

HC 3.1

HEALTH INSURANCE COVERAGE

Children who are covered by health insurance are considerably more likely to have a regular source of health care. Among children covered by private health insurance, 97 percent had a regular source of medical care in 1993; and of those covered by public health insurance, 94 percent had a regular source of medical care. In contrast, 79 percent of children with no health insurance had a regular source of medical care.⁵⁹ Regular care increases the continuity of care, which is important to the maintenance of good health.

Since 1987, the percentage of children who are covered by health insurance has remained stable, ranging from 85 to 87 percent (see Table HC 3.1.A). Rates of coverage vary little by age of child, though older children appear slightly less likely to be covered.

Differences by Race and Hispanic Origin. Hispanic children are less likely to be covered than either white or black children. In 1996, 71 percent of Hispanic children were covered by health insurance, compared with 86 percent of white children and 81 percent of black children (see Table HC 3.1.A).

Differences by Type of Health Care Coverage. Public health insurance coverage for children increased from 19 percent in 1987 to a high of 27 percent in 1993, before declining slightly to 25 percent by 1996 (see Figure HC 3.1).⁶⁰ Younger children are considerably more likely to be covered by public health insurance. In 1996, 31 percent of children under age 6 were covered, compared with 19 percent of children ages 12 through 17 (see Table HC 3.1.A). Finally, a very large proportion of black and Hispanic children rely on public health insurance for their medical coverage. In 1996, 45 percent of black and 35 percent of Hispanic children were covered by public health insurance, compared with 21 percent of white children. The vast majority of children covered by public health insurance are covered by Medicaid (see Table 3.1.B).

⁵⁹Simpson G., Bloom B., Cohen R.A., and Parsons P.E. "Access to Health Care. Part 1: Children." *Vital and Health Statistics* 10(196). National Center for Health Statistics, 1997.

⁶⁰Public health insurance for children consists primarily of Medicaid but also includes Medicare and CHAMPUS.

Table HC 3.1.A

Percentage of children under age 18 in the United States who are covered by health insurance, by type of insurance, age, and race and Hispanic origin:^a 1987-1996

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
All health insurance										
All children	87	87	87	87	87	87	86	86	86	85
Under age 6	88	87	87	89	89	89	88	86	87	86
Ages 6-11	87	87	87	87	88	88	87	87	87	85
Ages 12-17	86	86	86	85	85	85	83	85	86	84
Race and Hispanic origin^a										
White	88	88	88	87	88	88	87	87	87	86
Black	83	84	84	85	85	86	84	83	85	81
Hispanic	72	71	70	72	73	75	74	72	73	71
Private health insurance										
All children	74	74	74	71	70	69	67	66	66	66
Under age 6	72	71	71	68	66	65	63	60	60	62
Ages 6-11	74	74	75	73	71	71	70	67	67	67
Ages 12-17	75	76	76	73	72	71	69	70	71	70
Race and Hispanic origin^a										
White	79	79	78	76	75	74	72	71	71	71
Black	49	50	52	49	45	46	46	43	44	45
Hispanic	48	48	48	45	43	42	42	38	38	40
Public health insurance^b										
All children	19	19	19	22	24	25	27	26	26	25
Under age 6	22	23	24	28	30	33	35	33	33	31
Ages 6-11	19	18	18	20	22	23	25	25	26	25
Ages 12-17	16	16	15	18	19	19	20	20	21	19
Race and Hispanic origin^a										
White	14	14	15	17	19	20	22	21	21	21
Black	42	42	41	45	48	49	50	48	49	45
Hispanic	28	27	27	32	37	38	41	38	39	35

^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

^bPublic health insurance for children consists primarily of Medicaid, but also includes Medicare and CHAMPUS.

Source: Unpublished tables, based on Analyses from the March Current Population Surveys. Housing and Household Economic Statistics Division, U.S. Bureau of the Census.

Table HC 3.1.B

Percentage of children under age 18 in the United States who are covered by Medicaid, by age, and by race and Hispanic origin:^a 1987-1996

