However, among births to younger mothers (white mothers 15 years or younger and black mothers 16 years or younger), there was a slightly higher proportion of low birth weight among legitimate births.

The difference in percent low birth weight by legitimacy status cannot be attributed solely

Table T. Percent of live births of 2,500 grams or less by legitimacy status, age of mother, and race: total of 38 reporting States and the District of Columbia, 1973

[See Technical Notes]

Age of mother	All races <sup>1</sup>		White		Black	
	Legitimate	Illegitimate	Legitimate	Illegitimate	Legitimate	Illegitimate
Total.....	6.8	12.8	6.2	9.9	11.9	14.8
Under 15 years .....	14.0	16.0	12.6	12.2	20.2	17.6
15-19 years .....	8.5	12.7	7.7	9.4	14.0	14.8
15 years.....	10.9	13.1	10.0	9.3	17.0	15.2
16 years.....	9.9	12.7	9.1	9.3	15.8	14.9
17 years.....	9.0	12.7	8.3	9.1	14.9	15.0
18 years.....	8.5	12.6	7.6	9.7	14.1	14.6
19 years.....	7.7	12.4	6.9	9.6	12.9	14.3
20-24 years .....	6.6	12.6	5.9	9.7	11.6	14.6
25-29 years .....	6.0	12.7	5.5	10.4	11.1	14.5
30-34 years .....	6.6	13.2	6.1	11.6	10.9	14.4
35-39 years .....	8.0	15.7	7.2	14.2	12.3	16.9
40-44 years .....	9.0	15.6	8.2	18.6	13.1	13.6
45-49 years .....	9.2	16.1	9.0	9.3	10.3	23.3

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

to the difference in socioeconomic status between these two groups. The percent low birth weight was higher among illegitimate than among legitimate births for all educational levels for both racial groups (table U). The differential was greater for white than for black births, ranging from 27 to 109 percent among white births and from 18 to 46 percent among black births. The differential increased with increasing levels of education among mothers who had more than 8 years of schooling.

### Prenatal Care

Mothers of legitimate births are more likely to seek prenatal care and to seek it at an earlier stage of pregnancy than are mothers of illegitimate births (table V). The vast majority of legitimate births (75 percent) were to mothers who began prenatal care by the third month of pregnancy, while less than half (39.5 percent) of the illegitimate births were to mothers who began care during the first trimester of pregnancy. Only 1.0 percent of legitimate births were to mothers who had no prenatal care, as opposed to 5.2 percent of illegitimate births. The same variations are observed when the data are examined by race, but the differences are smaller among black births.

Table U. Percent of live births of 2,500 grams or less by educational attainment of mother, legitimacy status, and race: total of 33 reporting States and the District of Columbia, 1973

[See Technical Notes]

Race and years of school completed by mother	Total	Legitimate	Illegitimate
All races <sup>1</sup> .....	7.6	6.8	12.9
0-8 years .....	10.6	9.4	14.4
9-11 years .....	10.1	8.9	13.5
12 years .....	6.8	6.3	11.7
13-15 years .....	5.9	5.6	10.9
16 years or more.....	5.0	5.0	11.2
White.....	6.4	6.1	9.9
0-8 years .....	9.1	8.7	11.9
9-11 years .....	8.4	8.1	10.3
12 years .....	5.8	5.7	8.8
13-15 years .....	5.1	5.1	8.1
16 years or more.....	4.6	4.6	9.6
Black.....	13.2	11.8	14.9
0-8 years .....	15.2	13.7	16.3
9-11 years .....	14.5	13.1	15.5
12 years .....	12.2	11.3	13.6
13-15 years .....	11.1	10.4	12.8
16 years or more.....	9.5	9.1	13.3

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



Table V. Percent distribution of live births by month of pregnancy prenatal care began, by legitimacy status and race: total of 33 reporting States and the District of Columbia, 1973

[See Technical Notes]

Race and month of pregnancy prenatal care began	Legitimate	Illegitimate
All races <sup>1</sup> .....	100.0	100.0
1st-2d month .....	46.5	19.3
3d month .....	28.5	20.2
4th-6th month .....	20.2	41.6
7th-9th month .....	3.8	13.7
No prenatal care.....	1.0	5.2
White.....	100.0	100.0
1st-2d month .....	48.2	19.0
3d month .....	28.9	19.7
4th-6th month .....	18.7	39.7
7th-9th month .....	3.4	16.4
No prenatal care.....	0.8	5.2
Black.....	100.0	100.0
1st-2d month .....	33.8	19.6
3d month .....	25.4	20.7
4th-6th month .....	31.8	43.1
7th-9th month .....	6.7	11.6
No prenatal care.....	2.4	5.0

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

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Table 1. Percent of births to mothers completing 12 or more years of school by live-birth order, age of mother, and race: total of 41 reporting States and the District of Columbia, 1973

[See Technical Notes]

Age of mother and race	Total	Live-birth order							
		1st	2d	3d	4th	5th	6th	7th	8th and over
All races <sup>1</sup> .....	69.4	70.7	76.1	69.1	61.3	54.0	48.0	43.7	35.5
15-19 years.....	36.0	39.9	23.5	13.0	9.9	*	-	*	*
20-24 years.....	75.5	88.3	74.0	50.4	30.7	21.3	15.5	13.9	32.9
25-29 years.....	82.8	93.6	90.5	78.5	61.8	45.3	31.0	25.4	16.3
30-34 years.....	77.4	89.9	88.8	83.3	75.2	63.9	52.4	42.8	29.8
35-39 years.....	67.0	81.9	80.6	76.9	72.4	66.4	61.2	53.4	39.2
40 years and over .....	58.9	75.9	72.4	69.9	68.5	64.1	59.3	56.2	42.8
White .....	73.3	74.4	78.7	72.2	64.9	58.3	53.6	50.6	46.3
15-19 years.....	38.3	42.4	21.5	8.3	8.4	-	-	*	*
20-24 years.....	77.8	89.0	75.1	51.5	30.5	19.6	13.0	12.2	44.9
25-29 years.....	85.0	94.1	91.2	79.7	63.6	47.6	33.6	30.2	24.6
30-34 years.....	80.5	90.6	89.6	84.4	76.9	66.8	56.8	48.8	38.9
35-39 years.....	71.0	83.3	81.1	77.8	73.8	68.4	64.7	58.1	49.3
40 years and over .....	64.7	77.5	74.1	72.2	70.2	65.8	63.0	60.8	53.4
Black .....	51.5	52.1	60.5	54.0	46.8	40.5	34.0	29.8	20.7
15-19 years.....	30.9	33.1	27.1	17.1	10.8	*	-	*	*
20-24 years.....	65.3	84.8	69.0	47.8	31.0	23.1	16.9	14.5	19.8
25-29 years.....	66.2	87.8	82.6	69.7	54.6	39.6	27.3	20.7	10.6
30-34 years.....	57.9	83.0	80.8	73.1	62.6	50.5	39.6	30.8	20.1
35-39 years.....	48.0	69.7	74.5	69.3	62.9	55.2	45.9	40.5	23.8
40 years and over .....	36.5	67.5	61.5	54.9	56.1	53.1	43.4	37.3	21.6

