
June 1998

TEEN MOTHERS

Selected Socio-Demographic Characteristics and Risk Factors





**United States
General Accounting Office
Washington, D.C. 20548**

**Health, Education, and
Human Services Division**

B-280170

June 30, 1998

The Honorable Charles B. Rangel
House of Representatives

Dear Mr. Rangel:

In 1995, 1 of every 8 of the almost 4 million babies born in the United States was born to a woman aged 19 or younger. Three-quarters of those teenage mothers were unmarried. Families started by teenagers received an estimated \$39 billion in federal assistance in fiscal year 1995 through programs such as Aid to Families With Dependent Children (AFDC), Medicaid, Food Stamps, and others.¹ Teenage parenting also has implications for the health and well-being of the mother and the child. Studies have shown that the children of teen mothers are at greater risk for lower birth weights, lower cognitive scores, and school failure. Studies also show that children of teen mothers have a greater likelihood of becoming teenage parents themselves. We reported in 1994 that a significant percentage of teen mothers who receive welfare do not have high school diplomas² and tend to have larger families³—characteristics associated with longer stays on welfare.

Recognizing the importance of this issue, the Congress, federal and state governments, and the private sector are encouraging and implementing initiatives to prevent teen pregnancies and births. The Congress recently enacted welfare reform legislation⁴ that contains provisions directed at reducing out-of-wedlock childbearing and welfare dependency and promoting abstinence education. In addition, the Department of Health and Human Services (HHS) is developing a national strategy to prevent teen pregnancy; state and local governments are implementing new strategies that they believe hold promise for addressing the problem; and private entities, such as the National Campaign to Prevent Teen Pregnancy, are supporting actions related to teenage childbearing. A better understanding of the characteristics of teen mothers and antecedents of teen motherhood

¹Advocates for Youth, Teen Pregnancy, the Case for Prevention: An Analysis of Recent Trends in Federal Expenditures Associated With Teenage Pregnancy (Washington, D.C.: Apr. 1998).

²Families on Welfare: Focus on Teenage Mothers Could Enhance Welfare Reform Efforts (GAO/HEHS-94-112, May 31, 1994).

³Families on Welfare: Teenage Mothers Least Likely to Become Self-Sufficient (GAO/HEHS-94-115, May 31, 1994).

⁴Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193, Aug. 22, 1996).

could help these efforts as public and private entities try to develop and implement more effective prevention strategies.

Because of the impact of teen pregnancies and births and your interest in teen mothers and their children, you asked us to provide social and demographic information about teen mothers. Specifically, we agreed to (1) show the trends in birth rates for teens; (2) provide a profile of teen mothers; and (3) identify factors, such as education or family background, that may influence the likelihood of teen motherhood. To provide this information, we relied on national birth certificate data and the most current analyses of four nationally representative surveys: the National Longitudinal Survey of Youth (NLSY), the National Education Longitudinal Study of 1988 (NELS:88), the National Survey of Family Growth (NSFG), and the National Household Survey on Drug Abuse (NHSDA). Limitations and lack of comparability among the various data sources restricted our ability to make comparisons or report by race and marital status in some cases. (For more information on our methods and data, see the appendix.) We conducted our work between July 1997 and May 1998 in accordance with generally accepted government auditing standards.

Results in Brief

Although the birth rate for teenage women decreased 41 percent from the late 1950s to 1995—paralleling the decline in the U.S. birth rate—the number of babies born to teenagers is still high (about 512,000 in 1995). Births to unmarried teenage mothers, however, more than quintupled as a proportion of total teen births over the same period. As of 1995, the teen birth rate was about 57 per thousand; however, rates varied considerably by subgroup. The birth rates for black and Hispanic teenage women are more than twice those for white teens.

In 1995, nearly half of teen mothers were white and most were aged 18 to 19 and unmarried. About two-thirds of recent teen mothers did not intend to get pregnant or have a child; however, about one-fifth of women who gave birth already had one child. Teenage mothers also graduate from high school at lower rates than all teen women. Sixty-four percent of teen mothers complete high school, compared with about 90 percent of all teen women.

Research studies that have examined the antecedents of teen motherhood have shown that limited involvement in school and some family background characteristics—such as family instability and declines in family income—are associated with an increased likelihood of teen

