

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

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Introduction

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

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

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

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

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

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

Geographic distribution of Indian births

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

Age of mother and live-birth order

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

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

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

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

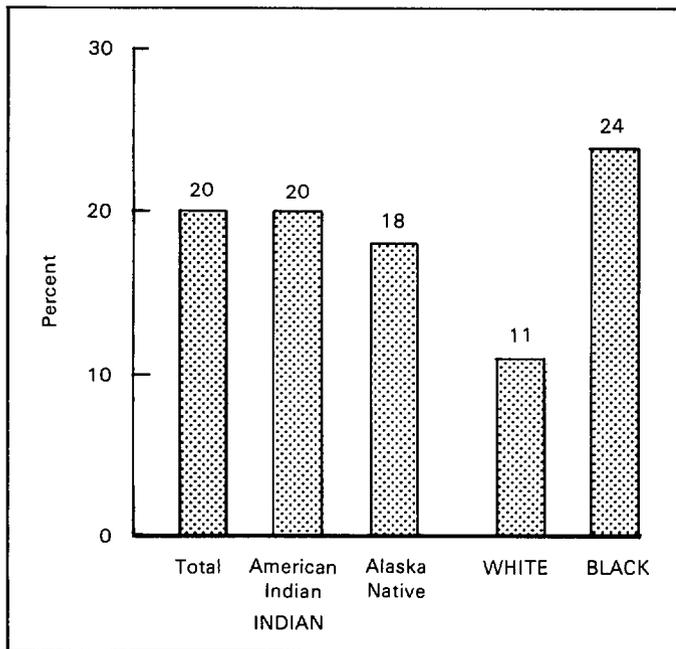


Figure 1. Percent of Indian, white, and black births to mothers under 20 years of age: United States, 1984

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

Educational attainment

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

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

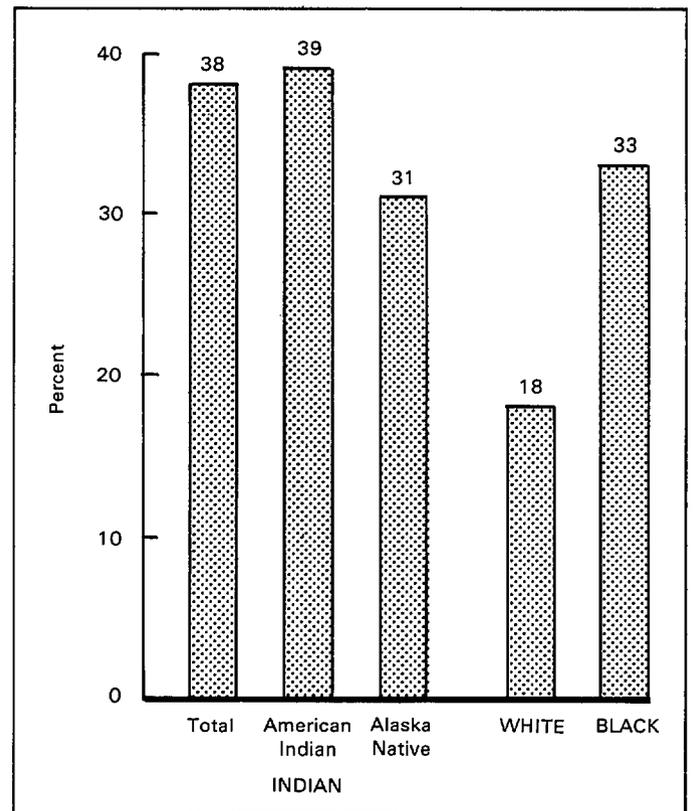


Figure 2. Percent of Indian, white, and black mothers with less than 12 years of school: 47 reporting States and the District of Columbia, 1984

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

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

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

Births to unmarried women

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

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

Sex ratio and multiple-birth ratio

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

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

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

Place of delivery and attendant at birth

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

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

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

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

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

Prenatal care

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

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

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

Birth weight and period of gestation

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

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

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

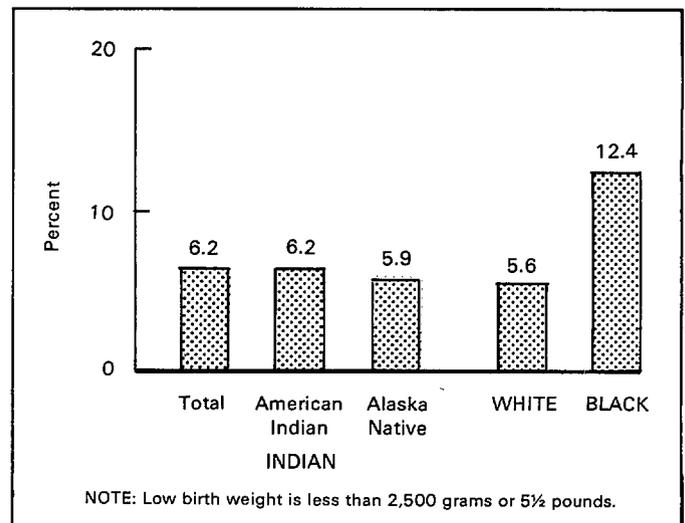


Figure 3. Percent of Indian, white, and black births of low birth weight: United States, 1984

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

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

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

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

Apgar score

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

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

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

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

Residence on reservations

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

characteristics of Indian mothers residing in reservation and nonreservation areas.