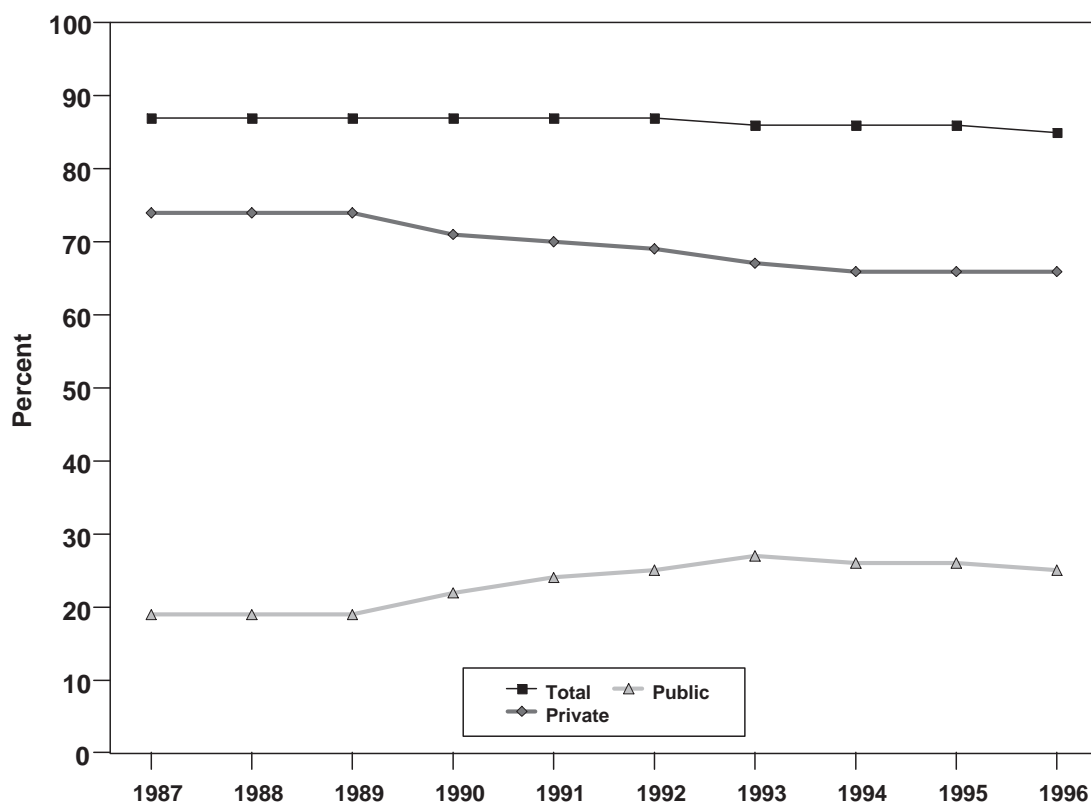
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
All children	15	16	16	19	20	22	24	23	23	22
Under age 6	18	19	20	24	27	30	32	30	30	28
Ages 6-11	15	15	15	17	19	20	22	22	23	22
Ages 12-17	12	12	11	14	15	15	17	16	17	16
Race and Hispanic origin^a										
White	11	11	11	14	16	17	19	18	18	18
Black	38	38	37	42	44	46	47	44	45	41
Hispanic	26	25	25	30	34	37	39	37	37	34

^aEstimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: Unpublished tables, based on Analyses from the March Current Population Surveys. Housing and Household Economic Statistics Division, U.S. Bureau of the Census.

Figure HC 3.1

Percentage of children under age 18 in the United States who are covered by health insurance, by type of insurance:^a 1987-1996



^aPublic health insurance for children consists primarily of Medicaid, but also includes Medicare and CHAMPUS.

Source: Unpublished tables, based on Analyses from the March Current Population Surveys. Housing and Household Economic Statistics Division, U.S. Bureau of the Census.

HC 3.2

EARLY PRENATAL CARE: RECEIPT OF PRENATAL CARE IN THE FIRST TRIMESTER

Early prenatal care (i.e., care in the first trimester of a pregnancy) allows women and their health care providers to identify and, when possible, treat or correct health problems and health-compromising behaviors that can be particularly damaging during the initial stages of fetal development. Increasing the percentage of women who receive prenatal care, and who do so early in their pregnancies, can improve birth outcomes and lower health care costs by reducing the likelihood of complications during pregnancy and childbirth.⁶¹

The percentage of women receiving prenatal care in the first trimester has increased from 68.0 percent in 1970 to 81.8 percent in 1996 (see Table HC 3.2).⁶² Following a decade of essentially no change, the proportion of women receiving early prenatal care has improved incrementally throughout the 1990s.

Differences by Race and Ethnicity. The percentage of women receiving prenatal care during the first three months of pregnancy has increased over the past two decades for women of all races and those of Hispanic origin.⁶³ While the gains have been greatest for black, American Indian/Alaskan Native and Hispanic women, white women and Asian/Pacific Islander women are most likely to receive prenatal care in their first trimester (see Table HC 3.2 and Figure HC 3.2).

- American Indian/Alaskan Native women have consistently had the lowest percentage of women receiving early prenatal care; however, this percentage has increased gradually, from 38.2 percent in 1970 to 66.7 percent by 1995 (the latest year for which data are available for this group).
- The percentage of black women receiving prenatal care in the first trimester increased from 44.2 percent in 1970 to 62.4 percent in 1980. Rates declined slightly to 60.6 percent in 1990 but continued to increase in subsequent years, reaching 71.3 percent by 1996.
- The percentage of Hispanic women who receive early prenatal care has increased from 60.2 percent in 1980 to 71.9 percent by 1996. Among Hispanics, there are important subgroup disparities. In 1995, 89.2 percent of Cuban women received early prenatal care, compared with 69.1 percent of Mexican American women.
- Since 1980, there has been a gradual increase of nearly 6 percentage points in early prenatal care receipt among Asian/Pacific Islander women — from 73.7 percent in 1980 to 79.9 percent in 1995 (the latest year for which data are available for this group). Chinese, Japanese, and Filipino women tend to have higher rates of prenatal care among all Asian women, compared with Hawaiian and other Asian women.
- The percentage of white women receiving early prenatal care increased from 72.4 percent to 79.2 percent between 1970 and 1980, was stable through the 1980s, then increased during the 1990s to 83.9 percent by 1996.