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

Table 2. Percent distribution of live births by educational attainment of father, age of father, and race: total of 41 reporting States and the District of Columbia, 1973

[See Technical Notes]

Age of father and race	Total	Years of school completed by father					
		0-8	9-11	12 or more			
				Total	12	13-15	16 or more
All races <sup>1</sup> .....	100.0	7.4	16.6	75.9	42.2	15.9	17.8
15-19 years.....	100.0	6.4	45.0	48.7	43.9	4.7	0.1
20-24 years.....	100.0	5.4	20.0	74.7	50.1	17.6	7.0
25-29 years.....	100.0	5.3	11.8	82.8	40.6	18.7	23.5
30-34 years.....	100.0	7.4	12.2	80.4	37.6	15.2	27.6
35-39 years.....	100.0	13.2	14.6	72.2	36.9	12.5	22.8
40-44 years.....	100.0	20.0	15.3	64.8	34.3	10.9	19.6
45-49 years.....	100.0	26.4	17.8	55.8	30.0	9.7	16.1
50-54 years.....	100.0	34.0	15.2	50.8	28.3	9.1	13.4
55 years and over .....	100.0	49.4	14.0	36.6	20.9	6.3	9.4
White .....	100.0	7.1	15.3	77.5	41.8	16.5	19.2
15-19 years.....	100.0	6.8	44.5	48.6	44.0	4.5	0.1
20-24 years.....	100.0	5.5	19.0	75.5	49.6	18.2	7.7
25-29 years.....	100.0	5.2	10.7	84.1	40.0	19.1	25.0
30-34 years.....	100.0	7.1	11.0	81.9	37.4	15.6	28.9
35-39 years.....	100.0	12.5	13.0	74.5	37.4	13.0	24.1
40-44 years.....	100.0	18.5	13.9	67.6	34.9	11.3	21.4
45-49 years.....	100.0	24.4	16.5	59.1	30.7	10.5	17.9
50-54 years.....	100.0	31.4	13.8	54.8	29.3	10.0	15.5
55 years and over .....	100.0	43.7	14.2	42.1	23.8	6.9	11.4
Black .....	100.0	9.3	26.5	64.1	46.1	12.0	6.0
15-19 years.....	100.0	4.0	47.4	48.6	43.4	5.1	0.1
20-24 years.....	100.0	4.5	25.9	69.7	52.8	13.8	3.1
25-29 years.....	100.0	7.0	22.7	70.3	47.5	14.3	8.5
30-34 years.....	100.0	11.2	24.1	64.7	42.1	12.1	10.5
35-39 years.....	100.0	18.4	27.4	54.3	36.3	9.5	8.5
40-44 years.....	100.0	28.9	24.6	46.5	31.2	8.4	6.9
45-49 years.....	100.0	35.1	24.6	40.1	27.7	6.2	6.2
50-54 years.....	100.0	43.0	21.1	35.9	25.3	5.5	5.1
55 years and over .....	100.0	57.9	16.2	25.9	15.3	5.8	4.8

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

Table 3. Percent distribution of live births by educational attainment of mother, age of mother, and race: total of 41 reporting States and the District of Columbia, 1973

[See Technical Notes]

Age of mother and race	Total	Years of school completed by mother					
		0-8	9-11	12 or more			
				Total	12	13-15	16 or more
All races <sup>1</sup> .....	100.0	6.7	24.0	69.4	45.4	14.0	10.0
15-19 years.....	100.0	8.5	55.4	36.0	33.3	2.6	0.1
20-24 years.....	100.0	4.8	19.7	75.5	54.2	16.6	4.7
25-29 years.....	100.0	4.8	12.4	82.8	45.1	18.8	18.9
30-34 years.....	100.0	7.5	15.0	77.4	42.7	15.1	19.6
35-39 years.....	100.0	13.9	19.1	67.0	42.6	11.9	12.5
40 years and over .....	100.0	20.6	20.6	58.9	39.6	10.0	9.3
White.....	100.0	6.0	20.7	73.3	47.1	15.1	11.1
15-19 years.....	100.0	8.7	53.1	38.3	35.7	2.5	0.1
20-24 years.....	100.0	4.6	17.7	77.8	55.5	17.3	5.0
25-29 years.....	100.0	4.3	10.7	85.0	45.5	19.6	19.9
30-34 years.....	100.0	6.6	12.9	80.5	43.8	15.9	20.8
35-39 years.....	100.0	12.6	16.4	71.0	44.8	12.9	13.3
40 years and over .....	100.0	17.9	17.4	64.7	43.2	11.1	10.3
Black .....	100.0	9.1	39.4	51.5	38.9	9.1	3.5
15-19 years.....	100.0	8.2	61.0	30.9	27.9	2.9	0.0
20-24 years.....	100.0	5.4	29.2	65.3	49.0	13.5	2.8
25-29 years.....	100.0	7.6	26.2	66.2	45.0	12.8	8.4
30-34 years.....	100.0	12.3	29.8	57.9	39.3	10.2	8.4
35-39 years.....	100.0	18.6	33.4	48.0	34.3	7.5	6.3
40 years and over .....	100.0	29.0	34.5	36.5	26.3	5.6	4.5