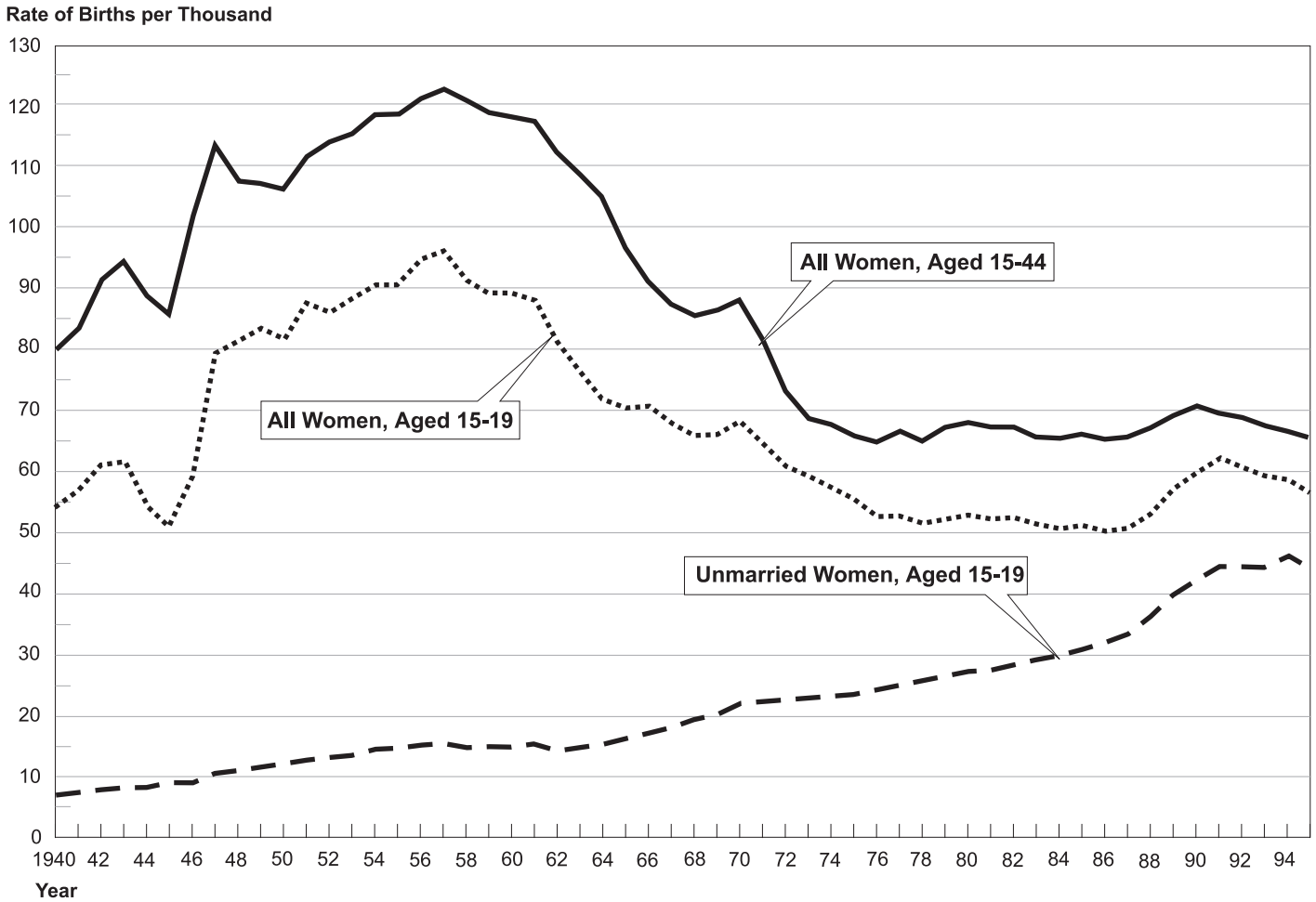
motherhood. The effect of most other factors varies among racial and ethnic groups.

Teen Birth Rates Have Declined, but Proportion of Unmarried Mothers Has Increased

Since the late 1950s, the birth rate of women aged 15 to 19 has decreased by about 41 percent overall. (One substantial increase started around the mid-1980s, then reversed itself in the early 1990s). The overall decrease in the teen birth rate parallels the overall decline in the U.S. birth rate as a whole, which has fallen 47 percent over the same time period. In contrast, the proportion of teen births outside of marriage has steadily increased over the same period (1957-95) from 14 percent to 78 percent of all teen births.⁵ (See fig. 1.)

⁵The National Center for Health Statistics defines a mother's marital status as follows: Women who have never been married or are divorced or widowed at the time of the birth are considered not married; women who are married but separated at the time of the birth are considered married.

Figure 1: U.S. Birth Rates, 1940-95



Sources: Data were derived from information found in S.J. Ventura and others, "Report of Final Natality Statistics, 1995," Monthly Vital Statistics Report, Vol. 45, No. 11, Supp. 2 (Hyattsville, Md.: National Center for Health Statistics, 1997); and U.S. Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1970, Part 1, No. 003-024-001209 (Washington, D.C.: Bureau of the Census, 1975).

Decline in Teen Birth Rate Parallels Decline in Birth Rate for All Women

In 1995, the most recent year for which final data are available,⁶ the annual birth rate for women aged 15 through 19 was approximately 57 per thousand, compared with 96 per thousand in 1957 when the rate was at its peak.⁷ (See fig. 1.) There was a similar decline in the birth rate for all women over the same time period. The rate fell from 123 per thousand to 66 per thousand for women aged 15 through 44, a decline of 47 percent.⁸

While the overall trend in the teen birth rate has been downward, fluctuations have occurred. The most dramatic increase began in 1986 after the teen birth rate had reached 50 per thousand, the lowest point in 40 years. Between 1986 and 1991, the rate increased by 24 percent before starting to decline again.⁹

Births to Unmarried Teens Have Steadily Increased

The percentage of births to unmarried teen women has increased substantially over the past several decades. In 1995, 78 percent of teen births were to unmarried women, compared with about 14 percent in 1957. This trend parallels a rise in births outside of marriage for the general population of women. Births to unmarried women of all ages had risen to 32 percent of the total in 1995 from about 5 percent in 1957.¹⁰

Birth Rates Vary Among Race and Age Groups and by Geographic Area

Teen birth rates in 1995 varied considerably by race, age, and geography. Rates for black and Hispanic teens were more than double those of white teens,¹¹ and older teens constituted nearly two-thirds of teens who gave birth in 1995. Higher rates of teen births were found in the southern and southwestern states.

Birth Rates Are Higher for Blacks and Hispanics Than for Whites

In 1995, birth rates for Hispanic and black teens were 107 and 99 per thousand, respectively—more than twice the rate for white teens at 39 per thousand.¹² Black and Hispanic women were also more likely to begin

⁶Final data on 1996 births is expected to be released by the National Center for Health Statistics later this year.

⁷Ventura, "Report of Final Natality Statistics, 1995."

⁸Ventura, "Report of Final Natality Statistics, 1995" and Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1970.

⁹Ventura, "Report of Final Natality Statistics, 1995."

¹⁰Ventura, "Report of Final Natality Statistics, 1995."

¹¹In this report "white" means non-Hispanic white and "black" means non-Hispanic black. "Hispanic" designates an ethnicity; Hispanic individuals can be of any race.