Differences by Age. Older women are more likely to receive early prenatal care than are younger women. Although there have been improvements in the receipt of early prenatal care by teenagers, this age group is consistently the least likely to receive prenatal care in the first trimester of pregnancy (see Table HC 3.2).

- Receipt of early prenatal care among women under age 15 improved considerably between 1975 and 1996, increasing from 30.9 percent to 47.2 percent.

⁶¹U.S. Public Health Service. "Caring for Our Future: The Content of Prenatal Care." Washington, D.C.: U.S. Department of Health and Human Services, 1989.

⁶²Data for 1996 are preliminary.

⁶³These data include only those women who gave birth, not all women who were pregnant.

- The percentage of women age 35 and over who received early prenatal care also improved during this time period, increasing from 68.4 percent in 1975 to 87.0 percent by 1996.
- More than 80 percent of women age 25 and older received early prenatal care throughout the 1990s.

Table HC 3.2

Percentage of women^a in the United States receiving prenatal care in the first trimester, by race/ethnicity of mother and by age: selected years, 1970-1996^b

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^b
Total	68.0	72.4	76.3	76.2	75.8	76.2	77.7	78.9	80.2	81.3	81.8
Race/ethnicity											
White ^c	72.4	75.8	79.2	79.3	79.2	79.5	80.8	81.8	82.8	83.6	83.9
Black ^c	44.2	55.5	62.4	61.5	60.6	61.9	63.9	66.0	68.3	70.4	71.3
American Indian/Alaskan Native ^c	38.2	45.4	55.8	57.5	57.9	59.9	62.1	63.4	65.2	66.7	—
Asian/Pacific Islander^c	—	—	73.7	74.1	75.1	75.3	76.6	77.6	79.7	79.9	—
Chinese	71.8	76.7	82.6	82.0	81.3	82.3	83.8	84.6	86.2	85.7	—
Japanese	78.1	82.7	86.1	84.7	87.0	87.7	88.2	87.2	89.2	89.7	—
Filipino	60.6	70.6	77.3	76.5	77.1	77.1	78.7	79.3	81.3	80.9	—
Hawaiian and part Hawaiian	—	—	—	—	65.8	68.1	69.9	70.6	77.0	75.9	—
Other Asian or Pacific Islander	—	—	—	—	71.9	71.9	72.8	74.4	76.2	77.0	—
Hispanic origin^{d,e}	—	—	60.2	61.2	60.2	61.0	64.2	66.6	68.9	70.8	71.9
Mexican American	—	—	59.6	60.0	57.8	58.7	62.1	64.8	67.3	69.1	—
Puerto Rican	—	—	55.1	58.3	63.5	65.0	67.8	70.0	71.7	74.0	—
Cuban	—	—	82.7	82.5	84.8	85.4	86.8	88.9	90.1	89.2	—
Central and South American	—	—	58.8	60.6	61.5	63.4	66.8	68.7	71.2	73.2	—
Other and Unknown Hispanic	—	—	66.4	65.8	66.4	65.6	68.0	70.0	72.1	74.3	—
Age											
Under age 15	—	30.9	34.5	36.0	37.9	40.3	42.9	44.8	45.7	48.1	47.2
15-19 years	—	53.3	56.3	53.9	55.1	56.6	59.5	61.9	64.3	66.3	66.9
20-24 years	—	73.4	74.9	71.7	68.9	69.5	71.2	72.8	74.6	76.0	76.5
25-29 years	—	81.5	84.0	83.1	81.7	81.9	82.9	83.6	84.5	85.2	85.5
30-34 years	—	78.9	84.4	85.5	85.3	85.4	86.4	86.9	87.7	88.2	88.5
35 years and older	—	68.4	76.1	81.3	83.4	83.8	84.6	85.3	86.2	86.7	87.0

^aThe data refer to those women who had live births.

^bData for 1996 are preliminary.

^cIncludes persons of Hispanic origin.

