#### 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.<sup>28</sup> Regular care increases the continuity of care, which is important to the maintenance of good health.

Table HC 3.1 presents trends from 1987 to 1994 in the percentage of children who were not covered by any form of health insurance. During that period, rates of non-coverage were 13 percent, with an increase to 14 percent in 1993 and 1994.

Table HC 3.1 also displays selected estimates by age, race/ethnicity, and family structure. The table indicates that children were somewhat less likely to be covered as they got older. In 1993 rates of non-coverage increased from 12 percent for children under age 6, to 17 percent for children ages 12-17. Between 1989 and 1993, rates of non-coverage have decreased slightly for children under age 6 (from 13 percent to 12 percent) and increased for children ages 12-17 (from 14 percent to 17 percent).

Across race/ethnicity groups for 1994, Hispanics were considerably more likely to lack coverage (28 percent) than either white (13 percent) or black (17 percent) children. In 1989, the gap between race/ethnicity groups was somewhat larger, when 30 percent of all Hispanic children lacked health coverage.

While children in two parent and single female headed families in 1993 showed similar rates of non-coverage (12 and 14 percent, respectively), children living in single father household were considerably more likely to lack coverage (22 percent). Between 1989 and 1993, rates of health non-coverage appear to have decreased somewhat for children in single female headed families (from 16 to 14 percent), and to have increased for children living in two-parent families (from 11 to 12 percent).

<sup>28</sup>National Center for Health Statistics, "Health of Our Nation's Children" 1988. Vital Statistics Health Series 10, No. 191.

	D BY HEALTH INSURANCE

	1987	1988	1989	1990	1991	1992	1993	1994
All Children	13	13	13	13	13	12	14	14
Age 0-5	_	_	13	_	_	_	12	_
Age 6-11	_	_	13	_	_	_	13	_
Age 12-17	_	_	14	_	_	_	17	_
Race/Ethnicity								
White	_	_	13	_	_	_	13	13
Black	_	_	17	_	_	_	16	17
Hispanic	_	_	30	_	_	_	26	28
Family Structure								
Two parents	_	_	11	_	_	_	12	_
Single Female He	aded —	_	16	_	_	_	14	_
Single Male Head	ed —	_	24	_	_	_	22	_

Source: Data for 1989 and 1993 produced by Child Trends, Inc., based on data from the March 1990 and 1994 Current Population Surveys. Data for 1994 produced by Child Trends, Inc., based on unpublished tables supplied by the U.S. Bureau of the Census. Data for other years provided by U.S. Bureau of the Census based on analyses of March Current Population Surveys for 1988, 1989, 1991, 1992, and 1993.

#### HC 3.2.A PRENATAL CARE RECEIPT IN THE FIRST TRIMESTER

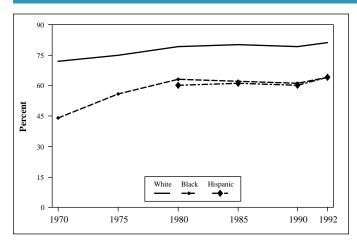
Receiving prenatal care early, that is during the first trimester of a woman's pregnancy, is most beneficial to the mother and fetus. Early prenatal care allows for the early detection of health or physical problems, and the early identification of health compromising behaviors which can be particularly damaging during the initial stages of fetal development. Increasing the number of women who receive prenatal care, and who do so early in their pregnancies can have important implications for birth outcomes and can reduce health care costs by reducing the likelihood of complications during pregnancy and childbirth.

The percent of mothers receiving prenatal care during the first three months of pregnancy (Table HC 3.2.a) has increased, in general, over the past two decades for all women irrespective of race, ethnicity, or age, although gains in the receipt of prenatal care are greater for black mothers than for either white or Hispanic mothers (Figure HC 3.2.a). Further, virtually all of these gains were made between 1970 and 1980. The percent of black mothers receiving prenatal care in the first trimester increased from 44 percent in 1970 to 63 percent in 1980. Rates dipped slightly to 61 percent in 1990 before rising to 64 percent in 1992. Among white mothers, the percent receiving early prenatal care increased from 72 percent in 1970 to 79 percent in 1980, then to 81 percent by 1994.