¹²Ventura, "Report of Final Natality Statistics, 1995."

their families at younger ages. Compared with white teens, they were twice as likely to give birth by age 20.¹³

Birth Rates Are Higher for Older Teens

In 1995, the birth rates for teen women aged 18 to 19 were more than double the rates for those aged 15 to 17, regardless of race. (See table 1.) A similar pattern is evident among unmarried teens, where older teens had birth rates about double those of younger teenage women.

Table 1: Birth Rate per Thousand Women by Age, Race, and Marital Status, 1995

Race	All		Unmarried	
	Aged 15-17	Aged 18-19	Aged 15-17	Aged 18-19
White	22	66	18	45
Black	70	142	69	131
Hispanic	73	158	56	118
Totals	36	89	31	68

Note: Rates are calculated per thousand women in a specified group and are rounded.

Source: Ventura, "Report of Final Natality Statistics, 1995."

Teen Birth Rates Are Higher in the Southern and Southwestern States

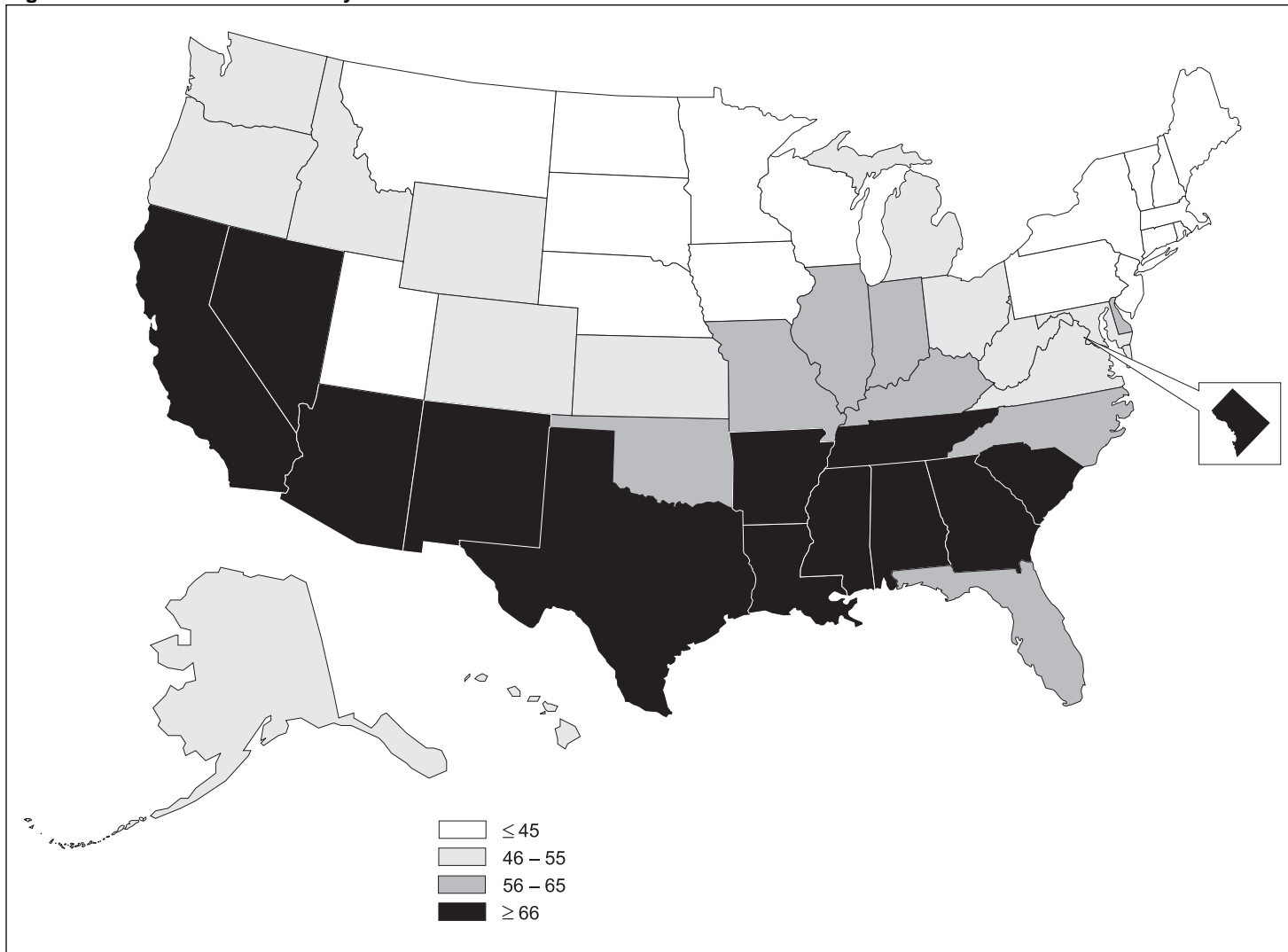
In 1995, teen birth rates were the lowest in the northern states and highest in the South and the Southwest. (See fig. 2.) The states with the lowest rates had 45 or fewer births per thousand teen women while the states with the highest rates had 66 or more births per thousand. The 12 highest rates, which are concentrated in the southern and southwestern states, are 1.5 times the lowest rates in the northern states.¹⁴ A recent analysis of these patterns shows that teen birth-rate variations by geographic area correspond to the racial and ethnic distributions in the United States—higher numbers of blacks and Hispanics live in southern and southwestern states.¹⁵

¹³Child Trends, Inc., Facts at a Glance (Washington, D.C.: Oct. 1997).

¹⁴Child Trends, Facts at a Glance.

¹⁵"State-Specific Birth Rates for Teenagers—United States, 1990-96," Morbidity and Mortality Weekly Report, Vol. 46, No. 36 (Sept. 12, 1997).

Figure 2: 1995 Teen Birth Rates by State



Note: Birth rates are per thousand women, aged 15 to 19.

Source: Derived from information in Child Trends, Facts at a Glance.