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

Table 4. Median birth weight and percent of live births of 2,500 grams or less, by race and sex: United States, 1960, 1965, 1970, 1973, and 1975

[See Technical Notes]

Race and sex	1975	1973	1970	1965	1960	1975	1973	1970	1965	1960
	Median weight in grams <sup>1</sup>					Percent weighing 2,500 grams or less				
All races .....	3,320	3,310	3,300	3,290	3,310	7.4	7.6	7.9	8.3	7.7
Male .....	3,390	3,380	3,360	3,350	3,370	6.8	6.9	7.3	7.6	7.1
Female .....	3,260	3,250	3,240	3,230	3,250	8.1	8.3	8.6	9.0	8.4
White.....	3,360	3,350	3,330	3,320	3,340	6.3	6.4	6.8	7.2	6.8
Male .....	3,430	3,420	3,390	3,380	3,400	5.8	5.9	6.3	6.6	6.3
Female .....	3,300	3,290	3,270	3,260	3,280	6.8	7.0	7.4	7.8	7.4
All other.....	3,160	3,150	3,140	3,130	3,150	12.2	12.5	13.3	13.8	12.8
Male .....	3,210	3,210	3,190	3,180	3,210	11.2	11.4	12.2	12.4	11.6
Female .....	3,100	3,100	3,080	3,070	3,100	13.4	13.7	14.4	15.1	14.1
Black.....	3,140	3,140	3,120	---	---	13.1	13.3	13.9	---	---
Male .....	3,200	3,190	3,180	---	---	11.9	12.0	12.7	---	---
Female .....	3,080	3,080	3,070	---	---	14.4	14.5	15.1	---	---

<sup>1</sup>Computed to nearest 10 grams on exact conversion of interval from pounds and ounces.

Table 5. Percent of live births of 2,500 grams or less by place of residence and race for metropolitan and nonmetropolitan counties: United States, 1960, 1965, 1970, 1973, and 1975

[See Technical Notes]

Type of county and year	Race and place of residence											
	All races			White			All other					
							Total			Black		
	All areas	Urban places <sup>1</sup>	Balance of area	All areas	Urban places <sup>1</sup>	Balance of area	All areas	Urban places <sup>1</sup>	Balance of area	All areas	Urban places <sup>1</sup>	Balance of area
<u>United States</u>												
1975.....	7.4	8.0	6.7	6.3	6.4	6.1	12.2	12.6	11.2	13.1	13.4	12.3
1973.....	7.6	8.1	6.9	6.4	6.6	6.3	12.5	13.0	11.5	13.3	13.6	12.4
1970.....	7.9	8.5	7.2	6.8	7.0	6.6	13.3	13.7	12.0	13.9	14.2	12.8
1965.....	8.3	8.9	7.5	7.2	7.4	6.9	13.8	14.6	12.1	---	---	---
1960.....	7.7	8.3	7.0	6.8	7.1	6.5	12.8	13.9	11.0	---	---	---
<u>Metropolitan counties</u>												
1975.....	7.6	8.1	6.4	6.3	6.4	5.9	12.5	12.7	11.0	13.2	13.4	12.1
1973.....	7.7	8.2	6.4	6.4	6.6	6.0	12.7	13.0	10.9	13.4	13.6	11.9
1970.....	8.1	8.6	6.9	6.9	7.0	6.5	13.6	13.8	12.0	14.1	14.3	12.8
1965.....	8.5	9.1	7.3	7.3	7.5	6.8	14.5	14.8	12.9	---	---	---
1960.....	8.0	8.4	6.8	6.9	7.1	6.4	13.7	14.0	12.1	---	---	---
<u>Nonmetropolitan counties</u>												
1975.....	7.1	7.5	6.9	6.3	6.5	6.2	11.6	12.5	11.3	12.7	13.2	12.4
1973.....	7.3	7.6	7.2	6.5	6.5	6.5	11.9	12.7	11.7	12.8	13.2	12.6
1970.....	7.6	7.9	7.5	6.8	6.9	6.8	12.4	13.4	12.1	13.1	13.9	12.8
1965.....	7.8	8.3	7.7	7.0	7.4	6.9	12.2	13.4	11.8	---	---	---
1960.....	7.3	7.7	7.2	6.7	7.0	6.6	11.1	13.1	10.6	---	---	---

<sup>1</sup>Places with 10,000 residents or more in 1960 for the years 1960 and 1965 and 10,000 residents or more in 1970 for 1970-75.



Table 6. Percent of live births of 2,500 grams or less, by age of mother, educational attainment of mother, and race: total of 41 reporting States and the District of Columbia, 1973

[See Technical Notes]

Age of mother and race	Total	Years of school completed by mother						
		0-8	9-11	12	13-15	16 or more	Less than 12	12 or more
All races <sup>1</sup> .....	7.7	10.4	10.3	6.9	5.9	5.1	10.3	6.4
15-19 years.....	10.1	11.7	10.9	8.4	8.6	11.4	11.0	8.4
20-24 years.....	7.3	9.7	9.8	6.7	5.8	5.2	9.8	6.4
25-29 years.....	6.4	8.9	9.5	6.3	5.5	4.8	9.3	5.8
30-34 years.....	7.0	9.2	9.9	6.7	6.3	5.3	9.6	6.3
35-39 years.....	8.5	10.5	10.8	7.8	6.9	6.3	10.6	7.3
40-44 years.....	9.2	10.6	10.7	8.6	7.2	7.2	10.7	8.2
45-49 years.....	10.1	9.9	13.0	6.7	13.2	10.1	11.4	8.4
White.....	6.5	9.0	8.6	5.9	5.2	4.7	8.7	5.6
15-19 years.....	8.1	10.2	8.7	6.7	7.1	10.0	8.9	6.7
20-24 years.....	6.1	8.8	8.3	5.7	4.9	4.6	8.4	5.4
25-29 years.....	5.7	7.7	8.2	5.7	5.1	4.5	8.1	5.3
30-34 years.....	6.3	8.4	8.6	6.1	5.8	5.0	8.5	5.7
35-39 years.....	7.6	9.3	9.8	7.0	6.4	5.5	9.6	6.6
40-44 years.....	8.5	9.8	10.0	8.4	6.1	6.7	9.9	7.7
45-49 years.....	9.2	8.3	14.4	5.4	12.6	10.5	11.3	7.5
Black.....	13.3	15.0	14.7	12.2	11.0	9.5	14.8	11.8
15-19 years.....	14.8	15.7	15.4	13.3	11.6	11.5	15.4	13.2
20-24 years.....	12.9	14.1	14.5	12.2	11.2	9.7	14.5	11.9
25-29 years.....	11.9	14.3	13.6	11.5	10.2	9.0	13.7	11.0
30-34 years.....	12.0	13.1	13.7	11.1	11.1	9.4	13.5	10.9
35-39 years.....	12.8	13.7	13.3	12.1	10.7	11.3	13.4	11.8
40-44 years.....	12.3	12.3	12.7	10.9	16.0	12.3	12.5	11.8
45-49 years.....	13.7	14.3	10.5	15.4	17.6	-	12.4	15.5

