

**SECTION 3.**

# **Health Conditions and Health Care**



**Health Care**

**Health  
Conditions**

**Mortality**

## Health Care

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Health  
Conditions

Mortality

## HC 1.1 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 government health insurance,<sup>1</sup> 94 percent had a regular source of medical care. In contrast, only 79 percent of children without health insurance had a regular source of medical care.<sup>2</sup>

Since 1987, the overall percentage of children covered by health insurance has remained stable, ranging from 85 to 88 percent. In contrast, government health insurance coverage for children increased from 19 percent in 1987 to 26 percent in 1995, before declining to 24 percent by 2000 and increasing to 27 percent in 2002 (Table HC 1.1.A and Figure HC 1.1).

**Differences by Age.** Younger children are more likely to be covered by government health insurance than older children. In 2002, 32 percent of children under age 6 were covered, compared with 22 percent of children ages 12 to 17 (Table HC 1.1.A). In contrast, 71 percent of children ages 12 to 17 were covered by private health insurance, compared with 63 percent of children under age 6.

**Differences by Race and Hispanic Origin.**<sup>3</sup> Hispanic children are less likely to be covered by health insurance than White, non-Hispanic, or Black children. In 2002, 77 percent of Hispanic children were covered by health insurance, compared with 92 percent of White, non-Hispanics, and 87 percent of Black children (Table HC 1.1.A).

A large proportion of Black and Hispanic children rely on government health insurance for their medical coverage. In 2002, 44 percent of Black and 40 percent of Hispanic children were covered by government health insurance, compared with 18 percent of White, non-Hispanic children.

**Differences by Poverty Status.** Poor children have lower rates of health insurance coverage at 80 percent compared to 88 percent for all children in 2002 (Tables HC 1.1.A and HC 1.1.B). They are also much less likely to be covered by private health insurance at 21 percent compared to 67 percent for all children. However, poor children are more likely to be covered by Medicaid, with 62 percent covered in 2002, compared with 24 percent of all children (Table HC 1.1.C).

<sup>1</sup> Government health insurance for children consists primarily of Medicaid but also includes Medicare and CHAMPUS.

<sup>2</sup> Simpson, G., Bloom, B., Cohen, R. A., & Parsons, P. E. (1997). Access to Health Care: Part 1: Children. *Vital and Health Statistics*, 10(196).

<sup>3</sup> Persons of Hispanic origin may be of any race. Estimates for Whites, Blacks, and Asians and Pacific Islanders include Hispanics of those races.

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**Table HC 1.1.A**

Percentage of children under age 18 who are covered by health insurance, by type of insurance, age, and race and Hispanic origin: Selected years, 1987-2002

	1987	1990	1995	1996	1997	1998	1999 <sup>a</sup>	2000	2001	2002
<b>All health insurance<sup>b</sup></b>	87	87	86	85	85	85	87	88	88	88
Age										
Under age 6	88	89	87	86	86	84	87	89	89	89
Ages 6-11	87	87	87	85	86	85	88	88	89	89
Ages 12-17	86	85	85	84	83	84	87	87	87	87
Race and Hispanic origin <sup>c</sup>										
White, non-Hispanic	90	90	89	89	89	89	92	93	93	92
Black	83	85	85	81	81	80	84	86	86	87
Hispanic	72	72	73	71	71	70	74	75	76	77
Asian/Pacific Islander	91	86	86	84	85	83	86	88	88	89
<b>Private health insurance</b>	74	71	66	66	67	68	70	70	68	67
Age										
Under age 6	72	68	60	62	63	64	66	66	64	63
Ages 6-11	74	73	67	67	68	68	70	70	69	68
Ages 12-17	75	73	71	70	69	70	73	73	72	71
Race and Hispanic origin <sup>c</sup>										
White, non-Hispanic	83	81	78	78	78	79	81	81	80	79
Black	49	48	44	45	48	47	52	53	52	51
Hispanic	48	45	38	40	42	43	46	45	44	43
Asian/Pacific Islander	70	72	67	68	70	67	70	72	71	72
<b>Government health insurance<sup>d</sup></b>	19	22	26	25	23	23	23	24	26	27
Age										
Under age 6	22	28	33	31	29	27	27	29	31	32
Ages 6-11	19	20	26	25	23	23	23	25	26	27
Ages 12-17	16	17	21	19	19	19	19	20	20	22
Race and Hispanic origin <sup>c</sup>										
White, non-Hispanic	12	15	18	18	17	16	16	17	19	18
Black	42	45	49	45	40	42	40	42	42	44
Hispanic	28	32	39	35	34	31	33	35	37	40
Asian/Pacific Islander	27	22	27	20	21	22	21	23	22	23

<sup>a</sup> Estimates beginning in 1999 include follow-up questions to verify health insurance status. Estimates for 1999 and beyond are therefore not directly comparable to earlier years.