A comparison of 1990 urban and rural teen birth rates for eight southeastern states shows that rural teen birth rates were higher than urban rates in three of four race and age categories.¹⁶ Among white

¹⁶T. Bennett and others, "Rural Adolescent Pregnancy: A View From the South," Family Planning Perspectives, Vol. 29, No. 6 (Nov.-Dec. 1997).

women aged 15 to 17 and 18 to 19 and black women aged 18 to 19, those who lived in rural areas had higher birth rates than those who lived in urban areas. Only black women aged 15 through 17 had higher rates in urban areas. The study links the higher rural birth rates to a relatively lower use of abortion in rural areas.

Profile of Teen Mothers

This profile provides descriptive characteristics of teen mothers who gave birth in the 1990s. Of teens who gave birth in 1995, almost half were white and most were age 18 or 19 and unmarried. About two-thirds of teen births were the result of an unintended pregnancy, and many births (21 percent) were a second or later child. About two-thirds of teen mothers graduated from high school; however, teen mothers graduated at substantially lower rates than teen women without children. (See table 2.) Furthermore, teen mothers reported drug use in the past month that was similar to that of other women their age. Also, 28 percent of white teen mothers reported smoking tobacco during their pregnancy, compared with 5 percent of black and Hispanic mothers.¹⁷

¹⁷While earlier information in this report is based on birth rates (numbers of births per thousand women), this table provides percentage distribution of teen mothers across several background and outcome characteristics.

**Table 2: Profile of Teenage Mothers
Who Gave Birth in the 1990s**

Numbers in percent				
	All	White	Black	Hispanic
Total number of teen mothers	492,000 ^a	233,000	137,000	122,000
Age at time of birth^b				
Under 15	2	1	4	3
15-17	38	34	42	40
18-19	60	65	53	57
Marital status at time of birth^b				
Married	25	32	5	32
Unmarried	75	68	95	68
First or later birth^b				
First birth	79	83	74	77
Later birth	21	17	26	23
Conception intended or unintended^c				
Intended	35	33	25	54
Unintended	65	67	75	46
High school completion^d				
Completed high school	64			
Did not complete high school	36			
Welfare receipt within 5 years of birth^e				
Received	49			
Did not receive	51			
Insurance coverage for birth^f				
Medicaid	69			
Some private	26			
Self	4			

(Table notes on next page)

^aThe data exclude about 21,000 births to races other than white, black, and Hispanic and those of unknown race. S.J. Ventura and others, "Report of Final Natality Statistics, 1995," Monthly Vital Statistics Report, Vol. 45, No. 11, Supp. 2 (Hyattsville, Md.: National Center for Health Statistics, 1997).

^bThese characteristics reflect only 1995 natality data.

^cJ.C. Abma and others, "Fertility, Family Planning, and Women's Health: New Data From the 1995 National Survey of Family Growth," Vital and Health Statistics, PHS 97-1995, Series 23, No. 19 (Hyattsville, Md.: HHS, 1997). The question asked about live births to teenage women in the 5 years before the survey.

^dNational Center for Education Statistics, "The Relationship Between the Parental and Marital Experiences of 1988 Eighth-Grade Girls and High School Completion as of 1994," Statistics in Brief, NCES 98-093 (Washington, D.C.: 1998). The survey upon which this study is based, NELS:88, represents U.S. eighth-graders in 1988 who should have graduated from high school in 1992.

^eThe Congressional Budget Office calculated welfare receipt (AFDC only) from NLSY data. Sources of Support for Adolescent Mothers, U.S. Congressional Budget Office (Sept. 1990).

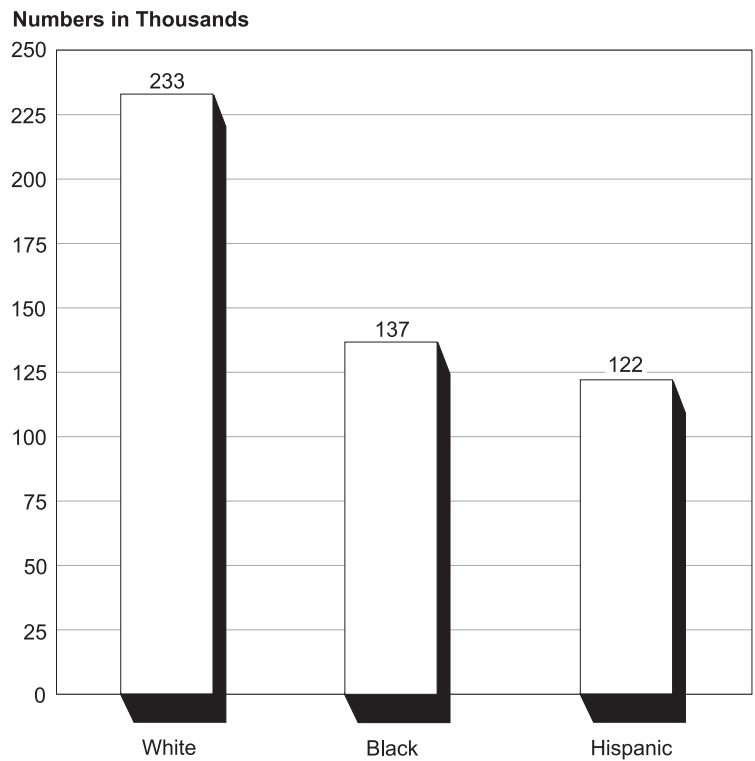
^fJ.C. Abma, "Fertility, Family Planning, and Women's Health." This source presents insurance coverage for the most recent live birth in the last 5 years. "Medicaid" includes Medicaid and "other government sources."

Nearly Half of Teen Mothers Are White, and Most Are Age 18 or Older and Unmarried

Almost half of the 512,000 births¹⁸ in 1995 (233,000) were to white teen mothers. The remainder included an almost even distribution of births between blacks (137,000) and Hispanics (122,000). (See fig. 3.)