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

Table 7. Median number of prenatal visits and percent distribution of births by month of pregnancy prenatal care began, by age of mother, and race: total of 42 reporting States and the District of Columbia, 1973

[See Technical Notes]

Age of mother and race	Median number of visits <sup>1</sup>	Total	Month of pregnancy prenatal care began				
			1st-2d	3d	4th-6th	7th-9th	No prenatal care
All races <sup>2</sup> .....	10.6	100.0	43.8	27.0	22.6	5.2	1.5
Under 15 years .....	7.3	100.0	14.0	16.9	46.6	16.8	5.7
15-19 years.....	9.2	100.0	27.3	25.2	36.0	9.0	2.5
20-24 years.....	10.7	100.0	45.0	27.5	21.3	4.8	1.4
25-29 years.....	11.2	100.0	52.5	27.4	16.0	3.2	0.9
30-34 years.....	10.9	100.0	48.8	27.8	18.5	3.8	1.1
35-39 years.....	10.3	100.0	41.4	27.4	23.7	5.6	1.8
40-44 years.....	9.8	100.0	33.9	26.4	29.4	7.4	2.8
45-49 years.....	9.1	100.0	25.4	26.1	36.3	9.5	2.7
White .....	10.9	100.0	47.1	27.8	19.7	4.3	1.1
Under 15 years .....	8.0	100.0	14.7	18.1	45.3	16.5	5.4
15-19 years.....	9.8	100.0	30.2	26.8	33.2	8.0	1.9
20-24 years.....	11.0	100.0	48.1	28.2	18.7	4.0	1.0
25-29 years.....	11.4	100.0	54.7	27.7	14.2	2.7	0.6
30-34 years.....	11.1	100.0	51.0	28.3	16.6	3.2	0.8
35-39 years.....	10.6	100.0	43.8	27.9	21.8	5.0	1.5
40-44 years.....	10.1	100.0	36.1	27.0	27.9	6.7	2.2
45-49 years.....	9.5	100.0	26.8	27.9	34.7	8.6	1.9
Black .....	8.6	100.0	28.2	23.2	36.1	9.0	3.4
Under 15 years .....	6.9	100.0	13.4	16.2	47.6	16.8	5.9
15-19 years.....	7.7	100.0	20.4	21.4	43.3	11.0	3.9
20-24 years.....	8.8	100.0	30.2	24.1	34.0	8.5	3.2
25-29 years.....	9.6	100.0	36.5	24.7	29.4	6.8	2.6
30-34 years.....	9.4	100.0	35.1	24.3	30.8	7.0	2.8
35-39 years.....	8.9	100.0	29.8	24.6	33.7	8.5	3.3
40-44 years.....	8.6	100.0	24.8	24.1	35.6	10.2	5.4
45-49 years.....	8.1	100.0	21.3	20.0	41.6	12.8	4.4

<sup>1</sup>Based on information from 38 reporting States and the District of Columbia. Excludes births to mothers with no visits.

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

Table 8. Median number of prenatal visits and percent distribution of births by month of pregnancy prenatal care began, by live-birth order and race: total of 42 reporting States and the District of Columbia, 1973

[See Technical Notes]

Live-birth order and race	Median number of visits <sup>1</sup>	Total	Month of pregnancy prenatal care began				
			1st-2d	3d	4th-6th	7th-9th	No prenatal care
All races <sup>2</sup> .....	10.6	100.0	43.8	27.0	22.6	5.2	1.5
First births .....	10.7	100.0	44.3	26.8	22.9	4.8	1.2
Second births .....	10.8	100.0	48.2	27.8	18.9	4.0	1.2
Third births .....	10.5	100.0	44.2	27.8	21.7	4.7	1.5
Fourth births .....	10.1	100.0	38.7	27.3	25.7	6.1	2.1
Fifth births .....	9.6	100.0	34.2	26.7	28.9	7.6	2.7
Sixth births and over .....	8.7	100.0	26.6	23.6	34.2	11.1	4.5
White .....	10.9	100.0	47.1	27.8	19.7	4.3	1.1
First births .....	11.0	100.0	47.5	27.3	20.2	4.1	0.9
Second births .....	11.1	100.0	51.2	28.5	16.4	3.2	0.8
Third births .....	10.8	100.0	47.2	28.6	19.2	3.8	1.1
Fourth births .....	10.4	100.0	41.4	28.4	23.3	5.3	1.6
Fifth births .....	10.0	100.0	36.5	27.9	26.5	6.8	2.3
Sixth births and over .....	9.2	100.0	28.6	24.7	32.2	10.6	3.9
Black .....	8.6	100.0	28.2	23.2	36.1	9.0	3.4
First births .....	8.7	100.0	28.1	23.9	37.2	8.2	2.6
Second births .....	8.7	100.0	30.6	23.4	34.0	8.6	3.5
Third births .....	8.7	100.0	29.4	23.9	34.2	8.7	3.8
Fourth births .....	8.4	100.0	27.9	23.1	35.8	9.1	4.2
Fifth births .....	8.3	100.0	26.6	22.9	37.0	9.6	3.9
Sixth births and over .....	7.6	100.0	22.4	21.3	39.1	11.5	5.6

<sup>1</sup>Based on information from 38 reporting States and the District of Columbia. Excludes births to mothers with no visits.