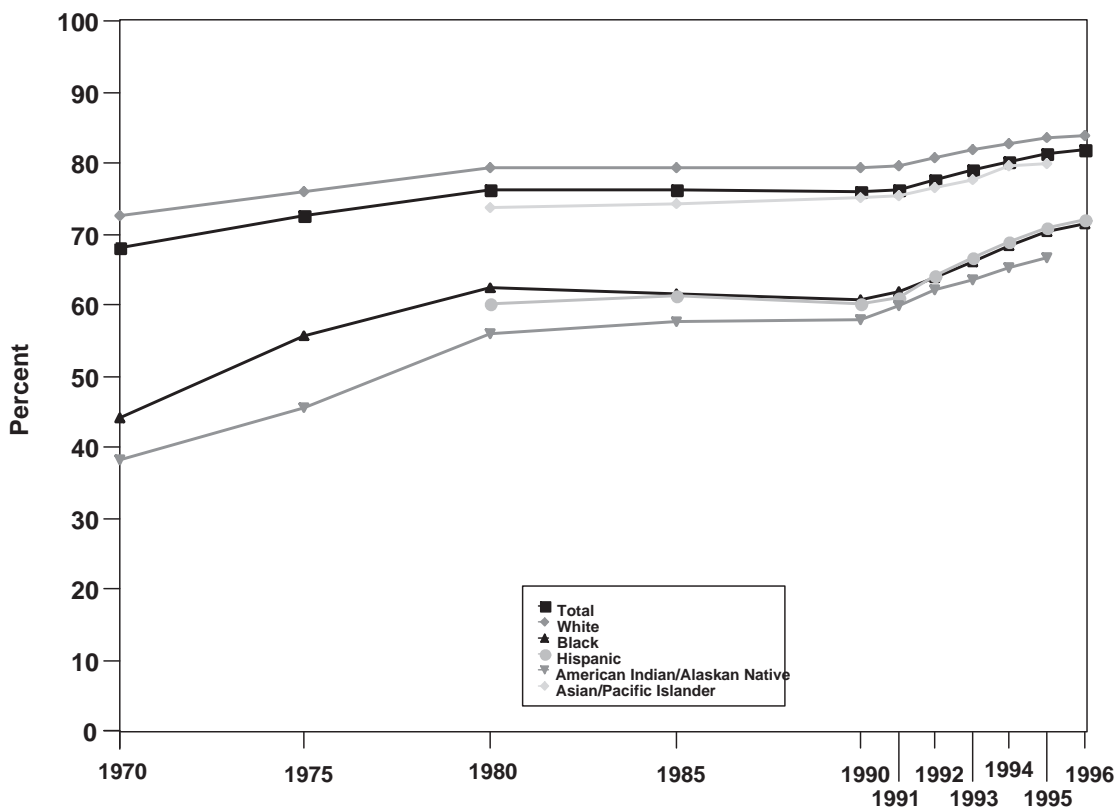
^dPersons of Hispanic origin may be of any race.

^eFigures for Hispanic women in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate; 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the District of Columbia since 1993.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46(1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. Report of Final Natality Statistics, 1995. *Monthly Vital Statistics Report* 45(11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

Figure HC 3.2

Percentage of women^a in the United States receiving prenatal care in the first trimester, by race/ethnicity^b of mother: selected years, 1970-1996^c



^aThe data refer to those women who had live births.

^bEstimates for all race groups include Hispanics of those races. Persons of Hispanic origin may be of any race. Figures for Hispanic women in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate; 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the District of Columbia since 1993.

^cData for 1996 are preliminary.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46(1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. Report of Final Natality Statistics, 1995. *Monthly Vital Statistics Report* 45(11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

HC 3.3

LATE OR NO PRENATAL CARE

Receiving prenatal care late in a pregnancy, or receiving no prenatal care at all, can lead to negative health outcomes for mother and child. Women who receive care late in their pregnancy, or who do not receive care at all, are at increased risk of bearing infants who are of low birth weight, who are stillborn, or who die within the first year of life.⁶⁴ Between 1970 and 1996, the percentage of women receiving late or no prenatal care declined from 7.9 percent to 4.1 percent (see Figure HC 3.3).⁶⁵

Differences by Race and Ethnicity. The percentage of women who receive late or no prenatal care has declined substantially for women in all race and ethnic groups. The descriptions that follow present 1995 data which are available for all race groups and Hispanic origins. Preliminary data for 1996 are available for white, black, and Hispanic women, as shown in Table HC 3.3:

- American Indian/Alaskan Native women and black women have seen the most dramatic improvements, with the percentages receiving late or no prenatal care dropping by more than two-thirds for American Indian women and by more than half for black women since 1970. In 1995, 9.5 percent of American Indian women received late or no prenatal care, and 7.6 percent of black women received late or no prenatal care.
- The percentage of Hispanic women receiving late or no prenatal care has decreased every year during the 1990s, and at 7.4 percent in 1995 was lower than the rate for black women.
- White women and Asian women have consistently been least likely to receive late or no prenatal care. In 1995, 3.5 percent of white women received late or no prenatal care and 4.3 percent of Asian women received late or no prenatal care.

Differences by Age. In general, as the age of a woman increases, the likelihood of receiving late or no prenatal care decreases. The percentage of women age 15 and younger who received late or no prenatal care is double that of women ages 15 through 19 and three to five times greater than women age 20 and older, as reflected in 1996 preliminary data. Although their rates remain much higher than any other age group, the percentage of women age 15 and under who received late or no prenatal care has improved substantially since 1975, decreasing from 21.1 percent to 15.5 percent by 1996. Percentages among women ages 15 through 19 have also improved over this time period, decreasing to 7.4 percent in 1996. Less than four percent of women in each age group 25 and over received late or no prenatal care during pregnancy in 1996, especially women ages 30 through 34 whose rate of late or no prenatal care reached a new low of 2.6 percent (see Table HC 3.3).