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

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

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

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

References

- ¹U.S. Bureau of the Census: *1980 Census of Population*, Supplementary Report, American Indian Areas and Alaska Native Villages, 1980. PC80-S1-13. Washington. U.S. Government Printing Office, Aug. 1984.
- ²U.S. Bureau of the Census: *1980 Census of Population*, Vol. 1, Characteristics of the Population, Chapter B, General Population Characteristics, Part 1, United States Summary. PC80-1-B1. Washington. U.S. Government Printing Office, May 1983.
- ³U.S. Bureau of the Census: *1980 Census of Population*, Vol. 1, Characteristics of the Population, Chapter C, General Social and Economic Characteristics, Part 1, United States Summary. PC80-1-C1. Washington. U.S. Government Printing Office, Dec. 1983.
- ⁴G. E. Markle: Sex ratio at birth: Values, variance, and some determinants. *Demography* 11(1):131-142, Feb. 1974.
- ⁵National Center for Health Statistics, R. L. Heuser: Multiple births, 1964. *Vital and Health Statistics*. Series 21, No. 14. DHEW Pub. No. (HRA) 76-1298. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1967.
- ⁶Indian Health Service: A comprehensive health care program for American Indians and Alaska natives. Public Health Service. U.S. Department of Health and Human Services.

Symbols

- - - Data not available
 - ... Category not applicable
 - Quantity zero
 - 0.0 Quantity more than zero but less than 0.05
 - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
 - * Figure does not meet standards of reliability or precision (when the base of the measure includes fewer than 20 events)
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Table 1. Number of American Indian, Alaska Native, white, and black births and percent change: United States, selected years, 1970-84

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

¹Includes races not shown separately.

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

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

¹Includes races not shown separately.

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

Age of mother	All races ¹	Indian				
		Total	American Indian	Alaska Native	White	Black
Percent distribution						
All ages.....	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years.....	0.3	0.4	0.4	0.2	0.1	1.0
15-19 years.....	12.8	19.7	19.8	17.5	11.0	22.7
15 years.....	0.7	0.9	0.9	0.6	0.4	1.8
16 years.....	1.4	2.3	2.3	1.6	1.1	3.2
17 years.....	2.4	3.9	3.9	3.3	2.0	4.6
18 years.....	3.5	5.5	5.5	5.2	3.1	6.0
19 years.....	4.7	7.2	7.2	6.7	4.3	7.1
20-24 years.....	31.1	36.9	37.0	35.4	30.7	34.3
25-29 years.....	31.8	25.1	25.0	26.9	33.1	24.8
30-34 years.....	17.9	12.6	12.5	14.4	18.8	12.5
35-39 years.....	5.3	4.5	4.5	4.8	5.4	4.1
40-49 years.....	0.8	0.8	0.8	1.0	0.7	0.7

¹Includes races not shown separately.

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

Live-birth order	All races ¹	Indian				
		Total	American Indian	Alaska Native	White	Black
Percent distribution						
All birth orders.....	100.0	100.0	100.0	100.0	100.0	100.0
1st birth.....	41.9	35.6	35.7	33.5	42.5	39.6
2d birth.....	33.1	28.6	28.6	28.1	33.9	29.6
3d birth.....	15.4	17.7	17.7	17.5	15.1	16.9
4th and higher order births.....	9.6	18.1	17.9	20.9	8.5	13.9

¹Includes races not shown separately.

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

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

¹Includes races not shown separately.

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

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

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

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

¹Includes races not shown separately.

²Births to unmarried women per 1,000 total live births.

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

⁴Births in multiple deliveries per 1,000 total live births.

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

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

¹Includes races not shown separately.²Includes births delivered en route to or on arrival at the hospital.³Includes births with place of delivery not stated.⁴Includes births with attendant not stated; these births are excluded from the computation of the percent distributions.

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

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

¹Includes races not shown separately.²Births with prenatal care not stated are excluded from the computation of the percent distributions.³Based on information from 49 reporting States and the District of Columbia. California did not require reporting of number of prenatal visits. Excludes births to mothers with no prenatal care.

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

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

¹Includes races not shown separately.

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

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

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

¹Includes races not shown separately.

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

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

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

¹Includes races not shown separately.

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

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

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

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

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

¹Includes races not shown separately.

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

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

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

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

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

Technical notes

Source of data

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

Racial classification

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

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

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

Reservation status

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

Computation of percents, medians, and ratios

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

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