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

Table 9. Percent distribution of live births by month of pregnancy prenatal care began, educational attainment of mother, and race: total of 38 reporting States and the District of Columbia, 1973

[See Technical Notes]

Years of school completed by mother and race	Total	Month of pregnancy prenatal care began				
		1st-2d	3d	4th-6th	7th-9th	No pre-natal care
All races <sup>1</sup> .....	100.0	43.3	27.2	23.0	5.2	1.3
0-8 years.....	100.0	26.4	23.1	35.1	11.7	3.7
9-11 years.....	100.0	30.2	25.1	33.6	8.8	2.3
12 years.....	100.0	46.3	28.6	20.5	3.8	0.8
13-15 years.....	100.0	53.7	27.8	15.3	2.8	0.4
16 years or more.....	100.0	60.0	26.9	11.3	1.7	0.2
Less than 12 years.....	100.0	29.4	24.7	33.9	9.4	2.6
12 years or more.....	100.0	49.7	28.2	18.2	3.3	0.7
White.....	100.0	47.0	28.2	19.8	4.1	0.8
0-8 years.....	100.0	28.5	24.4	33.0	11.0	3.0
9-11 years.....	100.0	33.9	26.8	30.2	7.6	1.5
12 years.....	100.0	49.3	29.4	17.8	3.0	0.5
13-15 years.....	100.0	55.9	28.1	13.5	2.2	0.3
16 years or more.....	100.0	61.1	27.0	10.4	1.4	0.1
Less than 12 years.....	100.0	32.7	26.3	30.8	8.3	1.8
12 years or more.....	100.0	52.4	28.8	15.8	2.6	0.4
Black.....	100.0	27.2	22.7	37.1	9.6	3.4
0-8 years.....	100.0	19.8	19.5	42.1	13.4	5.3
9-11 years.....	100.0	21.4	21.2	41.8	11.4	4.2
12 years.....	100.0	30.2	24.2	34.8	8.1	2.7
13-15 years.....	100.0	39.2	25.0	27.6	6.5	1.6
16 years or more.....	100.0	52.4	25.0	18.2	3.7	0.7
Less than 12 years.....	100.0	21.1	20.8	41.9	11.8	4.4
12 years or more.....	100.0	33.3	24.4	32.4	7.6	2.3

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

Table 10. Percent distribution of live births by attendant and place of delivery, race, and place of residence: United States, 1960, 1970, 1973, and 1975

[See Technical Notes]

Race and attendant and place of delivery	Year and place of residence											
	1975			1973			1970			1960		
	United States	Urban places <sup>1</sup>	Bal-ance of coun-try	United States	Urban places <sup>1</sup>	Bal-ance of coun-try	United States	Urban places <sup>1</sup>	Bal-ance of coun-try	United States	Urban places <sup>1</sup>	Bal-ance of coun-try
All races.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physician in hospital <sup>2</sup> .....	98.7	98.8	98.7	99.3	99.5	99.0	99.4	99.6	99.0	96.6	98.3	94.7
Physician not in hospital.....	0.4	0.3	0.4	0.2	0.2	0.2	0.1	0.1	0.2	1.2	0.8	1.6
Midwife.....	0.4	0.3	0.5	0.4	0.2	0.6	0.4	0.2	0.7	2.0	0.8	3.5
Other and not specified.....	0.5	0.6	0.4	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2
White.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physician in hospital <sup>2</sup> .....	98.9	98.8	99.0	99.5	99.6	99.5	99.7	99.7	99.7	98.8	99.1	98.3
Physician not in hospital.....	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.7	0.5	1.0
Midwife.....	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.4	0.3	0.5
Other and not specified.....	0.6	0.7	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
All other.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physician in hospital <sup>2</sup> .....	98.1	98.8	96.3	98.3	99.3	95.8	97.8	99.4	93.8	85.0	94.5	68.0
Physician not in hospital.....	0.6	0.4	1.0	0.3	0.3	0.4	0.2	0.1	0.5	3.5	2.3	5.4
Midwife.....	0.9	0.3	2.3	1.2	0.3	3.5	1.8	0.4	5.5	11.0	2.8	25.7
Other and not specified.....	0.5	0.5	0.5	0.2	0.2	0.3	0.1	0.1	0.3	0.5	0.3	0.8
Black.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	---	---	---
Physician in hospital <sup>2</sup> .....	98.0	98.8	95.7	98.2	99.2	95.1	97.6	99.4	92.7	---	---	---
Physician not in hospital.....	0.6	0.5	1.1	0.3	0.3	0.4	0.2	0.1	0.5	---	---	---
Midwife.....	1.0	0.3	2.8	1.3	0.3	4.2	2.0	0.4	6.5	---	---	---
Other and not specified.....	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.3	---	---	---

<sup>1</sup>Places with 10,000 residents or more in 1960 for that year and 10,000 residents or more in 1970 for 1970-75.

<sup>2</sup>Includes all births in hospitals or institutions and births attended by physicians in clinics. A very large proportion of births in hospitals are attended by physicians.

Table 11. Percent distribution of live births by attendant and place of delivery and race: United States and each geographic division, 1973

[See Technical Notes]

Area and race	Attendant and place of delivery				
	Total	Physician in hospital <sup>1</sup>	Physician not in hospital	Mid-wife	Other and not specified
United States					
White .....	100.0	99.5	0.2	0.2	0.1
Black .....	100.0	98.2	0.3	1.3	0.2
New England					
White .....	100.0	99.9	0.1	0.0	0.0
Black .....	100.0	99.8	0.2	-	0.0
Middle Atlantic					
White .....	100.0	99.6	0.3	0.0	0.1
Black .....	100.0	99.4	0.3	0.0	0.3
East North Central					
White .....	100.0	99.7	0.2	0.0	0.1
Black .....	100.0	99.6	0.3	-	0.1
West North Central					
White .....	100.0	99.8	0.1	0.0	0.0
Black .....	100.0	99.5	0.2	0.2	0.0
South Atlantic					
White .....	100.0	99.7	0.1	0.1	0.1
Black .....	100.0	97.3	0.4	2.1	0.2
East South Central					
White .....	100.0	99.5	0.2	0.2	0.1
Black .....	100.0	94.6	0.4	4.8	0.2
West South Central					
White .....	100.0	98.6	0.1	1.1	0.2
Black .....	100.0	98.3	0.2	1.3	0.2
Mountain					
White .....	100.0	99.2	0.3	0.2	0.3
Black .....	100.0	99.5	0.3	0.0	0.2
Pacific					
White .....	100.0	99.4	0.3	0.0	0.3
Black .....	100.0	99.6	0.2	0.0	0.2

<sup>1</sup>Includes all births in hospitals or institutions and births attended by physicians in clinics. A very large proportion of births in hospitals are attended by physicians.