Mothers under age 15 and mothers age 35 and over also experienced sizable increases in the proportion receiving prenatal care during the first trimester, with rates rising steadily between 1975 and 1992. (*See* Table HC 3.2.a) The percent of young adolescent mothers receiving early prenatal care went from 31 percent in 1975 to 43 percent by 1992; the respective percentages for mothers ages 35 and over were 68 percent and 85 percent.

Despite the general improvements and the strong improvements for black, teen and older mothers, strong race/ethnicity and age differences in the percent of women receiving prenatal care still remain. White women and older women are more likely to receive prenatal care during their first trimester than either black and Hispanic mothers, or younger mothers. For example, in 1992 a greater proportion of white mothers had received prenatal care during their first trimester of pregnancy than black mothers (81 percent versus 64 percent). Young mothers were the least likely to receive prenatal care in the first trimester. Forty-three percent of teen mothers under 15 and 60 percent of mothers 15-19 years of age were reported to receive early prenatal care in 1992, compared to rates in excess of 80 percent among mothers age 25 and older.

Figure HC 3.2.A PERCENT OF MOTHERS RECEIVING PRENATAL CARE IN THE FIRST TRIMESTER, FOR SELECTED YEARS 1970 - 1992, BY RACE/ETHNICITY



Source: 1970 data from: National Center for Health Statistics *Health, United States*, 1982, Table 24; 1975 data from: *Monthly Vital Statistics Report*, Vol. 25, No. 10 (Supplement) December 1976, Tables 17 and 18; 1980 data from: Monthly Vital Statistics Report, Vol. 31, No. 8 (Supplement) November, 1982, Table 20 and Vol. 32, No. 6 (Supplement) September, 1983, Table 13. 1985 data from *Vital Statistics of the United States*, 1985, Vol. 1, "Natality" Tables 1-44 and 1-111. 1990 data from *Monthly Vital Statistics Report*, Vol. 41 No. 9 (Supplement) February, 1993, Tables 26 and 30. 1992 data from *Monthly Vital Statistics Report*, Vol. 43, No. 5(s) October, 1994, Tables 24 and 33.

Table HC 3.2.A PERCENT OF MOTHERS RECEIVING PRENATAL CARE IN THE FIRST TRIMESTER, FOR SELECTED YEARS: 1970-1992

	1970	1975	1980	1985	1990	1992
Race/Ethnicity <sup>a</sup>						
White	72	75	79	80	79	81
Black	44	56	63	62	61	64
Hispanic	_	_	60	61	60	64
Age of Mother						
Under 15	_	31	35	36	38	43
15-19	_	53	56	54	55	60
20-24	_	73	75	72	69	71
25-29	_	82	84	83	82	83
30-34	_	79	84	86	85	86
35 and older	_	68	76	_	83	85

Note: <sup>a</sup>Figures for Hispanic women in 1985 are based on data for 23 States and the District of Columbia which report Hispanic origin of the mother on the birth certificate in those years. These states accounted for 90 percent of the Hispanic population in 1980. By 1992, 49 states reported Hispanic origin.

Source: 1970 data from: National Center for Health Statistics *Health, United States, 1982*, Table 24; 1975 data from: *Monthly Vital Statistics Report*, Vol. 25, No. 10 (Supplement) December 1976, Tables 17 and 18; 1980 data from: Monthly Vital Statistics Report, Vol. 31, No. 8 (Supplement) November, 1982, Table 20 and Vol. 32, No. 6 (Supplement) September, 1983, Table 13. 1985 data from: *Vital Statistics of the United States, 1985*, Vol. 1, "Natality" Tables 1-44 and 1-111. 1990 data from Monthly Vital Statistics Report, Vol. 41 No. 9 (Supplement) February, 1993, Tables 26 and 30. 1992 data from *Monthly Vital Statistics Report*, Vol. 43, No. 5(s) October, 1994, Tables 24 and 33.