⁶⁴U.S. Public Health Service. "Caring for Our Future: The Content of Prenatal Care." Washington, D.C.: U.S. Department of Health and Human Services, 1989.

⁶⁵Data for 1996 are preliminary.

Table HC 3.3

Percentage of women^a in the United States receiving late or no prenatal care,^b by race/ethnicity of mother and by age: selected years, 1970-1996^c

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996 ^e
Total	7.9	6.0	5.1	5.7	6.1	5.8	5.2	4.8	4.4	4.2	4.1
Race/ethnicity											
White ^d	6.3	5.0	4.3	4.8	4.9	4.7	4.2	3.9	3.6	3.5	3.4
Black ^d	16.6	10.5	8.9	10.2	11.3	10.7	9.9	9.0	8.2	7.6	7.4
American Indian/Alaskan Native ^d	28.9	22.4	15.2	12.9	12.9	12.2	11.0	10.3	9.8	9.5	—
Asian/Pacific Islander^d			6.5	6.5	5.8	5.7	4.9	4.6	4.1	4.3	—
Chinese	6.5	4.4	3.7	4.4	3.4	3.4	2.9	2.9	2.7	3.0	—
Japanese	4.1	2.7	2.1	3.1	2.9	2.5	2.4	2.8	1.9	2.3	—
Filipino	7.2	4.1	4.0	4.8	4.5	5.0	4.3	4.0	3.6	4.1	—
Hawaiian and part Hawaiian	—	—	—	—	8.7	7.5	7.0	6.7	4.7	5.1	—
Other Asian or Pacific Islander	—	—	—	—	7.1	6.8	5.9	5.4	4.8	5.0	—
Hispanic origin^{e,f}			12.0	12.4	12.0	11.0	9.5	8.8	7.6	7.4	6.8
Mexican American	—	—	11.8	12.9	13.2	12.2	10.5	9.7	8.3	8.1	—
Puerto Rican	—	—	16.2	15.5	10.6	9.1	8.0	7.1	6.5	5.5	—
Cuban	—	—	3.9	3.7	2.8	2.4	2.1	1.8	1.6	2.1	—
Central and South American	—	—	13.1	12.5	10.9	9.5	7.9	7.3	6.5	6.1	—
Other and Unknown Hispanic	—	—	9.2	9.4	8.5	8.2	7.5	7.0	6.2	6.0	—
Age											
Under age 15	—	21.1	20.0	20.5	20.3	18.8	17.2	16.6	15.9	15.3	15.5
15-19 years	—	10.8	10.3	12.0	11.9	10.9	9.7	8.9	8.0	7.6	7.4
20-24 years	—	5.8	5.4	6.9	8.0	7.5	6.7	6.2	5.6	5.4	5.2
25-29 years	—	3.6	3.1	3.8	4.4	4.3	3.9	3.7	3.4	3.3	3.2
30-34 years	—	4.3	3.0	3.1	3.4	3.3	3.0	2.9	2.7	2.7	2.6
35 years and older	—	7.5	5.4	4.5	4.1	3.9	3.6	3.4	3.1	3.1	3.0

^aThe data refer to those women who had live births.

^bLate prenatal care is defined as 7th month or later.

^cData for 1996 are preliminary.

^dIncludes persons of Hispanic origin.

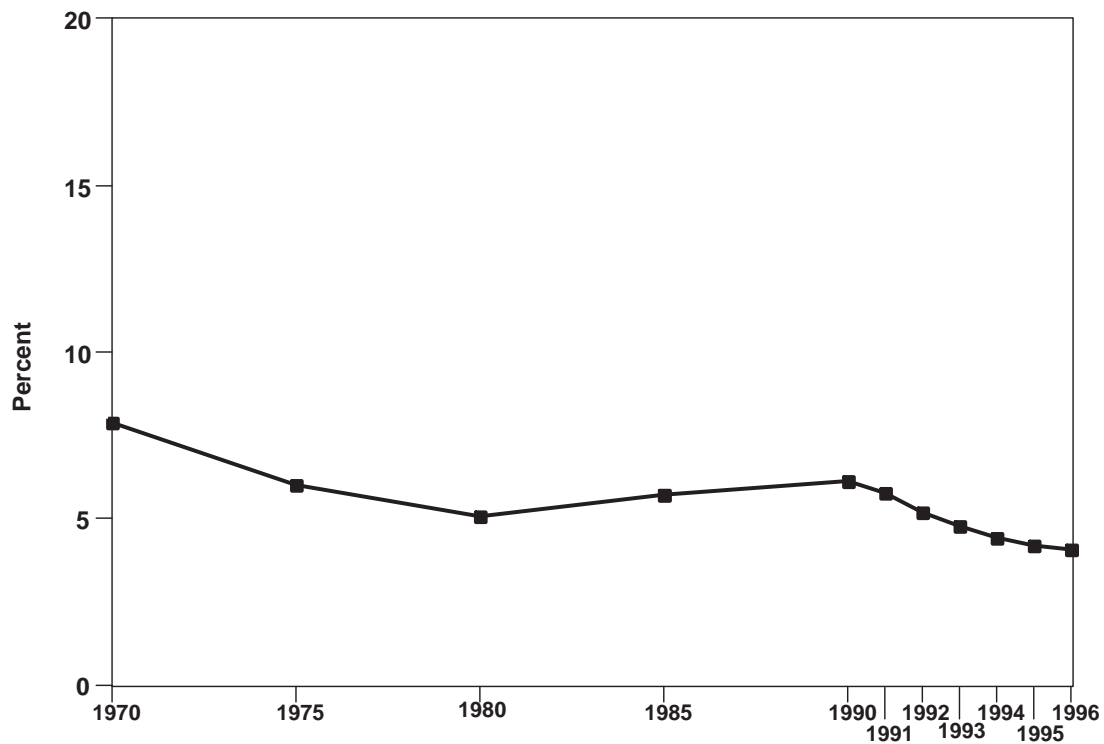
^ePersons of Hispanic origin may be of any race.

