



Health Aspects of Pregnancy and Childbirth

United States, 1982

Statistics collected in 1982 are presented on the timing of the first prenatal visit, the source of prenatal care, smoking and alcohol use during pregnancy, low birth weight, and how delivery was paid for. The data are shown by characteristics of the mother and the pregnancy.

**Data From the National Survey of
Family Growth
Series 23, No. 16**

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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 (see Technical notes)
-

Health Aspects of Pregnancy and Childbirth

by Elsie R. Pamuk, M.A. and William D. Mosher, Ph.D., Division of Vital Statistics

Introduction

In 1900, the infant mortality rate in the United States was about 100 infant deaths per 1,000 live births (Shapiro, Schlesinger, and Nesbitt, 1968). At that time, more than half of infant deaths were postneonatal (after the first 27 days of life) and were due primarily to the infant's environment, especially infections causing diarrhea and respiratory illnesses (McCormick, 1985; NCHS, 1986a; Shapiro, Schlesinger, and Nesbitt, 1968). Between 1900 and 1950, infant mortality rates declined by about 70 percent, to 29 per 1,000 births. In 1950, about two-thirds of infant deaths were neonatal (during the first 27 days of life) (NCHS, 1986a). Between 1950 and 1982, the infant mortality rate fell from 29 to 11.5 per 1,000 live births, but neonatal deaths still made up two-thirds of infant deaths. The major causes of neonatal death stem from conditions that develop during pregnancy (Brown, 1985; McCormick, 1985; Shapiro, Schlesinger, and Nesbitt, 1968). Low birth weight was a factor in two-thirds of neonatal deaths in 1982, just as in 1950 (Brown, 1985; McCormick, 1985; Shapiro, Schlesinger, and Nesbitt, 1968; Shapiro et al., 1980).

Infant mortality for births to white women has been substantially lower than for births to women of other races in the 20th century (NCHS, 1986a; Shapiro, Schlesinger, and Nesbitt, 1968). Further, the 1982 rate was higher in the United States than in a number of other industrialized countries (Shapiro et al., 1980). Progress in reducing infant mortality probably will depend on reducing neonatal mortality and the conditions in pregnancy that cause it (Behrman, 1985; Brown, 1985; Institute of Medicine, 1985; McCormick, 1985; NCHS, 1981a; Shapiro et al., 1980). Accordingly, this report presents the first comprehensive analysis of the data from the National Survey of Family Growth on health aspects of pregnancy and childbirth. These measures of health may be useful in assessing the risk of infant mortality among various groups in the United States.

The National Survey of Family Growth (NSFG), a periodic survey conducted by the National Center for Health Statistics, is designed to provide information on fertility, family planning, and aspects of maternal and infant health that are closely related to childbearing. This report presents a wide range of data from the survey on health aspects of pregnancy and childbirth, including:

- The number of months women had been pregnant when they began receiving prenatal care for that pregnancy (tables 1–6).
- Whether they received their prenatal care for that pregnancy from a private doctor, a hospital clinic, or another kind of clinic (tables 7–12).
- Whether women smoked during their most recent pregnancy, and if so, how much they smoked (tables 13–18).
- Whether women drank alcoholic beverages during their most recent pregnancy, and if so, how often (tables 19–24).
- The proportion of babies weighing 5½ pounds or less at birth (tables 25 and 26).
- How deliveries were paid for (sources of payment, tables 27–32).
- Trends in sources of payment for delivery of live births in 1973 and 1982 (table 33).

Note that the measures of health in this report are arranged in temporal order—that is, the order in which they usually occur: from first prenatal visit (tables 1–12) to smoking and drinking during pregnancy (tables 13–24) to birth weight (tables 25 and 26) to sources of payment for the birth (tables 27–33). These data are shown separately for pregnancies of women of all races, of white women, and of black women, in relation to

- The mother's age and marital status when the pregnancy ended.
- Birth order or pregnancy order.
- Whether the pregnancy had been wanted by the mother at the time of conception.

The data are also shown by selected characteristics of the woman at the date of interview, including geographic region, education, most recent occupation, income (as a percent of poverty level), whether she had received Medicaid, and residence (metropolitan or nonmetropolitan). The sample size was not large enough to study pregnancies of Hispanic women in the same amount of detail as for white and for black women, but data are shown for Hispanic women in the text tables.

In tables 1-12 and 25-33 of this report, data are presented on prenatal care, low birth weight, and how delivery was paid for. In these tables, the unit of analysis is the pregnancy or birth. Women who had more than one pregnancy are included once for each pregnancy, and women who had never been pregnant are excluded entirely. For example, a woman who had her first birth in 1979 at age 19 and her second birth in 1981 at age 21 would be counted twice in tables 1-12 and 25-33. For convenience in writing, the word "women" is sometimes used in the text when discussing data in tables 1-12 and 25-33, but the reader should note that these tables refer to pregnancies or births.

The range and richness of the data shown here are not matched in any other source of national information. For example, this report contains data on miscarriages and

stillbirths as well as live births. This report also contains information on income, occupation, and receipt of Medicaid, which is not available in other published reports based on national data sources.

The data shown here may be useful for measuring the adequacy of medical care during pregnancy, the sources women use to obtain and pay for prenatal and obstetric services, certain health practices during pregnancy, and birth weight, one important measure of pregnancy outcome.

Certain other measures related to pregnancy outcome were analyzed in a previous report (NCHS, 1987a); those measures included infertility, surgical sterilization, pelvic inflammatory disease, spontaneous pregnancy loss, and cesarean section.

Summary of principal findings

There are large differences by race and Hispanic origin in many aspects of the health of women during pregnancy and in the health of their infants. This is why data are presented separately for pregnancies of white, black, and Hispanic women. One major finding of this report is that the large race differences observed in timing of the first prenatal visit, in rates of low birth weight, and in sources of payment for delivery were limited primarily to ever married women.

Timing of the first prenatal visit—Black women were less likely to receive early prenatal care than white women. Nearly 70 percent of white women began prenatal care in the first trimester of pregnancy, compared with only 53 percent of black women (figure 1). However, the percents receiving early prenatal care were similar by race in the highest categories of education, income, and occupational status.

For both white and black births, prenatal care was less likely to begin in the first trimester if the mother was a

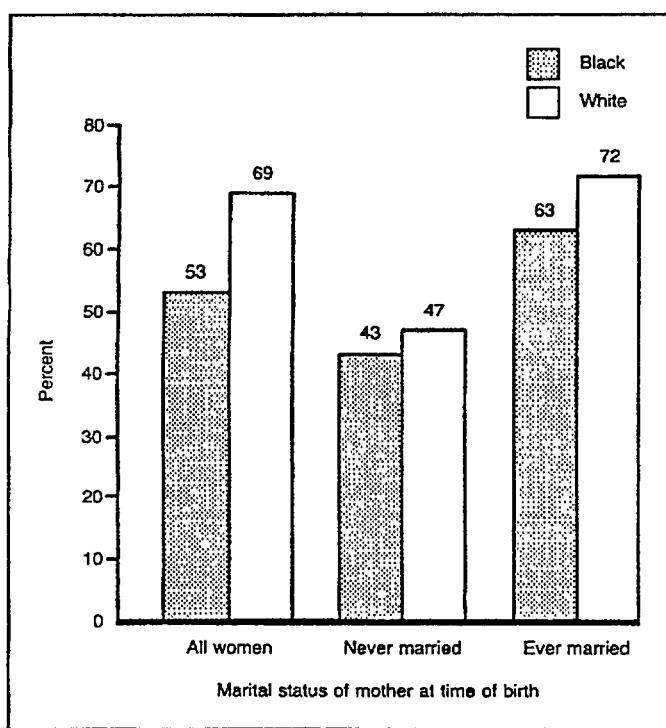


Figure 1. Percent of mothers receiving prenatal care in the first trimester, by race and marital status: United States, 1979-82

teenager, had never married, had not finished high school, had never worked, had a low income, was receiving Medicaid, or if her pregnancy was unwanted at conception (figure 1).

Births to Hispanic women were more likely to have received prenatal care only after the fifth month of pregnancy, or not at all, than were those to non-Hispanic white women. About 7 percent of all pregnancies received no prenatal care at all, but fewer than 2 percent of pregnancies ending in live birth received no care at all.

First source of prenatal care—For about 80 percent of pregnancies of white women, first prenatal care was by private doctors, compared with only 48 percent of pregnancies of black women (figure 2). Among both black and white women, pregnancies to teenagers and never married women were less likely to receive prenatal care from

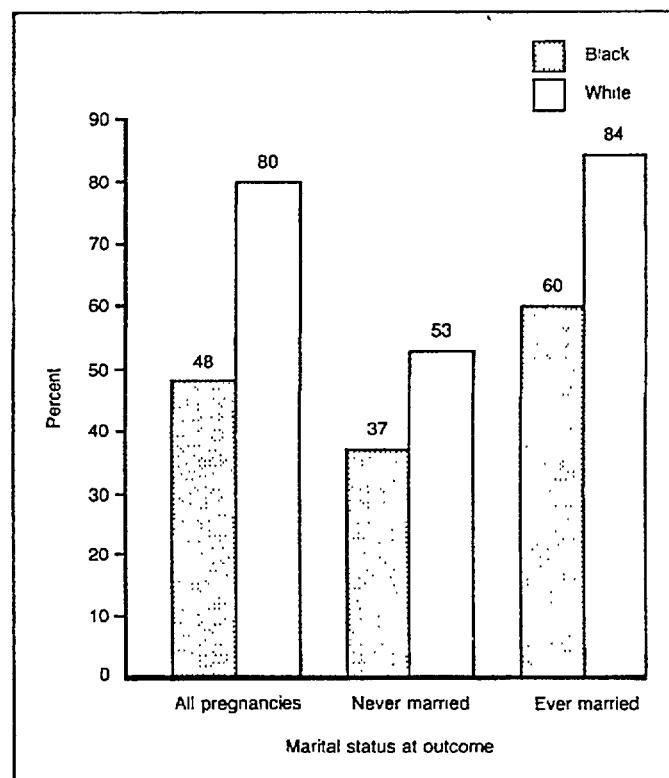


Figure 2. Percent of women who received prenatal care for a pregnancy ending in 1979-82 whose first prenatal care was from a private physician, by race and marital status of mother at outcome: United States, 1982

private physicians than pregnancies to older women and ever married women.

For a given pregnancy, women who received early and continuous prenatal care (that is, who began care in the first trimester and had a visit at least once a month thereafter) were less likely to have attended a clinic for their first visit than women who received later or discontinuous care.

Smoking during pregnancy—About 69 percent of women did not smoke at all during their most recent pregnancy. The proportion of women not smoking at all was similar for white and black women. However, white women were more likely to have smoked 15 or more cigarettes per day than were black women (16 percent versus 10 percent), especially younger, less-educated, and never married women (figure 3).

White women with less than 12 years of education were almost three times as likely to have smoked 15 or more cigarettes per day during their most recent pregnancy than were college-educated women (26 percent versus 9 percent, figure 3). Heavy smoking declined as education increased among black women, as well, although not as sharply.

For both white and black women, those whose pregnancies ended in spontaneous loss were more likely to have smoked than were women whose pregnancies ended in live birth.

Drinking during pregnancy—About 12 percent of women drank alcoholic beverages at least once a week during their most recent pregnancy, and the proportions were similar for black and white women. For both races, alcohol consumption increased with the age of the pregnant woman.

Women whose most recent pregnancy ended in spontaneous loss were almost twice as likely to have consumed alcohol once a week or more (19 percent) as were women whose pregnancy ended in live birth (11 percent). This difference was found for both white and black women.

In contrast to cigarette smoking, alcohol consumption during pregnancy was more common among white women with some college education than among those with less education (figures 3 and 4). The proportion of white women who drank alcohol once a week or more during their most recent pregnancies was more than twice as large for women with some college education (17 percent) as for those having less than 12 years of schooling (8 percent), but for black women the reverse was true (8 percent versus 17 percent, figure 4).

Hispanic women were more likely to have abstained from smoking than non-Hispanic white women (83 percent versus 67 percent), and more likely to have abstained from drinking alcohol during their most recent pregnancy than non-Hispanic white women (69 percent versus 50 percent).

Low birth weight—The proportion of babies who were low birth weight was twice as high for black as white mothers (12 percent versus 6 percent). For never married mothers, however, there was no significant difference by race in the percent of low birth weight (figure 5).

Babies born to mothers who had smoked 15 or more cigarettes a day during pregnancy had about three times the incidence of low birth weight (13 percent) seen for babies born to mothers who had not smoked at all (4 percent). An increased risk of low birth weight was found for both white and black women who smoked (figure 6).

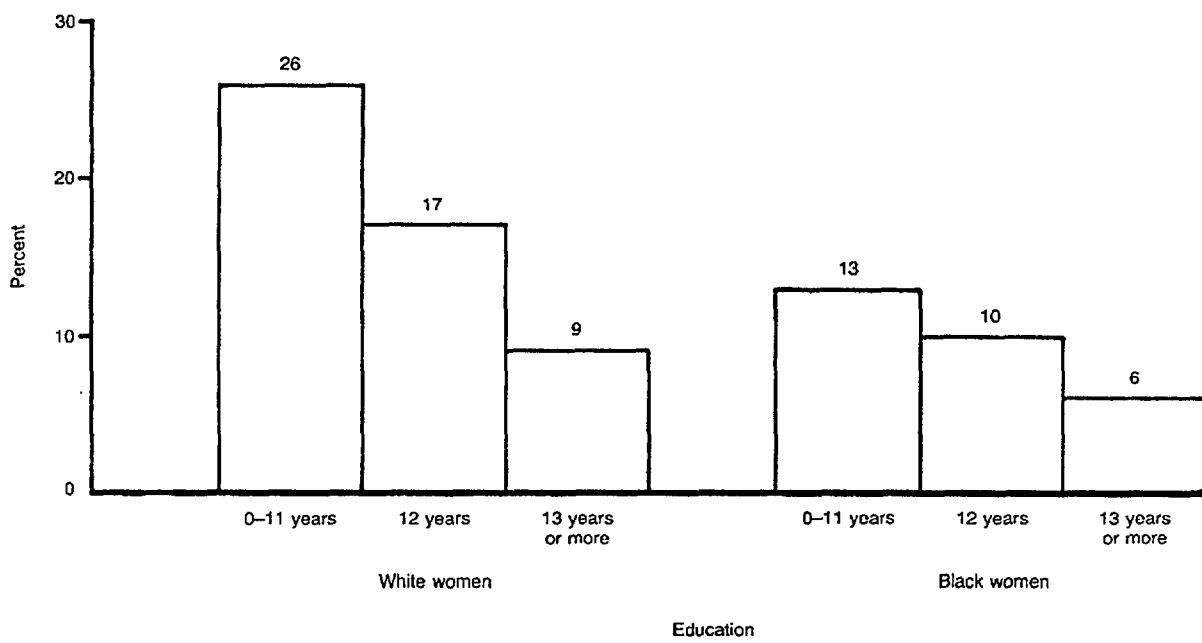


Figure 3. Percent of ever married women who smoked 15 or more cigarettes per day during their most recent pregnancy, by race and education: United States, 1982

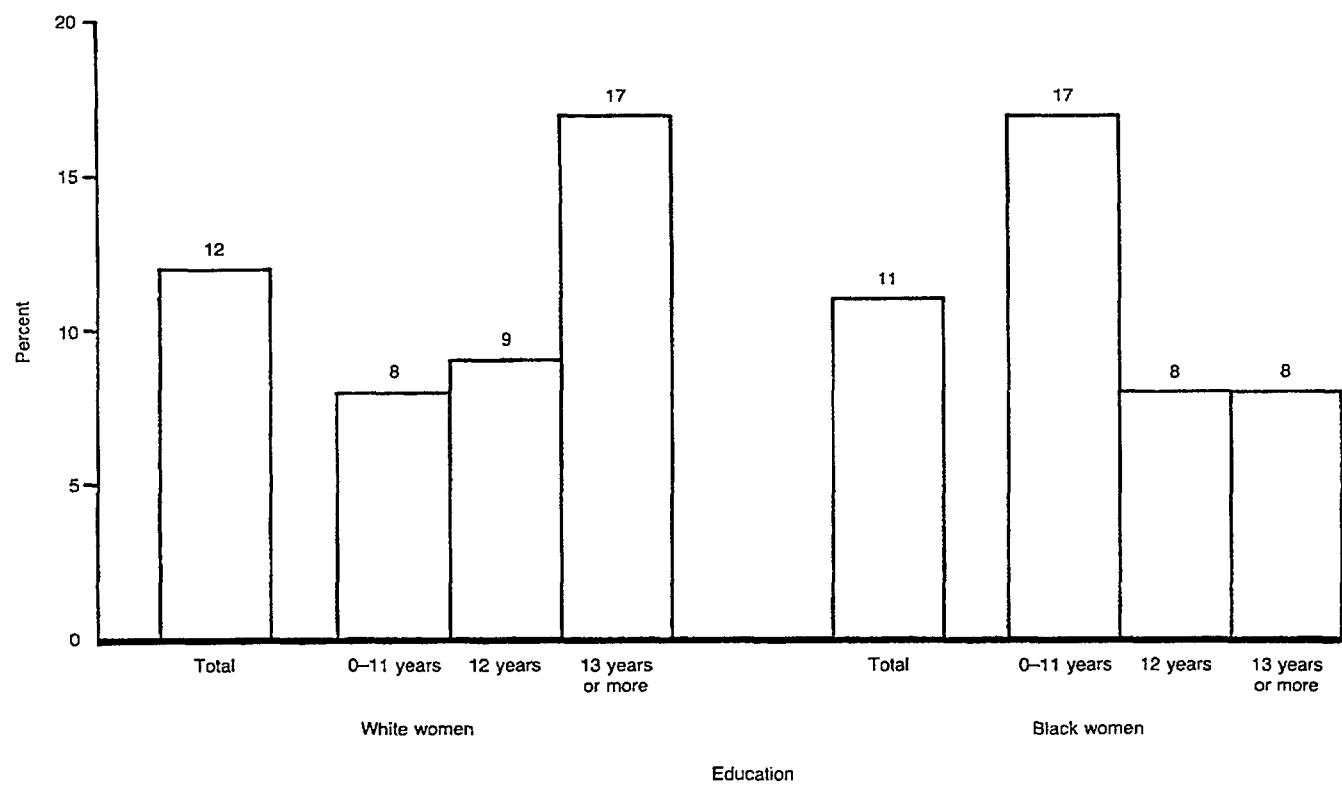


Figure 4. Percent of ever pregnant women who drank alcoholic beverages once a week or more during their most recent pregnancy, by race and education: United States, 1982

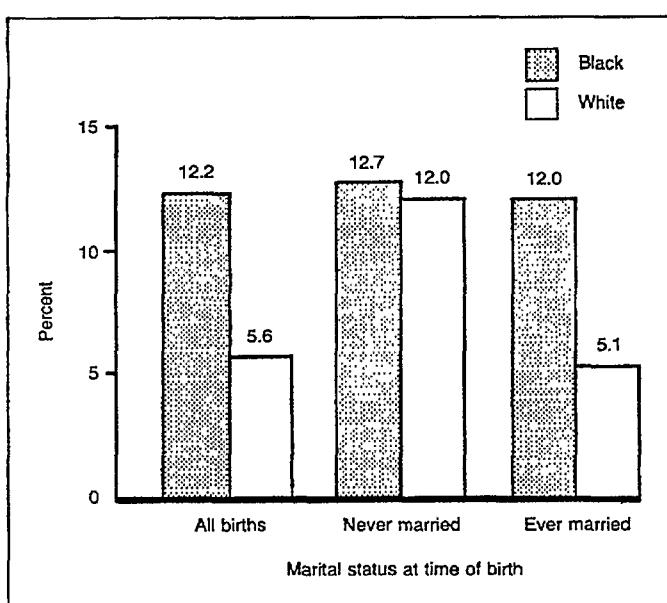


Figure 5. Percent of single live births to women 15-44 years of age that were low birth weight, by race and marital status of mother at time of birth: United States, 1982

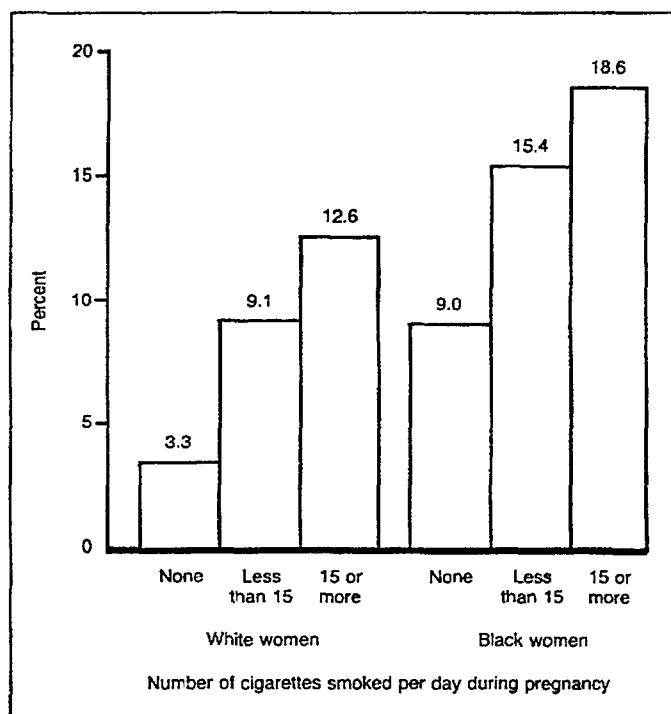


Figure 6. Percent of most recent live births to ever pregnant women 15-44 years of age that were low birth weight, by race of mother and number of cigarettes smoked per day during pregnancy: United States, 1982

Sources of payment for delivery—About 68 percent of deliveries to white women used private medical insurance as a source of payment for delivery, compared with only 38 percent of deliveries to black women (figure 7). Births to

black women were paid for by Medicaid about four times as often as were births to white women (30 percent versus 7 percent, figure 7). Black births were also nearly twice as likely as white births (15 percent versus 8 percent) to be

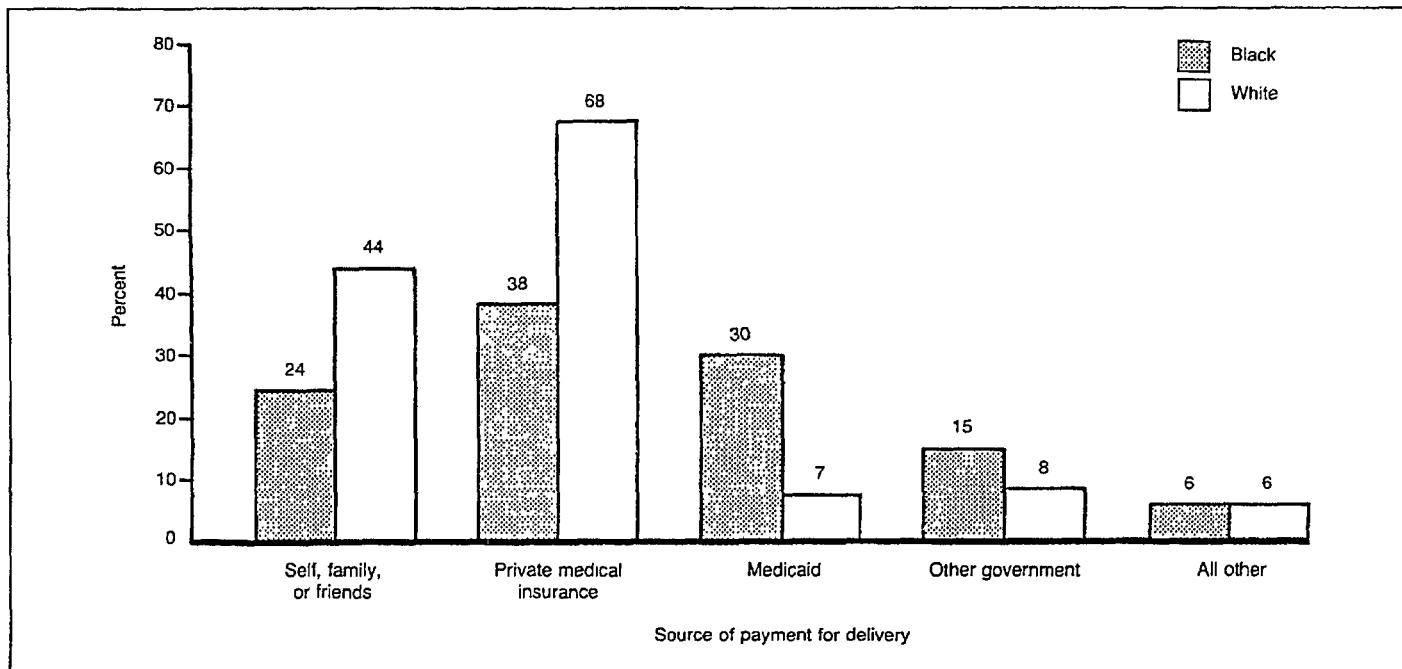


Figure 7. Percent of live births in 1979-82 that were paid for, in whole or in part, from specified sources, by race of mother: United States, 1982

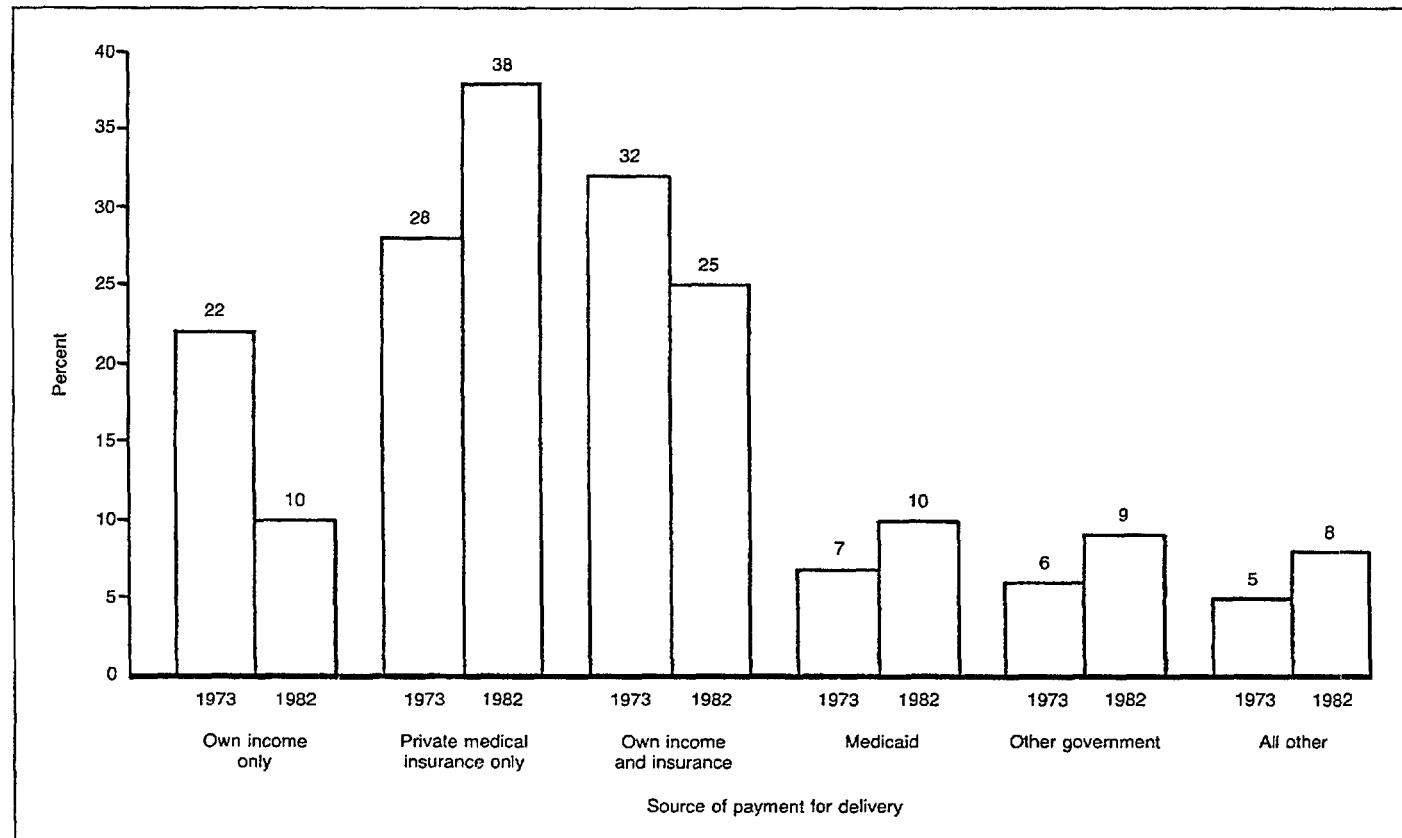


Figure 8. Percent distribution of most recent live births by source of payment for delivery: women 15-44 years of age who ever had a live birth, United States, 1973 and 1982

paid for by other government sources. Race differences in source of payment for delivery were not significant for never married women.