### HC 3.2.B LATE OR NO PRENATAL CARE

Receiving prenatal care late in a woman's pregnancy, or receiving no prenatal care at all during pregnancy, can lead to negative health outcomes for mother and child. Women who receive care late in their pregnancy or no care at all are at an increased risk of bearing infants who are low birth weight, who are stillborn, or who die within the first year of life

As Table HC 3.2.b shows, between 1970 and 1980 the proportion of women receiving late or no prenatal care dropped from 16.6 percent to 8.8 percent for black mothers, and from 6.2 percent to 4.3 percent for white mothers Rates for black mothers rose to 11.3 percent in 1990 before declining to 9.9 percent in 1992. Rates for whites mothers also rose between 1980 and 1990, then fell to a new low of 4.2 percent by 1992.

Table HC 3.2.b shows that young mothers are considerably more likely to receive prenatal care late or not at all than older mothers, with rates for 1992 ranging from 17.2 percent among mothers under age 15 to less than 4 percent among mothers ages 25 and older.

Table HC 3.2.B PERCENT OF MOTHERS RECEIVING LATE<sup>b</sup> or no prenatal care, for selected years: 1970 - 1992

	1970	1975	1980	1985	1990	1992
Race/Ethnicity <sup>a</sup>						
White	6.2	5.0	4.3	4.7	4.9	4.2
Black	16.6	10.5	8.8	10.0	11.3	9.9
Hispanic	12.0	12.5	12.0	9.5	_	_
Agea						
< 15	_	21.1	20.0	20.5	20.3	17.2
15-19	_	10.8	12.7	12.0	11.9	9.7
20-24	_	5.8	9.2	6.9	8.0	6.7
25-29	_	3.6	2.7	3.7	4.4	3.9
30-34	_	4.2	2.7	3.2	3.4	3.0
35 and older	r	_	7.5	5.4	_	4.1

Notes: <sup>a</sup>Figures for Hispanic women in 1985 are based on data for 23 States and the District of Columbia which reported Hispanic origin of the mother on the birth certificate. These states accounted for 90 percent of the Hispanic population in 1980. Non-Hispanic women are white, black, and other women not of Hispanic origin, in the same 23 states that report data on origin. By 1992, 49 states reported Hispanic origin.

<sup>b</sup>Late prenatal care is defined as 7th month or later.

Source: 1970 data from: National Center for Health Statistics *Health, United States, 1982*, Table 24; 1975 data from: *Monthly Vital Statistics Report*, Vol. 25, No. 10 (Supplement) December 1976, Tables 17 and 18; 1980 data from: *Monthly Vital Statistics Report*, Vol. 31, No. 8 (Supplement) November, 1982, Table 20 and Vol. 32, No. 6 (Supplement) September, 1983, Table 13. 1985 data from: *Vital Statistics of the United States, 1985*, Vol. 1, "Natality" Tables 1-44 and 1-111. 1990 data from *Monthly Vital Statistics Report*, Vol. 41 No. 9 (Supplement) February, 1993, Tables 26 and 30. 1992 data from *Monthly Vital Statistics Report*, Vol. 43, No. 5(s) October, 1994, Tables 24 and 33.

### HC 3.2.C INADEQUATE PRENATAL CARE

Timeliness of prenatal care is an important contributor to healthy birth outcomes, and is used to assess the adequacy of prenatal care received by mothers. Timeliness of prenatal care is determined by the number of prenatal care visits obtained according to the stage of fetal development. Thus, mothers whose prenatal care is defined as inadequate (e.g., too few visits given the stage of fetal development) are at a greater risk for negative birth outcomes and complications during pregnancy.

According to Table HC 3.2.c, relatively few women received inadequate prenatal care, although strong racial disparities in the adequacy of prenatal care are evident.<sup>29</sup> In 1984, only 6.2 percent of white mothers had received too few visits with respect to the fetal development of their child. The proportion of black mothers in this category was more than twice as high, at 15.1 percent. These racial disparities persisted through 1992.

<sup>29</sup>Data on the adequacy of prenatal care are available only by race of the mother.