<sup>b</sup> Children are considered to be covered by health insurance if they had government or private coverage at any time during the year. Some children are covered by both types of insurance, so the sum of government and private is greater than the total.

<sup>c</sup> Persons of Hispanic origin may be of any race. Estimates for Blacks include Hispanics of that race.

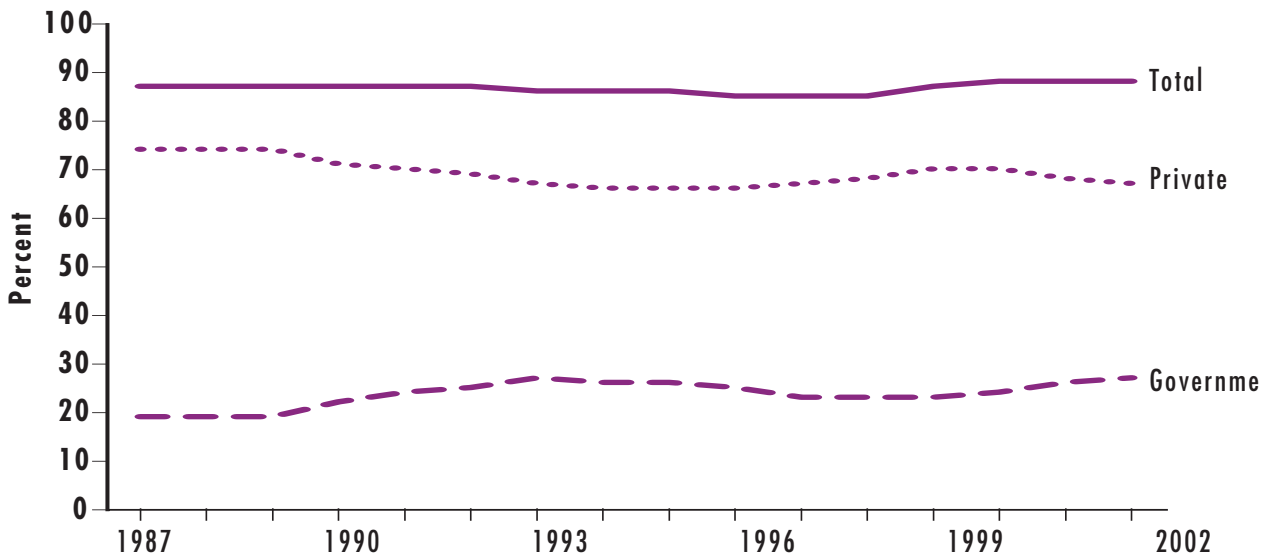
<sup>d</sup> Government health insurance for children consists primarily of Medicaid but also includes Medicare and CHAMPUS.

Note: Data in this table have been revised and therefore do not match data presented in previous issues of this report.

Sources: U.S. Census Bureau. (2003). *Current Population Reports*, P60-223; Federal Interagency Forum on Child and Family Statistics. (2003). *America's Children: Key National Indicators of Well-Being, 2003*. Washington, DC: U.S. Government Printing Office; U.S. Census Bureau. (2002). *Current Population Reports*, P60-220; U.S. Census Bureau. (2000). *Current Population Reports*, P60-211.

**Figure HC 1.1**

Percentage of children under age 18 who are covered by health insurance, by type of insurance: 1987-2002



Note: Children are considered to be covered by health insurance if they had government or private coverage at any time during the year. Some children are covered by both types of insurance, so the sum of government and private is greater than the total. Government health insurance for children consists primarily of Medicaid but also includes Medicare and CHAMPUS.

Sources: U.S. Census Bureau. (2003). *Current Population Reports*, P60-223; Federal Interagency Forum on Child and Family Statistics. (2003). *America's Children: Key National Indicators of Well-Being, 2003*. Washington, DC: U.S. Government Printing Office; U.S. Census Bureau. (2002). *Current Population Reports*, P60-220; U.S. Census Bureau. (2000). *Current Population Reports*, P60-211.