Between 1973 and 1982, the proportion of live births paid for entirely by private medical insurance increased. The proportion paid for out of pocket, with or without

private medical insurance, declined (figure 8). The proportion of births paid for by Medicaid or other government sources did not change significantly overall, but the proportion paid for using government funds other than Medicaid increased for black women, women who had not finished high school, and women with low incomes.

Source and limitations of the data

Cycle III of the National Survey of Family Growth (NSFG) was based on personal interviews with a multistage area probability sample of 7,969 women 15–44 years of age in the civilian noninstitutionalized population of the conterminous United States. For the first time, women were eligible for interview regardless of their marital status.

Between August of 1982 and February of 1983, 4,577 white women, 3,201 black women, and 191 women of other races were interviewed. Black women and women 15–19 years of age were sampled at higher rates than others, to increase the reliability of statistics from these groups. Each interview was conducted in person and focused on the respondent's marital and pregnancy history, her use of contraception, whether each pregnancy had been planned at the time of conception, her use of family planning and infertility services, her physical ability to bear children, and a wide range of social and economic characteristics. Questions were also asked about prenatal care, the weight of each child at birth, smoking and drinking during the last pregnancy, and sources of payment for delivery of live births. Interviews were conducted by trained female interviewers and lasted an average of 1 hour.

Characteristics such as race, origin, parity, education, and geographic region refer to the woman who was interviewed. For convenience in writing, in this report, expressions such as "black births" refer to births to black women, regardless of the race of the father. Similarly, women living in families with incomes below 150 percent of the poverty level are referred to as low-income women, and women living in families with higher incomes are referred to as high-income women.

The statistics cited are estimates for the national population from which the sample was drawn. Because the estimates are based on a sample, they are subject to sampling variability. Further, nonsampling errors may have been introduced during interviewing, data processing, and analysis, although quality control measures were used at each stage to minimize error. Further discussion of the survey design, definition of terms, and sampling variability can be found both in the appendixes and in a detailed report (NCHS, 1985a) on the design of the survey.

In this report, the term "similar" means that any observed difference between two estimates being compared is not statistically significant; terms such as "greater," "less," "larger," and "smaller" indicate that the observed differences are statistically significant at the 5-percent level using a two-tailed *t*-test with 39 degrees of freedom. Statements about differences that are qualified in some way (for example, "the data suggest") indicate that the difference is significant at the 10-percent but not at the 5-percent level.

The following sections include comparisons with other data and detailed descriptions of survey findings on when prenatal care began, the source of prenatal care, smoking and alcohol use during pregnancy, birth weight, and sources of payment for delivery of live births. Appendix I contains technical notes on how the survey was designed and conducted; appendix II, definitions of technical terms used in the report; and appendix III, the survey questions on the topics covered in this report.

Comparisons with other data

The data in this report are from the 1982 National Survey of Family Growth. The NSFG is the only source of reliable national data on the source of prenatal care (private doctor, hospital clinic, or other clinic—tables 7–12) and on the sources of payment for delivery of live births (insurance, Medicaid, and so forth—tables 27–33).

Low birth weight—Data on birth weight are published each year from the birth registration system for the United States and for each State, by such characteristics as race, age and education of the mother, birth order, and month of the pregnancy for which prenatal care began. It is important to emphasize that the birth registration data are based on complete counts of all births and refer only to births in a particular calendar year, but the data in this report are based on a sample of births and refer to births in several calendar years up to 1982. In addition, the data on low birth weight—5 pounds 8 ounces (2,500 grams) or less—in this report refer only to single live births, not all births. The following table shows a sample comparison—the percent of single live births that were low birth weight by race, from the 1982 NSFG and the 1981 data on registered births (NCHS, 1985b):

Race	NSFG (± 2 standard errors)	Registered births, 1981
All races	6.6 (± 1.0)	5.9
White	5.6 (± 1.0)	4.8
Black	12.2 (± 1.7)	11.3

The numbers in parentheses after the NSFG figures show two standard errors around the NSFG estimate. In each case, the NSFG data and the data from the registered births are within two standard errors of each other; that is, the NSFG estimates do not differ significantly from the birth registration data.

Another source of data on low birth weight is the 1980 National Natality Survey (NNS), which was based on a sample of about 10,000 births in 1980. Questionnaires were sent by mail to mothers and health care providers to obtain additional information about the births (Placck, 1984).

Timing of the first prenatal visit—In the NSFG, the mother was asked the following question for each birth that occurred in 1979–82: “During this pregnancy, did you ever visit a doctor or clinic for prenatal care?” If the mother answered “yes,” she was asked: “How many months pregnant were you when you first visited a doctor or clinic for prenatal care?”

On the birth registration certificate, the entry reads “month of pregnancy prenatal care began” (first, second, etc.). This was obtained either from the mother herself or from physician records.

Differences between the wording of these questions and those asked on the certificate of live birth and the NNS, as well as differences in methods of data collection, the time reference of the questions, and sampling error, account for variation among the three data sources in the observed percents of women who began care within a specified period.

In general, a smaller proportion of respondents to the 1982 NSFG than of mothers in the NNS or of those in the vital records reported beginning care in the first trimester; 76.3 percent of 1980 birth certificates reported care in the first trimester of pregnancy (Forrest and Singh, 1987), but NSFG data show 65.9 percent of live births occurring between 1979 and the date of interview as receiving first-trimester care (table 1). These differences are important, because they give different estimates of the amount of progress that has been made toward the goal of timely prenatal care for all mothers and babies. It is not clear which source—the birth certificates, the NNS, or the NSFG—gives the most accurate estimate of the true level of first trimester prenatal care, and further methodological research is necessary to answer this question (Forrest and Singh, 1987). However, all three sources—the NSFG, the 1980 NNS, and the vital statistics—show that black, unmarried, teenage, and less educated women get first-trimester prenatal care less often than do others (Forrest and Singh, 1987; Ingram, Makuc, and Kleinman, 1986; NCHS, 1978a). This strengthens confidence in the NSFG findings for variables not contained in the NNS or vital statistics.

Smoking and alcohol consumption during pregnancy—These data are not available from the birth registration system. They are available for married mothers from the 1980 NNS (Prager et al., 1984). Thus the NSFG data on smoking and alcohol use during pregnancy for never married and formerly married mothers are not available from any other reliable national source.

Other differences—The NSFG contains a number of variables that were not collected in the birth registration statistics in the early 1980's. These include the following:

- Income.
- Current receipt of Medicaid.
- Most recent occupation.

- Wantedness of the pregnancy.
- Sources of payment for births.
- Smoking and alcohol use during pregnancy.
- Type of provider of prenatal care.

Of these, the following were collected in the 1980 NNS, but only from married mothers: income, occupation, want-

edness, and smoking and alcohol use. Therefore, the data for unmarried mothers by income, occupation, and wantedness and the data on smoking and drinking during pregnancy for unmarried mothers are not available from any other national source.

Findings

Timing of the first prenatal visit

In numerous studies, mothers receiving prenatal care have been shown to have better birth outcomes than have mothers receiving no care. In these studies, prenatal care has been associated with a lower incidence of low birth weight, lower neonatal mortality, less need for neonatal intensive care, and lower hospital costs (Moore et al., 1986; Kotelcheck et al., 1984; Heins et al., 1983; Leveno et al., 1985). Further, most studies show that the impact of prenatal care is greatest for adolescent, unmarried, Hispanic, black, and other high-risk women (Kotelcheck et al., 1984; Greenberg, 1983; Peoples and Siegel, 1983).

Prenatal care is important because most interventions to improve pregnancy outcome must occur in the context of prenatal care (Institute of Medicine, 1985; NCHS, 1981a). Prenatal care makes it possible to offer counseling on nutrition, smoking, and alcohol and drug consumption during pregnancy; to identify medical conditions such as high blood pressure and diabetes; to assess the risk of problems such as preterm delivery, premature rupture of membranes, and low birth weight; and to manage these problems appropriately (Brown, 1985; Institute of Medicine, 1985; NCHS, 1981a; Behrman, 1985; Moore et al., 1986; Heins et al., 1983; Leveno et al., 1985).

The timing of the beginning of prenatal care is widely used as a convenient, if imperfect, indicator of the adequacy of care. Recognizing its importance, the Surgeon General of the United States in 1980 set a goal that by 1990, at least 90 percent of women in all counties and of every racial and ethnic group would be obtaining prenatal care during the first trimester (Koontz, 1984). The data in this section will help to reveal the status of prenatal care in various social groups in the United States near the beginning of the 1980's.

Data on the timing of the first prenatal visit are shown for live births in tables 1-6 in order to compare pregnancies of approximately equal length. For example, most pregnancy losses occur early (Leridon, 1977); thus when older women (who have more pregnancy losses) are compared with younger women (who have fewer losses), more older than younger women would be expected to have received no care, because more of their pregnancies did not last 9 months. In fact, as shown in table 7, women who had pregnancy losses are much more likely than mothers of live births to receive no prenatal care at all, apparently because

many women do not know they are pregnant until a miscarriage occurs or miscarry shortly after they find out. Thus, a woman who has a miscarriage in the first trimester, before beginning prenatal care, would be classified as receiving no care, largely because the pregnancy ended before she had a chance to seek prenatal care. To avoid this problem, miscarriages are excluded from tables 1-6. Stillbirths are excluded because there were too few in the survey to study separately and because limiting the data to live births makes the data more comparable to the other data on live births in this report and to those in the tables based on the birth registration system.

Characteristics of the pregnancy—Data from the NSFG show that the timing—and by implication the adequacy—of prenatal care varies considerably by age (table 1). Less than half (46 percent) of births to teenaged mothers received early care, compared with three-quarters of births to women aged 25-29 years. About 17 percent of births to adolescent mothers received care only after the fifth full month of pregnancy or not at all, three times the proportion among births to mothers aged 25-29. Second births were somewhat more likely to receive care in the first trimester (73 percent) than were first births or third or higher-order births (63 and 60 percent, respectively). These findings by age and birth order are consistent with those reported by Ingram et al. (1986) and by Taffel (NCHS, 1978a), based on vital statistics data.

Births to never married women were much less likely to have received care early in the pregnancy than were births to ever married women (table 1). Only 44 percent of births to never married mothers had care initiated in the first trimester, compared with 71 percent of births to ever married women. Births to never married women were much more likely to get late prenatal care or no care than births to ever married women. These findings are consistent with those from other national data sources (Forrest and Singh, 1987; Ingram, Makuc, and Kleinman, 1986; NCHS, 1978a). Similarly, only half (50 percent) of all unwanted births and only 56 percent of mistimed births received first-trimester care, compared with 73 percent of births that were wanted at the time they were conceived ("wanted then" in table 1).

Comparing tables 2 and 3 reveals large differences in the timing of prenatal care by race. White mothers reported that prenatal care began in the first 3 months of pregnancy for 69 percent of their births between 1979 and the date of

interview; this compares with only 53 percent of those of black women (figure 1). Much of this difference was made up in the fourth or fifth month of pregnancy—37 percent of black births had prenatal care beginning in the fourth or fifth month, compared with 24 percent of white births. The percents in the last timing category are similar by race (tables 2 and 3).

The pattern of variation in the timing of the first prenatal visit by age, birth order, marital status, and wantedsness status for both white and black births is generally consistent with the pattern just described for all races combined. For example, the difference in the percent of births receiving prenatal care in the first trimester between those with mothers aged 25–29 and those with teenaged mothers was approximately 26 percentage points for both white and black women; and births to never married women were much less likely to get early care in each racial group (figure 1). The data suggest, however, that the difference in the timing of prenatal care between unwanted births and those that were appropriately timed was larger for black (28 percentage points) than for white women (19 percentage points).

Hispanic origin—The timing of prenatal care for births to Hispanic women is shown in table A according to age

and marital status. These data are compared with those for non-Hispanic white and non-Hispanic black births separately, because the differences between white and black non-Hispanic births are so large that using an overall "non-Hispanic" category for comparison would be misleading (Ingram, Makuc, and Kleinman, 1986; Felice et al., 1986; Chavez et al., 1986; Williams et al., 1986).

The data in table A suggest that age and marital status differences in the timing of prenatal care for Hispanic births are considerably different from the general pattern (NCHS, 1978a). For example births to Hispanic teenagers were more likely to have received first-trimester care than births to non-Hispanic white teenagers (64 percent versus 45 percent). In contrast, births to Hispanic women aged 20 years and older were much less likely to receive first-trimester care than births to non-Hispanic white women (46 percent versus 66 percent at 20–24 years of age).

Another contrast between Hispanic and other births is shown in the data by marital status in table A. Births to never married non-Hispanic white women were much less likely to receive early prenatal care than births to ever married non-Hispanic white women (39 percent versus 74 percent). The same was true for non-Hispanic black women (43 percent versus 63 percent). However, among Hispanic

Table A. Number of pregnancies ending in a live birth in January 1979 or later to women 15–44 years of age and percent distribution by months pregnant when prenatal care began, according to race, origin, and age and marital status at birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definitions of terms]

Characteristic	Number in thousands	Total	Months pregnant when prenatal care began		
			Less than 3 months	3 or 4 months	5 months or more or no care
			Percent distribution		
Hispanic	1,704	100.0	58.1	25.8	16.1
Mother's age at time of birth:					
Under 20 years	380	100.0	64.0	*20.0	*16.0
20–24 years	527	100.0	46.2	35.9	*17.9
25–44 years	796	100.0	63.1	*21.9	*15.0
Mother's marital status at time of birth:					
Never married	480	100.0	58.5	*19.8	*21.7
Ever married	1,222	100.0	58.0	28.0	*14.0
Non-Hispanic white	10,248	100.0	70.4	23.2	6.4
Mother's age at time of birth:					
Under 20 years	1,016	100.0	45.0	40.0	*15.0
20–24 years	3,389	100.0	66.1	26.7	*7.3
25–44 years	5,842	100.0	77.4	18.2	*4.4
Mother's marital status at time of birth:					
Never married	913	100.0	39.1	43.8	*17.1
Ever married	9,311	100.0	73.6	21.1	5.4
Non-Hispanic black	2,020	100.0	52.7	36.9	10.4
Mother's age at time of birth:					
Under 20 years	512	100.0	37.9	43.8	18.3
20–24 years	755	100.0	53.7	38.3	*8.0
25–44 years	752	100.0	62.0	30.7	*7.2
Mother's marital status at time of birth:					
Never married	1,021	100.0	43.2	41.6	15.2
Ever married	995	100.0	62.5	32.1	*5.3

¹Includes births for which mother's marital status at birth was unknown and other races, not shown separately.

births there was almost no difference by marital status in the proportion receiving early prenatal care (59 percent versus 58 percent, table A).

Showing Hispanic births separately appears to affect white-black comparisons of the timing of prenatal care. For example, comparison of data for white and black women in tables 2 and 3 and in table A shows that excluding Hispanic births from the comparisons for teenage births cuts the race difference in half, making it nonsignificant:

Teenage mothers	Percent receiving care in first 3 months	
	Tables 2 and 3	Table A
White	50.9	45.0
Black	37.0	37.9
Difference	13.9	7.1

The slightly greater proportion of births to never married non-Hispanic black mothers receiving care in the first trimester (43 percent) compared with the proportion for never married non-Hispanic white mothers (39 percent, table A) is not statistically significant, but it is consistent with findings from vital statistics and the 1980 NNS (Forrest and Singh, 1987; NCHS, 1978a).

These differences suggest that the pattern of the time of first prenatal care by age and marital status differs by Hispanic origin, with teenage and never married Hispanic women resembling non-Hispanic white women, and older and ever married Hispanic women resembling non-Hispanic black women. An overall Hispanic versus non-Hispanic comparison would obscure these two distinct patterns of prenatal care. Further, differences by Hispanic origin sometimes affect comparisons of white and black women as shown above. The sample sizes for Hispanic pregnancies are too small to investigate these hypotheses in greater detail in this report, but these findings suggest that it will be most useful to show Hispanic pregnancies by age and marital status and contrast them with pregnancies of non-Hispanic white and non-Hispanic black women separately.

Characteristics of the mother—The timing of first prenatal care for all live births since January 1979 by selected characteristics of the mother at the date of the NSFG interview is shown in table 4.

The timing of prenatal care differed sharply with the socioeconomic characteristics of the mother. Fewer than half of births to mothers with less than 12 years of schooling received prenatal care in the first trimester (48 percent), compared with more than three-fourths of infants born to mothers with some college (77 percent). About 18 percent of births to the least educated women received care only after the fifth month of pregnancy or not at all, compared with only 3 percent of births to college-educated women.

The largest differences in the timing of prenatal care are in the mother's most recent occupation. Prenatal care began in the first trimester for 82 percent of births to professionals or managers; this proportion declined to less than 50 percent for births to women working in craft,

operative, or farm occupations, and for women who never worked. Similarly, the proportion who began care at the sixth month or later or who never received care ranged from 3 percent for births to professionals and managers to 21 percent for births to women who had never worked.

Only half of births to low-income women (149 percent of poverty level or less) began to receive prenatal care in the first trimester, compared with three of four births to higher-income women. Similarly, only 46 percent of births to women receiving Medicaid at the time of the interview had prenatal care beginning in the first trimester, compared with 69 percent for those not receiving Medicaid. This does not necessarily mean that these mothers were Medicaid recipients at the time they became pregnant; it is possible that being pregnant, needing care, and having no other source of care was the reason they became Medicaid recipients.

The distribution of births by mother's region, education, occupation, income, and Medicaid status varies by race; thus the timing of prenatal care for these characteristics is given separately for white and black women in tables 5 and 6. Births to white women living in the Northeast were more likely to receive first-trimester care than births to women in the South (78 percent versus 65 percent, table 5). This was also true for black women (63 percent versus 49 percent, table 6). The proportion of births to black women who received early care differed more sharply by mother's educational level than did births to white women. For white mothers, the proportions beginning prenatal care in the first trimester were 52 percent in the lowest education group and 79 percent in the highest, a range of 27 percentage points, but for black mothers this proportion ranged from 35 percent in the lowest education group to 71 percent in the highest, a range of 36 percentage points. Thus, births to white mothers with less than a high school education were more likely to receive care in the first trimester (52 percent) than were births to black mothers with this amount of schooling (35 percent), but among births to mothers with at least some college, the proportions receiving early care were similar.

There were large race differences in the timing of prenatal care for sales and clerical and for service workers. However, the proportions of births receiving first-trimester care did not differ significantly by race among professionals and managers or among craft workers, operatives, or farm workers. In addition, the data also suggest that infants born to white mothers were more likely to have received first-trimester care than infants born to black mothers regardless of whether income at survey date was less than 150 percent of the poverty level or more. However, for infants born to mothers with incomes of 300 percent of the poverty level or more, the percents receiving early care were similar by race—79 percent for white and 78 percent for black women. There also was no significant race difference in the timing of prenatal care among births to mothers receiving Medicaid at the interview date.

In summary, there was no significant difference by race in the proportion receiving first-trimester prenatal care

among relatively homogeneous groups: those with incomes of 300 percent of poverty level or more; craft workers, operatives, and farm workers; or women receiving Medicaid. Race differences are largest within relatively large and diverse groups, such as women not receiving Medicaid and high school graduates. In other words, the very large race difference in receipt of first trimester prenatal care is not significant when socioeconomic status differences between white and black women are well controlled for. This suggests that socioeconomic status, not race itself, is the most important determinant of early prenatal care.

Receipt of any prenatal care—About 93 percent of all women who had pregnancies ending in a live birth or spontaneous fetal loss in 1979–82 received some prenatal care (table 7). This percent varied from approximately 90 percent among pregnancies of never married and teenage mothers to 96 percent of pregnancies of women aged 25 to 29 years. The proportion receiving prenatal care was even

higher for pregnancies ending in a live birth—98 percent—with very little variation by age, marital status, or wantedness status at conception. The proportions receiving prenatal care were similar for white and black women and virtually identical when limited to live births (tables 8 and 9).

The percent of women receiving prenatal care and the source of care at first visit are shown by race and Hispanic origin in table B. The data suggest that both overall and at the older ages, pregnancies to Hispanic women were less likely to receive any prenatal care (87 percent overall) compared with pregnancies to non-Hispanic white women (95 percent overall). However, the data also suggest that Hispanic teenagers were somewhat more likely than non-Hispanic white teenagers to receive any care at all (98 percent versus 87 percent).

Table 10 also shows that pregnancies to women who had not graduated from high school were less likely to

Table B. Number of pregnancies ending in live births or spontaneous loss in January 1979 or later to women 15–44 years of age, percent receiving prenatal care, and percent distribution of pregnancies receiving care by source of care at first visit, according to race, origin, and age and marital status at pregnancy outcome: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Percent receiving prenatal care	Total	Source of prenatal care at first visit		
				Private doctor	Hospital clinic	Other clinic
All pregnancies						
Hispanic	1,993	86.6	100.0	61.8	16.0	22.2
Mother's age at pregnancy outcome:						
Under 20 years	406	98.3	100.0	66.6	*15.5	*17.9
20–24 years	570	80.3	100.0	45.8	*24.9	*29.3
25–44 years	1,018	85.4	100.0	67.9	*11.6	*20.5
Mother's marital status at pregnancy outcome:						
Never married	522	86.6	100.0	52.5	*29.0	*18.5
Ever married	1,470	86.6	100.0	65.2	*11.4	23.4
Non-Hispanic white	112,340	94.6	100.0	82.9	6.1	11.1
Mother's age at pregnancy outcome:						
Under 20 years	1,355	87.1	100.0	66.0	*16.5	*17.5
20–24 years	3,882	95.2	100.0	75.0	7.5	17.5
25–44 years	7,104	95.7	100.0	90.2	*3.4	6.4
Mother's marital status at pregnancy outcome:						
Never married	1,230	91.4	100.0	52.2	*18.5	29.3
Ever married	11,086	94.9	100.0	86.1	4.7	9.2
Non-Hispanic black	1,2489	90.8	100.0	47.6	17.8	34.7
Mother's age at pregnancy outcome:						
Under 20 years	631	90.8	100.0	31.9	18.2	49.9
20–24 years	884	92.0	100.0	42.6	19.4	37.9
25–44 years	975	89.7	100.0	62.8	15.9	21.2
Mother's marital status at pregnancy outcome:						
Never married	1,269	90.2	100.0	37.2	18.7	44.0
Ever married	1,213	91.4	100.0	58.6	16.5	24.9
Live births						
Hispanic	1,704	93.2	100.0	61.5	16.6	21.9
Non-Hispanic white	10,248	99.2	100.0	82.6	6.1	11.3
Non-Hispanic black	2,020	98.3	100.0	47.7	17.8	34.5

¹Includes pregnancies for which mother's marital status at outcome was unknown and other races, not shown separately.

receive prenatal care at all (88 percent) than were pregnancies to women with more education (95 percent). This was true for pregnancies ending in live birth as well, although the difference was not as large.