¹⁸S.J. Ventura and others, "Births to Unmarried Mothers: United States, 1980-92," Vital and Health Statistics, Series 21, No. 53 (Hyattsville, Md.: National Center for Health Statistics, 1995) and personal communication with the lead author. This number includes about 21,000 births to teenagers that year for which the race or ethnicity is either unknown or is other than black, white, or Hispanic.

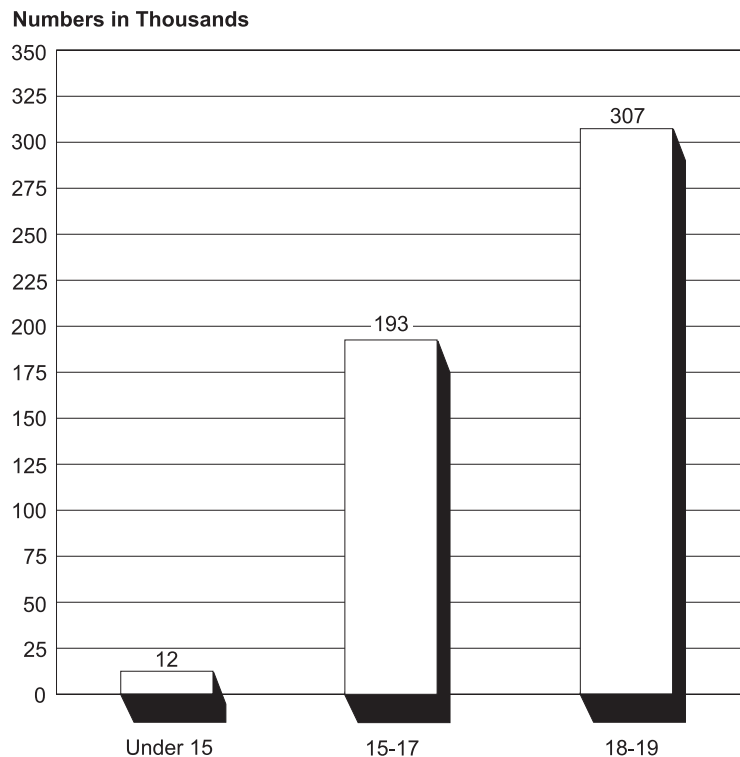
Figure 3: Number of Teen Mothers, by Race, in 1995



Source: Ventura, "Report of Final Natality Statistics, 1995."

Births to teen mothers were predominantly to older teens. In 1995, about 60 percent of all children born to teens—married and unmarried—were born to 18- and 19-year-olds. Of the remaining 40 percent born to younger teenage women, most were born to women aged 15 to 17, with just slightly more than 12,000 born to women under age 15. (See table 2 and fig. 4.)

Figure 4: Number of Teen Mothers, by Age, in 1995



Note: This figure includes about 21,000 births to teenagers that year for which the race or ethnicity is either unknown or is other than black, white, or Hispanic.

Source: Ventura, "Report of Final Natality Statistics, 1995."

About three-fourths of all teenage women who gave birth were unmarried at the time of the birth. Black teen mothers were predominantly unmarried (95 percent), while 68 percent of white and 68 percent of Hispanic teen mothers were unmarried at the time of the birth.

Many Teens Who Gave Birth in 1995 Already Had at Least One Child

In 1995, more than one-fifth of all teen births in the United States were to teenage women who had already given birth to at least one child. (See table 2.) The highest proportions of second or later births were among 18- and 19-year-olds. In this age group, 36 percent of black teen births, 30 percent of Hispanic teen births, and 21 percent of white teen births were a second or later child. The chance of the birth being a second or

later birth was similar for all teens, regardless of race, age, or marital status. (See table 3.)

Table 3: Percent and Number of Second or Later Teen Births by Age and Race, 1995

Race	Under age 15		Aged 15-17		Aged 18-19	
	Percent	Number	Percent	Number	Percent	Number
White	1	28	8	6,119	21	32,457
Black	3	158	16	9,303	36	26,491
Hispanic	3	100	14	6,689	30	20,908
Total	2	286	12	22,111	27	79,856

Note: Births for which birth order was not stated are counted as first births in each race and age category. Excluded are births for which race is not known and births to other racial groups.

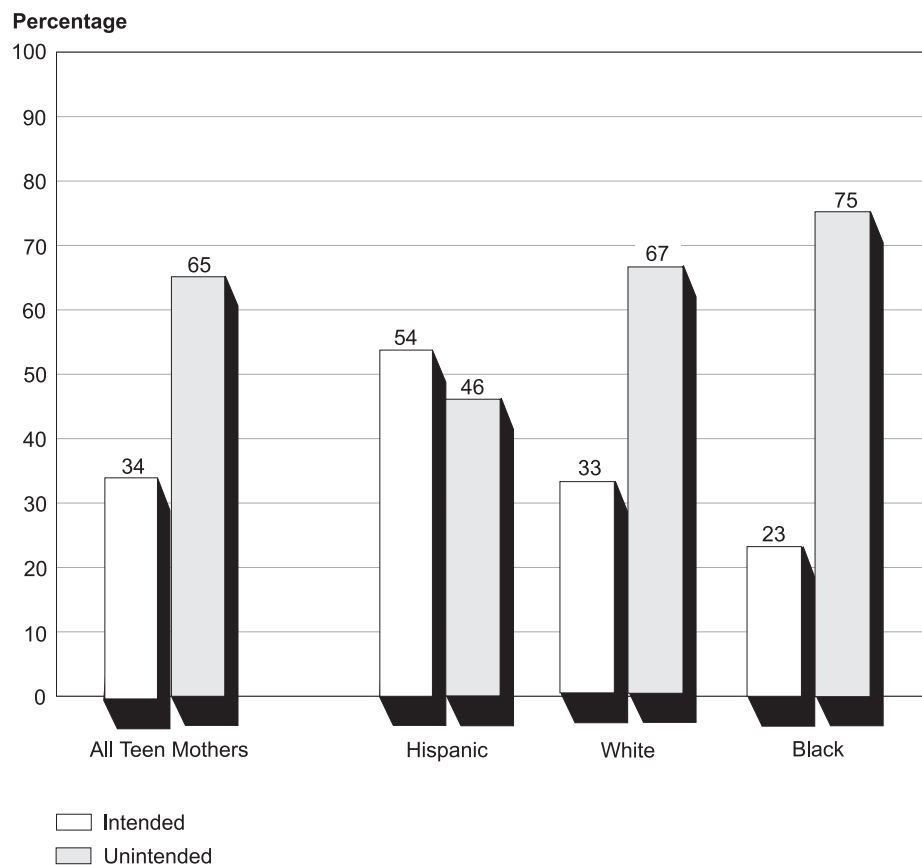
Source: Calculated from data in Ventura, "Report of Final Natality Statistics, 1995."