^fFigures for Hispanic women in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate; 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the District of Columbia since 1993.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46(1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45(11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

Figure HC 3.3

Percentage of women^a in the United States receiving late or no prenatal care:^b selected years, 1970-1996^c



^aThe data refer to those women who had live births.

^bLate prenatal care is defined as 7th month or later.

^cData for 1996 are preliminary.

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Data computed by the Division of Health and Utilization Analysis from data compiled by the Division of Vital Statistics; Ventura, S.J., Peters, K.D., Martin, J.A., and Maurer, J.D. "Births and Deaths: United States, 1996." *Monthly Vital Statistics Report* 46(1, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997; Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report* 45(11, Supp. 2). Hyattsville, Md.: National Center for Health Statistics, 1997. Also previous issues of this annual report and unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

HC 3.4

INADEQUATE PRENATAL CARE

Receiving early and consistent prenatal care increases the likelihood of a healthy birth outcome. Adequate prenatal care is determined by both the early receipt of prenatal care (within the first trimester) and the receipt of an appropriate number of prenatal care visits for each stage of a pregnancy. Women whose prenatal care fails to meet these standards are at a greater risk for pregnancy complications and negative birth outcomes. After fluctuating for the latter half of the 1980s, the percentage of women receiving inadequate prenatal care has decreased since 1990 to 4.7 percent in 1995 (see Table HC 3.4).

Differences by Race. While the percentages of both black and white women receiving inadequate prenatal care have declined since 1990, the percentage of black women receiving inadequate care has consistently been more than twice as high as the percentage of white women. This gap has existed since at least 1984 (see Table HC 3.4). For example, in 1995, 11 percent of black women received inadequate prenatal care, compared with 4.7 percent of white women.

Table HC 3.4

Percentage of women in the United States^a receiving inadequate prenatal care (based on the Kessner Index),^b by race:^c selected years, 1984-1995

Race ^c	1984	1986	1988	1990	1991	1992	1993	1994	1995
White	6.2	6.3	6.1	6.8	6.4	5.7	5.3	4.9	4.7
Black	15.1	15.3	15.5	16.4	15.5	14.5	13.1	12.0	11.0

^aBased on 49 states for 1984-1988 and all 50 states for 1989-1995.

^bThe Kessner Index provides a measure for the adequacy of prenatal care by assessing the timeliness and frequency with which prenatal care is received according to the gestational age of the baby. Using the Kessner Index standards, prenatal care is determined to be adequate, intermediate, or inadequate. Adequate prenatal care must begin within the first trimester of pregnancy and follow a prescribed number of minimum prenatal visits by gestational period. Inadequate care encompasses all women who started care after the sixth month of pregnancy (3rd trimester) and all women who had a low frequency of prenatal visits that followed the pattern described in the following chart:

Gestation (Weeks)	Number of Prenatal Visits
17 - 21	and 0
22 - 29	and 1 or less
30 - 31	and 2 or less
32 - 33	and 3 or less
34 or More	and 4 or less

^cFor 1990, 1991, 1992, 1993, 1994, and 1995, race is of mother; for 1984, 1986, and 1988, race is of child.

Note: Births with period of gestation, number of prenatal visits, or month prenatal care began not stated were excluded from tabulation.

Source: Unpublished tabulations, Division of Vital Statistics, National Center for Health Statistics.

HC 3.5

IMMUNIZATION: PERCENTAGE OF CHILDREN AGES 19 MONTHS TO 35 MONTHS WHO ARE FULLY IMMUNIZED

Childhood vaccinations can prevent diseases that killed or permanently impaired many children in past decades. The Centers for Disease Control and Prevention recommend that 80 percent of all routine childhood vaccinations be administered within the first two years of life. Vaccination coverage is particularly important before children enter preschool to prevent the spread of disease. Today, at least 95 percent of children are adequately vaccinated by the time they enter kindergarten.⁶⁶

There were substantial increases in the proportion of children vaccinated between 1991 and 1994 for each of the recommended vaccines (data not shown).⁶⁷ Coverage has continued to increase during the period from 1994 to 1996. For example, the percentage of pre-school children receiving the combined series 4:3:1:3 vaccine was 69 percent in 1994 and reached 77 percent by 1996.⁶⁸ Even with the increases of recent years, more than one million preschool children remain unvaccinated for serious preventable diseases.⁶⁹ In particular, there are differences in immunization rates by poverty status and race and Hispanic origin.