# Table HC 3.2.C PERCENT RECEIVING INADEQUATE PRENATAL CARE, (based on the KESSNER Index<sup>a</sup>) BY RACE FOR SELECTED YEARS: 1984 - 1992<sup>b</sup>

1984	1986	1988	1990	1991	1992
6.2	6.3	6.1	6.8	6.4	5.7
15.1	15.3	15.5	16.4	15.5	14.5
_					

Notes: <sup>a</sup>The Kessner index takes into account both timeliness and quantity of prenatal care, as well as the gestational age of the baby. Inadequate care is defined as follows:

Gestation (W	leeks)	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

In addition, all women who started care after the 6th month of pregnancy (3rd trimester) were considered to have inadequate care. Adequate care is defined as follows:

Gestation	(Weeks)	Number of Prenatal visits
17	and	2 or more
18-21	and	3 or more
22-25	and	4 or more
26-39	and	5 or more
30-31	and	6 or more
32-33	and	7 or more
34-35	and	8 or more
36 or Moi	re and	9 or more

In addition, the interval to the first prenatal visit has to be within the first trimester of pregnancy.

Intermediate care - all combinations other than those specified above.

 $^{b}$ Based on 49 states for 1984-1988 and all 50 states of the United States, 1989-1992. Births with period of gestation, number of prenatal visits or month pregnancy care began not stated were excluded from tabulation.  $^{c}$ In 1990, 1991, and 1992 race is of mother: For 1984, 1986 and 1988, race is of child.

## HC 3.3 IMMUNIZATION: PERCENT OF CHILDREN AGES 19-35 MONTHS WHO ARE FULLY IMMUNIZED

Between 1989 and 1991, several major outbreaks of measles occurred across the United States, refocusing national attention on childhood immunizations. According to the Centers for Disease Control and Prevention, 80 percent of all routine childhood vaccinations are recommended to be administered within the first 2 years of life. Although between 97 and 98 percent of children in the United States receive their complete series<sup>30</sup> of immunizations before or shortly after starting school, estimates of complete immunization among preschool children are considerably lower.

Increases in the proportion of children vaccinated between 1991 and 1993 are noted for each of the five recommended vaccines. (*See* Figure HC 3.3.a) Improvements in vaccination coverage of individual vaccines are observed for all children, but particularly for low-income children, minority children, and children living in urban or rural areas. (*See* Table HC 3.3.a) For instance, in 1991 the percent of impoverished children vaccinated for polio was roughly 39 percent, while 60 percent of children at or above the poverty line had received the polio vaccine (a 21 percentage point gap). By 1993, the gap had closed to only 8 percent, with respective percentages at 73 and 81.

During this time period, substantial improvements are observed in the proportion of children receiving the combined series of DTP, OPV and MMR vaccinations. (*See* Figure HC 3.3.b) In 1991, only 37 to 56 percent of children 19-35 months had received their completed vaccination series of 4 doses of DTP, 3 doses of OPV, and 1 dose of MMR (4:3:1). The proportion increased to 55 percent in 1992 and 67 percent in 1993.<sup>31</sup> Similar increases are observed for children across socioeconomic, minority, and residence subgroups. (*See* Table HC 3.3.a) However, disparities by income subgroups remain. For example, less than one-quarter of children in poverty in 1991 received the complete vaccination series with four doses of DTP. The proportion of children above poverty who did so was 42 percent. By 1993 the respective proportions were 59 percent and 71 percent.

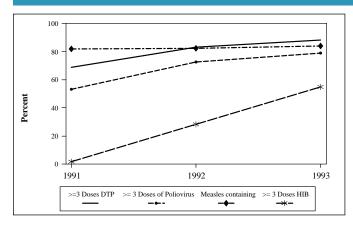
Table 3.3.b presents immunization data for 1994. Unlike data for previous years, which were based only on parent reports, 1994 estimates are based on both parent and provider information. Current plans are for future Federal estimates will also be based on parent and provider information as well. Estimates that include provider reports are more accurate and reflect higher rates of immunization than those based on parent reports alone. Data for 1994 cannot be compared to estimates for 1991-1993, however, since an undetermined portion of the observed increase between 1993 and 1994 is due to this change in methodology.

In 1994, the proportion of two year olds who had received the full 4:3:1 series of vaccines is 75 percent. Ninety-three percent of two year olds received three or more doses of DTP vaccine, and 77 percent received 4 or more doses. Eighty-three percent received three or more doses of poliovirus vaccine, 86 percent three or more doses of hemophilus influenzas type b vaccine, 89 percent received the MMR (measles, mumps, rubella) vaccine, and 42 percent received three or more doses of the hepatitis b vaccine. Still, over one million American children remain unvaccinated for serious preventable diseases.