First source of prenatal care

Although many studies of prenatal care have been published, statistics like those in tables 7-12 do not appear to be available from any other national source. First sources of prenatal care are categorized in tables 7-12 as "private doctor," "hospital clinic," and "other (nonhospital) clinic."

Women interviewed in the 1982 NSFG were asked to specify the type of prenatal care provider they used on their first visit for each pregnancy ending on or after January 1, 1979. These are listed in tables 7-12 for all pregnancies except those ending in induced abortion; pregnancies ending in live birth are shown separately. If a woman reported that her first prenatal care for a particular pregnancy was by a private doctor, private group practice, co-op, or private clinic, the care was classified in tables 7-12 as by a private doctor. Care at a hospital clinic is shown separately in tables 7-12. Care at a community health center clinic, public health department clinic, family planning or abortion clinic, student health service, or military health service clinic is classified as "other clinics" in tables 7-12 and sometimes referred to as "nonhospital" clinics in the text.

Characteristics of the pregnancy—In 75 percent of all pregnancies, the first prenatal visit was to a private doctor; in 9 percent, to a clinic in a hospital; and in 16 percent, to some other type of clinic. These same percents characterized all pregnancies ending in a live birth. There were, however, large differences in the first source of prenatal care, depending on the age of the pregnant woman, her marital status, and the wantedness status of the pregnancy.

The proportion of women receiving care from clinics decreased as the age of the pregnant woman increased. Teenagers were four times as likely to use a hospital clinic or other clinic for the first prenatal visit as women 30-44 years of age (44 percent, compared with only 11 percent).

A majority of pregnancies to never married women (55 percent) received prenatal care services from hospital clinics or other clinics. This compares with only 18 percent for pregnancies to ever married women. Furthermore, planned pregnancies were associated with privately financed care, but differences in source of care between mistimed and unwanted pregnancies were not significant. All of these general observations held for live births as well.

Data are shown separately for pregnancies of white and of black women in tables 8 and 9. First sources of care differed substantially by race; four of five pregnancies of white women received care from a private doctor, compared with fewer than half of pregnancies to black women (figure 2). Black women were more than twice as likely as white women to have made their first prenatal visit to a hospital clinic (18 percent versus 7 percent) or other clinic (34 percent versus 13 percent).

For both races, the proportion receiving first prenatal care from a nonhospital clinic declined as age of the woman increased, but the decline was much steeper for black women. (The only increase, for white women aged 20-24 years, was not significant.) For about 50 percent of pregnancies to black teenagers receiving care, the first visit was to a nonhospital clinic. This proportion decreased sharply as age increased, to 17 percent of pregnancies to black women 30-44 years of age. Among white women, 17 percent of pregnancies to teenagers first received care from nonhospital clinics, declining to 6 percent at age 30-44. Thus, the proportion of pregnancies receiving care at non-hospital clinics was higher for black than for white women in each age group, but the difference was greatest at the youngest ages.

In contrast, the proportion of teenage pregnancies receiving prenatal services from hospital clinics was similar for white and black women (16 percent versus 18 percent). But among pregnancies to white women, the percent receiving their first prenatal care from a hospital clinic declined sharply with age, from 16 percent to 3 percent, while among pregnancies to black women, the observed decline from 18 percent to 14 percent was not large and not statistically significant.

There was no significant variation in the first source of care by pregnancy order for white women, but first pregnancies of black women were more likely to receive prenatal services from nonhospital clinics (41 percent versus 14 percent, tables 8 and 9), perhaps because of the higher proportion of first pregnancies at younger ages for black women.

For both races, pregnancies of never married women were less likely to receive care from private doctors and more likely to obtain services from nonhospital clinics than pregnancies to ever married women (figure 2). Pregnancies to never married white women were almost four times as likely to receive their first prenatal care from hospital clinics (22 percent) than were pregnancies occurring to ever married white women (6 percent). In contrast, the percent of black pregnancies first receiving prenatal services from a hospital clinic did not vary significantly by marital status. Thus, similar proportions of pregnancies to white and black never married women received prenatal care at a hospital clinic (22 and 19 percent), but a larger proportion of pregnancies to never married black women received their first prenatal care at a nonhospital clinic (44 and 26 percent).

These patterns of variation in source of prenatal care according to race, age, and marital status apply equally to the subset of pregnancies ending in live birth. Thus, it is not surprising that births receiving late or noncontinuous prenatal care were more likely to have received their first services from a clinic—younger, never married women and women whose pregnancy was unwanted at conception were both more likely to initiate care after the first trimester and to have attended a clinic for their first prenatal visit. As seen in the last line of table 7, 39 percent of women receiving late or discontinuous prenatal care received their

first services from a clinic, but the proportion varied from 33 percent for white births to 63 percent for black births (tables 8 and 9).

Among pregnancies receiving care, those to Hispanic women were less likely than those to non-Hispanic white women to obtain it from private physicians (62 percent versus 83 percent, table B). However, this difference was limited to pregnancies of women aged 20 years or older and married women. Pregnancies of Hispanic teenagers were very similar to those of non-Hispanic white teenagers in source of prenatal services, but pregnancies of Hispanic women 20 and older were more similar to those of non-Hispanic black women 20 and older. Vital statistics data suggest that Hispanic teenage mothers were most often U.S.-born and older Hispanic women foreign-born; foreign-born women are probably more likely than U.S.-born women to use clinics (Ventura and Taffel, 1985).

Characteristics of the woman—The percent of pregnancies receiving any prenatal care and the source of care at first visit are shown in table 10 and separately for white and black women in tables 11 and 12 by selected characteristics of the woman on the date she was interviewed.

Overall, pregnancies to women living in the Midwest were more likely to have received their first prenatal services from private physicians than were those to women in the Northeast or South (83 percent versus 71 percent). Pregnancies to women in the Northeast were more than twice as likely to have obtained prenatal care at a hospital clinic than were those in any other region (17 percent versus 7 to 8 percent). A larger proportion of pregnancies to women living in the South received care from "other" clinics (23 percent), compared with those in the Northeast or Midwest (9 to 12 percent).

The proportion of pregnant women receiving care from private physicians differed sharply with the level of education—from 56 percent for pregnancies to women with less than 12 years of schooling to 86 percent for women who had attended college. Pregnancies to women with less than a high school education were four times as likely to have received service from a hospital clinic (16 percent versus 4 percent) and over two and a half times as likely to have received services from other clinics (28 percent versus 10 percent) as pregnancies to college-educated women.

Differences by education in the proportion of pregnancies receiving care from clinics were larger for white than for black women. Pregnancies to white women with less than 12 years of schooling were at least twice as likely to have first received services at either a hospital clinic or other clinic than were those to high school graduates (39 percent versus 17 percent). Among pregnancies to black women, this difference by education was smaller (64 percent versus 56 percent) and not significant. The racial difference in the proportion of pregnancies to women with less than a high school education that received care at hospital clinics was not significant (16 percent versus 19 percent).

Differences according to most recent occupation were marked. The proportion of pregnancies receiving care from

private sources differed sharply, from 88 percent of professionals and managers to 53 percent of women who had never worked (table 10). The decline was steeper for black women, from 78 percent to 30 percent (table 12).

Pregnancies to white women were more likely than pregnancies to black women to receive their first prenatal care from private doctors in every occupational group except professionals and managers, for whom the difference was not significant (tables 11 and 12). Similarly, with the exception of professionals and managers, the percent receiving care at nonhospital clinics was two or three times as large for black as for white women in each occupational category.

Overall, pregnancies to low-income women were more than twice as likely to have received care from a hospital clinic (14 percent versus 6 percent) and almost three times as likely to have received care at a nonhospital clinic (28 percent versus 10 percent) than pregnancies to women with higher incomes (table 10).

In each income category, pregnancies to black women were less likely than pregnancies to white women to receive care from private physicians and substantially more likely to get it from nonhospital clinics. Indeed, most of these differences were significant at the 0.001 level. The proportion of black women receiving services at hospital clinics did not differ significantly by income, but the proportion obtaining care at nonhospital clinics was sharply higher for low-income black women (43 percent) than for high-income black women (24 percent).

Fewer than half (42 percent) of women receiving Medicaid at the survey date had obtained prenatal care from a private doctor. About 20 percent received care at a clinic in a hospital, and 38 percent received care at a community-based clinic. There was no observed difference between white and black Medicaid recipients in the proportion receiving hospital clinic services, and the observed differences in the proportions receiving private physician services and care at "nonhospital" clinics were not large enough to be significant, given the relatively small number of women in the sample who were receiving Medicaid.

These generalizations regarding the source of prenatal care are also true when only pregnancies ending in live birth are examined.

Cigarette smoking during most recent pregnancy

Smoking during pregnancy has been shown to increase the risk of adverse pregnancy outcomes, including low birth weight, preterm birth, miscarriage, premature rupture of membranes, infant death, low Apgar scores, and illness during childhood (Harlap, 1987; Keppel and Taffel, 1987; Hogue and Sappenfield, 1987; Moss et al., 1987; Sachs, 1987; Stein and Kline, 1983; Anderson et al., 1984; Dougherty and Jones, 1982; Rantakallio, 1983). These effects worsen when smoking is heavier (Moss et al., 1987; Sachs, 1987; Anderson et al., 1984; Dougherty and Jones, 1982). Recent studies attribute 21–39 percent of cases of low birth

weight, 11–14 percent of cases of preterm births, and about 4,600 infant deaths in the United States each year to maternal smoking (Behrman, 1985; Hogue and Sappenfield, 1987; Sachs, 1987).

Most well-controlled studies show that, independently of other factors, smoking reduces birth weight by 150–300 grams, and doubles the risk of low birth weight (Hogue and Sappenfield, 1987; Stein and Kline, 1983; Anderson et al., 1984).

The effects of maternal smoking on postnatal child health are more difficult to study, but two recent reports suggest that maternal smoking during pregnancy has long-lasting adverse effects. Moss et al. (1987) found that children under the age of 3 years whose mothers smoked during pregnancy were more likely to be in poor health, to have a chronic condition, to be hospitalized at least once, and to have more days of bed rest because of illness than was true for children of mothers who did not smoke during pregnancy. These relationships were stronger for children of mothers who smoked more, and they held when controlling for the mother's age, parity, and education and the child's birth weight. Investigators in Finland who followed children to the age of 14 (Rantakallio, 1983) found that children of mothers who smoked during pregnancy had more respiratory diseases, were shorter, and had lower average achievement in school than other study children, after controlling for other variables.

Characteristics of the pregnancy—The National Survey of Family Growth data in tables 13–18 show patterns of smoking during pregnancy for both married and unmarried women and include other characteristics not found in any other national source. Women who had ever been pregnant were asked, "On the average, during your last pregnancy, how many cigarettes per day did you usually smoke, if any?"

The answer categories were:

- About one a day or less.
- Just a few (2–4).
- About half a pack (5–14).
- About a pack (15–24).
- About 1½ packs (25–34).
- About 2 packs (35–44).
- More than 2 packs (45+).
- Didn't smoke during last pregnancy.

Women who reported smoking about half a pack (5–14 cigarettes) or less per day are shown in tables 13–15 as having smoked fewer than 15 per day. These women are sometimes referred to as light smokers in the text. Those who reported smoking about a pack (15–24) or more per day are shown in tables 13–15 as having smoked 15 or more per day and are called heavy smokers in the text.

Overall, nearly 7 out of 10 women did not smoke at all during their most recent pregnancy (69 percent, table 13). Those who did smoke were divided almost equally between those smoking fewer than 15 cigarettes per day (16 percent) and those smoking 15 or more per day (15 percent). The

proportion who did not smoke at all was similar for white and black women (69 and 71 percent), but black women were less likely to have smoked 15 or more cigarettes per day (10 percent versus 16 percent, tables 14 and 15).

For white women, the proportion of nonsmokers increased with age at pregnancy outcome from 58 percent of teenagers to 73 percent of women aged 25–44 years (table 14). This pattern was not observed for black women (table 15). The highest proportion of black women who did not smoke at all was at ages 20–24 (75 percent) and the lowest (66 percent) at ages 30–44 years. The proportion of black women smoking 15 or more cigarettes per day increased from 6 percent of teenagers to 16 percent of the oldest age group, but for white women there was a nonsignificant decline with age in the proportion who smoked heavily.

White ever married women were more likely not to have smoked during their most recent pregnancies than white never married women (70 percent versus 54 percent, table 14). However, this difference by marital status was smaller and not significant for black women. About 25 percent of never married white women smoked 15 or more cigarettes per day, compared with 15 percent of ever married white women; for black women, the proportions who smoked heavily were similar by marital status.

Refraining from smoking was more common among women whose last pregnancy had been wanted at the time of conception, but for black women, these percents did not differ significantly.

Of the women whose most recent pregnancy ended in a live birth, 71 percent did not smoke at all while they were pregnant, compared with only 59 percent of women whose most recent pregnancy ended in a miscarriage or stillbirth. The difference between the proportions of nonsmokers according to pregnancy outcome was somewhat larger for black (17 percentage points) than for white women (12 percentage points). The data suggest, however, that for both races, the proportion of women smoking 15 or more cigarettes per day was about 8 percentage points higher for those whose most recent pregnancy ended in miscarriage or stillbirth than for those whose pregnancy ended in a live birth.

For women whose most recent pregnancy ended in January 1979 or later, 77 percent who received adequate prenatal care did not smoke at all, compared with only 65 percent of women who did not receive adequate care. The data suggest that the proportions of women who smoked were higher for women receiving late or discontinuous care than for others. These findings suggest either that adequate care discourages some women from smoking during pregnancy or that women with good health habits (such as not smoking) use prenatal health services more than do women with worse health habits.

In general, the largest race differences were observed in the proportion of women smoking 15 or more cigarettes per day during their last pregnancy, with a higher percent of white than of black women smoking heavily. Race differences in the percent smoking heavily were greatest for

Table C. Percent of women 15–44 years of age whose most recent pregnancy ended in live birth or spontaneous loss not smoking cigarettes and not consuming any alcoholic beverages during the most recent pregnancy, by race, origin, and selected characteristics: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Percent not smoking cigarettes at all			Percent not drinking alcohol at all		
	Hispanic	Non-Hispanic white	Non-Hispanic black	Hispanic	Non-Hispanic white	Non-Hispanic black
Total ¹	82.8	67.2	70.8	69.3	49.8	67.0
Age at pregnancy outcome						
Under 20 years	77.7	54.8	72.5	77.0	66.6	77.0
20–24 years	81.7	62.0	75.0	76.3	53.6	70.4
25–44 years	84.8	71.5	66.7	62.2	45.5	60.0
Marital status at pregnancy outcome						
Never married	77.8	45.5	67.1	71.5	47.9	68.5
Ever married	85.1	68.4	72.7	68.0	49.9	65.7
Pregnancy outcome						
Live birth	83.1	68.4	73.2	70.9	50.0	68.8
Spontaneous pregnancy loss	80.4	55.6	54.7	54.5	47.1	54.9

¹Data for all races and origins are shown in tables 13 and 16. Races other than white or black are not shown separately.

women who had never married or were in their teens at the outcome of their most recent pregnancy. The race difference in heavy smoking diminished as age increased.

The percents of women not smoking during their most recent pregnancies are given in table C by race and Hispanic origin. The proportion who did not smoke at all was 83 percent for Hispanic women—higher than for non-Hispanic white (67 percent) and black (71 percent) women. The percent who did not smoke at all increased significantly with age for non-Hispanic white women (from 55 to 72 percent), but this increase was smaller and not significant for Hispanic women (from 78 to 85 percent).

Ever married non-Hispanic white women were one and a half times as likely to have abstained from smoking during

their most recent pregnancy (68 percent) than were never married women (46 percent). In contrast, abstention from smoking did not differ significantly by marital status among Hispanic or non-Hispanic black women. Thus, the proportion abstaining from smoking was lowest for never married non-Hispanic white women: Only 46 percent abstained during their most recent pregnancy, compared with 78 percent of never married Hispanic women and 67 percent of never married non-Hispanic black women.

To account for differences in time between a woman's most recent pregnancy and the date of interview, table D details smoking behavior by year of outcome. Perhaps because of increasing awareness of the dangers of smoking during pregnancy, the proportion smoking heavily (15 or

Table D. Number of women 15–44 years of age whose most recent pregnancy ended in live birth or spontaneous loss and percent distribution by average number of cigarettes smoked per day during the pregnancy, according to race of woman and year of outcome: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Race of woman and year of outcome	Number of women in thousands	Total	Average number of cigarettes smoked per day during pregnancy		
			None	Fewer than 15	15 or more
Percent distribution					
All women ¹	29,345	100.0	69.4	15.7	14.9
1980–82	9,890	100.0	72.2	16.1	11.8
1975–79	7,974	100.0	69.1	15.2	15.8
Before 1975	11,481	100.0	67.3	15.7	17.0
White women	24,174	100.0	68.7	15.2	16.1
1980–82	8,109	100.0	71.8	15.4	12.9
1975–79	6,299	100.0	68.7	14.7	16.6
Before 1975	9,765	100.0	66.2	15.4	18.4
Black women	4,222	100.0	70.9	19.6	9.5
1980–82	1,412	100.0	70.6	22.6	6.8
1975–79	1,398	100.0	71.8	17.3	10.9
Before 1975	1,412	100.0	70.4	18.9	10.7

¹Includes white, black, and other races.

more cigarettes per day) was smaller for women whose last pregnancy ended in 1980–82 than for those whose pregnancy ended before 1975 (12 percent versus 17 percent). For black women, the observed percent decrease between 1975–79 and 1980–82 was smaller than for white women and not significant. In short, in 1980–82 white women were still more likely to smoke 15 or more cigarettes per day during pregnancy than were black women, but the difference was a little less than before 1975.

Characteristics of the woman—Smoking behavior during the most recent pregnancy is shown according to selected characteristics of the woman at the time of the interview in tables 16–18.

Proportions of women not smoking at all were similar for all four geographic regions (table 16). White women in the Midwest and South were more likely to have smoked “heavily” during their most recent pregnancy than were black women living in the same regions (tables 17 and 18).

The percent of women who refrained from smoking during their most recent pregnancy rose substantially with their years of schooling: 79 percent of women with some college education did not smoke at all, compared with only 56 percent of women with less than a high school education—a difference of 23 percentage points. Overall, differences by education made a larger difference in the proportion smoking heavily than in the proportion smoking lightly: women with less than a high school education were more than twice as likely as college-educated women to have smoked at least a pack a day during their most recent pregnancy (24 percent versus 9 percent). It is worth noting, however, that this difference by education was much larger for white women (26 percent versus 9 percent) than for black women (13 percent versus 6 percent, figure 3).

Given their observed differences by education, it is not surprising that a larger percent of women employed as professionals or managers (78 percent) than of women working in service occupations (62 percent) or in craft or farm occupations or as operatives (63 percent) did not smoke at all during their most recent pregnancy.

Low-income white women were more likely to have smoked during their last pregnancy than were higher-income white women, but this difference was smaller for black women and not significant. Similarly, white women receiving Medicaid were much less likely to abstain from smoking (50 percent, table 17) than were women not receiving Medicaid (70 percent). Further, for white women, almost twice as many of those receiving Medicaid as of those not receiving Medicaid smoked 15 or more cigarettes per day (29 percent versus 15 percent). In contrast, there was no significant difference by Medicaid status for black women, either in the proportion who had abstained or in the proportion who had smoked heavily.

Thus, white women with less than a high school education, those most recently employed as craft or farm workers or as operatives, and those receiving Medicaid at the date of interview were more likely than their black counterparts to have smoked heavily during their most recent pregnancy (tables 17 and 18 and figure 3).

Alcohol consumption during most recent pregnancy

Mothers who drink heavily during pregnancy have increased risks of spontaneous pregnancy loss, and their babies have increased risks of low birth weight, pre- and postnatal growth retardation, mental retardation, learning disorders, hyperactivity, and perinatal mortality (American Medical Association, 1983; Kruse, 1984; Mills et al., 1984; Abel, 1982). Babies of alcoholic mothers are often born with several of these symptoms, called fetal alcohol syndrome (Abel, 1982; AMA, 1983; Kruse, 1984; Mills et al., 1984).

After reviewing a number of epidemiologic studies, the American Medical Association (1983) concluded that an alcohol intake of 1 ounce (one drink) per day or more reduces birth weight, and that the risk of spontaneous pregnancy loss is increased when the intake is 1 ounce *per week* or more. One ounce or more per week corresponds to the “more frequent” drinking category in tables 19–24. The effects of the amounts in the “less frequent” category in tables 19–24 are not known (AMA, 1983; Mills et al., 1984).

In a large recent study, alcohol consumption was associated with reduced birth weight after controlling for smoking and other variables (Mills et al., 1984). The study showed that increased risks of low birth weight occurred among newborns of women who consumed one drink a day or more (Mills et al., 1984). However, that is more alcohol consumption than in the “more frequent” drinking category in tables 19–24. Several issues need to be resolved by further research, including the health effects of binge drinking and other drinking patterns; the month of pregnancy in which drinking occurs; and whether the health effects of beer, wine, and liquor differ (AMA, 1983; Kruse, 1984; Stein and Kline, 1983).

The AMA concluded that the amount of alcohol a pregnant woman can consume without adversely affecting her baby is still unknown, and that, until a safe amount is determined, pregnant women should not use alcohol at all (AMA, 1983). Similarly, in July 1981, the Surgeon General of the United States advised physicians that “each patient should be told about the risk of alcohol consumption during pregnancy and advised not to drink alcoholic beverages” (Surgeon General of the United States, 1981).

Characteristics of the pregnancy—In the 1982 National Survey of Family Growth, ever pregnant women were asked, “During your last pregnancy, how often did you usually drink alcoholic beverages, that is, beer, wine, or liquor?”

Women who reported drinking less than once a week are sometimes referred to as “infrequent drinkers” in this report, and women who reported drinking at least once a week are sometimes referred to as “regular” or “frequent” drinkers. The frequency with which women drank alcoholic beverages during their most recent pregnancy ending in live birth, miscarriage, or stillbirth is given in tables 19–21. Overall, about 55 percent reported not drinking at all; 34

percent, less than once a week; and 12 percent, once a week or more (table 19). Black women were more likely to have refrained from drinking altogether than were white women (67 percent versus 52 percent, tables 21 and 20 respectively), but this difference was due almost entirely to the differing proportions of women drinking less than once a week; the percents drinking once a week or more were similar by race (11–12 percent).

The percent who reported consuming no alcohol at all during their most recent pregnancy decreased from 71 percent for teenagers to 48 percent for those aged 25–29 years. Women aged 25–44 were at least twice as likely as teenagers to have consumed alcohol at least once a week during their most recent pregnancy. Unlike smoking behavior, the same general age-related pattern of alcohol consumption was observed for both white and black women (tables 20 and 21).

Considering all races combined, never married women were more likely to have abstained from drinking alcohol during pregnancy than were ever married women (62 percent versus 54 percent, table 19). However, this difference was due to the fact that never married women were disproportionately black, and that black women were more likely to abstain from drinking than white women (tables 20 and 21), because differences in the frequency of alcohol consumption by marital status *within* the two race groups were not significant. This similarity by marital status is in sharp contrast to the pattern for smoking behavior, for which large differences by marital status were observed, both overall and for white women in particular (tables 13 and 14). Differences in drinking behavior during pregnancy by wantedness status at conception were relatively small and not significant.

Women whose most recent pregnancy ended in miscarriage or stillbirth were almost twice as likely to have been frequent drinkers (once a week or more) than were those whose most recent pregnancy resulted in a live birth; 19 percent of women whose pregnancy ended in a pregnancy loss drank once a week or more, compared with 11 percent of women whose pregnancy ended in a live birth.

This finding was also observed for white and black women separately. Black women who last had a live birth were more likely than black women who last had a pregnancy loss to have abstained from alcohol use (69 percent versus 55 percent), but the proportions abstaining were similar by pregnancy outcome for white women. Unlike smoking, however, frequency of alcohol consumption did not differ significantly between women who had received frequent prenatal care and those who had not.

Overall, differences in frequency of alcohol consumption between black and white women are apparent only in the percents of those who did not drink at all and of those who drank less often than once a week. Proportions of those who drank once a week or more were similar for black and white women in all categories of the characteristics examined. This is in sharp contrast to smoking behavior, for which the largest race differences were observed in

the proportions of those smoking 15 or more cigarettes per day.