Table 12. Mean interval since last live birth by live-birth order, educational attainment of mother, and race: total of 38 reporting States and the District of Columbia, 1973

[ See Technical Notes ]

Live-birth order and race	Total	Years of school completed by mother				
		0-8	9-11	12	13-15	16 or more
<u>All races<sup>1</sup></u>		Mean interval in months				
All second and higher order births.....	43.4	44.8	42.6	44.6	42.3	39.6
Second births .....	39.1	39.7	36.7	40.3	39.3	37.5
Third births .....	46.6	46.4	45.2	48.2	45.4	42.8
Fourth births.....	49.6	49.1	48.3	51.5	48.4	44.7
Fifth births.....	51.2	49.6	49.8	53.3	51.7	46.2
Sixth births and over.....	47.2	45.1	47.3	48.6	47.0	44.8
<u>White</u>						
All second and higher order births.....	43.8	46.1	44.3	44.9	41.8	39.1
Second births .....	39.2	40.2	37.8	40.3	38.7	36.9
Third births .....	47.5	47.9	47.8	48.9	45.1	42.6
Fourth births.....	51.0	50.9	51.2	52.5	48.0	44.1
Fifth births.....	52.9	51.8	52.8	54.6	51.6	45.8
Sixth births and over.....	48.5	46.9	50.1	49.1	46.4	44.0
<u>Black</u>						
All second and higher order births.....	41.9	41.2	38.4	43.6	47.5	50.1
Second births .....	39.3	37.4	33.7	41.3	45.5	49.0
Third births .....	42.4	40.4	38.4	44.6	48.6	49.8
Fourth births.....	44.5	43.1	41.3	46.6	51.8	54.7
Fifth births.....	45.7	43.6	43.6	47.9	52.3	55.6
Sixth births and over.....	44.8	43.0	44.0	46.8	50.9	58.7

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

Table 13. Percent of live births of 2,500 grams or less, by age of mother, interval since last live birth, and race: total of 40 reporting States and the District of Columbia, 1973

[ See Technical Notes ]

Interval since last live birth and race	Total	Age of mother					
		Under 20 years	20- 24 years	25- 29 years	30- 34 years	35- 39 years	40- 44 years
All races <sup>1</sup> .....	7.3	13.2	7.5	6.1	6.6	7.9	8.7
0 months (plural deliveries) .....	55.3	68.2	57.3	51.6	50.7	50.5	52.9
1-11 months .....	20.8	27.0	20.0	16.8	18.2	17.7	23.3
12-17 months .....	8.4	12.0	8.2	6.9	7.2	9.0	6.2
18-23 months .....	6.3	9.4	6.4	5.1	5.5	6.7	7.3
24-35 months .....	5.5	9.3	5.6	4.8	4.9	5.8	7.1
36-47 months .....	5.3	9.7	5.9	4.6	5.0	6.1	6.6
48-59 months .....	5.8	10.1	6.5	5.2	5.7	6.3	7.3
60-71 months .....	6.2	12.0	6.5	5.9	6.3	6.7	7.7
72 months or more .....	7.5	14.1	8.0	7.1	7.0	8.2	8.9
White .....	6.2	10.6	6.3	5.5	6.0	7.1	8.0
0 months (plural deliveries) .....	52.9	65.7	54.8	50.4	48.2	47.4	51.5
1-11 months .....	17.5	22.3	17.4	14.1	17.4	16.2	15.9
12-17 months .....	6.9	9.1	6.8	6.0	6.5	7.9	5.5
18-23 months .....	5.3	7.0	5.4	4.6	4.9	6.4	5.7
24-35 months .....	4.7	7.0	4.9	4.3	4.4	5.2	6.5
36-47 months .....	4.6	7.6	5.0	4.2	4.6	5.5	5.9
48-59 months .....	5.1	5.9	5.4	4.7	5.2	5.6	6.3
60-71 months .....	5.5	13.2	5.4	5.3	5.8	5.5	7.3
72 months or more .....	6.6	19.6	5.9	6.1	6.3	7.5	8.5
Black .....	13.2	18.1	13.1	11.7	11.6	12.4	12.2
0 months (plural deliveries) .....	66.5	73.4	67.5	60.9	63.0	61.8	71.0
1-11 months .....	29.8	34.7	28.0	27.5	21.6	22.2	43.8
12-17 months .....	14.5	17.5	13.7	12.9	11.6	13.0	8.4
18-23 months .....	11.8	14.3	11.4	10.1	10.1	9.2	15.7
24-35 months .....	10.9	13.7	10.6	10.0	9.6	9.3	10.4
36-47 months .....	10.5	12.8	11.0	9.2	10.1	10.4	10.3
48-59 months .....	10.4	13.8	11.0	9.2	10.8	10.7	11.4
60-71 months .....	10.4	11.5	9.9	10.0	10.9	13.0	10.3
72 months or more .....	11.9	7.7	12.8	12.0	11.1	13.0	11.6

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



Table 14. Percent of births occurring less than 24 months since the previous live birth, by live-birth order, educational attainment of mother, and race: total of 38 reporting States and the District of Columbia, 1973

[See Technical Notes]