Most Teen Births Are the Result of Unintended Pregnancies

A high percentage of births to teens in the United States result from unintended pregnancies.¹⁹ Between 1990 and 1995, 65 percent of births to teenage mothers were reported as unintended, whereas about one-third of all U.S. births were reported as unintended in that period. From 1990 to 1995, about 75 percent of births to black teen mothers, 67 percent to white teen mothers, and 46 percent to Hispanic teen mothers were reported as unintended. (See table 2 and fig. 5.)

¹⁹“Unintended births” result from mistimed and unwanted pregnancies. “Intended births,” by contrast, are those that occurred when the mother intended to have a child at the time she conceived.

Figure 5: Percentage of Intended and Unintended Births to Mothers Under Age 20, by Race



Source: J.C. Abma and others, "Fertility, Family Planning, and Women's Health: New Data From the 1995 National Survey of Family Growth," *Vital and Health Statistics*, Series 23, No. 19 (Hyattsville, Md.: HHS, 1997).

About Two-Thirds of Teen Mothers Complete High School

Generally, women who give birth in their teens have substantially lower high school graduation rates than those who do not. A recent education study shows that about 64 percent of teen mothers graduated from high school or earned a general equivalency diploma within 2 years after the time they would have graduated, compared with about 94 percent of teenage women who did not give birth.²⁰ An older study similarly found that less than 60 percent of teen mothers graduated from high school by

²⁰"The Relationship Between the Parental and Marital Experiences of 1988 Eighth-Grade Girls and High School Completion as of 1994," *Statistics in Brief*, NCES 98-093 (Washington, D.C.: National Center for Education Statistics, 1998). This study used expected high school graduation date as an approximation for age.

age 25, compared with 90 percent of women who did not have a child in their teens.²¹

Also, high school completion rates among teen mothers vary considerably by race. Black teen mothers—in both a 1990s study and a 1970s study—had the highest high school completion rates compared with whites and Hispanics.

Half of Teen Mothers Receive Welfare Within 5 Years of Giving Birth

Research shows that a large percentage of teenage mothers eventually become welfare recipients. Data from a 1990 Congressional Budget Office report show that almost half of all teen mothers and three-quarters of unmarried teen mothers received AFDC within 5 years of giving birth.²² By contrast, only about one-quarter of married teen mothers received AFDC during the same time period. In our 1994 report, we similarly found that women who gave birth as teenagers made up nearly half of the unmarried AFDC caseload.²³ Also, survey data from 1995 show that 69 percent of births to teens in a 5-year period were paid for by Medicaid or other government sources.

Teen Mothers' Drug Use Is Similar to Other Teen Women

Substance use among teen mothers is comparable to that for other women their age. In a national survey, about one-sixth of teen mothers aged 15 to 19 reported any illicit drug use in the past month, while about one-third reported alcohol and one-third cigarette use during that time. Similar percentages of women without children in those age groups reported using those substances in the past month.²⁴

²¹N. Ahn, "Teenage Childbearing and High School Completion: Accounting for Individual Heterogeneity," *Family Planning Perspectives*, Vol. 26, No. 1 (Jan.-Feb. 1994).

²²Sources of Support for Adolescent Mothers, U.S. Congressional Budget Office (Washington, D.C.: Sept. 1990).

²³GAO/HEHS-94-115, May 31, 1994.

²⁴These figures are from 3 years (1994-96) of the National Household Survey on Drug Abuse, provided upon request by Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies. Illicit drug use includes any nonmedical use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or psychotherapeutic drugs. Rates of use of illegal drugs, alcohol, or tobacco may be low as a result of standard survey methods that rely on the individual to honestly report usage.

Table 4: Percentage of Women Aged 15 to 19 Reporting Past Month Drug Use, 1994-96

Drug type	Total	With children (standardized) ^a	Without children
Alcohol	36	33	36
Cigarettes	30	32	30
Any illicit	14	16	14

Note: SAMHSA, Office of Applied Studies, supplied data upon request. Comparisons between women with and without children found no statistically significant differences (.05).

^aThe standardized prevalence for women with children presents what would happen if the relative number of women at ages 15, 16, 17, 18, and 19 was the same as the number of women without children at those ages.

Smoking during the pregnancy, by contrast, appears lower for teens than for their peers with children. Compared with the one-third of teen mothers aged 15 to 17 who smoke, about 17 percent of mothers that age who gave birth in 1995 reported smoking while they were pregnant. However, smoking cigarettes during pregnancy varied by race or ethnicity;²⁵ about 28 percent of white teen mothers reported smoking during pregnancy, compared with about 5 percent of black or Hispanic teenage mothers.