As seen in table C, 69 percent of Hispanic women did not drink alcoholic beverages at all during their most recent pregnancy, compared with 67 percent of non-Hispanic black women and only 50 percent of non-Hispanic white women. In general, for the categories of age, marital status, and pregnancy outcome given in table C, the proportions not drinking at all among Hispanic women did not differ significantly from those for non-Hispanic black women and were higher than those for non-Hispanic white women.

The pattern of alcohol consumption during the most recent pregnancy by the year in which the pregnancy ended is outlined in table E. White women whose most recent pregnancy ended in 1980–82 were less likely to have consumed alcohol once a week or more than women whose last pregnancy ended before 1975 (9 percent versus 15 percent). For black women, there was no significant trend.

Characteristics of the woman—Alcohol consumption during the most recent pregnancy is shown by selected characteristics of the woman at the time of interview in tables 22–24. Both white and black women living in the South were more likely to have abstained from alcohol than were women living in any other region. This regional differential was particularly large among white women (66 percent in the South, versus 44–47 percent in the other regions).

For white women, alcohol consumption during pregnancy increased with education level (table 23). Only about 33 percent of white women with less than a high school education drank during pregnancy, compared with 59 percent of college-educated women. Similarly, about 8 percent of white women with less than a high school education drank once a week or more, compared with 17 percent of college-educated women (figure 4). For black women, less frequent drinking increased with education level, and more frequent drinking decreased as education increased (figure 4).

Differences in alcohol consumption by occupation were largely limited to white women. The proportion of white women not drinking at all during their most recent pregnancy ranged from 37 percent of women employed as professionals or managers to 74 percent of white women who had never been employed. White professionals and managers were more likely to drink once a week or more than any other occupational group. In contrast, there were few significant variations in level of drinking by occupation among black women.

Abstinence from alcohol was more common among low-income white women than among higher-income white women (66 percent versus 48 percent) and more common among white women receiving Medicaid at the date of interview than among white women not receiving Medicaid (73 percent versus 51 percent). For black women, on the other hand, the proportions not drinking at all were similar by income and Medicaid status. For both races, the proportion not drinking at all was highest for women residing in

Table E. Number of women 15–44 years of age whose most recent pregnancy ended in live birth or spontaneous loss and percent distribution by average frequency of alcoholic beverage consumption during the pregnancy, according to race of woman and year of outcome: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Race of woman and year of outcome	Number of women in thousands	Total	Average frequency of alcoholic beverage consumption during pregnancy		
			Never	Less than once a week	Once a week or more
			Percent distribution		
All women ¹	29,345	100.0	54.5	33.7	11.8
1980–82	9,890	100.0	55.4	35.6	9.0
1975–79	7,974	100.0	56.4	32.2	11.4
Before 1975	11,481	100.0	52.5	33.1	14.4
White women	24,174	100.0	51.8	36.3	11.9
1980–82	8,109	100.0	53.2	38.2	8.6
1975–79	6,299	100.0	53.3	35.5	11.2
Before 1975	9,765	100.0	49.6	35.2	15.1
Black women	4,222	100.0	67.1	22.1	10.8
1980–82	1,412	100.0	67.4	23.5	9.1
1975–79	1,398	100.0	67.6	20.2	12.2
Before 1975	1,412	100.0	66.3	22.5	11.2

¹Includes white, black, and other races.

nonmetropolitan areas, but this difference was smaller for black women.

For white women, more frequent drinking (once a week or more) during pregnancy was more common among those who were college educated (17 percent), who were employed as professionals or managers (19 percent), or who had incomes at least three times the poverty level (16 percent) than among others. In contrast, more frequent drinking was more prevalent among black women who had not finished high school (17 percent) and those receiving Medicaid at the survey date (16 percent).

Low birth weight

A baby weighing 5½ pounds (2,500 grams) or less at birth is classified as low birth weight (Institute of Medicine, 1985). In the first 28 days after birth, low-birth-weight babies have nearly 40 times the mortality of other babies, and they account for two-thirds of neonatal deaths in the United States (McCormick, 1985; Brown, 1985; Shapiro et al., 1980; Institute of Medicine, 1985). Low-birth-weight babies are also five times more likely to die between 28 days and 1 year after birth and are more likely to develop neurodevelopmental handicaps, including cerebral palsy and seizure disorders, congenital anomalies, significant illnesses, learning disorders, and behavioral problems (McCormick, 1985; Brown, 1985; Shapiro et al., 1980; Institute of Medicine, 1985; NCHS, 1981a; Behrman, 1985; Siegel, 1985). In addition, neonatal intensive care of low-birth-weight babies is expensive—in 1981, \$1.5 billion was spent on neonatal intensive care in the United States, most of it on low-birth-weight babies (American Public Health Association, 1986; Phibbs, Williams, and Phibbs, 1981).

The biological causes of low birth weight are not well understood. There is, however, a large literature on risk

factors—that is, characteristics that make low birth weight more likely. The list of these characteristics is long; they include age (under 18 and over 34 years), black race, low education, having had a previous low-birth-weight baby, lack of prenatal care, previous multiple pregnancy losses, smoking, drinking, short interval since the most recent pregnancy, low socioeconomic status, and being unmarried (McCormick, 1985; Brown, 1985; Institute of Medicine, 1985; Behrman, 1985). These characteristics are important in screening and risk assessment, because they can be identified before delivery (McCormick, 1985; Brown, 1985; Institute of Medicine, 1985; Behrman, 1985). Of these, smoking may be the most important preventable risk factor, because 21–39 percent of low-birth-weight infants in the United States have been attributed to maternal smoking (Behrman, 1985; Hogue and Sappenfield, 1987; Sachs, 1987). Another very important risk factor for low birth weight is being of black race: after controlling for maternal age, education, parity, smoking, height, weight, weight gain during pregnancy, previous low-birth weight deliveries, and the timing of prenatal care, the percent of black babies who were low birth weight is still higher than that for white babies (Brown, 1985).

Characteristics of the pregnancy—Table 25 shows the proportion of single live births that were low birth weight by race of the mother and selected characteristics of the pregnancy. Variation in the percent low birth weight is small relative to variations observed in the health-related behavior during pregnancy reported in the preceding tables. But because low birth weight often results in long-term illness or infant death (Institute of Medicine, 1985), even small variations have important consequences for the populations involved.

Data from Cycle III of the National Survey of Family Growth reveal that 6.6 percent of all babies born to women

15–44 years of age in 1982 weighed 2,500 grams (5 1/2 pounds) or less at birth. The most striking finding in table 25 is that 5.6 percent of babies born to white mothers (in this report, white babies) were low in birth weight, compared with 12.2 percent of black babies. This proportion was higher for black than for white babies in every subgroup in table 25, although not every difference was significant and the size of the differences varies. The percents of low birth weight for white and black never married women were not significantly different (12 percent versus 13 percent, figure 5).

Twelve percent of babies of never married white women were low birth weight, compared with only 5 percent of babies born to ever married white women (figure 5). However, for black women the proportions of low birth weight were similar by marital status (13 percent and 12 percent, figure 5). Babies born to teenage mothers were more likely to be low birth weight than babies born to mothers aged 25 and older, but some of this difference was due to a larger share of black births among births to teenagers.

The largest difference in the percent of low birth weight was between babies of mothers who did not smoke during their most recent pregnancy and those who did. Overall, babies born to women who smoked heavily were three times as likely to be low birth weight than babies born to women who did not smoke at all (13 percent versus 4 percent). The observed difference in the proportion of low birth weight between babies born to mothers who did not smoke and those born to mothers who smoked heavily was more than 9 percentage points for both white women (3 percent versus 13 percent) and black women (9 percent versus 19 percent, figure 6). The difference was not statistically significant for births to black women, because of the smaller number of black women in the NSFG sample who smoked 15 or more cigarettes a day. Effects of alcohol on birth weight have been found only in women who drank at least daily. The NSFG was too small to have enough such women in the sample to draw reliable conclusions about the relationship between alcohol consumption and birth weight.

The difference between white and black babies in the percent having low birth weight was significant for women who did not smoke and for women who did not drink alcohol during their most recent pregnancy. The differences between black women and white women who smoked were not significant because of small sample sizes for black babies. But despite this, the observed difference in the percents of low birth weight between babies born to black women and those born to white women who drank once a week or more during pregnancy was large enough (18 percent versus 5 percent) to attain statistical significance at the 5-percent level.

Of babies born to Hispanic women, 5.5 percent weighed 2,500 grams or less at birth (table F). Differences in the percents low birth weight by marital status of the mother for Hispanic births (14 percent versus 4 percent) were at least as large as for non-Hispanic births (11 percent versus 5 percent).

Table F. Percent of single live births that were low birth weight, by race, origin, and marital status of mother at time of birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Race and origin	Mother's marital status at time of birth		
	All marital statuses	Never married	Ever Married
Percent			
Total ¹	6.6	12.2	5.8
Hispanic	5.5	*13.9	*3.5
Non-Hispanic white	5.7	11.4	5.3
Non-Hispanic black	12.3	12.8	12.1

¹Includes races other than white or black, not shown separately.

Characteristics of the mother—Table 26 shows the percent low birth weight according to selected characteristics of the mother at the date of interview.

Overall, nearly 9 percent of babies born to mothers with less than a high school education were low birth weight, compared with 5 percent of those born to mothers with some college education. These differences by level of education are similar to those for babies born to women employed as professional, managerial, sales, or clerical workers (5.6 percent) compared with those born to service, craft, and farm workers and operatives (8.2 percent).

Across the income categories in table 26, the proportions of low-birth-weight infants were similar, but 10 percent of infants born to mothers receiving Medicaid at the survey date weighed 2,500 grams or less at birth, compared with only 6 percent of those born to mothers not receiving Medicaid. However, for black women there was no significant difference in this proportion by Medicaid status.

Source of payment for delivery

A report based on the NCHS 1984 Health Interview Survey showed that white persons 18–44 years of age were more likely to have private medical insurance than black persons; black persons 18–44 years of age were much more likely to have no coverage than white persons were (NCHS, 1987b). The report also showed that the percent of persons 18–44 years of age covered by private insurance increased as education and income increased. Conversely, the proportion who had no health care coverage decreased as education and family income increased (NCHS, 1987b).

Characteristics of the birth—The number of live births since 1979 and the percent paid for from specified sources are shown in table 27 and for white and black women separately in tables 28 and 29. Note that the percents add to more than 100 because many women reported more than one source of payment for delivery. The most common combination was private medical insurance plus “self, family, or friends.”

Overall, 63 percent of deliveries were paid for, entirely or in part, by private medical insurance; 41 percent, by the woman, her family, or friends; 10 percent, by Medicaid; 9

percent, by State and/or local government; and 6 percent, in other ways. The difference in source of payment by race was very large: 68 percent of white births were covered by private medical insurance (table 28), compared with only 38 percent of black births (table 29 and figure 7). Because private medical insurance often covers most but not all of medical expenses, and because white women were more likely to use insurance than black women, white women would be expected to use their own income more often than black women—and this was the case: 44 percent of deliveries to white women were at least partly paid for using out-of-pocket funds, compared with 24 percent for births to black women (figure 7).

Even more strikingly, although only 7 percent of all white women used Medicaid as a source of payment for live birth, 30 percent of black women did so. About 8 percent of deliveries to white women were paid for by other government sources, compared with 15 percent of deliveries to black women. The figure for all other sources was small and similar for both races (figure 7).

The percent of deliveries paid for through private medical insurance increased dramatically with age of the mother, from 27 percent for teenage mothers to 80 percent for women 30–44 years old. This increase with age was similar for both black and white women—an increase of approximately 50 percentage points over the entire age range, with the largest difference for adjacent age groups seen between teenage women and women aged 20–24. Thus, a larger percent of white births than of black births were paid for from private medical insurance in every age group.

On the other hand, nearly half—47 percent—of births to black teenagers were paid for by Medicaid, compared with only 20 percent of births to white teenagers. For women aged 30–44 at delivery, the proportion paid for by Medicaid was 2 percent for white and 18 percent for black women.

Overall, a higher proportion of births to teenagers were paid for through non-Federal governmental sources (24 percent) than was true for other age groups (4–9 percent). The proportions of births paid for through these sources were similar for white and black teenagers and for white and black women aged 30–44, but a higher proportion of black than of white births were paid for by State and/or local government sources for women 20–29 years of age.

Method of payment differed dramatically by marital status of the mother at birth. For all races combined, 72 percent of births to ever married mothers were paid for with private medical insurance, compared with only 18 percent of births to never married mothers. The proportion paid for out of pocket (“self, family, or friends”) was almost twice as great for deliveries to ever married women (45 percent) as for those to never married women (23 percent). Only 4 percent of births to ever married women were paid for by Medicaid, compared with 40 percent of births to never married women.

Differences by race in the source of payment for births to never married women were not significant. Significant

race differences were found, however, for births to ever married women (and, therefore, for all births).

For both black and white births, those that were wanted at the time of conception were much more likely to be paid for from private medical insurance than were births that were either mistimed or unwanted, and less likely to be paid for from Medicaid.

Sources of payment for birth differed substantially between women receiving early and continuous prenatal care and those receiving later or discontinuous care. Births with early and continuous care were more likely to be paid for with private medical insurance (73 percent versus 45 percent) and less likely to be paid for by Medicaid (6 percent versus 18 percent) and non-Federal government sources (5 percent versus 16 percent) than were births receiving late or discontinuous care (table 27). About 12 percent of white deliveries and 41 percent of black deliveries following late or discontinuous prenatal care were paid for through Medicaid.

In assessing these figures, it should be noted that poor women may not have been receiving Medicaid when they became pregnant or sought prenatal care. Some may have been determined eligible for Medicaid only *after* they became pregnant. Births to white mothers receiving early and continuous prenatal care were less likely to be paid for from non-Federal government sources than were those receiving late or discontinuous care, but for black women the proportions paid for from these sources did not differ significantly by timing and continuity of prenatal care. Differences in the proportions paid for out of pocket and from all other sources were not significant, either overall or for either race group (tables 27–29).

As expected, sources of payment for delivery differed sharply by whether prenatal care was received at a clinic or from a private doctor. Births to those receiving care at a clinic were much less likely than births receiving care at a private doctor to be paid for out of pocket (28 percent versus 45 percent) or by private medical insurance (27 percent versus 76 percent). Births receiving prenatal care from clinics were also much more likely than those cared for by private doctors to be paid for by Medicaid (27 percent versus 5 percent), by State and/or local government (18 percent versus 6 percent), and by other sources (15 percent versus 3 percent). About 1 in 7 births to women receiving care from clinics was paid for from “all other” sources. The largest part of the “all other” category is the military. It is likely that many of these births received prenatal care at clinics in military hospitals.

The pattern of source of payment for delivery according to prenatal care provider for white births closely resembled the pattern for all races, but for black births the percents of deliveries paid for out of pocket and from other government sources did not differ significantly by type of prenatal care provider.

Sources of payment for delivery by origin and race are seen in table G. About 40 percent of births to Hispanic women were paid for (entirely or in part) out of pocket (“self, family, or friends”); 42 percent were paid with private

Table G. Number of live births in January 1979 or later to women 15–44 years of age and percent paid for from specified sources, by race, origin, and selected characteristics: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of births in thousands	Source of payment				
		Self, family, or friends	Private medical insurance	Medicaid	Other government	All other
		Percent ¹				
Hispanic	2,1704	40.1	41.9	19.6	14.5	*4.5
Mother's age at time of birth:						
Under 20 years	380	*35.3	*23.6	*28.0	*25.3	*0.5
20–24 years	527	39.2	*28.7	*26.8	*13.1	*8.2
25–44 years	796	43.0	59.4	*10.8	*10.3	*4.1
Mother's marital status at time of birth:						
Never married	480	*28.0	*17.3	44.8	*15.3	*2.7
Ever married	1,222	44.9	51.5	*9.7	*14.2	*5.3
Non-Hispanic white	210,248	44.4	71.6	5.0	6.8	6.0
Mother's age at time of birth:						
Under 20 years	1,016	37.6	34.7	*17.9	23.9	*5.0
20–24 years	3,389	39.7	65.0	*7.0	*7.2	8.6
25–44 years	5,842	48.4	82.1	*1.5	*3.5	*4.7
Mother's marital status at time of birth:						
Never married	913	25.5	*18.6	32.2	30.5	*3.9
Ever married	9,311	46.2	76.7	*2.4	4.5	6.2
Non-Hispanic black	2,020	24.0	37.3	30.5	15.2	6.6
Mother's age at time of birth:						
Under 20 years	512	21.4	*13.5	46.0	20.6	*6.7
20–24 years	755	25.0	34.1	30.6	15.7	*7.7
25–44 years	752	24.6	56.8	20.0	11.0	*5.4
Mother's marital status at time of birth:						
Never married	1,021	17.6	16.4	46.5	22.9	*4.3
Ever married	995	30.5	58.6	14.3	*7.2	8.9

¹The sum of the percents exceeds 100.0 because some women reported more than one source of payment.

²Includes births for which mother's marital status at time of birth was unknown.

medical insurance; 20 percent, with Medicaid; 14 percent from other government sources; and 5 percent, from other sources. Thus, births to Hispanic women were much less likely than births to non-Hispanic white women to be paid for by private medical insurance (42 percent versus 72 percent), and more likely to be paid for by Medicaid (20 percent versus 5 percent) and other government sources (15 percent versus 7 percent). Comparing births to Hispanic women with births to non-Hispanic black women (table G), births to Hispanic women were more likely to be paid for out of pocket (40 percent versus 24 percent) and less likely to be paid for by Medicaid (20 percent versus 31 percent) than births to non-Hispanic black women. As observed for both white and black non-Hispanic births, deliveries to never married Hispanic women were much more likely to be paid for through Medicaid (45 percent versus 10 percent) and less likely to be paid for through insurance (17 percent versus 52 percent) than was true for deliveries to ever married Hispanic women.

Characteristics of the mother—Tables 30, 31, and 32 show the percents of births paid for from various sources according to characteristics of the mother at the date of interview (not necessarily at the date of the birth).

For both white and black births, the proportion paid for by private insurance increased with the rising education of

the mother—from 40 to 84 percent for births to white women and from 16 to 58 percent for births to black women. The proportions paid by Medicaid declined sharply as the mother's education increased, for both white and black births, and the race difference in the use of Medicaid was very large for all three categories of education. For example, at the lowest educational level, 49 percent of black births and only 20 percent of white births were paid for using Medicaid.

Source of payment for delivery differed considerably according to the most recent occupation of the mother. For all races combined, 84 percent of births to women employed as professionals or managers used private medical insurance and 54 percent used income from self, family, or friends, but only 2 percent used funds from Medicaid or other government sources. In contrast, only 27 percent of births to women who had never worked used private medical insurance to pay for delivery, 38 percent used out-of-pocket resources, but 32 percent used Medicaid and 14 percent used State or local government sources. The proportion of births to professionals and managers who used their own income as a source of payment was higher for white than for black women (56 percent versus 23 percent). However, the other four sources of payment for births to professional and managerial women were similar by race.

On the other hand, there were large race differences in payment for births to women in the other occupational groups. More than half of births to never employed black women were paid for using Medicaid, compared with 26 percent for never employed white women.

Births to low-income women were more likely to have been paid for using Medicaid (24 percent versus 2 percent) or by other government sources (19 percent versus 2-4 percent) than were births to higher-income women, but there were significant differences by race within this income category. Births to low-income black women were more likely to have been paid for by Medicaid than were births to low-income white women (41 percent versus 18 percent).

Fewer than half (47 percent) of current Medicaid recipients reported Medicaid as a source of payment for delivery. In addition, 30 percent of births to current Medicaid recipients were paid for through other government sources. Taken together, these findings suggest that in many cases either the woman was eligible for Medicaid during her pregnancy but unable to complete the application process before delivery; or, after delivery (or as a result of the birth), she lost support from her parents or the baby's father, or her income decreased, and she thus became eligible for Medicaid.

Trends in source of payment for delivery: 1973-82

The percent distributions of source of payment for delivery for the most recent birth to women interviewed in 1973 and for the most recent birth since January 1979 to women interviewed in 1982 are given in table 33 and figure 8. Over this 9-year period, the percent of women who paid

for their most recent delivery entirely from their own or their family's own income declined from 22 percent to 10 percent (figure 8). The decline was apparent at all ages, at all levels of education and income examined, in every region, and for both white and black women. However, the decline was largest among births to teenagers (from 38 percent to 9 percent). The declines were generally similar across categories of all variables except age.

The percent of women who paid for their most recent birth entirely through private medical insurance increased by approximately 10 percentage points, from 28 percent in 1973 to 38 percent in 1982 (figure 8). In contrast to the trend in self-payment, however, this increase was smaller and not significant among teenagers, black and Hispanic women, women with a high school education or less, low-income women, and those living in the Midwest. The proportion of women who used a combination of private medical insurance and their own income to pay for their most recent delivery declined from 32 to 25 percent (figure 8).

These data suggest that there has been a slight increase in the proportion of women paying for delivery from Medicaid between the two survey dates, but the rise from 7 to 10 percent was not large enough to be significant at the 5 percent level. Overall, a similar three-point increase was suggested in the proportion of most recent deliveries paid for from other government sources (from 6 to 9 percent), but larger, significant increases were found among births to teenagers, black women, women with less than 12 years of education, and low-income women. The data also suggest that a larger proportion of Hispanic women interviewed in 1982 than of those interviewed in 1973 used other government sources to pay for their most recent deliveries.

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Table 1. Number of pregnancies ending in a live birth in January 1979 or later to women 15–44 years of age and percent distribution by months pregnant when prenatal care began, according to selected characteristics of the birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Total	Months pregnant when prenatal care began		
			Less than 3 months	3 or 4 months	5 months or more or no care
Percent distribution					
All pregnancies ending in a live birth	114,372	100.0	65.9	25.6	8.5
Mother's age at time of birth:					
Under 20 years	1,972	100.0	45.7	37.5	16.8
20–24 years	4,764	100.0	61.4	30.1	8.5
25–29 years	4,863	100.0	75.1	19.5	*5.4
30–44 years	2,773	100.0	72.1	19.9	*8.0
Birth order:					
First	6,001	100.0	63.4	28.1	8.4
Second	4,900	100.0	72.9	20.7	6.3
Third or higher	3,471	100.0	60.2	28.2	11.7
Mother's marital status at time of birth:					
Never married	2,471	100.0	43.8	39.1	17.2
Ever married	11,872	100.0	70.6	22.7	6.7
Wantedness status at conception:					
Wanted then	9,127	100.0	72.6	20.9	6.6
Mistimed	3,823	100.0	56.0	33.5	10.5
Unwanted	1,422	100.0	49.6	34.9	*15.5

¹Includes births for which mother's marital status at birth or wantedness status at conception was unknown.

Table 2. Number of pregnancies ending in a live birth in January 1979 or later to white women 15–44 years of age and percent distribution by months pregnant when prenatal care began, according to selected characteristics of the birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Total	Months pregnant when prenatal care began		
			Less than 3 months	3 or 4 months	5 months or more or no care
Percent distribution					
All pregnancies ending in a live birth	111,836	100.0	68.7	23.6	7.7
Mother's age at time of birth:					
Under 20 years	1,364	100.0	50.9	34.7	*14.3
20–24 years	3,890	100.0	63.3	28.0	8.7
25–29 years	4,200	100.0	77.0	18.8	*4.2
30–44 years	2,381	100.0	73.3	18.2	*8.5
Birth order:					
First	4,902	100.0	66.0	26.3	7.7
Second	4,142	100.0	76.2	18.7	*5.1
Third or higher	2,792	100.0	62.3	26.1	11.7
Mother's marital status at time of birth:					
Never married	1,350	100.0	46.6	35.7	17.7
Ever married	10,460	100.0	71.6	21.9	6.4
Wantedness status at conception:					
Wanted then	7,912	100.0	74.1	19.3	6.5
Mistimed	2,980	100.0	58.5	33.0	*8.5
Unwanted	944	100.0	55.1	29.8	*15.1

¹Includes births for which mother's marital status at birth or wantedness status at conception was unknown.

Table 3. Number of pregnancies ending in a live birth in January 1979 or later to black women 15–44 years of age and percent distribution by months pregnant when prenatal care began, according to selected characteristics of the birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Total	Months pregnant when prenatal care began		
			Less than 3 months	3 or 4 months	5 months or more or no care
Percent distribution					
All pregnancies ending in a live birth	12,095	100.0	53.0	36.6	10.4
Mother's age at time of birth:					
Under 20 years	528	100.0	37.0	44.3	18.7
20–24 years	774	100.0	53.9	37.9	*8.2
25–29 years	505	100.0	64.3	26.1	*9.7
30–44 years	288	100.0	60.9	37.2	*2.0
Birth order:					
First	857	100.0	49.2	38.4	12.4
Second	603	100.0	61.1	31.5	*7.5
Third or higher.	635	100.0	50.4	39.2	*10.5
Mother's marital status at time of birth:					
Never married	1,049	100.0	42.7	41.7	15.7
Ever married	1,042	100.0	63.4	31.5	*5.1
Wantedness status at conception:					
Wanted then	935	100.0	63.4	32.0	*4.5
Mistimed	709	100.0	50.2	35.6	14.3
Unwanted.	450	100.0	35.9	47.9	16.2

¹Includes births for which mother's marital status at birth or wantedness status at conception was unknown.