**Table HC 1.1.B**

Percentage of poor children under age 18 who are covered by health insurance, by type of insurance, age, and race and Hispanic origin: 2002

	All health insurance	Private health insurance	Government health insurance <sup>a</sup>
<b>All poor children</b>	80	21	65
<b>Age</b>			
Under age 6	84	18	72
Ages 6-11	80	23	64
Ages 12-17	75	24	57
<b>Race and Hispanic origin<sup>b</sup></b>			
White, non-Hispanic	84	30	61
Black, non-Hispanic	85	21	72
Hispanic	72	12	63
Asian/Pacific Islander	76	20	58

<sup>a</sup> Government health insurance for children consists primarily of Medicaid but also includes Medicare and CHAMPUS.

<sup>b</sup> Persons of Hispanic origin may be of any race.

Source: U.S. Census Bureau. (2003). *Current Population Reports*, P60-223.

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**Table HC 1.1.C**

Percentage of children under age 18 who are covered by Medicaid, by age and by race and Hispanic origin: Selected years, 1987-2002

	1987	1990	1995	1996	1997	1998	1999 <sup>a</sup>	2000	2001	2002
<b>All children</b>	15	18	23	22	20	20	20	21	23	24
<b>Age</b>										
Under age 6	18	24	29	28	25	24	24	25	28	29
Ages 6-11	15	17	22	21	20	20	21	21	23	24
Ages 12-17	12	14	17	16	16	15	16	16	17	19
<b>Race and Hispanic origin<sup>b</sup></b>										
White, non-Hispanic	8	11	14	14	14	12	13	14	15	16
Black	38	41	45	41	37	39	37	37	38	41
Hispanic	26	30	37	34	32	30	31	33	35	37
Asian/Pacific Islander	19	16	22	18	18	19	17	18	18	19
<b>Poor children</b>	56	62	65	63	61	58	59	59	62	62
<b>Age</b>										
Under age 6	61	71	73	71	67	63	65	64	68	69
Ages 6-11	56	59	65	63	62	59	59	59	62	61
Ages 12-17	48	52	53	51	51	51	52	51	52	55
<b>Race and Hispanic origin<sup>b</sup></b>										
White, non-Hispanic	47	56	55	58	55	54	56	55	58	57
Black	67	73	76	70	68	65	67	67	71	70
Hispanic	53	58	64	60	60	54	55	55	58	61
Asian/Pacific Islander	69	53	63	61	63	61	51	54	58	57

<sup>a</sup> Estimates beginning in 1999 include follow-up questions to verify health insurance status. Estimates for 1999 and beyond are therefore not directly comparable to earlier years.

<sup>b</sup> Persons of Hispanic origin may be of any race. Estimates for Blacks include Hispanics of that race.

Note: Data in this table have been revised and therefore do not match data presented in previous issues of this report.

Source: U.S. Census Bureau. (2003). *Current Population Reports*, P60-223.

## HC 1.2 Prenatal Care

Prenatal care in the first trimester of a pregnancy allows females and their health care providers to identify and treat health problems and health-compromising behaviors that can be particularly damaging during the initial stages of fetal development. Increasing the percentage of females who receive prenatal care, and who do so early in their pregnancies, can improve birth outcomes by determining the risk of a poor pregnancy outcome.<sup>1</sup> The percentage of females receiving prenatal care in the first trimester has increased from 68.0 percent in 1970 to 83.8 percent in 2002 (Table HC 1.2.A).

Receiving prenatal care only late in a pregnancy,<sup>2</sup> or receiving no prenatal care at all, can lead to negative health outcomes for mother and child. Females 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 birthweight, who are stillborn, or who die within the first year of life.<sup>3</sup> Between 1970 and 2002, the percentage of females receiving late or no prenatal care declined from 7.9 percent to 3.6 percent (Table HC 1.2.B).

According to the Adequacy of Prenatal Care Utilization Index, there has been a sharp decline in the percentage of females receiving inadequate prenatal care from 18 percent in 1989 to 11.6 percent in 2001 (Table HC 1.2.C). The proportion of females with intensive use of care (females for whom the number of visits exceeded the American College of Obstetricians and Gynecologists' recommendations by a ratio of observed to expected visits of at least 110 percent) rose from 24.1 to 31.8 percent during the same time period (Table HC 1.2.C).

**Differences by Race and Hispanic Origin.**<sup>4</sup> The percentage of females receiving prenatal care during the first 3 months of pregnancy has increased over the past two decades for females of all races and ethnicities, with American Indian/Alaska Native and Black females seeing the largest increases. However, American Indian/Alaska Native and Mexican American females are least likely to receive early prenatal care, while White, non-Hispanic, Chinese, Japanese, and Cuban females are most likely to receive prenatal care in their first trimester (Table HC 1.2.A). Among Hispanics there are important subgroup disparities. In 2001, 91.8 percent of Cuban females received early prenatal care, compared with 74.6 percent of Mexican American females (Table HC 1.2.A).