School Involvement and Family Background Influence the Likelihood of Teenage Motherhood

Certain social factors, such as the teen's level of school involvement or family background and income, appear to influence the likelihood that a woman will give birth in her teenage years. Generally, lower school involvement, unstable family structure, and declining family income are associated with an increased likelihood of teen births. According to one study, teens who experienced multiple risk factors such as early school failure, poverty, or family dysfunction were more likely to become teenage mothers.²⁶

Beyond a few factors, which had similar effects across the groups studied, the impact of other social factors on the likelihood of teen births varied by racial or ethnic group. Family instability, such as divorce and remarriage; declining family income, such as with job loss; and lower standardized test scores were associated with an increased likelihood of a teen birth,²⁷ while

²⁵Ventura, "Report of Final Natality Statistics, 1995."

²⁶Child Trends, Facts at a Glance. A descriptive study of eighth-graders found that those who did not demonstrate any of these characteristics had the lowest probability of a teenage birth; as the number of risk factors increased, the probability of a teenage birth increased. Teenage women with three or more of the risk factors had a 50-percent chance of a teenage birth.

²⁷L. Wu, "Effects of Family Instability, Income, and Income Instability on the Risk of a Premarital Birth," *American Sociological Review*, Vol. 61 (June 1996). This analysis did not include Hispanics.

family stability, increasing family income, and higher standardized test scores were associated with a reduced likelihood of birth for each group studied. Staying in school and living in two-parent families were associated with a lower risk of birth for white and Hispanic teens but had no effect for black teens. Socioeconomic status (SES) also had a mixed effect across racial groups. Lower SES was associated with an increased likelihood of a teen birth for Hispanic teens, a decreased likelihood for black teens, and had no effect on white teens. Higher SES had the opposite effect. Living in female-headed single-parent families was associated with an increased likelihood of a birth for black teens but had no effect for white teens. And only white teens were more likely to become teen mothers if their mothers had also been teen mothers. (See fig. 6.)

Figure 6: Effects of School and Family Background Factors on the Likelihood of Teen Births

Factor ^a		White	Black	Hispanic
School	Dropping Out	↑	□	↑
	Lower Test Scores	↑	↑	↑
	Negative Teacher Evaluation	□	↑	□
	Lower Grades	↑	↑	□
	Limited Postsecondary Education Plans	□	↑	↑
Family Background	Family Instability ^b	↑	↑	
	Two-Parent Household	↓	□	↓
	Mother-Only Household ^b	□	↑	
	Mother Was Teen Mother	↑	□	□
	Lower SES ^c	□	↓	↑
	Declining Income ^b	↑	↑	

- ↑ Significant Association With an Increased Likelihood of Teen Birth
- ↓ Significant Association With a Decreased Likelihood of Teen Birth
- No Effect

Note: Data for this figure are drawn from two recent studies based on large-scale nationally representative longitudinal data. We report only their statistically significant findings. These studies use a multivariate analysis, that is, net of or controlling for background factors in each analysis. Wu's analysis, which covers "Family Instability," "Mother-Only Household," and "Declining Income," does not contain data for Hispanics.

^aJ. Manlove, "The Influence of High School Dropout and School Disengagement on the Risk of School-Age Pregnancy," *Journal of Research on Adolescence* (1998). School factors are based on an analysis of women who were in the eighth grade in 1988 (NELS:88 data), and most factors were measured in the eighth grade. By contrast, dropping out was measured over the school years before a school-aged pregnancy leading to a live birth.

^bL. Wu, "Effects of Family Instability, Income, and Income Instability on the Risk of a Premarital Birth," *American Sociological Review*, Vol. 61 (June 1996). Dr. Wu's data are from the 1979 NLSY survey.

^cThe SES measure is a composite of family income and parental education and occupation.

Limited Involvement in School Is Associated With Greater Likelihood of Teen Birth

Research indicates a link between school involvement and teen births. A national study of girls who were eighth-graders in 1988, found several measures of school involvement, including dropping out, were associated with a greater risk of a subsequent teen birth.²⁸ However, only one measure—lower standardized test scores—was consistently associated with an increased risk of a teen birth in all racial and ethnic groups. Other measures, such as lower grades or limited postsecondary education plans, were associated with an increased likelihood of a teenaged birth for one or more races but not for all. For example, lower grades in school were associated with an increased likelihood of a school-aged pregnancy leading to a birth for white and black teens.²⁹ (See fig. 6.)

Teenage women who dropped out of school were more likely than those who stayed in school to become pregnant and give birth in their teens. However, an association between dropping out of school and teen pregnancy was observed only among whites and Hispanics. After controlling for family background and measures of school involvement and performance, white and Hispanic teens who dropped out of school were about 1.5 times more likely to become a teenage mother than white and Hispanic teens who stayed in school. For black teens, drop-out status had no effect on teen pregnancy. Moreover, of school-age teens who gave birth, more than one quarter (28 percent) dropped out of school prior to pregnancy; an additional 30 percent dropped out after the pregnancy or birth of a child, and 42 percent stayed in school. These findings are consistent with those of a study of teen experiences in the 1970s and early 1980s.

Limited postsecondary education plans were associated with a greater likelihood of a school-aged birth for black and Hispanic teens.

²⁸J. Manlove, "The Influence of High School Dropout and School Disengagement on the Risk of School-Age Pregnancy," *Journal of Research on Adolescence* (1998). Her sample from the NELS:88 study comprises women who had a pregnancy before 12th grade leading to a live birth.

²⁹J. Manlove, "The Influence of High School Dropout and School Disengagement." The age at pregnancy was constructed by subtracting 9 months from the date of the first birth.

Unstable Family Structure and Households Headed by Women Are Associated With Greater Likelihood of Teen Birth

Descriptive studies have generally found a lower risk of teen birth in two-parent families than with other family types.³⁰ A study of the effects of changes in family structure—such as divorce, appearance of a stepparent, going to live with grandparents or in an institution—on teen women found that the greater the number of such changes, the greater the probability of an early teen birth, regardless of family income.³¹ (See fig. 6.)