Table 4. Number of pregnancies ending in a live birth in January 1979 or later to women 15–44 years of age and percent distribution by months pregnant when prenatal care began, according to selected characteristics of the mother: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Total	Months pregnant when prenatal care began		
			Less than 3 months	3 or 4 months	5 months or more or no care
Percent distribution					
All pregnancies ending in a live birth	14,372	100.0	65.9	25.6	8.5
Region:					
Northeast	2,653	100.0	75.0	19.3	*5.8
Midwest	3,839	100.0	65.7	29.0	*5.3
South	4,719	100.0	60.6	28.8	10.5
West	3,161	100.0	66.4	22.1	11.5
Education:					
Less than 12 years	3,516	100.0	48.2	33.4	18.4
12 years	5,669	100.0	66.7	25.9	7.4
13 years or more	5,187	100.0	77.1	20.0	*2.9
Most recent occupation:					
Professional or managerial	2,222	100.0	81.9	15.5	*2.6
Sales or clerical	5,502	100.0	72.8	22.0	5.2
Service	2,575	100.0	65.7	25.4	*8.9
Craft or farm worker or operative	1,851	100.0	46.8	42.9	*10.3
Never worked	2,142	100.0	48.3	30.9	20.7
Poverty level income:					
149 percent or less	5,113	100.0	50.1	34.1	15.8
150 percent or more	9,260	100.0	74.7	20.9	4.4
300 percent or more	4,663	100.0	78.7	18.4	*3.0
Medicaid status:					
Receives Medicaid	2,059	100.0	45.9	37.5	16.6
Does not receive Medicaid	12,269	100.0	69.2	23.6	7.1

¹Includes births for which last occupation or Medicaid status was unknown.

Table 5. Number of pregnancies ending in a live birth in January 1979 or later to white women 15–44 years of age and percent distribution by months pregnant when prenatal care began, according to selected characteristics of the mother: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Total	Months pregnant when prenatal care began		
			Less than 3 months	3 or 4 months	5 months or more or no care
Percent distribution					
All pregnancies ending in a live birth	11,836	100.0	68.7	23.6	7.7
Region:					
Northeast	2,183	100.0	77.6	16.7	*5.7
Midwest	3,449	100.0	67.4	28.2	*4.4
South	3,458	100.0	64.8	25.8	9.4
West	2,746	100.0	68.1	20.5	11.4
Education:					
Less than 12 years	2,794	100.0	51.8	30.7	17.5
12 years	4,693	100.0	69.1	23.9	7.0
13 years or more	4,438	100.0	79.2	18.7	*2.1
Most recent occupation:					
Professional or managerial	1,998	100.0	81.9	16.1	*2.1
Sales or clerical	4,619	100.0	75.7	19.7	*4.6
Service	2,116	100.0	68.0	23.0	*9.0
Craft or farm worker or operative	1,502	100.0	47.7	41.7	*10.6
Never worked	1,542	100.0	52.0	28.1	19.9
Poverty level income:					
149 percent or less	3,774	100.0	53.3	31.2	15.5
150 percent or more	8,062	100.0	76.0	20.0	4.0
300 percent or more	4,095	100.0	78.9	18.6	*2.5
Medicaid status:					
Receives Medicaid	1,222	100.0	47.4	35.3	*17.3
Does not receive Medicaid	10,599	100.0	71.2	22.2	6.6

¹Includes births for which last occupation or Medicaid status was unknown.

Table 6. Number of pregnancies ending in a live birth in January 1979 or later to black women 15–44 years of age and percent distribution by months pregnant when prenatal care began, according to selected characteristics of the mother: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Total	Months pregnant when prenatal care began		
			Less than 3 months	3 or 4 months	5 months or more or no care
Percent distribution					
All pregnancies ending in a live birth	12,095	100.0	53.0	36.6	10.4
Region:					
Northeast	389	100.0	62.7	33.0	*4.3
Midwest	320	100.0	53.4	39.1	*7.6
South	1,141	100.0	48.9	38.8	12.3
West	244	100.0	56.4	28.9	*14.7
Education:					
Less than 12 years	652	100.0	35.2	46.5	18.3
12 years	867	100.0	54.7	36.2	9.2
13 years or more	576	100.0	70.7	26.1	*3.2
Most recent occupation:					
Professional or managerial	151	100.0	90.8	*7.6	*1.7
Sales or clerical	682	100.0	58.5	36.2	*5.3
Service	433	100.0	52.3	38.6	*9.1
Craft or farm worker or operative	274	100.0	47.3	45.9	*6.8
Never worked	532	100.0	38.9	40.3	20.8
Poverty level income:					
149 percent or less	1,185	100.0	42.6	42.4	14.9
150 percent or more	910	100.0	66.6	29.0	*4.4
300 percent or more	369	100.0	78.3	19.3	*2.3
Medicaid status:					
Receives Medicaid	786	100.0	44.3	41.8	13.9
Does not receive Medicaid	1,290	100.0	58.2	33.5	8.3

¹Includes births for which last occupation or Medicaid status was unknown.

Table 7. Number of pregnancies ending in a live birth or spontaneous loss in January 1979 or later to women 15–44 years of age, percent receiving prenatal care, and percent distribution of pregnancies receiving care by source of care at first visit, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Percent receiving prenatal care	Total	Source of prenatal care at first visit		
				Private doctor	Hospital clinic	Other clinic
Percent distribution						
All pregnancies ¹	217,397	93.1	100.0	75.3	8.8	15.8
Mother's age at pregnancy outcome:						
Under 20 years	2,474	89.6	100.0	55.6	16.2	28.1
20–24 years	5,450	93.0	100.0	67.0	11.1	21.9
25–29 years	5,837	96.0	100.0	82.7	6.7	10.6
30–44 years	3,636	91.0	100.0	89.3	*3.8	*6.9
Pregnancy order:						
First pregnancy	5,526	94.0	100.0	71.4	9.8	18.7
Second pregnancy	5,604	93.0	100.0	78.1	8.0	13.9
Third pregnancy or higher	6,267	92.4	100.0	76.5	8.6	14.9
Mother's marital status at pregnancy outcome:						
Never married	3,093	89.8	100.0	45.3	19.9	34.8
Ever married	14,272	93.8	100.0	81.6	6.5	11.9
Wantedness status at conception:						
Wanted then	10,697	95.4	100.0	80.0	7.6	12.4
Mistimed	4,710	90.9	100.0	69.1	9.5	21.3
Unwanted.	1,991	86.0	100.0	62.6	*14.5	22.9
Live births	² 14,372	98.4	100.0	74.9	9.0	16.1
Mother's age at birth:						
Under 20 years	1,972	98.1	100.0	55.1	16.3	28.7
20–24 years	4,764	97.4	100.0	66.8	11.4	21.8
25–29 years	4,863	99.7	100.0	82.9	6.6	10.5
30–44 years	2,773	98.0	100.0	88.7	*4.2	*7.1
Mother's marital status at pregnancy outcome:						
Never married	2,471	97.1	100.0	43.4	20.8	35.8
Ever married	11,872	98.7	100.0	81.3	6.6	12.0
Wantedness status at conception:						
Wanted then	9,127	98.6	100.0	79.6	7.5	12.8
Mistimed	3,823	97.7	100.0	68.8	9.9	21.3
Unwanted.	1,422	99.3	100.0	60.4	*16.6	23.0
Prenatal care:						
Early and continuous.	9,124	100.0	100.0	82.2	7.0	10.8
Late or discontinuous	5,052	95.5	100.0	60.9	12.9	26.2

¹"All pregnancies" refers to live births, miscarriages, and stillbirths. Induced abortions are excluded.

²Includes pregnancies for which data were missing on mother's marital status at outcome or on prenatal care.

Table 8. Number of pregnancies ending in a live birth or spontaneous loss in January 1979 or later to white women 15–44 years of age, percent receiving prenatal care, and percent distribution of pregnancies receiving care by source of care at first visit, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Percent receiving prenatal care	Total	Source of prenatal care at first visit		
				Private doctor	Hospital clinic	Other clinic
Percent distribution						
All pregnancies ¹	214,148	93.6	100.0	80.2	7.3	12.5
Mother's age at pregnancy outcome:						
Under 20 years	1,728	89.5	100.0	66.6	16.3	17.1
20–24 years	4,425	93.2	100.0	71.9	9.5	18.6
25–29 years	4,995	96.9	100.0	85.6	*5.2	9.2
30–44 years	3,000	91.3	100.0	91.2	*2.8	*6.0
Pregnancy order:						
First pregnancy	4,498	94.5	100.0	77.6	8.0	14.4
Second pregnancy	4,643	92.9	100.0	81.8	7.3	10.8
Third pregnancy or higher	5,007	93.5	100.0	81.1	6.8	12.2
Mother's marital status at pregnancy outcome:						
Never married	1,695	90.5	100.0	52.2	21.7	26.0
Ever married	12,427	94.1	100.0	83.8	5.5	10.7
Wantedness status at conception:						
Wanted then	9,163	95.4	100.0	83.7	6.3	10.0
Mistimed	3,695	91.5	100.0	74.0	*7.5	18.5
Unwanted.	1,289	87.0	100.0	71.3	*14.8	*13.8
Live births	211,836	98.3	100.0	79.9	7.5	12.7
Mother's age at birth:						
Under 20 years	1,364	98.4	100.0	65.4	*16.3	18.3
20–24 years	3,890	97.2	100.0	71.7	9.8	18.6
25–29 years	4,200	99.8	100.0	86.1	*4.9	9.0
30–44 years	2,381	97.7	100.0	90.6	*3.2	*6.2
Mother's marital status at birth:						
Never married	1,350	96.5	100.0	48.6	23.6	27.8
Ever married	10,460	98.6	100.0	83.8	5.5	10.7
Wantedness status at conception:						
Wanted then	7,912	98.4	100.0	83.5	6.2	10.3
Mistimed	2,980	97.6	100.0	73.5	*7.9	18.6
Unwanted.	944	100.0	100.0	69.1	*17.3	*13.7
Prenatal care:						
Early and continuous.	7,856	100.0	100.0	85.6	5.8	8.6
Late or discontinuous	3,836	94.9	100.0	67.3	11.1	21.5

¹"All pregnancies" refers to live births, miscarriages, and stillbirths. Induced abortions are excluded.

²Includes pregnancies for which data were missing on mother's marital status at outcome or on prenatal care.

Table 9. Number of pregnancies ending in a live birth or spontaneous loss in January 1979 or later to black women 15–44 years of age, percent receiving prenatal care, and percent distribution of pregnancies receiving care by source of care at first visit, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Percent receiving prenatal care	Total	Source of prenatal care at first visit		
				Private doctor	Hospital clinic	Other clinic
Percent distribution						
All pregnancies ¹	2,574	91.0	100.0	48.3	17.5	34.2
Mother's age at pregnancy outcome:						
Under 20 years	646	91.0	100.0	31.5	18.3	50.2
20–24 years	902	92.2	100.0	43.1	19.1	37.8
25–29 years	616	89.8	100.0	60.3	16.9	22.8
30–44 years	409	90.3	100.0	69.4	*13.9	*16.7
Pregnancy order:						
First pregnancy	806	93.2	100.0	42.3	16.9	40.8
Second pregnancy	685	92.5	100.0	48.6	15.9	35.5
Third pregnancy or higher	1,082	88.4	100.0	52.8	19.2	28.0
Mother's marital status at pregnancy outcome:						
Never married	1,297	90.4	100.0	37.1	18.7	44.2
Ever married	1,271	91.6	100.0	59.8	16.2	24.0
Wantedness status at conception:						
Wanted then	1,116	95.6	100.0	52.6	16.6	30.9
Mistimed	850	89.4	100.0	47.5	20.0	32.5
Unwanted.	608	84.8	100.0	40.5	15.9	43.6
Live births	22,095	98.4	100.0	48.3	17.6	34.1
Mother's age at birth:						
Under 20 years	528	97.0	100.0	33.2	18.6	48.2
20–24 years	774	98.6	100.0	42.5	19.1	38.3
25–29 years	505	98.7	100.0	61.0	16.6	22.4
30–44 years	288	100.0	100.0	69.7	*13.1	*17.2
Mother's marital status at birth:						
Never married	1,049	97.6	100.0	37.6	18.7	43.7
Ever married	1,042	99.2	100.0	59.1	16.4	24.5
Wantedness status at conception:						
Wanted then	935	99.5	100.0	52.2	16.3	31.5
Mistimed	709	97.4	100.0	48.8	20.0	31.2
Unwanted.	450	97.7	100.0	39.4	16.4	44.2
Prenatal care:						
Early and continuous	1,040	100.0	100.0	57.9	14.4	27.7
Late or discontinuous	1,001	96.7	100.0	37.3	21.2	41.5

¹"All pregnancies" refers to live births, miscarriages, and stillbirths. Induced abortions are excluded.

²Includes pregnancies for which data were missing on mother's marital status at outcome or on prenatal care.

Table 10. Number of pregnancies ending in a live birth or spontaneous loss in January 1979 or later to women 15-44 years of age, percent receiving prenatal care, and percent distribution of pregnancies receiving care by source of care at first visit, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Percent receiving prenatal care	Total	Source of prenatal care at first visit		
				Private doctor	Hospital clinic	Other clinic
Percent distribution						
All pregnancies ¹	217,397	93.1	100.0	75.3	8.8	15.8
Region:						
Northeast	3,244	94.3	100.0	71.3	16.8	11.9
Midwest	4,501	93.7	100.0	83.1	7.5	9.4
South	5,672	93.3	100.0	70.5	6.7	22.8
West	3,980	91.2	100.0	76.8	*6.7	16.5
Education:						
Less than 12 years	4,156	87.8	100.0	56.2	16.1	27.7
12 years	6,746	94.8	100.0	76.5	9.3	14.2
13 years or more	6,495	94.7	100.0	85.6	*4.0	10.4
Most recent occupation:						
Professional or managerial	2,738	93.2	100.0	87.9	*3.5	*8.6
Sales or clerical	6,749	94.5	100.0	82.0	6.4	11.6
Service	3,263	93.4	100.0	71.4	12.5	16.1
Craft or farm worker or operative	2,074	94.9	100.0	69.6	*9.9	20.6
Never worked	2,456	87.9	100.0	52.9	15.2	31.9
Poverty level income:						
149 percent or less	5,910	91.7	100.0	57.6	14.3	28.2
150 percent or more	11,487	93.8	100.0	84.4	6.1	9.6
300 percent or more	6,025	94.2	100.0	87.1	5.3	7.5
Medicaid status:						
Receives Medicaid	2,367	91.4	100.0	42.3	19.9	37.7
Does not receive Medicaid	14,963	93.4	100.0	80.5	7.1	12.4
Live births	214,372	98.4	100.0	74.9	9.0	16.1
Region:						
Northeast	2,653	99.5	100.0	69.5	18.3	12.2
Midwest	3,839	98.9	100.0	83.6	*6.6	9.8
South	4,719	97.8	100.0	70.6	6.7	22.6
West	3,161	97.9	100.0	75.2	*7.6	17.3
Education:						
Less than 12 years	3,516	95.5	100.0	55.2	16.9	28.0
12 years	5,669	99.2	100.0	76.6	8.6	14.7
13 years or more	5,187	99.5	100.0	85.7	*4.4	9.9
Most recent occupation:						
Professional or managerial	2,222	99.9	100.0	87.5	*3.3	*9.2
Sales or clerical	5,502	99.3	100.0	82.0	6.5	11.6
Service	2,575	98.7	100.0	71.7	12.8	15.5
Craft or farm worker or operative	1,851	97.9	100.0	68.9	*9.9	21.1
Never worked	2,142	94.7	100.0	52.2	15.9	32.0
Poverty level income:						
149 percent or less	5,113	97.0	100.0	57.0	14.7	28.3
150 percent or more	9,260	99.2	100.0	84.5	6.0	9.5
300 percent or more	4,663	100.0	100.0	86.8	*5.8	7.4
Medicaid status:						
Receives Medicaid	2,059	97.7	100.0	42.2	20.0	37.8
Does not receive Medicaid	12,269	98.5	100.0	80.4	7.2	12.4

¹"All pregnancies" refers to live births, miscarriages, and stillbirths. Induced abortions are excluded.

²Includes pregnancies for which mother's last occupation or mother's Medicaid status was unknown.

Table 11. Number of pregnancies ending in a live birth or spontaneous loss in January 1979 or later to white women 15-44 years of age, percent receiving prenatal care, and percent distribution of pregnancies receiving care by source of care at first visit, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Percent receiving prenatal care	Total	Source of prenatal care at first visit		
				Private doctor	Hospital clinic	Other clinic
Percent distribution						
All pregnancies ¹	214,148	93.6	100.0	80.2	7.3	12.5
Region:						
Northeast	2,622	95.3	100.0	76.1	14.1	*9.8
Midwest	3,989	94.8	100.0	86.0	*6.3	7.7
South	4,197	93.1	100.0	78.4	*5.2	16.4
West	3,340	91.6	100.0	78.8	*5.8	15.4
Education:						
Less than 12 years	3,251	88.4	100.0	60.9	15.7	23.5
12 years	5,521	95.3	100.0	83.0	7.5	9.5
13 years or more	5,375	95.1	100.0	88.2	*2.5	9.3
Most recent occupation:						
Professional or managerial	2,430	93.2	100.0	88.0	*3.1	*8.9
Sales or clerical	5,565	95.6	100.0	86.3	*4.7	9.0
Service	2,638	93.3	100.0	76.5	10.9	12.6
Craft or farm worker or operative	1,670	95.9	100.0	72.7	*10.6	16.8
Never worked	1,759	87.1	100.0	62.1	*12.6	25.3
Poverty level income:						
149 percent or less	4,284	92.6	100.0	62.9	13.5	23.6
150 percent or more	9,863	94.1	100.0	87.7	4.7	7.6
300 percent or more	5,182	94.7	100.0	89.0	*4.4	6.6
Medicaid status:						
Receives Medicaid	1,354	92.2	100.0	46.1	20.0	33.9
Does not receive Medicaid	12,757	93.8	100.0	83.7	6.0	10.3
Live births	211,836	98.3	100.0	79.9	7.5	12.7
Region:						
Northeast	2,183	99.5	100.0	74.8	15.6	*9.6
Midwest	3,449	98.9	100.0	86.6	*5.3	8.1
South	3,458	97.6	100.0	78.2	*5.2	16.6
West	2,746	97.7	100.0	77.6	*6.6	15.8
Education:						
Less than 12 years	2,794	94.9	100.0	59.4	16.7	23.9
12 years	4,693	99.3	100.0	83.1	6.8	10.1
13 years or more	4,348	99.5	100.0	88.9	*2.6	8.4
Most recent occupation:						
Professional or managerial	1,998	100.0	100.0	87.6	*3.0	*9.4
Sales or clerical	4,619	99.3	100.0	86.5	*4.6	8.9
Service	2,116	98.6	100.0	77.4	*11.0	*11.6
Craft or farm worker or operative	1,502	97.7	100.0	71.8	*10.7	17.5
Never worked	1,542	93.5	100.0	60.6	*13.4	26.0
Poverty level income:						
149 percent or less	3,774	96.8	100.0	62.1	14.2	23.7
150 percent or more	8,062	99.1	100.0	88.0	4.4	7.6
300 percent or more	4,095	100.0	100.0	88.7	*4.7	6.6
Medicaid status:						
Receives Medicaid	1,222	97.5	100.0	46.5	19.5	34.0
Does not receive Medicaid	10,599	98.4	100.0	83.6	6.1	10.2

¹"All pregnancies" refers to live births, miscarriages, and stillbirths. Induced abortions are excluded.

²Includes pregnancies for which mother's last occupation or mother's Medicaid status was unknown.

Table 12. Number of pregnancies ending in a live birth or spontaneous loss in January 1979 or later to black women 15-44 years of age, percent receiving prenatal care, and percent distribution of pregnancies receiving care by source of care at first visit, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number in thousands	Percent receiving prenatal care	Total	Source of prenatal care at first visit		
				Private doctor	Hospital clinic	Other clinic
Percent distribution						
All pregnancies	1 ² 2,574	91.0	100.0	48.3	17.5	34.2
Region:						
Northeast	483	92.8	100.0	44.9	31.9	23.2
Midwest	394	86.7	100.0	50.9	22.8	26.4
South	1,340	93.4	100.0	45.8	12.2	41.9
West	358	84.6	100.0	60.0	*13.4	26.6
Education:						
Less than 12 years	824	85.6	100.0	36.3	19.2	44.5
12 years	1,051	94.3	100.0	44.2	20.1	35.7
13 years or more	700	92.5	100.0	67.7	11.9	20.4
Most recent occupation:						
Professional or managerial	178	96.1	100.0	78.2	*11.3	*10.5
Sales or clerical	878	89.8	100.0	56.8	17.6	25.6
Service	543	93.7	100.0	41.6	22.6	35.8
Craft or farm worker or operative	328	89.5	100.0	55.5	*8.6	35.9
Never worked	617	90.3	100.0	30.1	19.7	50.1
Poverty level income:						
149 percent or less	1,417	90.0	100.0	38.7	18.6	42.7
150 percent or more	1,157	92.3	100.0	59.8	16.3	23.9
300 percent or more	513	90.3	100.0	69.7	*12.1	18.3
Medicaid status:						
Receives Medicaid	940	89.7	100.0	33.3	21.4	45.3
Does not receive Medicaid	1,612	91.8	100.0	57.0	15.3	27.6
Live births	2 ² ,095	98.4	100.0	48.3	17.6	34.1
Region:						
Northeast	389	99.5	100.0	41.7	32.7	25.7
Midwest	320	98.4	100.0	51.7	22.4	25.9
South	1,141	98.1	100.0	47.0	12.1	41.0
West	244	98.1	100.0	60.6	*13.6	25.8
Education:						
Less than 12 years	652	97.5	100.0	36.6	19.4	44.0
12 years	867	98.5	100.0	44.7	19.8	35.5
13 years or more	576	99.2	100.0	67.0	*12.1	21.0
Most recent occupation:						
Professional or managerial	151	99.2	100.0	80.2	*8.7	*11.2
Sales or clerical	682	99.3	100.0	55.6	18.3	26.1
Service	433	99.1	100.0	42.0	22.0	36.0
Craft or farm worker or operative	274	98.8	100.0	56.4	*8.8	34.9
Never worked	532	97.3	100.0	31.3	20.2	48.5
Poverty level income:						
149 percent or less	1,185	97.3	100.0	39.4	18.2	42.4
150 percent or more	910	99.8	100.0	59.8	16.8	23.5
300 percent or more	369	100.0	100.0	69.8	*12.3	*18.0
Medicaid status:						
Receives Medicaid	786	97.8	100.0	33.4	21.8	44.8
Does not receive Medicaid	1,290	98.9	100.0	57.5	14.9	27.5

¹"All pregnancies" refers to live births, miscarriages, and stillbirths. Induced abortions are excluded.

²Includes pregnancies for which mother's last occupation or mother's Medicaid status was unknown.

Table 13. Number of women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average number of cigarettes smoked per day during the pregnancy, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average number of cigarettes smoked per day during pregnancy		
			None	Fewer than 15	15 or more
Percent distribution					
All women	129,357	100.0	69.4	15.7	14.9
Age at pregnancy outcome:					
Under 20 years	2,933	100.0	61.6	22.3	16.1
20–24 years	9,511	100.0	66.4	17.2	16.4
25–29 years	10,764	100.0	72.4	13.9	13.7
30–44 years	6,149	100.0	72.5	13.3	14.2
Pregnancy order:					
First pregnancy	6,436	100.0	68.2	19.8	12.0
Second pregnancy	9,582	100.0	72.4	14.2	13.4
Third pregnancy or higher	13,339	100.0	67.9	14.8	17.4
Marital status at pregnancy outcome:					
Never married	3,252	100.0	59.9	22.6	17.5
Ever married	25,899	100.0	70.7	14.7	14.5
Wantedness status at conception:					
Wanted then	18,130	100.0	72.4	13.8	13.8
Mistimed	7,024	100.0	65.5	18.2	16.3
Unwanted	4,202	100.0	63.2	19.5	17.3
Pregnancy outcome:					
Live birth	26,224	100.0	70.7	15.2	14.1
Spontaneous pregnancy loss.	3,133	100.0	59.0	19.7	21.4
Prenatal care:²					
Early and continuous.	7,306	100.0	76.9	12.7	10.4
Late or discontinuous	4,548	100.0	64.8	19.2	16.0

¹Includes women for whom marital status at outcome and timing and continuity of prenatal care were unknown for the most recent pregnancy.

²Pregnancies ending on or after January 1, 1979.