<sup>30</sup>Four doses of diphtheria and tetanus toxoids and pertussis (DTP), three doses of oral poliovirus vaccine (OPV) and one dose of measles-mumps-rubella (MMR).

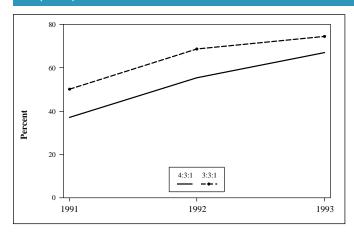
<sup>1</sup>311994 estimates that supplement immunization data gathered from parents with information from medical providers report a 75% rate of coverage. Morbidity and Mortality Weekly Report, Vol. 44, No. 33, pp 613-623.

Figure HC 3.3.A PERCENT OF CHILDREN 19-35 MONTHS WHO RECEIVED RECOMMENDED VACCINATIONS FOR 1991, 1992 AND 1993



Source: Morbidity and Mortality Weekly Reports, Vaccination Coverage 2 year old children, United States, 1991-1992 January 7, 1992 Vol. 43 Nos. 51 and 52, Table 1; and unpublished data from the Assessment Branch of the National Immunization Program, National Center for Health Statistics: Centers for Disease Control.

Figure HC 3.3.B PERCENT OF CHILDREN 19-35 MONTHS WHO RECEIVED THE COMBINED SERIES IMMUNIZATIONS 1991, 1992, AND 1993



Source: Morbidity and Mortality Weekly Reports, Vaccination Coverage 2 year old children, United States, 1991-1992 January 7, 1992 Vol. 43 Nos. 51 and 52, Table 1; and unpublished data from the Assessment Branch of the National Immunization Program, National Center for Health Statistics: Centers for Disease Control.

Table HC 3.3.A PERCENT<sup>a</sup> of Children aged 19-35 months who have received vaccinations for routinely recommended vaccines, by selected characteristics—united states: 1991 - 1993

			Individual \	/accine 1991						
≥	3 Doses DTP*	≥ 4 Doses DTP	≥ 3 Doses Poliovirus	≥ 3 Doses Hib <sup>†</sup>	Measles¥	≥ 3 Doses Hepatitis	4:3:1§	3:3:1¶		
Characteristics										
Socioeconomic status										
Below poverty <sup>††</sup> level	53.0	29.9	38.7	0.0	73.4	_	23.8	34.3		
At or above poverty lev	vel 75.7	48.6	59.5	2.2	86.6	_	42.2	56.6		
Race										
White	73.4	47.3	57.3	1.9	82.9	_	41.4	54.5		
Black	50.6	27.9	35.6	1.4	77.4	_	20.8	31.4		
Other§§	58.0	33.1	49.8	0.0	83.8	_	27.5	44.2		
Residence¶¶										
Urban	64.8	36.4	49.9	0.9	78.4	_	31.7	46.6		
Suburban	72.3	46.4	55.8	2.5	85.0	_	38.6	52.8		
Rural	67.6	47.5	52.5	1.2	81.1	_	41.9	49.4		
Total	68.8	43.3	53.2	1.7	82.0	_	37.0	50.0		

			Individual	Vaccine 1992						
≥	3 Doses DTP*	≥ 4 Doses DTP	≥ 3 Doses Poliovirus	≥ 3 Doses Hib <sup>†</sup>	Measles¥	≥ 3 Doses Hepatitis	4:3:1 <sup>§</sup>	3:3:1¶		
Characteristics										
Socioeconomic status										
Below poverty†† level	79.7	54.4	66.6	23.0	80.2	_	51.4	65.0		
At or above poverty le	vel 84.6	61.0	74.7	29.8	84.3	_	56.7	70.2		
Race										
White	84.8	59.5	74.1	29.1	83.6	_	55.9	70.0		
Black	74.7	55.0	62.7	25.5	77.9	_	50.9	60.2		
Other <sup>§§</sup>	79.3	62.4	75.5	23.0	79.9	_	57.5	71.9		
Residence¶¶										
Urban	82.5	59.7	74.1	27.5	84.5	_	57.7	72.4		
Suburban	84.4	60.0	72.6	31.8	83.3	_	55.4	68.2		
Rural	80.7	55.4	69.0	20.8	77.2	_	50.5	63.2		
Total	83.0	59.0	72.4	28.2	82.5	_	55.3	68.7		