Years of school completed by mother and race	Total	Live-birth order				
		2d	3d	4th	5th	6th and over
All races <sup>1</sup> .....	27.1	27.1	26.5	26.6	26.7	30.2
0-8 years.....	33.6	38.4	31.8	29.3	29.8	33.3
9-11 years.....	33.1	37.2	30.5	29.1	28.8	31.3
12 years.....	24.5	24.4	24.2	24.4	24.5	27.7
13-15 years.....	24.0	22.8	25.2	26.1	25.3	27.6
16 years or more .....	24.6	23.6	26.3	27.4	26.0	28.6
Less than 12 years .....	33.2	37.4	30.8	29.1	29.1	32.1
12 years or more .....	24.4	23.9	24.6	25.0	24.8	27.8
White.....	25.4	25.6	24.8	24.6	24.5	28.0
0-8 years.....	31.7	36.6	30.0	27.3	27.5	31.3
9-11 years.....	30.0	34.4	26.9	25.4	25.3	27.6
12 years.....	23.3	23.3	23.0	22.9	22.8	26.4
13-15 years.....	23.6	22.4	24.9	25.8	25.0	28.2
16 years or more .....	24.5	23.5	25.9	27.6	25.7	29.3
Less than 12 years .....	30.4	34.8	27.7	26.0	26.0	29.2
12 years or more .....	23.5	23.2	23.7	23.9	23.4	27.0
Black.....	34.9	35.5	34.5	34.6	34.1	34.5
0-8 years.....	39.7	47.2	39.2	37.2	37.2	36.4
9-11 years.....	40.8	45.5	40.2	37.8	36.3	35.7
12 years.....	31.0	30.7	30.7	32.2	31.7	32.1
13-15 years.....	26.1	25.5	27.0	27.5	27.8	25.2
16 years or more .....	21.6	19.7	26.3	22.5	27.3	16.2
Less than 12 years .....	40.6	45.8	40.0	37.7	36.5	36.0
12 years or more .....	29.7	28.9	29.9	31.2	31.0	30.9

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

Table 15. Percent of live births of 2,500 grams or less by outcome of last pregnancy, interval since termination of last pregnancy, and race: total of 39 reporting States and the District of Columbia, 1973

[See Technical Notes]

Outcome and interval since last pregnancy	All races <sup>1</sup>	White	Black
All live births resulting from second and higher order pregnancies <sup>2</sup> .....	7.4	6.3	13.5
1-11 months .....	17.5	14.4	29.0
12-17 months .....	8.1	6.6	14.3
18-23 months .....	6.3	5.3	11.7
24-35 months .....	5.5	4.7	10.7
36-47 months .....	5.2	4.5	10.3
48-59 months .....	5.5	4.8	10.0
60 months or more.....	6.7	6.0	11.0
Last pregnancy, live birth <sup>2</sup> .....	7.0	6.0	12.9
1-11 months .....	20.4	17.2	29.5
12-17 months .....	8.3	6.7	14.3
18-23 months .....	6.1	5.1	11.4
24-35 months .....	5.2	4.5	10.4
36-47 months .....	5.1	4.4	10.0
48-59 months .....	5.4	4.7	9.8
60 months or more.....	6.6	5.8	10.9
Last pregnancy, fetal death <sup>2</sup> .....	9.3	8.1	17.2
1-11 months .....	13.0	11.1	27.4
12-17 months .....	7.3	6.5	14.0
18-23 months .....	8.1	7.2	14.3
24-35 months .....	8.6	7.6	14.6
36-47 months .....	9.0	8.0	15.0
48-59 months .....	10.4	9.4	15.9
60 months or more.....	10.5	9.7	15.6

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

<sup>2</sup>Includes zero months (plural births) and births for which the interval was not stated.

Table 16. Estimated number of illegitimate live births and illegitimacy ratios and rates, by race: United States, 1940, 1950, 1960, and 1965-75

[See Technical Notes]

Year	Estimated number <sup>1</sup>				Ratio per 1,000 total live births				Rate per 1,000 unmarried women, 15-44 years <sup>2</sup>			
	All races	White	All other		All races	White	All other		All races	White	All other	
			Total	Black			Total	Black			Total	Black
1975.....	447,900	186,400	261,600	249,600	142.5	73.0	441.7	487.9	24.8	12.6	80.4	85.6
1974.....	418,100	168,500	249,600	238,800	132.3	65.4	427.3	470.9	24.1	11.8	81.5	86.6
1973.....	407,300	163,000	244,300	234,500	129.8	63.9	416.9	457.5	24.5	11.9	84.2	89.5
1972.....	403,200	160,500	242,700	233,300	123.7	60.4	402.6	439.1	24.9	12.0	86.9	92.2
1971.....	401,400	163,800	237,500	229,000	112.9	56.1	373.3	405.3	25.6	12.5	90.6	96.5
1970.....	398,700	175,100	223,600	215,100	106.9	56.6	349.3	375.8	26.4	13.9	89.9	95.5
1969.....	360,800	163,700	197,200	189,400	100.2	54.7	325.1	348.7	25.0	13.5	86.6	90.6
1968.....	339,200	155,200	183,900	---	96.9	53.3	312.0	---	24.4	13.2	86.6	---
1967.....	318,100	142,200	175,800	---	90.3	48.7	293.8	---	23.9	12.5	89.5	---
1966.....	302,400	132,900	169,500	---	83.9	44.4	276.5	---	23.4	12.0	92.8	---
1965.....	291,200	123,700	167,500	---	77.4	39.6	263.2	---	23.5	11.6	97.6	---
1960.....	224,300	82,500	141,800	---	52.7	22.9	215.8	---	21.6	9.2	98.3	---
1950.....	141,600	53,500	88,100	---	39.8	17.5	179.6	---	14.1	6.1	71.2	---
1940.....	89,500	40,300	49,200	---	37.9	19.5	168.3	---	7.1	3.6	35.6	---

<sup>1</sup>Because estimates were rounded to the nearest hundred, figures by race may not add to totals.

<sup>2</sup>Rates were computed by relating total illegitimate births regardless of age of mother to unmarried women 15-44 years.

NOTE: The illegitimacy rates shown in this table for the years 1951-68 differ from those published in issues of *Vital Statistics of the United States* prior to 1969. The rates shown here are based on a smoothed series of population estimates for unmarried women by race and age, which were not available when the previously published rates were computed.

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## APPENDIX

### TECHNICAL NOTES

#### Sources of Data

Statistics presented in this report are based on information from certificates of live birth filed throughout the United States. Additional data and details concerning the technical aspects of birth statistics are published annually by the National Center for Health Statistics in volume I of *Vital Statistics of the United States*. Table I shows areas reporting specific items on the certificates of live birth.