Differences by Poverty Status. Children in households at or above the poverty level are more likely to have received each of the vaccinations specified in each year from 1994 to 1996 than are children in households below the poverty level. In 1996, 80 percent of children in families at or above the poverty level received the combined series (4:3:1:3), compared with 69 percent of poor children (see Table HC 3.5).

Differences by Race and Hispanic Origin.⁷⁰ Non-Hispanic white infants ages 19 months to 35 months have higher percentages of vaccination receipt than do non-Hispanic black children or children of Hispanic origin. This disparity in vaccination levels has narrowed somewhat from 1994 to 1996, as the vaccination levels of black and Hispanic children have improved. By preschool, the vaccination levels of children across race and ethnic groups are nearly the same, narrowing a gap that once was as wide as 26 percentage points for specific vaccinations.⁷¹

⁶⁶Office of Communication, Division of Media Relations, Centers for Disease Control and Prevention. Facts About the Childhood Immunization Initiative. 1997.

⁶⁷Based on data from the National Immunization Program, Center for Prevention Services, from data compiled by the Division of Health Interview Statistics as reported in National Center for Health Statistics. *Health, United States, 1996-97*. Hyattsville, Md.: 1997.

⁶⁸The combined series 4:3:1:3 consists of four doses of Diphtheria-tetanus-pertussis (DTP) vaccine, three doses of polio vaccine, one dose of measles-containing vaccine, and three doses of Haemophilus influenzae type b (HiB) vaccine.

⁶⁹Office of Communication, Division of Media Relations, Centers for Disease Control and Prevention. Facts About the Childhood Immunization Initiative. 1997.

⁷⁰Estimates for whites and blacks exclude Hispanics of those races.

⁷¹"Vaccination Levels for Minority Children in the U.S. at All-time High." U.S. Department of Health and Human Services Press Release. October 16, 1997.

Table HC 3.5

Percentage of children^a ages 19 months to 35 months in the United States who have received vaccinations for routinely recommended vaccines, by poverty status,^b and race and Hispanic origin:^c 1994^d-1996

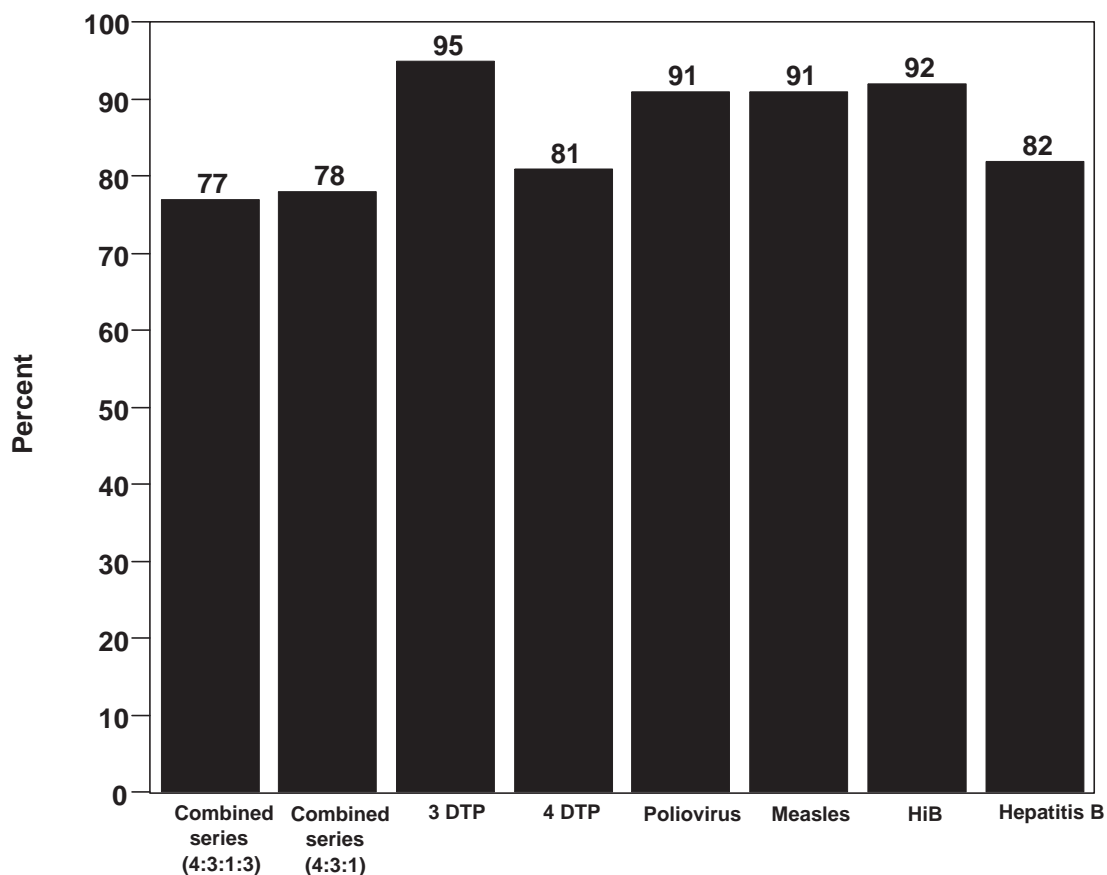
Vaccination type		Total	Poverty Status ^b		Race and Hispanic Origin ^c		
			Below poverty	At or above poverty	White, non-Hispanic	Black, non-Hispanic	Hispanic
Combined series (4:3:1:3) ^e	1994	69	61	72	72	66	62
	1995	74	66	77	77	70	68
	1996	77	69	80	79	74	71
Combined series (4:3:1) ^f	1994	75	66	78	78	69	68
	1995	76	68	79	79	72	71
	1996	78	71	81	80	76	73
DTP (3 doses or more) ^g	1994	93	89	96	95	91	90
	1995	95	91	96	96	92	93
	1996	95	92	96	96	93	93
DTP (4 doses or more) ^g	1994	77	68	80	80	71	71
	1995	79	71	81	81	74	74
	1996	81	73	84	83	79	77
Polio (3 doses or more)	1994	83	77	86	85	79	82
	1995	88	84	89	89	84	86
	1996	91	88	92	92	90	89
Measles-containing ^h	1994	89	87	90	90	85	88
	1995	90	85	91	91	87	88
	1996	91	87	92	92	89	88
HiB (3 doses or more) ⁱ	1994	86	81	88	87	84	83
	1995	92	88	93	93	89	89
	1996	92	88	93	93	90	89
Hepatitis B (3 doses or more) ^j	1994	36	24	41	40	30	31
	1995	68	64	69	68	65	70
	1996	82	78	83	82	82	80