Table 14. Number of white women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average number of cigarettes smoked per day during the pregnancy, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average number of cigarettes smoked per day during pregnancy		
			None	Fewer than 15	15 or more
Percent distribution					
All women	124,174	100.0	68.7	15.2	16.1
Age at pregnancy outcome:					
Under 20 years	2,034	100.0	57.9	22.0	20.1
20–24 years	7,778	100.0	64.3	17.3	18.4
25–29 years	9,320	100.0	72.5	13.3	14.2
30–44 years	5,043	100.0	73.0	12.8	14.3
Pregnancy order:					
First pregnancy	5,173	100.0	66.9	19.7	13.4
Second pregnancy	8,118	100.0	71.5	14.1	14.4
Third pregnancy or higher	10,883	100.0	67.5	13.9	18.6
Marital status at pregnancy outcome:					
Never married	1,508	100.0	54.1	21.1	24.8
Ever married	22,509	100.0	69.9	14.7	15.4
Wantedness status at conception:					
Wanted then	15,686	100.0	71.9	13.4	14.6
Mistimed	5,568	100.0	64.0	17.6	18.4
Unwanted.	2,920	100.0	60.4	20.3	19.3
Pregnancy outcome:					
Live birth	21,802	100.0	69.9	14.8	15.3
Spontaneous pregnancy loss.	2,372	100.0	57.7	19.0	23.3
Prenatal care:²					
Early and continuous.	6,209	100.0	76.6	12.2	11.3
Late or discontinuous	3,433	100.0	64.3	18.4	17.3

¹Includes women for whom marital status at outcome, and timing and continuity of prenatal care were unknown for the most recent pregnancy.

²Pregnancies ending on or after January 1, 1979.

Table 15. Number of black women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average number of cigarettes smoked per day during the pregnancy, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average number of cigarettes smoked per day during pregnancy		
			None	Fewer than 15	15 or more
Percent distribution					
All women	14,234	100.0	71.0	19.5	9.5
Age at pregnancy outcome:					
Under 20 years	822	100.0	72.6	21.7	*5.8
20–24 years	1,479	100.0	75.3	18.1	6.5
25–29 years	1,146	100.0	68.0	20.5	11.5
30–44 years	786	100.0	65.5	18.6	15.8
Pregnancy order:					
First pregnancy	1,092	100.0	74.9	18.9	6.1
Second pregnancy	1,099	100.0	73.2	17.7	9.1
Third pregnancy or higher	2,043	100.0	67.7	20.9	11.5
Marital status at pregnancy outcome:					
Never married	1,648	100.0	67.3	23.3	9.4
Ever married	2,537	100.0	73.0	17.4	9.6
Wantedness status at conception:					
Wanted then	1,872	100.0	73.0	18.4	8.5
Mistimed	1,232	100.0	71.5	22.0	6.5
Unwanted	1,129	100.0	67.0	18.8	14.3
Pregnancy outcome:					
Live birth	3,668	100.0	73.3	18.4	8.3
Spontaneous pregnancy loss.	566	100.0	56.2	26.9	16.8
Prenatal care: ²					
Early and continuous.	874	100.0	76.6	17.7	*5.7
Late or discontinuous	871	100.0	64.3	24.6	11.0

¹Includes women for whom marital status at outcome, and timing and continuity of prenatal care were unknown for the most recent pregnancy.

²Pregnancies ending on or after January 1, 1979.

Table 16. Number of women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average number of cigarettes smoked per day during the pregnancy, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average number of cigarettes smoked per day during pregnancy		
			None	Fewer than 15	15 or more
Percent distribution					
All women	129,357	100.0	69.4	15.7	14.9
Region:					
Northeast	5,784	100.0	69.3	19.4	11.3
Midwest	7,736	100.0	66.2	17.1	16.7
South	10,139	100.0	70.9	13.7	15.4
West	5,699	100.0	71.4	13.5	15.2
Education:					
Less than 12 years	6,360	100.0	55.7	20.7	23.6
12 years	12,652	100.0	68.3	16.1	15.6
13 years or more	10,345	100.0	79.2	12.1	8.7
Most recent occupation:					
Professional or managerial	4,362	100.0	77.5	11.4	11.2
Sales or clerical	12,630	100.0	72.3	14.1	13.6
Service	5,682	100.0	61.9	20.5	17.6
Craft or farm worker or operative	4,075	100.0	63.1	16.6	20.3
Never worked	2,442	100.0	69.2	17.8	13.0
Poverty level income:					
149 percent or less	7,553	100.0	63.3	19.8	16.9
150 percent or more	21,804	100.0	71.6	14.2	14.2
300 percent or more	12,316	100.0	72.2	13.9	13.9
Medicaid status:					
Receives Medicaid	2,620	100.0	57.5	21.2	21.3
Does not receive Medicaid	26,556	100.0	70.7	15.1	14.2
Residence:					
Metropolitan	22,637	100.0	69.0	16.0	15.0
Nonmetropolitan	6,720	100.0	71.0	14.5	14.5

¹Includes women whose last occupation or Medicaid status was unknown.

Table 17. Number of white women 15-44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average number of cigarettes smoked per day during the pregnancy, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average number of cigarettes smoked per day during pregnancy		
			None	Fewer than 15	15 or more
Percent distribution					
All women	124,174	100.0	68.7	15.2	16.1
Region:					
Northeast	4,880	100.0	68.3	19.9	11.8
Midwest	6,730	100.0	65.7	16.7	17.6
South	7,672	100.0	70.2	12.5	17.3
West	4,892	100.0	70.8	12.8	16.4
Education:					
Less than 12 years	4,904	100.0	53.2	20.4	26.4
12 years	10,567	100.0	67.6	15.6	16.8
13 years or more	8,703	100.0	78.8	11.8	9.4
Most recent occupation:					
Professional or managerial	3,827	100.0	77.0	11.1	11.9
Sales or clerical	10,741	100.0	71.6	13.8	14.6
Service	4,466	100.0	60.9	20.1	19.0
Craft or farm worker or operative	3,226	100.0	61.2	15.9	22.9
Never worked	1,789	100.0	68.5	17.0	14.6
Poverty level income:					
149 percent or less	5,263	100.0	60.9	19.5	19.6
150 percent or more	18,912	100.0	70.9	14.0	15.1
300 percent or more	10,825	100.0	71.3	14.0	14.7
Medicaid status:					
Receives Medicaid	1,490	100.0	50.4	20.2	29.4
Does not receive Medicaid	22,569	100.0	70.1	14.9	15.1
Residence:					
Metropolitan	18,350	100.0	68.3	15.4	16.3
Nonmetropolitan	5,824	100.0	70.0	14.5	15.5

¹Includes women whose last occupation or Medicaid status was unknown.

Table 18. Number of black women 15-44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average number of cigarettes smoked per day during the pregnancy, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average number of cigarettes smoked per day during pregnancy		
			None	Fewer than 15	15 or more
			Percent distribution		
All women	14,234	100.0	71.0	19.5	9.5
Region:					
Northeast	700	100.0	71.3	19.6	*9.0
Midwest	847	100.0	67.5	23.0	9.4
South	2,202	100.0	73.2	17.4	9.4
West	485	100.0	66.8	22.8	*10.4
Education:					
Less than 12 years	1,269	100.0	63.3	24.0	12.7
12 years	1,736	100.0	71.8	18.6	9.6
13 years or more	1,229	100.0	77.7	16.3	6.0
Most recent occupation:					
Professional or managerial	354	100.0	80.8	*13.9	*5.3
Sales or clerical	1,484	100.0	73.6	17.7	8.7
Service	1,105	100.0	64.0	23.8	12.2
Craft or farm worker or operative	718	100.0	73.1	17.7	9.2
Never worked	543	100.0	69.5	22.2	*8.4
Poverty level income:					
149 percent or less	2,083	100.0	68.6	22.2	9.3
150 percent or more	2,151	100.0	73.3	17.0	9.7
300 percent or more	954	100.0	71.4	17.5	11.1
Medicaid status:					
Receives Medicaid	1,078	100.0	66.4	22.7	10.9
Does not receive Medicaid	3,112	100.0	72.5	18.4	9.1
Residence:					
Metropolitan	3,454	100.0	69.8	20.3	9.9
Nonmetropolitan	780	100.0	76.3	16.2	*7.5

¹Includes women whose last occupation or Medicaid status was unknown.

Table 19. Number of women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average frequency of alcoholic beverage consumption during the pregnancy, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average frequency of alcoholic beverage consumption during pregnancy		
			Never	Less than once a week	Once a week or more
Percent distribution					
All women	129,357	100.0	54.5	33.7	11.8
Age at pregnancy outcome:					
Under 20 years	2,933	100.0	70.9	22.7	*6.4
20–24 years	9,511	100.0	59.2	31.8	9.0
25–29 years	10,764	100.0	48.0	38.5	13.5
30–44 years	6,149	100.0	51.0	33.4	15.5
Pregnancy order:					
First pregnancy	6,436	100.0	60.6	30.8	8.6
Second pregnancy	9,582	100.0	51.3	37.0	11.7
Third pregnancy or higher	13,339	100.0	54.0	32.7	13.3
Marital status at pregnancy outcome:					
Never married	3,252	100.0	62.0	25.5	12.5
Ever married	25,899	100.0	53.5	34.9	11.6
Wantedness status at conception:					
Wanted then	18,130	100.0	53.7	34.7	11.6
Mistimed	7,024	100.0	53.3	35.1	11.7
Unwanted.	4,202	100.0	60.4	27.0	12.6
Pregnancy outcome:					
Live birth	26,224	100.0	55.0	34.1	10.9
Spontaneous pregnancy loss.	3,133	100.0	50.4	30.3	19.3
Prenatal care:²					
Early and continuous.	7,306	100.0	54.8	37.4	7.8
Late or discontinuous	4,548	100.0	57.7	30.9	11.4

¹Includes women for whom marital status at outcome and timing and continuity of prenatal care were unknown for the most recent pregnancy.

²Pregnancies ending on or after January 1, 1979.

Table 20. Number of white women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average frequency of alcoholic beverage consumption during the pregnancy, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average frequency of alcoholic beverage consumption during pregnancy		
			Never	Less than once a week	Once a week or more
Percent distribution					
All women	124,174	100.0	51.8	36.3	11.9
Age at pregnancy outcome:					
Under 20 years	2,034	100.0	68.0	25.7	*6.3
20–24 years	7,778	100.0	56.3	34.4	9.2
25–29 years	9,320	100.0	46.1	40.5	13.3
30–44 years	5,043	100.0	48.7	35.6	15.6
Pregnancy order:					
First pregnancy	5,173	100.0	56.8	34.4	8.8
Second pregnancy	8,118	100.0	48.3	39.4	12.3
Third pregnancy or higher	10,883	100.0	52.1	34.9	13.0
Marital status at pregnancy outcome:					
Never married	1,508	100.0	55.0	32.5	*12.4
Ever married	22,509	100.0	51.5	36.7	11.8
Wantedness status at conception:					
Wanted then	15,686	100.0	51.8	36.5	11.6
Misimed	5,568	100.0	49.0	38.5	12.5
Unwanted.	2,920	100.0	56.9	30.8	12.3
Pregnancy outcome:					
Live birth	21,802	100.0	52.2	36.8	11.0
Spontaneous pregnancy loss.	2,372	100.0	48.1	32.0	20.0
Prenatal care:²					
Early and continuous.	6,209	100.0	53.4	39.3	7.3
Late or discontinuous	3,433	100.0	54.5	34.3	11.3

¹Includes women for whom marital status at outcome and timing and continuity of prenatal care were unknown for the most recent pregnancy.

²Pregnancies ending on or after January 1, 1978.

Table 21. Number of black women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average frequency of alcoholic beverage consumption during the pregnancy, according to selected characteristics of the pregnancy: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average frequency of alcoholic beverage consumption during pregnancy		
			Never	Less than once a week	Once a week or more
Percent distribution					
All women	14,234	100.0	67.1	22.0	10.9
Age at pregnancy outcome:					
Under 20 years	822	100.0	77.0	15.9	*7.2
20–24 years	1,479	100.0	70.4	20.3	9.3
25–29 years	1,146	100.0	61.1	26.6	12.4
30–44 years	786	100.0	59.6	24.9	15.5
Pregnancy order:					
First pregnancy	1,092	100.0	75.9	17.3	6.8
Second pregnancy	1,099	100.0	67.1	25.0	7.9
Third pregnancy or higher	2,043	100.0	62.5	22.9	14.6
Marital status at pregnancy outcome:					
Never married	1,648	100.0	68.6	19.8	11.6
Ever married	2,537	100.0	65.9	23.6	10.5
Wantedness status at conception:					
Wanted then	1,872	100.0	65.1	24.7	10.2
Mistimed	1,232	100.0	71.7	20.4	7.9
Unwanted	1,129	100.0	65.5	19.3	15.3
Pregnancy outcome:					
Live birth	3,668	100.0	69.0	21.3	9.7
Spontaneous pregnancy loss	566	100.0	55.1	26.3	18.6
Prenatal care:²					
Early and continuous	874	100.0	66.8	26.4	*6.8
Late or discontinuous	871	100.0	67.9	19.9	12.2

¹Includes women for whom marital status at outcome and timing and continuity of prenatal care were unknown for the most recent pregnancy.

²Pregnancies ending on or after January 1, 1979.

Table 22. Number of women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average frequency of alcoholic beverage consumption during the pregnancy, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average frequency of alcoholic beverage consumption during pregnancy		
			Never	Less than once a week	Once a week or more
			Percent distribution		
All women	129,357	100.0	54.5	33.7	11.8
Region:					
Northeast	5,784	100.0	46.4	37.3	16.3
Midwest	7,736	100.0	49.1	39.2	11.8
South	10,139	100.0	67.9	23.8	8.3
West	5,699	100.0	46.6	40.1	13.3
Education:					
Less than 12 years	6,360	100.0	67.1	23.4	9.5
12 years	12,652	100.0	55.8	35.0	9.3
13 years or more	10,345	100.0	45.4	38.4	16.2
Most recent occupation:					
Professional or managerial	4,362	100.0	39.5	42.2	18.3
Sales or clerical	12,630	100.0	52.6	35.6	11.8
Service	5,682	100.0	55.8	35.6	8.5
Craft or farm worker or operative	4,075	100.0	63.3	25.9	10.7
Never worked	2,442	100.0	73.2	17.7	9.1
Poverty level Income:					
149 percent or less	7,553	100.0	66.4	25.3	8.4
150 percent or more	21,804	100.0	50.4	36.6	12.9
300 percent or more	12,316	100.0	46.8	37.3	16.0
Medicaid status:					
Receives Medicaid	2,620	100.0	70.1	19.3	10.6
Does not receive Medicaid	26,556	100.0	53.0	35.1	11.9
Residence:					
Metropolitan	22,637	100.0	50.5	36.0	13.5
Nonmetropolitan	6,720	100.0	68.3	25.9	5.9

¹Includes women for whom last occupation or Medicaid status was unknown.

Table 23. Number of white women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average frequency of alcoholic beverage consumption during the pregnancy, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average frequency of alcoholic beverage consumption during pregnancy		
			Never	Less than once a week	Once a week or more
Percent distribution					
All women	124,174	100.0	51.8	36.3	11.9
Region:					
Northeast	4,880	100.0	43.5	39.0	17.5
Midwest	6,730	100.0	47.0	41.5	11.5
South	7,672	100.0	66.3	25.6	8.1
West	4,892	100.0	44.0	43.3	12.8
Education:					
Less than 12 years	4,904	100.0	67.3	24.8	7.9
12 years	10,567	100.0	53.1	37.6	9.3
13 years or more	8,703	100.0	41.5	41.2	17.3
Most recent occupation:					
Professional or managerial	3,827	100.0	36.8	43.9	19.3
Sales or clerical	10,741	100.0	50.5	37.6	11.9
Service	4,466	100.0	52.5	40.4	7.2
Craft or farm worker or operative	3,226	100.0	60.4	28.6	11.0
Never worked	1,789	100.0	73.5	17.0	*9.5
Poverty level Income:					
149 percent or less	5,263	100.0	65.6	27.4	7.1
150 percent or more	18,912	100.0	48.0	38.8	13.2
300 percent or more	10,825	100.0	44.4	39.2	16.4
Medicaid status:					
Receives Medicaid	1,490	100.0	72.6	20.4	*7.0
Does not receive Medicaid	22,569	100.0	50.5	37.3	12.2
Residence:					
Metropolitan	18,350	100.0	47.0	39.2	13.9
Nonmetropolitan	5,824	100.0	67.1	27.2	5.7

¹Includes women for whom last occupation or Medicaid status was unknown.

Table 24. Number of black women 15–44 years of age whose most recent pregnancy ended in a live birth or spontaneous loss and percent distribution by average frequency of alcoholic beverage consumption during the pregnancy, according to selected characteristics of the woman: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of women in thousands	Total	Average frequency of alcoholic beverage consumption during pregnancy		
			Never	Less than once a week	Once a week or more
Percent distribution					
All women	14,234	100.0	67.1	22.0	10.9
Region:					
Northeast	700	100.0	61.6	27.1	11.3
Midwest	847	100.0	63.1	25.2	11.7
South	2,202	100.0	72.4	18.4	9.3
West	485	100.0	58.5	25.4	16.1
Education:					
Less than 12 years	1,269	100.0	64.7	18.2	17.0
12 years	1,736	100.0	70.2	21.4	8.4
13 years or more	1,229	100.0	65.3	26.8	7.9
Most recent occupation:					
Professional or managerial	354	100.0	60.0	33.7	*6.3
Sales or clerical	1,484	100.0	66.0	23.9	10.0
Service	1,105	100.0	66.4	19.8	13.7
Craft or farm worker or operative	718	100.0	71.2	17.7	11.1
Never worked	543	100.0	71.2	19.1	*9.6
Poverty level income:					
149 percent or less	2,083	100.0	67.7	19.9	12.4
150 percent or more	2,151	100.0	66.6	24.0	9.3
300 percent or more	954	100.0	62.7	26.9	10.4
Medicaid status:					
Receives Medicaid	1,078	100.0	65.4	18.6	16.0
Does not receive Medicaid	3,112	100.0	67.7	23.1	9.2
Residence:					
Metropolitan	3,454	100.0	65.1	23.3	11.6
Nonmetropolitan	780	100.0	76.2	16.1	*7.7

¹Includes women for whom last occupation or Medicaid status was unknown.

Table 25. Number of single live births to women 15–44 years of age and percent low birth weight, by race and selected characteristics of the birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	All races		White		Black	
	Number of births in thousands	Percent low birth weight	Number of births in thousands	Percent low birth weight	Number of births in thousands	Percent low birth weight
All live births	169,511	6.6	156,602	5.6	110,907	12.2
Mother's age at birth:						
Under 20 years	14,803	8.7	10,601	7.3	3,811	13.2
20–24 years	29,013	6.7	23,888	5.6	4,384	12.4
25–44 years	25,634	5.3	22,060	4.7	2,704	10.5
Birth order:						
First birth	30,882	7.2	25,417	6.2	4,503	13.2
Second birth	21,688	6.4	18,046	5.7	3,012	10.9
Third birth or higher	16,940	5.8	13,139	4.3	3,392	12.0
Mother's marital status at birth:						
Never married	8,304	12.3	3,821	12.0	4,340	12.7
Ever married	60,603	5.8	52,339	5.1	6,405	12.0
Wantedness status at conception:						
Wanted then	41,970	5.8	36,112	5.3	4,581	10.2
Mistimed or unwanted	27,540	7.9	20,490	6.2	6,326	13.6
Amount smoked during pregnancy (most recent birth):						
Did not smoke	18,285	4.2	15,072	3.3	2,639	9.0
Fewer than 15 per day	3,886	10.0	3,161	9.1	657	15.4
15 or more per day	3,637	12.9	3,282	12.6	295	*18.6
Frequency of alcohol consumption during pregnancy (most recent birth):						
Did not drink	14,222	6.2	11,244	5.2	2,469	10.9
Less than once a week	8,794	6.5	7,885	6.4	773	*8.0
Once a week or more	2,381	*6.2	2,401	*4.7	352	*17.7

¹Includes births for which mother's age at birth, mother's marital status at birth, wantedness status at conception, amount smoked during pregnancy, or frequency of alcohol consumption during pregnancy was unknown.

Table 26. Number of single live births to women 15–44 years of age and percent low birth weight, by race and selected characteristics of the mother: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	All races		White		Black	
	Number of births in thousands	Percent low birth weight	Number of births in thousands	Percent low birth weight	Number of births in thousands	Percent low birth weight
All live births.....	169,511	6.6	156,602	5.6	110,907	12.2
Region:						
Northeast.....	13,475	6.5	11,133	5.9	1,899	10.6
Midwest.....	18,750	7.5	16,275	6.3	2,225	14.9
South.....	23,669	7.2	17,457	5.7	5,581	12.1
West.....	13,617	4.5	11,736	4.1	1,202	10.2
Education:						
Less than 12 years.....	18,247	8.9	13,505	7.5	4,196	13.9
12 years.....	29,285	6.2	24,628	5.3	3,970	11.2
13 or more years.....	21,978	5.3	18,468	4.6	2,741	11.0
Most recent occupation:						
Professional, managerial, sales, and clerical workers.....	37,724	5.6	32,275	5.0	4,220	11.3
Service, craft, and farm workers and operatives.....	24,920	8.2	19,207	7.0	5,247	13.3
Never worked.....	6,418	6.6	4,765	*5.0	1,379	10.5
Poverty level income:						
149 percent or less.....	20,286	7.7	13,893	5.6	5,932	12.9
150 percent or more.....	49,225	6.2	42,709	5.6	4,975	11.4
300 percent or more.....	26,223	6.2	23,239	5.8	1,995	11.0
Medicaid status:						
Receives Medicaid.....	7,278	10.2	4,086	8.7	3,096	12.0
Does not receive Medicaid.....	61,770	6.2	52,178	5.4	7,724	12.3
Residence:						
Metropolitan.....	53,331	7.1	42,706	6.1	8,976	12.1
Nonmetropolitan.....	16,180	5.1	13,895	4.2	1,932	12.4

¹Includes births for which mother's last occupation or mother's Medicaid status was unknown.

Table 27. Number of live births in January 1979 or later to women 15–44 years of age and percent paid for from specified sources, by selected characteristics of the birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of births in thousands	Source of payment				
		Self, family, or friends	Private medical insurance	Medicaid	Other government	All other
Percent ¹						
All live births	214,372	40.7	63.1	10.4	9.1	5.9
Mother's age at time of birth:						
Under 20 years	1,972	32.2	27.3	26.9	23.7	*4.7
20–24 years	4,764	37.3	55.9	13.4	9.1	8.2
25–29 years	4,863	46.5	75.0	*4.7	*4.1	*5.2
30–44 years	2,773	42.6	80.3	*3.6	*7.4	*3.9
Birth order:						
First	6,001	40.8	58.2	11.7	10.2	6.2
Second	4,900	38.3	68.6	8.5	7.3	6.5
Third or higher	3,471	44.2	63.8	11.1	9.6	*4.5
Mother's marital status at time of birth:						
Never married	2,471	22.5	18.3	39.9	24.6	*3.8
Ever married	11,872	44.5	72.3	4.4	5.9	6.3
Wantedness status at conception:						
Wanted then	9,127	40.8	72.6	6.2	6.8	5.3
Mistimed	3,823	41.7	48.6	16.5	11.3	7.1
Unwanted	1,422	37.6	41.2	21.5	17.6	*6.3
Prenatal care:						
Early and continuous	9,124	42.1	73.1	6.4	5.4	5.7
Late or discontinuous	5,052	38.6	44.7	17.9	15.8	6.5
Prenatal care provider:						
Private doctor	10,466	44.8	75.9	4.8	6.2	2.7
Hospital or other clinic	3,514	27.9	27.0	27.1	17.9	14.9
Birth weight:						
5½ pounds or less	802	40.7	54.1	*18.0	*8.3	*8.5
More than 5½ pounds	13,451	40.8	63.8	10.0	8.9	5.7
Whether infant came home from hospital with mother:						
Did not come home	1,062	38.3	55.5	*16.3	*13.4	*4.9
Came home	13,046	40.7	64.2	10.0	8.8	5.7

¹The sum of the percents exceeds 100.0 because some women reported more than one source of payment.

²Includes births for which mother's marital status at birth, timing and continuity of prenatal care, prenatal care provider, birth weight, or whether the infant came home from hospital with the mother was unknown or not applicable.

Table 28. Number of live births in January 1979 or later to white women 15–44 years of age and percent paid for from specified sources, by selected characteristics of the birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of births in thousands	Source of payment				
		Self, family, or friends	Private medical insurance	Medicaid	Other government	All other
Percent ¹						
All live births	211,836	43.8	67.5	7.0	7.8	5.8
Mother's age at time of birth:						
Under 20 years	1,364	37.1	32.0	20.2	23.7	*3.9
20–24 years	3,890	39.6	60.2	9.6	8.0	8.6
25–29 years	4,200	49.1	78.1	*3.1	*2.6	*5.1
30–44 years	2,381	45.4	81.5	*2.0	*7.4	*3.8
Birth order:						
First	4,902	43.5	62.5	8.4	8.8	6.0
Second	4,142	40.9	72.5	*5.6	*6.5	*6.4
Third or higher	2,792	48.9	68.9	*6.7	*8.0	*4.7
Mother's marital status at time of birth:						
Never married	1,350	26.8	18.7	36.4	24.3	*3.6
Ever married	10,460	46.0	73.7	3.3	5.7	6.2
Wantedness status at conception:						
Wanted then	7,912	43.2	75.1	4.4	6.0	5.0
Mistimed	2,980	45.0	53.8	12.4	9.7	*7.1
Unwanted	944	45.6	47.2	*11.7	*16.6	*8.9
Prenatal care:						
Early and continuous	7,856	44.5	76.3	4.6	4.2	5.3
Late or discontinuous	3,836	42.5	49.2	12.1	12.1	*7.1
Prenatal care provider:						
Private doctor	9,191	46.6	78.0	3.3	5.3	*2.6
Hospital or other clinic	2,319	31.6	28.4	21.7	17.9	17.7
Birth weight:						
5½ pounds or less	568	45.9	61.3	*10.8	*5.9	*9.5
More than 5½ pounds	11,138	43.8	68.0	6.9	7.6	5.7
Whether infant came home from hospital with mother:						
Did not come home	796	40.6	62.5	*8.3	*14.6	*4.7
Came home	10,806	43.8	68.5	7.0	7.4	5.6

¹The sum of the percents exceeds 100.0 because some women reported more than one source of payment.