#### Sampling Rates

Data for years prior to 1951 and for 1955 are based on the total file of birth records. Data for 1951-54, 1956-66, and 1968-71 are derived from 50-percent samples of birth records; data for 1967 are based partly on 20-percent and partly on 50-percent samples. Data for 1972-75 are based on information from two sources. For 6 States in 1972, 9 States in 1973, 16 States in 1974, and 23 States in 1975, statistics are based on information from the total file of records provided to the National Center for Health Statistics through the Cooperative Health Statistics System. In 1972, these States were Florida, Maine, Missouri, New Hampshire, Rhode Island, and Vermont. In subsequent years, additional States were added as follows: 1973—Colorado, Michigan, New York (exclusive of New York City); 1974—Illinois, Iowa, Kansas, Montana, Nebraska, Oregon, South Carolina; 1975—Maryland, Virginia, North Carolina, Tennessee, Louisiana, Oklahoma, and Wisconsin. Statistics for the remainder of the United States are based on information obtained from a 50-percent sample of microfilm copies of all certificates of live birth.

#### Residence Classification

All data included in this report are tabulated by place of residence. Births to U.S. residents occurring outside this country have not been re-allocated to the United States. Beginning in 1970, births to nonresidents of the United States occurring in the United States have been excluded from tabulations by place of residence. Prior to that year, births occurring in the United States to nonresident mothers were considered as births to residents of the place of occurrence. All tables showing time series include data for Alaska beginning with 1959 and for Hawaii beginning with 1960.

#### Geographic Divisions and Regions

The nine geographic divisions (as defined by the U.S. Bureau of the Census) and their component States are as follows:

<i>Division</i>	<i>States included</i>
New England . . . . .	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
Middle Atlantic . . . . .	New York, New Jersey, Pennsylvania
East North Central . . .	Ohio, Indiana, Illinois, Michigan, Wisconsin
West North Central . . .	Minnesota, Iowa, Missouri, North Dakota, Nebraska, Kansas
South Atlantic . . . . .	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida

Table 1. Areas reporting educational attainment of parents, dates of last live birth and fetal death, date last normal menses began (LMP), month of pregnancy prenatal care began, number of prenatal visits, and legitimacy status: each State, 1973-75

Area	Educational attainment of parents	Dates of last live birth and fetal death	Date last normal menses began (LMP)	Month of pregnancy prenatal care began	Number of prenatal visits	Legitimacy status
Alabama						X
Alaska	X	X	X			X
Arizona	X	X	X	X	X	X
Arkansas						X
California		X	X	X		
Colorado	X	X	X	X	X	X
Connecticut	X	X		X	X	
Delaware	X	X	X	X	X	X
District of Columbia	X	X	X	X	X	X
Florida	X	X	X	X	X	X
Georgia	X	<sup>1</sup> X	X	X	X	
Hawaii	X	X	X	X	X	X
Idaho						
Illinois	X	X	X	X	X	X
Indiana	X	X	X	X	X	X
Iowa	X	X	X	X	X	X
Kansas	X	X	X	X	X	X
Kentucky	X	X	X	X	X	X
Louisiana	X		X	X	X	X
Maine	X	X	X	X	X	X
Maryland	<sup>1</sup> X	<sup>1</sup> X	X	X		
Massachusetts	X	<sup>2</sup> X				
Michigan	X	X	X	X	X	X
Minnesota	X	X	X	X	X	X
Mississippi	X	X	X	X	X	X
Missouri	X	X	X	X	X	X

See footnotes at end of table.

Table 1. Areas reporting educational attainment of parents, dates of last live birth and fetal death, date last normal menses began (LMP), month of pregnancy prenatal care began, number of prenatal visits, and legitimacy status: each State, 1973-75—Con.

Area	Educational attainment of parents	Dates of last live birth and fetal death	Date last normal menses began (LMP)	Month of pregnancy prenatal care began	Number of prenatal visits	Legitimacy status
Montana	X	X	X	X	X	
Nebraska	X	X	X	X	X	X
Nevada	X	X	X	X	X	
New Hampshire	X	X	X	X	X	X
New Jersey	X	X	X	X	X	X
New Mexico						
New York	X	X	X	X		
North Carolina	X	X	X	X	X	X
North Dakota	X	X	X	X	X	X
Ohio	X	X	X	X		
Oklahoma	X	X	X	X	X	X
Oregon	X	X	X	X	X	X
Pennsylvania						X
Rhode Island	X	X	X	X	X	X
South Carolina	X	X	X	X	X	X
South Dakota	X	X	X	X	X	X
Tennessee	X	X	X	X	X	X
Texas				X		X
Utah	X	X	X	X	X	X
Vermont	X	X	X	X	X	
Virginia	X				X	X
Washington		X	X	X	X	X
West Virginia	X	X	X	X	X	X
Wisconsin	X	X		X	X	X
Wyoming	X	X	X	X	X	X

<sup>1</sup>Did not report in 1973.

<sup>2</sup>Certificate requests only date of last live birth.

East South Central . . .	Kentucky, Tennessee, Alabama, Mississippi
West South Central . . .	Arkansas, Louisiana, Oklahoma, Texas
Mountain . . . . .	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
Pacific . . . . .	Washington, Oregon, California, Alaska, Hawaii

The four geographic regions (as defined by the U.S. Bureau of the Census) are composed of the geographic divisions as follows:

<i>Region</i>	<i>Division</i>
Northeast . . . . .	New England, Middle Atlantic
North Central . . . . .	East North Central, West North Central
South . . . . .	South Atlantic, East South Central, West South Central
West . . . . .	Mountain, Pacific

### Population Bases

Populations used for computing illegitimacy rates for the United States exclude the Armed Forces overseas and persons living abroad but include the Armed Forces stationed in the United States. Rates for 1940 and 1950 are based on the population enumerated as of April 1 in the censuses of those years. Rates for all other years are based on the estimated midyear (July 1) population for the respective years. For further discussion see appendix I of the report, *Vital and Health Statistics*, "Trends in Illegitimacy, United States, 1940-1965," Series 21, Number 15, from the National Center for Health Statistics.

### Race and Color

In all cases, race or color refers to the child. Tabulations by color have two categories—"white" and "all other." Tabulations by race show data separately for the black population.





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