The impact of family structure or family instability, however, varied by race or ethnicity. For example, one study found that being born into and reared through early childhood in a single-parent family headed by a woman was associated with higher likelihood of a birth for black teens but not for white teens.³² Another recent study found that living in a two-parent “intact” family during the eighth grade was associated with less risk of birth for white and Hispanic teens—but not for black teens.³³ (See fig. 6.) Another factor associated with teen births only among white teens was having a parent who was also a teenage mother.

Influence of Family Income on Likelihood of Becoming a Teen Mother Varies

Some descriptive research suggests that teens from lower income families have a greater likelihood of having a teen birth than teens from higher-income families. However, recent multivariate analysis shows that the effect of SES on teen births varies by race and ethnicity. For example, a descriptive analysis of 1988 eighth-graders found that less than 7 percent of those from families with high incomes had had a child by the age of 20, compared with about 37 percent of teenage women from low-income families.³⁴ However, after controlling for a number of family background characteristics, lower SES was associated with an increased risk of teen pregnancy for Hispanics, lower risk for blacks, but had no effect for whites.³⁵ (See fig. 6.) Higher SES had the opposite effect for Hispanics and blacks.

³⁰K.A. Moore and others, *A Statistical Portrait of Adolescent Sex, Contraception, and Childbearing* (Washington, D.C.: National Campaign to Prevent Teen Pregnancy, 1998); and Sara McLanahan and Gary Sandefur, *Growing Up With a Single Parent: What Hurts, What Helps* (Cambridge, Mass.: Harvard University Press, 1994).

³¹L. Wu, “Effects of Family Instability, Income, and Income Instability on the Risk of a Premarital Birth,” *American Sociological Review*, Vol. 61 (June 1996). Dr. Wu’s analysis controls for multiple family background characteristics, using data from NLSY.

³²Wu, “Effects of Family Instability.”

³³Manlove, “The Influence of High School Dropout and School Disengagement.”

³⁴Child Trends, *Facts at a Glance*.

³⁵Manlove, “The Influence of High School Dropout and School Disengagement.”

An analysis of earlier data (1970s and early 1980s), which also controlled for a number of family background characteristics, found a relationship between a decline in family income and the risk of teen births. For example, job loss or other types of income losses were associated with a higher likelihood of a birth among black and white teens.³⁶ (See fig. 6.)

Comments From External Reviewers

External experts on the data presented reviewed a draft of this report. We included their comments where appropriate.

As agreed with your office, unless you publicly announce its contents earlier, we will make no further distribution of this report until 30 days from its issue date. At that time we will send copies to the Secretary of Health and Human Services and other interested parties. We will also make copies available to others upon request.

Major contributors were James O. McClyde, Assistant Director, and Barbara Chapman, Evaluator-in-Charge. Please contact me on (202) 512-7119 if you or your staff have any questions about this report.

Sincerely yours,



Marsha Lillie-Blanton
Associate Director
Health Services Quality and
Public Health Issues

³⁶Wu, "Effects of Family Instability."

Scope, Methodology, and Data Limitations

We used studies based primarily on nationally representative data sources to profile mothers who gave birth before age 20. We relied primarily on two types of data sources: national birth certificate information and the most current analyses and data tables from longitudinal surveys and other recent surveys. The national birth certificate data—collected by states and then transmitted to the National Center for Health Statistics for processing and publication—provides comprehensive information on U.S. birth rates over time.³⁷ Much of the information in this report—including birth rates and trends, marital status, first or later birth, and tobacco use during pregnancy—was derived or calculated from the published 1995 natality statistics.³⁸ For example, we calculated the percentage of teen births that were second or later births by racial and ethnic group. We requested that Substance Abuse and Mental Health Services Administration (SAMHSA) do a special analysis of data from the National Household Survey on Drug Abuse (NHSDA) 1994-96 in order to compare the drug use of teen mothers with that of teen women without children.

To further develop a profile and identify factors associated with teen motherhood, we reviewed studies of nationally representative databases that link information regarding a teen birth to a mother's education and family background. Specifically, we used the National Longitudinal Survey of Youth (NLSY) launched in 1979, which surveyed a sample of 14- to 21-year-olds and reinterviewed them annually. A more recent survey, the National Education Longitudinal Study of 1988 (NELS:88), followed a nationally representative sample of eighth graders to 1994. We used data from this more recent cohort, particularly in the discussion of education-related issues. We obtained additional information from the National Survey of Family Growth (NSFG), conducted in 1995, as well as several of the NHSDAs done in the 1990s and studies that used them. (See table I.1.)

³⁷The birth certificate data are incomplete on pregnancies that result in miscarriage or adoption and contain no information on abortions.

³⁸All but five states record the mother's marital status on the birth certificate. To determine the mother's marital status in the remaining five states, a more complex protocol was used. S. J. Ventura and others, "Report of Final Natality Statistics, 1995," *Monthly Vital Statistics Report*, Vol. 45, No. 11, Supp. 2 (Hyattsville, Md.: National Center for Health Statistics, 1997).

**Appendix
Scope, Methodology, and Data Limitations**

Table I.1: Major Information Sources

Data source	Years of data used	Brief description of source
NELS:88	1988, 1990, 1992, 1994	A school-based study that followed girls who were eighth-graders in 1988
NLSY	1979-1989	A labor survey that followed a cohort of youth aged 14 to 21 in 1979
NHSDA	1994-96	An annual household survey of drug use
NSFG	1995	A periodic fertility survey of women aged 15 to 44
Birth certificate information	Annual	Information for each birth compiled by HHS from state-submitted data

Limitations and lack of comparability among the various data sources restricted our ability to make comparisons or report by race and marital status in some cases. Because information was more readily available on teen mothers as a whole, and three-quarters of teen births in 1995 were to unmarried teens, we often present data on all teen mothers in lieu of specific information on unmarried teen mothers. With few exceptions, the information we present represents the experiences of U.S. teen women in the 1990s.

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