²Includes births for which mother's marital status at birth, timing and continuity of prenatal care, prenatal care provider, birth weight, or whether the infant came home from hospital with the mother was unknown or not applicable.

Table 29. Number of live births in January 1979 or later to black women 15–44 years of age and percent paid for from specified sources, by selected characteristics of the birth: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of births in thousands	Source of payment				
		Self, family, or friends	Private medical insurance	Medicaid	Other government	All other
Percent ¹						
All live births	2,095	24.1	37.7	30.3	15.1	6.4
Mother's age at time of birth:						
Under 20 years	528	21.6	*13.1	47.0	20.6	*6.5
20–24 years	774	25.3	33.9	30.5	15.9	*7.6
25–29 years	505	26.7	53.6	19.7	*11.3	*5.5
30–44 years	288	*21.3	64.8	*17.6	*9.7	*4.4
Birth order:						
First	857	28.1	31.1	33.1	16.1	*6.9
Second	603	22.4	45.4	25.6	*11.4	*7.8
Third or higher.	635	20.5	39.2	31.0	17.3	*4.2
Mother's marital status at time of birth:						
Never married	1,049	17.6	16.0	46.9	23.3	*4.2
Ever married	1,042	30.8	59.3	13.7	*6.9	8.5
Wantedness status at conception:						
Wanted then	935	25.1	49.3	21.8	12.8	8.0
Mistimed	709	26.0	30.5	33.9	14.4	*7.4
Unwanted.	450	19.3	24.9	43.2	20.8	*1.3
Prenatal care:						
Early and continuous.	1,040	25.6	47.9	20.4	14.1	7.6
Late or discontinuous	1,002	23.1	26.0	41.1	16.1	*5.3
Prenatal care provider:						
Private doctor	981	26.5	58.0	17.0	12.6	*3.8
Hospital or other clinic	1,048	22.1	19.3	42.1	17.4	9.1
Birth weight:						
5½ pounds or less	203	*24.3	32.9	41.3	*10.2	*7.3
More than 5½ pounds	1,876	24.1	38.1	29.2	15.7	6.3
Whether infant came home from hospital with mother:						
Did not come home.	239	*24.4	26.7	45.1	*11.2	*5.9
Came home	1,824	24.1	39.3	28.2	15.6	6.5

¹The sum of the percents exceeds 100.0 because some women reported more than one source of payment.

²Includes births for which mother's marital status at birth, timing and continuity of prenatal care, prenatal care provider, birth weight, or whether the infant came home from hospital with the mother was unknown or not applicable.

Table 30. Number of live births in January 1979 or later to women 15–44 years of age and percent paid for from specified sources, by selected characteristics of the mother: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of births in thousands	Source of payment				
		Self, family, or friends	Private medical insurance	Medicaid	Other government	All other
Percent ¹						
All live births	² 14,372	40.7	63.1	10.4	9.1	5.9
Region:						
Northeast	2,653	32.8	71.1	16.0	*4.7	*2.6
Midwest	3,839	37.7	75.7	*6.8	7.3	*3.0
South	4,719	44.7	53.7	10.7	10.6	8.9
West	3,161	45.2	55.1	9.9	12.7	*7.6
Education:						
Less than 12 years	3,516	33.4	35.3	25.0	17.0	*6.5
12 years	5,669	42.2	64.0	7.8	9.2	6.5
13 years or more	5,187	44.0	80.8	*3.6	*3.6	*4.8
Most recent occupation:						
Professional or managerial	2,222	53.9	83.9	*0.9	*1.2	*6.2
Sales or clerical	5,502	39.8	71.9	5.5	6.2	6.1
Service	2,575	34.9	56.7	11.0	15.5	*5.6
Craft or farm worker or operative	1,851	39.7	62.1	*10.9	*12.7	*3.2
Never worked	2,142	37.5	26.7	31.9	14.0	*7.6
Poverty level income:						
149 percent or less	5,113	32.8	35.6	23.6	19.1	8.5
150 percent or more	9,260	45.1	78.3	3.2	3.6	4.4
300 percent or more	4,663	43.9	83.0	*2.5	*2.2	*4.2
Medicaid status:						
Receives Medicaid	2,059	14.2	14.0	47.3	30.4	*3.2
Does not receive Medicaid	12,269	45.2	71.3	4.3	5.6	6.3

¹The sum of the percents exceeds 100.0 because some women reported more than one source of payment.

²Includes births for which mother's last occupation or mother's Medicaid status was unknown.

Table 31. Number of live births in January 1979 or later to white women 15-44 years of age and percent paid for from specified sources, by selected characteristics of the mother: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of births in thousands	Source of payment				
		Self, family, or friends	Private medical insurance	Medicaid	Other government	All other
Percent ¹						
All live births	211,836	43.8	67.5	7.0	7.8	5.8
Region:						
Northeast	2,183	35.7	77.0	13.2	*2.3	*2.3
Midwest	3,449	39.0	79.5	*3.9	*6.4	*3.1
South	3,458	50.1	58.7	*4.4	9.6	9.9
West	2,746	48.4	55.9	*9.3	11.6	*7.0
Education:						
Less than 12 years	2,794	37.6	39.7	19.6	14.9	*7.6
12 years	4,693	45.0	68.9	*4.2	8.2	6.0
13 years or more	4,348	46.5	83.8	*1.9	*2.8	*4.5
Most recent occupation:						
Professional or managerial	1,998	56.4	85.3	—	*0.6	*6.1
Sales or clerical	4,619	41.8	74.8	*3.1	*5.8	*5.9
Service	2,116	38.3	61.1	*7.7	14.1	*5.1
Craft or farm worker or operative	1,502	40.2	65.0	*8.6	*11.9	*3.7
Never worked	1,542	44.8	32.4	25.8	*10.7	*8.8
Poverty level income:						
149 percent or less	3,774	36.7	39.7	18.3	18.4	9.5
150 percent or more	8,062	47.2	80.5	*1.7	*2.8	4.2
300 percent or more	4,095	45.2	84.3	*1.8	*2.4	*3.8
Medicaid status:						
Receives Medicaid	1,222	*16.1	*17.4	41.8	33.0	*3.9
Does not receive Medicaid	10,599	47.0	73.2	3.0	4.9	6.1

¹The sum of the percents exceeds 100.0 because some women reported more than one source of payment.

²Includes births for which mother's last occupation or mother's Medicaid status was unknown.

Table 32. Number of live births in January 1979 or later to black women 15-44 years of age and percent paid for from specified sources, by selected characteristics of the mother: United States, 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Number of births in thousands	Source of payment				
		Self, family, or friends	Private medical insurance	Medicaid	Other government	All other
Percent ¹						
All live births	2,095	24.1	37.7	30.3	15.1	6.4
Region:						
Northeast	389	19.9	40.1	34.2	*11.4	*5.0
Midwest	320	*13.5	38.9	39.7	*15.0	*2.6
South	1,141	28.5	36.7	29.2	13.6	*6.3
West	244	*24.2	36.8	*16.7	27.9	*13.7
Education:						
Less than 12 years	652	15.6	16.0	48.8	24.1	*2.2
12 years	867	29.5	40.3	25.1	13.6	*7.9
13 years or more	576	25.7	57.9	17.4	*7.3	*8.8
Most recent occupation:						
Professional or managerial	151	*22.5	83.8	*4.3	*1.5	*9.6
Sales or clerical	682	27.7	48.9	21.2	*10.3	*8.9
Service	433	20.0	35.3	27.5	20.6	*8.7
Craft or farm worker or operative	274	33.1	47.3	26.7	*10.0	*1.0
Never worked	532	19.2	*7.8	52.3	23.2	*2.6
Poverty level income:						
149 percent or less	1,185	21.2	22.4	40.5	19.8	*6.2
150 percent or more	910	28.0	57.6	16.9	9.0	*6.6
300 percent or more	369	29.1	64.0	*12.2	*1.3	*10.1
Medicaid status:						
Receives Medicaid	786	10.8	*7.8	57.6	25.3	*1.9
Does not receive Medicaid	1,290	32.5	55.8	13.4	8.9	9.2

¹The sum of the percents exceeds 100.0 because some women reported more than one source of payment.

²Includes births for which mother's last occupation or mother's Medicaid status was unknown.

Table 33. Number of women 15–44 years of age who have ever had a live birth and percent distribution by source of payment of the hospital bill for the most recent birth, according to selected characteristics: United States, 1973 and 1982

[Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for discussion of the sample design, sampling variability, and definition of terms]

Characteristic	Source of payment														
	Women			Own income only		Insurance only		Own income and insurance		Medicaid		Other government		All other	
	1982 ¹	1973	Total	1982	1973	1982	1973	1982	1973	1982	1973	1982	1973	1982	1973
	Number in thousands														
All women.....	212,080	225,803	100.0	10.0	22.2	37.5	27.9	25.1	32.2	10.1	7.1	9.1	6.0	8.3	4.6
Age at time of birth:															
Under 20 years	1,473	2,786	100.0	*9.1	38.1	16.4	*10.5	*6.1	*14.5	25.1	17.3	28.3	*6.7	14.9	*12.9
20–24 years	3,847	8,619	100.0	11.8	26.2	36.8	26.6	18.1	27.5	13.8	7.9	9.0	7.6	10.5	*4.3
25–44 years	6,760	13,915	100.0	9.1	16.8	42.5	32.0	33.3	38.5	4.6	4.6	4.9	4.9	5.5	*3.2
Race:															
White	9,946	22,182	100.0	10.6	22.3	39.1	28.8	28.0	35.2	6.6	4.6	7.9	5.9	7.8	3.2
Black	1,752	3,359	100.0	6.8	21.6	28.3	21.9	8.6	13.2	30.0	23.9	15.0	5.4	11.3	14.1
Education:															
Less than 12 years	2,889	8,319	100.0	12.5	28.2	23.9	22.7	11.9	21.6	23.9	14.6	17.4	*4.3	10.4	8.7
12 years	4,771	12,161	100.0	11.1	19.6	38.1	31.7	24.6	34.8	8.1	4.2	9.2	7.0	8.9	*2.7
13 years or more	4,419	5,323	100.0	7.1	19.0	45.7	27.2	34.2	42.7	*3.3	*2.1	*3.6	*6.3	6.2	*2.7
Poverty level income:															
149 percent or less.....	3,969	5,818	100.0	12.3	25.2	19.4	17.2	12.5	18.9	24.6	21.7	19.8	*6.7	11.4	10.3
150 percent or more	8,110	19,985	100.0	8.8	21.4	46.4	31.0	31.3	36.0	3.0	2.9	3.8	5.8	6.7	3.0
300 percent or more.....	4,097	10,212	100.0	6.4	20.5	49.0	31.7	33.2	39.7	*2.2	*0.9	*2.5	5.0	6.7	*2.2
Region:															
Northeast.....	2,201	5,406	100.0	*5.0	14.0	48.3	35.0	21.5	33.4	14.6	10.7	*5.4	*3.0	*5.3	*3.8
Midwest.....	3,228	6,757	100.0	*6.8	16.3	47.2	41.8	26.4	29.7	7.0	*5.7	8.1	*3.2	*4.5	*3.3
South	4,068	8,500	100.0	13.1	26.8	29.4	19.3	24.6	33.2	10.5	*5.2	10.1	8.4	12.2	7.0
West	2,582	5,139	100.0	13.3	31.2	28.9	16.2	27.4	32.3	9.4	*8.4	11.8	*8.7	9.2	*3.2

¹Women whose most recent live birth occurred on or after January 1, 1979.

²Includes white, black, and other races and women for whom age at last birth was unknown.

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Appendix I

Technical notes

Background

This report is one of a series based on the National Survey of Family Growth (NSFG), conducted by the National Center for Health Statistics (NCHS). The NSFG was designed to provide data on fertility, family planning, and aspects of maternal and child health that are closely related to childbearing.

The NSFG is a periodic survey based on personal interviews with a nationwide sample of women. The NSFG has been conducted three times—in 1973, 1976, and 1982. The present report is based on Cycle III of the NSFG. A detailed report on Cycle III is contained in “National Survey of Family Growth, Cycle III: Sample Design, Weighting, and Variance Estimation,” Series 2, No. 98, *Vital and Health Statistics* (NCHS, 1985a). A detailed description of the methods and procedures used in Cycle I can be found in “National Survey of Family Growth, Cycle I: Sample Design, Estimation Procedures, and Variance Estimation,” Series 2, No. 76, of *Vital and Health Statistics* (NCHS, 1978b), and for Cycle II, in “National Survey of Family Growth, Cycle II: Sample Design, Estimation Procedures, and Variance Estimation,” Series 2, No. 87, of *Vital and Health Statistics* (NCHS, 1981b). This appendix presents a summary of the more important technical aspects of the 1982 NSFG.

Fieldwork for Cycle III was carried out under a contract with NCHS by Westat, Inc., between August of 1982 and February of 1983. For the first time, the sample represented all women 15–44 years of age, regardless of marital status, in the civilian noninstitutionalized population of the conterminous United States. Women living in group quarters, such as college dormitories, were included in Cycle III. Interviews were conducted with 7,969 women; 3,201 were black, 4,577 were white, and 191 were of other races.

Interviews were conducted by trained female interviewers in respondents’ homes and lasted an average of 1 hour. The interview focused on pregnancy history, use of contraceptives in each pregnancy interval, physical ability to bear children, expectations of bearing children in the future, use of family planning and infertility services, marital history, labor force participation, and a wide range of social, economic, and demographic characteristics.

Statistical design

The NSFG is based on a multistage area probability sample. Black households and households with resident teenage women were sampled at higher rates than were other households so that reliable estimates of statistics could be presented separately for black and teenage women. In addition, the sample was designed to provide tabulations for each of the four major geographic regions of the United States.

The first stage of the sample design consisted of drawing a sample of primary sampling units (PSU’s). A PSU consisted of a county, a small group of contiguous counties, or a standard metropolitan statistical area, as defined by the U.S. Bureau of the Census in 1970. The second and third stages of sampling were used to select several segments (clusters of 15 to about 60 dwelling units) within each PSU. A systematic sample of dwelling units was then selected from each segment. Each sample dwelling unit was visited by an interviewer, who listed all household members. The interviewer then consulted a computer-generated sampling table to determine which woman, if any, should be interviewed.

The statistics in this report are estimates for the national population and were computed by multiplying each sample case by the number of women she represented in the population. The multipliers, or final weights, ranged from less than 500 to more than 50,000 and averaged about 7,000. They were derived by using three basic steps:

- *Inflation by the reciprocal of the probability of selection*—The probability of selection is the product of the probabilities of selection of the PSU, segment, household, and sample person within the household.
- *Nonresponse adjustment*—The weighted estimates were ratio adjusted for nonresponse by a multiplication of two factors. The first factor adjusted for nonresponse to the screening questionnaire by imputing the characteristics of women in responding households to women in nonresponding households in the same PSU and stratum. The second factor adjusted for nonresponse to the interview by imputing the characteristics of responding women to nonresponding women in the same age, race, and marital status category and PSU. Response to the screener was 95.1 percent and response to the interview was 83.5 percent, yielding a combined response rate of 79.4 percent.

- *Poststratification by marital status, age, and race*—The estimates were ratio adjusted within each of 24 age, race, and marital status categories to independent estimates of the population of women aged 15–44. The independent estimates were derived from the Current Population Surveys of the U.S. Bureau of the Census.

The effect of the ratio estimating process was to make the sample more closely representative of the noninstitutionalized population of women 15–44 years of age in the conterminous United States. The final poststratification reduced the sample variances of the estimates for most statistics.

All figures were individually rounded; aggregate figures (numbers) were rounded to the nearest thousand. Aggregate numbers and percents may not add to the total because of this rounding.

Measurement process

Field operations for Cycle III were carried out by Westat, Inc., under contract with NCHS; these operations included pretesting the interview schedule, selecting the sample, interviewing respondents, and performing specified quality control checks. Interviewers, all of whom were female, were trained for 1 week prior to field work. The first five interview schedules done by each interviewer were reviewed; after a high level of quality was achieved by an interviewer, this review was reduced to a sample of questionnaires, unless an unacceptable level of error was found. A 10-percent sample of respondents were recontacted by telephone to verify that the interview had taken place and that certain key items had been accurately recorded.

A portion of the interview schedule applicable to this report is reproduced in appendix III. Two forms of the questionnaire were used, one for women 15–24 years of age and one for women 25–44 years of age. The questionnaire for women aged 15–24 included a few additional items that referred to early experiences that women over 25 could not be expected to remember accurately.

Data reduction

The responses of each woman to the interview questions were translated into predetermined numerical codes, and these code numbers were recorded on computer tapes. The first few questionnaires coded by each coder were checked completely; after an acceptable level of quality was reached, verification of coding was performed on a systematic sample of each coder's questionnaires. The data were edited by computer to identify inconsistencies between responses as well as code numbers not allowed in the coding scheme; these errors were corrected.

Missing data on all variables used in this report were imputed to provide consistent national estimates. (To speed release of the public use computer tape, however, not all variables on the computer tape were imputed.) If the level of missing data is relatively high (more than 5 percent), this

fact is noted in appendix II. Only two items are so affected: poverty level income and age (or date) at first intercourse.

Reliability of estimates

Because the statistics presented in this report are based on a sample, they may differ somewhat from the figures that would have been obtained had a complete census been taken using the same questionnaires, instructions, interviewing personnel, and field procedures. This chance difference between sample results and a complete count is referred to as sampling error.

Sampling error is measured by a statistic called the standard error of estimate. The chances are about 68 in 100 that an estimate from the sample will differ from a complete count by less than the standard error. The chances are about 95 in 100 that the difference between the sample estimate and a complete count will be less than twice the standard error. The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percent of the estimate. Numbers and percents that have a relative standard error of more than 30 percent are considered unreliable. These figures are marked with an asterisk to caution the user, but they may be combined to make other types of comparisons of greater reliability.

Estimation of standard errors

Because of the complex multistage design of the NSFG sample, conventional formulas for calculating sampling errors are inapplicable. Standard errors were, therefore, estimated empirically by using a technique known as balanced half-sample replication. This technique produces highly reliable, unbiased estimates of sampling errors. Its application to the NSFG has been described elsewhere (NCHS, 1978b, 1981b, 1985a).

Because it would be prohibitively expensive to estimate and cumbersome to publish a standard error for each percent or other statistic by this technique, standard errors were computed for selected statistics and population subgroups that were chosen to represent a wide variety of demographic characteristics and a wide variation in the size of the estimates themselves. Curves were then fitted to the relative standard error estimates (ratio of the standard error to the estimate itself) for numbers of women according to the model

$$RSE(N') = (A + B/N')^k$$

where N' is the number of women and A and B are the parameters whose estimates determine the shape of the curve. Separate curves were fitted for women of all races combined and white women, and for black women, because a different sampling rate was used for black women.

NOTE: A list of references follows the text.

Table I. Estimates of parameters A and B for relative standard error curves, by age, marital status, and race

Age, marital status, and race	Parameter A	Parameter B
Pregnancies of women 15-44 years of age by marital status and race		
All pregnancies: ¹		
All races and white	-0.000001353283	25567.442370
Black	0.0001091980	7143.225243
Pregnancies of ever married women: ¹		
All races and white	0.003120391	43592.725400
Black	-0.0001123101	15678.710304
Pregnancies of never married women and of teenagers 15-19 years of age: ¹		
All races:		
Never married	0.01388728	8660.961987
Teenagers	0.005951224	7802.208396
White:		
Never married	0.07096595	13265.323113
Teenagers	0.01024844	9664.917048
Black:		
Never married and teenagers	0.004546507	3430.760245

¹ Parameters for pregnancies are also used when computing standard errors for numbers and percents of births and living children.

Separate curves were fitted for teenagers, for the same reason. The estimates of *A* and *B* are shown in table I.

To calculate the estimated standard error or relative standard error of an aggregate or percent, the appropriate estimates of *A* and *B* are used in the equations:

$$\begin{aligned} RSE_{N'} &= (A+B/N')^{\frac{1}{2}} \\ SE_{N'} &= (A+B/N')^{\frac{1}{2}} (N') \\ RSE_{P'} &= (B/P' \cdot (100 - P')/X')^{\frac{1}{2}} \\ SE_{P'} &= (B \cdot P' \cdot (100 - P')/X')^{\frac{1}{2}} \end{aligned}$$

Table II. Approximate relative standard errors and standard errors for estimated number of pregnancies of women of all races: 1982 National Survey of Family Growth

Size of estimate	Relative standard error	Standard error
100,000	50.6	50,600
500,000	22.6	113,000
1,000,000	16.0	160,000
5,000,000	7.1	360,000
10,000,000	5.1	510,000
15,000,000	4.1	619,000
30,000,000	2.9	875,000
50,000,000	2.3	1,129,000

Table III. Approximate standard errors for estimated percents expressed in percentage points, for pregnancies to women of all races: 1982 National Survey of Family Growth

Base of percent	Estimated percent						
	2 or 98	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
100,000	7.1	11.0	15.2	20.2	23.2	24.8	25.3
500,000	3.2	4.9	6.8	9.0	10.4	11.1	11.3
1,000,000	2.2	3.5	4.8	6.4	7.3	7.8	8.0
5,000,000	1.0	1.6	2.1	2.9	3.3	3.5	3.6
10,000,000	0.7	1.1	1.5	2.0	2.3	2.5	2.5
20,000,000	0.5	0.8	1.1	1.4	1.6	1.8	1.8
30,000,000	0.4	0.6	0.9	1.2	1.3	1.4	1.5
50,000,000	0.3	0.5	0.7	0.9	1.0	1.1	1.1

Example of use of table III: If 30 percent of pregnancies in a specific category received their first prenatal care in the third or fourth month of pregnancy and the base of that percent was 10,000,000, then the 30-percent column and the 10,000,000 row indicate that one standard error is 2.3 percentage points and two standard errors are twice that, or 4.6 percentage points. Therefore, the chance is 55 in 100 that the true percent in the population was between 25.4 and 34.6 (30.0 percent plus or minus 4.6 percent). This is called a 95-percent confidence interval. In addition, the relative standard error of that 30-percent estimate is 2.3 percent divided by 30 percent, or 7.7 percent.

where

N' = number of pregnancies,

P' = percent,

X' = number of pregnancies in the denominator of the percent,

SE = standard error, and

RSE = relative standard error.

Tables II and III show some illustrative standard errors of aggregates and percents of pregnancies of women of all races from Cycle III of the NSFG.

Testing differences

The standard error of a difference between two comparative statistics, such as the proportion of babies born to white mothers that were low birth weight compared with that of babies born to black mothers, is approximately the square root of the sum of the squares of the standard errors of the statistics considered separately, or calculated by this formula: If

$$d = P'_1 - P'_2$$

then

$$S_d = \sqrt{(P'_1)^2(RSE_{P'_1})^2 + (P'_2)^2(RSE_{P'_2})^2}$$

where *P'*₁ is the estimated percent for one group and *P'*₂ is the estimated percent for the other group, and *RSE*_{*P'*₁} and *RSE*_{*P'*₂} are the relative standard errors of *P'*₁ and *P'*₂. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics, although it is only a rough approximation in most other cases.

A difference among comparable proportions or other statistics from two or more subgroups is considered to be statistically significant when a difference of that size or larger would be expected by chance in fewer than 5 percent of repeated samples of the same size and type, if no true difference existed in the populations sampled. Such a difference would be statistically significant at the 0.05 level. By this criterion, if the observed difference or a larger one could be expected by chance in more than 5 percent of

repeated samples, then one cannot be sufficiently confident to conclude that a real difference exists between the populations. When an observed difference is large enough to be statistically significant, the true difference in the population is estimated to lie between the observed difference plus or minus two standard errors of that difference in 95 of 100 samples.

Although the 5-percent criterion is conventionally applied, it is in a sense arbitrary; depending on the purpose of the particular comparison, a different level of significance may be more useful. For greater confidence, one would test for significance at the 0.01 (1-percent) level, but if one can accept a 10-percent chance of concluding a difference exists when there actually is none in the population, a test of significance at the 10-percent level would be appropriate.

The term "similar" means that any observed difference between two estimates being compared is not statistically significant, but terms such as "greater," "less," "larger," and "smaller" indicate that the observed differences are statistically significant at the 0.05 level using a two-tailed *t*-test with 39 degrees of freedom. Statements about differences that are qualified in some way (as by the phrases "the data suggest" and "some evidence") indicate that the difference is significant at the 0.10 level but not at the 0.05 level.

When a substantial observed difference is found not to be statistically significant, one should not conclude that no difference exists but simply that such a difference cannot be established with 95-percent confidence from this sample. This is especially important in Cycle III, because the number of ever married women in the sample is 4,651, compared with 7,970 in Cycle II—a reduction of 42 percent. This means that the standard errors in Cycle III are larger than those in Cycle II, so it is harder to establish significant differences in Cycle III than in Cycle II. Lack of comment in the text about any two statistics does not mean that the difference was tested and found not to be significant.