Table HC 3.3.A PERCENT<sup>a</sup> OF CHILDREN AGED 19-35 MONTHS WHO HAVE RECEIVED VACCINATIONS FOR ROUTINELY RECOMMENDED VACCINES, BY SELECTED CHARACTERISTICS—UNITED STATES: 1991 - 1993 (continued)

			Individual	Vaccine 1993				
	Combin	ed Series						
≥:	3 Doses DTP*	≥ 4 Doses DTP	≥ 3 Doses Poliovirus	≥ 3 Doses Hib <sup>†</sup>	Measles¥	≥ 3 Doses Hepatitis	4:3:1 <sup>§</sup>	3:3:1¶
Characteristics								
Socioeconomic status								
Below poverty†† level	80.6	65.3	73.3	44.0	78.4	11.3	58.7	66.8
At or above poverty lev	el 90.8	74.6	81.0	59.6	87.0	18.2	70.5	77.7
Race								
White	89.4	73.0	79.8	57.0	86.0	16.3	68.4	75.7
Black	82.6	69.2	73.4	44.8	76.9	16.0	61.8	69.2
Other <sup>§§</sup>	84.5	64.7	80.8	56.9	72.5	16.7	58.4	68.0
Residence¶¶								
Urban	85.8	68.5	75.3	47.8	84.2	17.4	62.1	71.5
Suburban	89.8	75.6	79.7	60.5	86.2	19.0	71.4	76.3
Rural	88.5	70.6	82.5	55.2	79.8	9.3	66.0	75.3
Total	88.2	72.1	78.9	55.0	84.1	16.3	67.1	74.5

Source: Morbidity and Mortality Weekly Reports, Vaccination Coverage 2 year old children, United States, 1993, October 7, 1994, Vol. 43 No. 39, Table 2.

# Table HC 3.3.B PERCENT<sup>a</sup> of Children aged 19-35 months who have received vaccinations for routinely recommended vaccines—united states: 1994

			Individual	Vaccine 1994				
							Combin	ed Series
	≥ 3 Doses DTP*	≥ 4 Doses DTP	≥ 3 Doses Poliovirus	≥ 3 Doses Hib <sup>†</sup>	Measles <sup>¥¥</sup>	≥ 3 Doses Hepatitis	4:3:1 <sup>§</sup>	3:3:1¶
Total	93	77	83	86	89	42	75	_

Note: Data for 1994 supplement immunization data gathered from parents with information from medical providers and cannot be compared to 1991-1993 data.

Source: Morbidity and Mortality Weekly Reports, National, State and Urban Area Vaccination Coverage Levels Among Children Aged 19-35 Months— United States April 1994-March 1995, February 23, 1995 (Data from the National Immunization Survey).

Notes for Tables HC 3.3.a and HC 3.3.b:

\*Diphtheria and tetanus toxoids and pertussis vaccine.

†Hemophilus influenzas type b vaccine;

§Four doses of DTP, three doses of poliovirus, and one dose of measles-mumps-rubella vaccine.

Three doses of DTP, three doses of poliovirus, and one dose of measles-mumps-rubella vaccine.

††Poverty statistics are based on definitions developed by the Social Security Administration that include a set of income thresholds that vary by family size and composition.

§§Limitations in sample size precluded collection of data about ethnicity and analysis of data for races other than black and white

¶Rural areas were those not in a metropolitan statistical area (MSA); suburban areas were those in an MSA but outside the central city; and urban areas were the central city of MSA.

<sup>¥</sup>Any vaccination containing measles vaccine.

¥¥Any vaccination containing measles-mumps-rubella vaccine.

<sup>a</sup>Data are based on household interviews of a sample of the non civilian, non institutionalized population. Refusals and unknowns were excluded.