^aData are based on household interviews of a sample of the civilian, noninstitutionalized population. Refusals and unknowns were excluded. Exclusions included unknown vaccine type. - ^bPoverty status is based on family income and family size using U.S. Bureau of the Census poverty thresholds. - ^cEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race. - ^dEstimates are based on interviews conducted from April 1994 through December 1994. - ^eThe combined series 4:3:1:3 consists of four doses of Diphtheria-tetanus-pertussis (DTP) vaccine, three doses of polio vaccine, one dose of a measles-containing vaccine, and three doses of Haemophilus influenzae type b (HiB) vaccine. - ^fThe combined series 4:3:1 consists of four doses of DTP vaccine, three doses of polio vaccine, and one dose of a measles-containing vaccine. - ^gDiphtheria-tetanus-pertussis vaccine. - ^hAny vaccination containing measles vaccine. - ⁱHaemophilus influenzae type b vaccine. - ^jThe percentage of children 19-35 months of age who received three or more doses of Hepatitis B vaccine was artificially low in 1994 because universal infant vaccination with a 3-dose series was not recommended until November 1991.

Sources: National Center for Health Statistics. *Health, United States, 1996-97*. Hyattsville, Md.: 1997 (table 55). Based on data from the National Immunization Survey, National Center for Health Statistics and National Immunization Program, Centers for Disease Control and Prevention; Estimates for 1996 from Centers for Disease Control and Prevention. October 17, 1997. "Vaccination Coverage by Race/Ethnicity and Poverty Level Among Children Aged 19-35 Months--United States, 1996." *Morbidity and Mortality Weekly Report* 46(41).

Figure HC 3.5

Percentage of children^a ages 19 months to 35 months in the United States who have received vaccinations for routinely recommended vaccines:^b 1996



^aData are based on household interviews of a sample of the civilian, noninstitutionalized population. Refusals and unknowns were excluded. Exclusions included unknown vaccine type.

^bThe combined series 4:3:1:3 consists of four doses of Diphtheria-tetanus-pertussis (DTP) vaccine, three doses of polio vaccine, one dose of a measles-containing vaccine, and three doses of Haemophilus influenzae type b (HiB) vaccine. The combined series 4:3:1 consists of four doses of DTP vaccine, three doses of polio vaccine, and one dose of a measles-containing vaccine.

Sources: National Center for Health Statistics. *Health, United States, 1996-97*. Hyattsville, Md.: 1997 (table 55). Based on data from the National Immunization Survey, National Center for Health Statistics and National Immunization Program, Centers for Disease Control and Prevention; Estimates for 1996 from Centers for Disease Control and Prevention. October 17, 1997. "Vaccination Coverage by Race/Ethnicity and Poverty Level Among Children Aged 19-35 Months--United States, 1996." *Morbidity and Mortality Weekly Report* 46(41).