The number of replicates in the balanced half-sample replication design minus one (39 in Cycle III) can reasonably be used as an estimate of the number of degrees of freedom, although the exact value of the degrees of freedom is unknown. Therefore, in this report, differences between sample statistics are compared using a two-tailed *t*-test with 39 degrees of freedom.

For example, in the years up to and including 1982, 12.2 percent of the 10,907,000 births to black women and 5.6 percent of the 56,602,000 births to white women were low birth weight. To test this racial difference at the 0.05 level of significance, compute

$$t = \frac{12.2 - 5.6}{\sqrt{(12.2)^2 RSE_{(12.2)}^2 + (5.6)^2 RSE_{(5.6)}^2}}$$

Relative standard errors are computed using the appropriate values for *B* from table I:

$$RSE_{(12.2)} = \sqrt{\frac{(7143.225243)(100 - 12.2)}{(12.2)(10,907,000)}} = 0.0686$$

and

$$RSE_{(5.6)} = \sqrt{\frac{(25567.442370)(100 - 5.6)}{(5.6)(56,602,000)}} = 0.0873$$

thus

$$t = \frac{12.2 - 5.6}{\sqrt{(12.2)^2(0.0686)^2 + (5.6)^2(0.0873)^2}} = 6.81$$

The two-tailed 0.95 critical value ($1-\alpha$) for a *t* statistic with 39 degrees of freedom is 2.02. Therefore, the difference is significant at the 5-percent level.

Nonsampling error

Although sampling error affects the reliability of survey estimates, nonsampling error may introduce bias. The results of any survey are subject to at least four types of nonsampling error, including interview nonresponse; nonresponse to individual questions or items within the interview; inconsistency of responses to questions; and errors of recording, coding, and keying by survey personnel.

To minimize nonsampling error, stringent quality control procedures were introduced at every stage of the survey, including a check on completeness of the household listing; extensive training and practice of interviewers; field editing of questionnaires; short verification interviews with a subsample of respondents; verification of coding and editing; independent recode of a sample of questionnaires by NCHS; keypunch verification; and an extensive computer "cleaning" to check for inconsistent responses, missing data, and invalid codes. A detailed description of some of these procedures follows; others were discussed above.

Interview nonresponse

Interview nonresponse means that no part of an interview was obtained. It resulted from failure at any of three principal steps: (1) failure to list all households in sample segments, (2) failure to screen all listed households, and (3) failure to interview an eligible woman in each screened household. A discussion of these steps follows.

The completeness of a list cannot be tested directly, because this requires an independent, accurate enumeration of the households that should have been listed. In the NSFG, the completeness and accuracy of lists were tested by the missed dwelling unit (DU) procedure at the time of

screening: Where the first structure in a segment was included in the sample, the whole segment was checked to see whether any structures had been missed in the listing process; where the first structure was a multiple-DU structure and the first-listed unit in the building was included in the sample, the entire structure was checked for missed DU's.

Of the original sample of 34,641 DU's screened, 3,614 were found to be vacant or not to be DU's. Of the 31,027 occupied DU's, 4.9 percent were not screened successfully. Screening was completed in 29,511 households; 9,964 of these contained eligible respondents who were selected for interview. Interviews were not completed in 16.5 percent of these cases, because of refusals by respondents (8.3 percent) and by the parents of respondents under 18 years of age (1.5 percent), no contact after repeated calls (2.8 percent), or other problems (4.0 percent).

The adjustment for interview nonresponse described above imputes to nonresponding women the characteristics of responding women of the same age group, race, marital status, and geographic area.

answer to a question, when the question was erroneously-not asked or the answer was not recorded by the interviewer, or when the answer could not be coded. The rate of nonresponse to individual questions was very low in Cycle III, as it was in Cycle II. Some examples of item nonresponse from among a total of 7,969 respondents are as follows: religion of respondent, 11 cases and respondent's occupation, 37 cases. The item with the most nonresponse was family income (from which poverty-level income was derived), with 1,767 cases. All missing data were imputed in this report. For those few items for which the proportion of cases imputed was high, this fact is noted in the appropriate section of the definitions.

As with all survey data, responses to the NSFG were subject to deliberate misreporting by the respondent. Such misreporting cannot be detected directly, but it can be detected indirectly by the extensive computer "cleaning" and editing procedures used in the NSFG.

Item nonresponse

Item nonresponse may have occurred when a respondent refused to answer a question or did not know the

Appendix II

Definitions of terms

Dependent variables

Months pregnant when prenatal care began—For pregnancies ending in January 1979 or later, women in the 1982 survey were asked, “During this pregnancy, did you ever visit a doctor or clinic for prenatal care?” Women who answered “yes” were then asked, “How many months pregnant were you when you first visited a doctor or clinic for prenatal care?” Women who answered that they were less than a month, 1 month, or 2 months pregnant were classified as beginning prenatal care in the first trimester, or at “less than 3 months.” Those who said they were 3 or 4 months pregnant were classified as “3 or 4 months pregnant” in the tables. Women who said they had been pregnant at least 5 months when they began prenatal care and those who received no prenatal care at all are combined, in the category “5 months or more or no care,” in tables 1–6.

Research on the proportion of births receiving first trimester prenatal care has used 3 national data sources: birth certificates (Forrest and Singh, 1987; Ingram, Makuc, and Kleinman, 1986; NCHS, 1978a), the 1980 National Natality Survey (NNS) (Prager et al., 1984), and the National Survey of Family Growth (NSFG) (Forrest and Singh, 1987). Because the questions are worded and administered differently in these 3 sources, the proportions reporting first-trimester care differ (Forrest and Singh, 1987). However, in one recent study the largest differences are seen in the first 1 or 2 months of pregnancy, which suggests that (1) the timing of the beginning of pregnancy differs among sources of data; (2) some women may be counting pregnancy tests as first prenatal visits; and (3) mothers report, but physicians may sometimes be unaware of, early visits to other providers of prenatal care (Forrest and Singh, 1987). One additional difference is that some data sources use “current month” of pregnancy, while others use “completed month.” For example, a woman who was 7 weeks pregnant at her first visit may report that she is *currently* in her second month of pregnancy, or that she had *completed* one month of pregnancy at her first visit. Such a woman would be classified in this report as getting care after 1 completed month of pregnancy. In Cycle IV of the NSFG, additional questions on the timing of the first visit will be asked to address these issues, which should help to determine which source is providing the most accurate estimate of the extent of first-trimester care.

NOTE: A list of references follows the text.

First source of prenatal care—Women who reported that they visited a doctor or clinic for prenatal care (for pregnancies ending in January 1979 or later) were asked, “To which of the places on the card did you go for your first visit?” They were then shown a card listing the following types of medical facilities:

- | | | |
|----|--|----|
| A. | Community health center clinic..... | 01 |
| B. | Public health department clinic..... | 02 |
| C. | Family planning clinic..... | 03 |
| D. | Abortion clinic..... | 04 |
| E. | Student health service clinic..... | 05 |
| F. | Military health service clinic | 06 |
| G. | Hospital clinic | 07 |
| H. | Private doctor | 08 |
| J. | Private group practice, co-op, or private clinic | 09 |
| K. | Other (specify)..... | 10 |

In this report, women who answered H or J were classified as receiving care from a “private doctor or clinic”; women who answered G, as using a “hospital clinic”; and those who answered A–F or K, as using “other clinic.” In previous NSFG reports on use of family planning services (NCHS, 1986b; Mosher and Horn, 1986), the categories “other clinic” and “hospital clinic” were combined into an overall “clinic” category. With respect to prenatal care, sample sizes are not large enough to allow separate analyses of use of the seven different types of clinics.

Smoking during pregnancy—Women in the NSFG who had ever been pregnant were asked, “On the average during your (last) pregnancy, how many cigarettes per day did you smoke, if any?”

The responses were coded in the following categories:

- | | |
|--|----|
| About one a day or less | 01 |
| Just a few (2–4)..... | 02 |
| About half a pack (5–14)..... | 03 |
| About a pack (15–24) | 04 |
| About 1½ packs (25–34) | 05 |
| About 2 packs (35–44)..... | 06 |
| More than 2 packs (45+) | 07 |
| Didn't smoke during (last) pregnancy | 96 |

In this report, women in categories 01, 02, and 03 were classified as having smoked fewer than 15 cigarettes per day. Those in categories 04, 05, 06, and 07 were classified as having smoked 15 or more per day. Women in category 96 were labeled as “did not smoke at all.”

Women who were currently pregnant were excluded from the statistics on smoking and drinking during the most recent pregnancy. In contrast, in a previous report (NCHS, 1987a), currently pregnant women were included in the tables showing smoking and drinking during pregnancy, but excluded from the statistics by age at pregnancy outcome (NCHS, 1987a). In this report, they were excluded entirely so that the totals would be more consistent throughout the tables and so that the data would refer only to completed pregnancies.

Alcohol consumption during pregnancy—Women in the NSFG who had ever been pregnant were also asked, “During your (last) pregnancy, how often (did) you usually drink alcoholic beverages, that is, beer, wine, or liquor? Was it

Every day	1
A few days a week	2
Once a week	3
Once a month	4
Less than once a month.....	5
Or never?".....	6

In this report, women in category 6 “did not drink at all”; women in categories 4 and 5 drank “less than once a week”; and those in categories 1, 2, and 3 drank “once a week or more.”

Low birth weight—A “low-birth-weight” baby is one who weighs 5 pounds 8 ounces or less at birth. Statistics on birth weight in this report are shown only for single live births, because multiple births often have lower birth weights. For all births in the NSFG, women were asked, “How much did (child’s name) weigh at birth?” Women who could not remember were then asked, “Did (child’s name) weigh more than 5½ pounds, or less?”

As noted in the text, births in this report occurred during a period of several years up to and including 1982 and are based on a sample, but births in the vital statistics system occurred during a specified calendar year and are based on birth certificates. (In most states, statistics on birth weight were based on all birth certificates; in selected states, data on birth weight were based on a 50 percent sample of birth certificates.)

Source of payment for delivery—Women who had had one or more live births were asked the following question for each live birth in January 1979 or later: “This card lists some of the ways in which medical bills can be paid. When (child) was born, in which of these ways was the bill paid?”

The woman was then handed a card containing the following categories:

A. Your (or your husband’s) own income.	01
B. Partner, boyfriend, or his family	02
C. Insurance (which you carry or is carried for you).....	03
D. No charge—paid by Medicaid	04

E. Government assistance other than Medicaid (State or local)	05
F. Military	06
G. Parents or other relatives	07
H. Some other way (specify).....	08

Up to three answers were coded for each birth, so the percents in these tables add to more than 100. Responses to categories A, B, and G were combined to form the category “self, family, or friends”; category C is labeled “private medical insurance” in the tables; category D is labeled “Medicaid”; and category E is labeled “other government.” Responses in categories F and H were combined to form the “all other” category in the tables.

Characteristics of pregnancies

Prenatal care—In this report, prenatal care was classified as “early and continuous” if it began in the first trimester *and* if the woman made at least one prenatal visit per month. Prenatal care was classified as “late or discontinuous” if care did not begin in the first trimester *or* if the visits were made less often than once a month. It should be stressed that this variable reflects only the timing and frequency of prenatal visits; it does not measure the length of the visits, what the doctor and patient talked about, the qualifications and experience of the doctor or other provider, or the woman’s level of satisfaction with the care.

Age at birth or pregnancy outcome—Each woman was asked the month, day, and year each pregnancy ended. Her date of birth was subtracted from the date the pregnancy ended to compute her age in completed years when the child was born or the pregnancy otherwise ended.

Birth order or pregnancy order—Births are classified by birth order. Where the birth order is “first,” the birth was the woman’s first birth; where it is “second,” the birth was the woman’s second birth. Similarly, where the pregnancy order is “first,” it was the woman’s first pregnancy; where it is “second,” it was the woman’s second pregnancy, and so on.

Marital status at birth and at pregnancy outcome—These are classified as “never married” or “ever married.” If the date of the baby’s birth was before the date of the woman’s first formal marriage, the woman was classified as “never married at birth”; if the date of the baby’s birth was after the date of her first formal marriage, she was classified as “ever married at birth.” The same procedure was used for other pregnancy outcomes.

Wantedness status at conception—Pregnancies were classified as “wanted then,” “mistimed,” “unwanted,” or “undetermined,” according to the mother’s report of her attitude toward the pregnancy at the time she became pregnant. There were very few “undetermined” pregnancies, so they are included in the totals but not shown separately in this report. The wantedness of each pregnancy was determined from a series of questions that asked whether the woman had wanted to become pregnant at the time of conception. It is important to emphasize that an

NOTE: A list of references follows the text.

"unwanted pregnancy" does not necessarily mean "unwanted child"; many children who were not wanted at conception nonetheless become cherished members of their families.

Wanted then—A pregnancy was classified as "wanted then" if the woman had stopped using, or was not using, contraception at about the time she became pregnant, because she wanted to become pregnant, or if she said that she became pregnant later than she had wanted to or at the right time.

Mistimed—Women whose pregnancies were classified as wanted were asked, "Did you become pregnant sooner than you wanted, later than you wanted, or at about the right time?" If the mother said that the pregnancy occurred sooner than she wanted, the pregnancy was classified as "mistimed."

Unwanted—A pregnancy was classified as unwanted if the woman, at the time the pregnancy occurred, did not want to have a(nother) baby, ever.

For further details on how pregnancies are classified by wantedness status, see "Wanted and Unwanted Childbearing: United States, 1973-82," Advance Data No. 108, May 9, 1985 (NCHS, 1985c).

Demographic terms

Characteristics of women

Race—Race refers to the race of the woman interviewed and is reported as black, white, or other. In Cycle III, race was classified according to the woman's choice of which race best described her. In Cycles I and II, race was classified by the observation of the interviewer. Comparisons of the results of Cycle III using both definitions indicate that results of both methods of classification are very similar.

Hispanic origin—A respondent was classified as being of Hispanic origin if she reported that her only or principal national origin was Puerto Rican, Cuban, Mexican American, Central or South American, or other Spanish. In tables presenting data for women by race, women of Hispanic origin are included in the statistics for white and black women who were classified as such by race.

Region of residence—Data are classified by region of residence into the four major census regions: Northeast, Midwest, South, and West. The sample size greatly restricts the possibility of meaningful analyses by social characteristics among smaller geographic divisions. The areas constituting these four major geographic regions are as follows:

Geographic region and division	States included
Northeast	
New England	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut

NOTE: A list of references follows the text.

Middle Atlantic	New York, New Jersey, Pennsylvania
Midwest	
East North Central	Ohio, Indiana, Illinois, Michigan, Wisconsin
West North Central	Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas
South	
South Atlantic	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida
East South Central	Kentucky, Tennessee, Alabama, Mississippi
West South Central	Arkansas, Louisiana, Oklahoma, Texas
West	
Mountain	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
Pacific	Washington, Oregon, California

Place of Residence—Data are classified by place of residence into two categories, metropolitan and nonmetropolitan, using 1980 census population counts. A respondent's place of residence is metropolitan if the census gave the area as part of a standard metropolitan statistical area (SMSA), as established by the U.S. Office of Management and Budget, and nonmetropolitan if it is not in an SMSA. Nonmetropolitan areas may include both rural and urban places.

Education—Education was classified according to the highest grade or year of regular school or college completed. Determination of the highest year completed was based on responses to a series of questions concerning the last grade or year of school attended and whether that grade or year was completed.

Poverty level income—The poverty index ratio was calculated by dividing the total family income by the weighted average threshold income of families whose head of household was under 65 years of age, based on the poverty levels shown in table A-3 in the U.S. Bureau of the Census *Current Population Reports*, Series P-60, No. 140, "Money Income and Poverty Status of Families and Persons in the U.S., 1982." This definition takes into account the sex of the family head and the number of persons in the family. Total family income includes income from all sources for all members of the respondent's family. For a substantial number of respondents (22 percent), total family income was not ascertained. These missing values were imputed using a known value of another similar, randomly selected respondent. Because of these high levels of missing data,

small differences by poverty level income should be interpreted with caution.

Most recent occupation—Women who were working at the date of interview were asked:

- What is your occupation? That is, what is your job called?
- What are your most important activities or duties?
- What kind of business or industry do you work for? That is, what do they make or do?

Women who had worked in the past but were not currently working were asked:

- What was your last occupation? That is, what was your job called?
- What were your most recent activities or duties?
- What kind of business or industry did you work for? That is, what did they make or do?

The answers to these questions were recorded verbatim and used by specially trained occupation coders in finding the most appropriate standard job title in the 1980 U.S. Census classification. Where more than one occupation was given, the primary or first-mentioned occupation was coded. Occupations were coded using the 3-digit codes used by the U.S. Bureau of the Census; for this report, however, they have been grouped into major categories, according to Bureau practice.

Medicaid status—Women were asked, “Are you yourself now covered by Medicaid (STATE NAME FOR MEDICAID), or do you have a card that looks like this?” The respondent was then shown a Medicaid card for her State. In this report, women who said that they were covered by Medicaid or had a Medicaid card at the date of interview were classified as “receives Medicaid.” All other women were classified as “does not receive Medicaid.”

Appendix III

Items on the 1982 National Survey of Family Growth questionnaire related to health aspects of pregnancy and childbirth

ALL PREGNANCIES

	FIRST PREGNANCY	SECOND PREGNANCY
B-19. Thinking about your (1st/2nd/etc.) pregnancy, in which of the ways shown on this card did the pregnancy end? (CIRCLE CODE HERE AND ON B&P RECORD.)		
HAND CARD 7	A. Stillbirth B. Miscarriage. C. Abortion D. Birth by Cesarean section. E. Birth by normal (vaginal) delivery 1 (B-22) 2 (B-22) 3 (B-22) 4 (B-20) 5 (B-20)
IF MULTIPLE OUTCOME, CIRCLE FIRST OUTCOME ABOVE AND ENTER LETTER FOR OTHER OUTCOME(S) ON LINE		
B-20. Was the baby a boy or a girl?		
	Boy Girl. Twins, both boys. Twins, both girls Twins, one boy, one girl. 1 2 3 4 5
B-21. What did you name (her/him)? (ENTER HERE AND ON B&P RECORD.)	NAME	NAME
	NAME	NAME
B-22. On what date (was [CHILD] born/did that pregnancy end)? (ENTER HERE AND ON B&P RECORD.)	MO DAY YR	MO DAY YR

BOX 7. IF PREGNANCY ENDED BEFORE JANUARY 1979, SKIP TO BOX 8.
IF PREGNANCY ENDED JANUARY 1979 OR LATER, CONTINUE.

B-23. During this pregnancy, did you ever visit a doctor or clinic for prenatal care?		
	Yes No. 1 (B-24) 2 (BOX 8)
B-24. How many months pregnant were you when you first visited a doctor or clinic for prenatal care?	MONTHS	MONTHS

	FIRST PREGNANCY	SECOND PREGNANCY
B-25. To which of the places on the card did you go for your first visit?		
HAND CARD 3	A. Community health center clinic 01 B. Public health department clinic. 02 C. Family planning clinic 03 D. Abortion clinic. 04 E. Student health service clinic. 05 F. Military health service clinic 06 G. Hospital clinic. 07 H. Private doctor 08 J. Private group practice, co-op, or private clinic. 09 K. Other (SPECIFY). 10 01 02 03 04 05 06 07 08 09 10
B-26. Between your first visit and the end of the pregnancy, how often did you visit a doctor or clinic for prenatal care? Was it once a month or more, or less often than that?		
Once a month or more. Less often than once a month. Pregnancy ended within month of first visit	1 2 3	1 2 3
B-27. During your pregnancy, did a doctor ever tell you to remain in bed for one or more weeks because of some problem related to your pregnancy?		
Yes No.	1 2	1 2

BOX 8. IF PREGNANCY ENDED IN:

LIVE BIRTH, GO TO B-28, PAGE 12.
 ABORTION, GO TO B-39, PAGE 18.
 MISCARRIAGE OR STILLBIRTH, GO TO B-47, PAGE 22.

LIVE BIRTHS

Pregnancy No. [] []

Pregnancy No. [] []

CHILD's NAME	FIRST BIRTH	SECOND BIRTH
B-28. How much did (CHILD) weigh at birth?	_____ _____ (BOX 9) LBS. OZ. DK. 9898 (B-29)	_____ _____ (BOX 9) LBS. OZ. DK. 9898 (B-29)
B-29. Did (s/he) weigh more than 5 1/2 pounds or less? More. 1 5 1/2 or less 2	 1 2

 BOX 9. IF CHILD BORN BEFORE JANUARY 1979, SKIP TO BOX 10.
 IF CHILD BORN JANUARY 1979 OR LATER, CONTINUE.

HAND CARD 8	B-30. This card lists some of the ways in which medical bills can be paid. When (CHILD) was born, in which of these ways was the bill paid? (CIRCLE ALL THAT APPLY AND PROBE: What other ways?)		
	A. Your (or your husband's) own income 01	 01
	B. Partner/boyfriend or his family. 02	 02
	C. Insurance (which you carry or is carried for you). 03	 03
	D. No charge -- paid by Medicaid. 04	 04
	E. Government assistance other than Medicaid (state or local) 05	 05
	F. Military . 06	 06
	G. Parents or other relatives . 07	 07
	H. Some other way (SPECIFY) . 08	 08
	B-31. Did (CHILD) come home from the hospital at the same time you did, or did s/he have to stay longer for medical reasons?		
	Came home with mother . 1 (B-32)	 1 (B-32)
	Stayed longer . 2 (B-32)	 2 (B-32)
	Child given up for adoption . 3 (BOX 12, PAGE 16)	 3 (BOX 12, PAGE 16)
	Not born in hospital. 4 (B-32)	 4 (B-32)
	Child died at hospital. 5 (B-36)	 5 (B-36)
	B-32. In the first six months of (her/his) life, did you ever take (CHILD) to the doctor or clinic for a well-baby or routine checkup?		
	Yes . 1	 1
	No. 2	 2

BOX 33. • IF R NEVER PREGNANT, GO TO BOX 34.
• IF R EVER PREGNANT, CONTINUE.

C-63. There has recently been a great deal of discussion about cigarette smoking and women's health. On the average, during your (last) pregnancy, how many cigarettes per day (did/have) you smoke(d), if any?

About one a day or less. 01
Just a few (2-4) 02
About half a pack (5-14) 03
About a pack (15-24) 04
About 1 1/2 packs (25-34). 05
About 2 packs (35-44). 06
More than 2 packs (45+). 07

Didn't smoke during (last/current)
pregnancy. 96

66-67

C-64. During your (last) pregnancy, how often (did/do) you usually drink alcoholic beverages, that is, beer, wine, or liquor? (Was/Is) it . . .

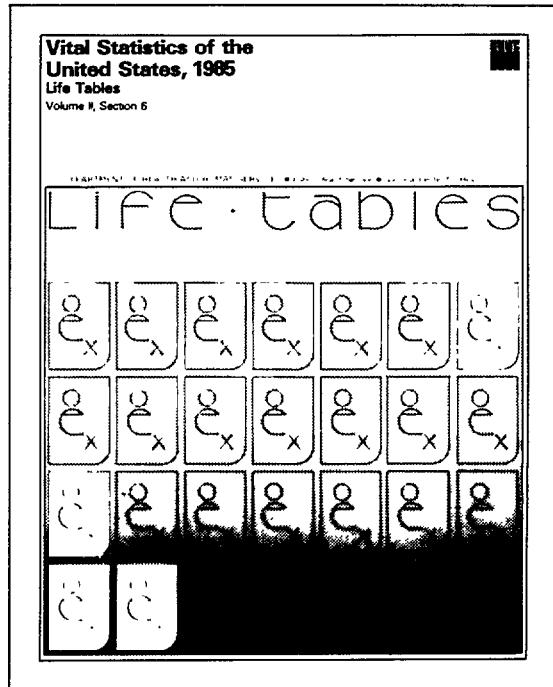
A. Every day, 1
B. A few days a week, 2
C. Once a week, 3
D. Once a month, 4
E. Less than once a month, 5
F. Or never? 6

68

HAND
CARD
17

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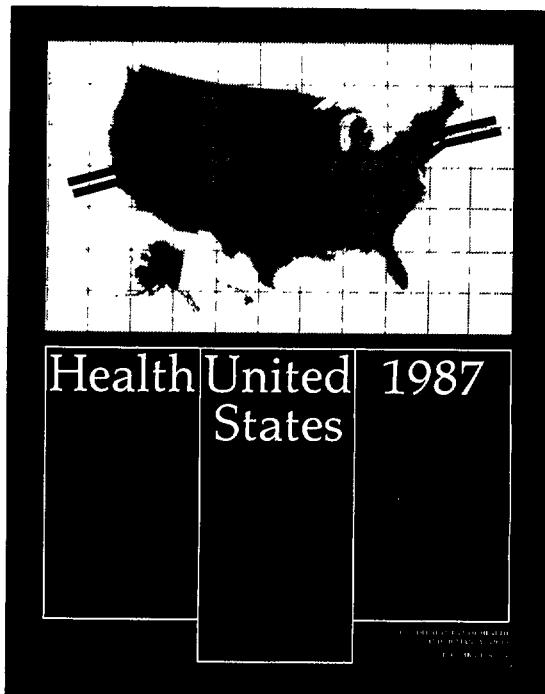
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