The percentage of females who receive late or no prenatal care has declined substantially for females in all racial and ethnic groups. Specifically, Puerto Rican females have seen the most dramatic improvements, with the percentages receiving late or no prenatal care dropping by more than two-thirds since the data were first reported (Table HC 1.2.B).

<sup>1</sup> Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2).

<sup>2</sup> Defined as the seventh month or later.

<sup>3</sup> U.S. Public Health Service. (1989). *Caring for Our Future: The Content of Prenatal Care*. Washington, DC: Department of Health and Human Services.

<sup>4</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks includes persons of Hispanic origin until 1990. After 1990 persons of Hispanic origin are not included.

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**Table HC 1.2.A**

Percentage of females receiving prenatal care in the first trimester, by race and Hispanic origin of mother: Selected years, 1970-2002

	1970	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002 <sup>a</sup>
<b>All females receiving prenatal care</b>	68.0	76.3	76.2	75.8	81.3	81.9	82.5	82.8	83.2	83.2	83.4	83.8
<b>Race and Hispanic origin<sup>b</sup></b>												
White	72.3	79.2	79.3	83.3	87.1	87.4	87.9	87.9	88.4	88.5	88.5	88.7
Black	44.2	62.4	61.5	60.7	70.4	71.5	72.3	73.3	74.1	74.3	74.5	—
American Indian/Alaskan Native	38.2	55.8	57.5	57.9	66.7	67.7	68.1	68.8	69.5	69.3	69.3	—
Asian/Pacific Islander	67.3	73.7	74.1	75.1	79.9	81.2	82.1	83.1	83.7	84.0	84.0	—
Chinese	71.8	82.6	82.0	81.3	85.7	86.8	87.4	88.5	88.5	87.6	87.0	—
Japanese	78.1	86.1	84.7	87.0	89.7	89.3	89.3	90.2	90.7	91.0	90.1	—
Filipino	60.6	77.3	76.5	77.1	80.9	82.5	83.3	84.2	84.2	84.9	85.0	—
Hawaiian and part Hawaiian	—	68.8	67.7	65.8	75.9	78.5	78.0	78.8	79.6	79.9	79.1	—
Other Asian or Pacific Islander	54.9	67.6	69.7	71.9	77.0	78.4	79.7	80.9	81.8	82.5	82.7	—
Hispanic origin	—	60.2	61.2	60.2	70.8	72.2	73.7	74.3	74.4	74.4	75.7	76.8
Mexican American	—	59.6	60.0	57.8	69.1	70.7	72.1	72.8	73.1	72.9	74.6	—
Puerto Rican	—	55.1	58.3	63.5	74.0	75.0	76.5	76.9	77.7	78.5	79.1	—
Cuban	—	82.7	82.5	84.8	89.2	89.2	90.4	91.8	91.4	91.7	91.8	—
Central and South American	—	58.8	60.6	61.5	73.2	75.0	76.9	78.0	77.6	77.6	77.4	—
Other and unknown Hispanic	—	66.4	65.8	66.4	74.3	74.6	76.0	74.8	74.8	75.8	77.3	—

<sup>a</sup> Data for 2002 are preliminary.

<sup>b</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks includes persons of Hispanic origin until 1990. After 1990 persons of Hispanic origin are not included. Figures for Hispanic women are based on data from 22 states that reported Hispanic origin on birth certificates in 1980; 23 states and the District of Columbia in 1985; 48 states and the District of Columbia in 1990; and 50 states and the District of Columbia since 1993.

— Data not available.

Note: The data refer to those women who had live births.

Sources: Hamilton, B.E., Martin, J.A., & Sutton, P.D. (2003). Births: Preliminary Data for 2002. *National Vital Statistics Report*, 51(11). Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, E., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2); Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, E., & Park, M. M. (2002). Births: Final Data for 2000. *National Vital Statistics Reports*, 50(5); Ventura, S. J., Martin, J. A., Curtin, S. C., Menacker, E., & Hamilton, B. E. (2001). Births: Final Data for 1999. *National Vital Statistics Reports*, 49(1); Ventura, S. J., Martin, J. A., Curtin, S. C., Mathews, T. J., & Park, M. M. (2000). Births: Final Data for 1998. *National Vital Statistics Reports*, 48(3); National Center for Health Statistics. (1987). Advance Report of Final Natality Statistics, 1985. *Monthly Vital Statistics Report*, 36(4 (Supp)).



**Table HC 1.2.B**

Percentage of females receiving late or no prenatal care, by race and Hispanic origin of mother and by age: Selected years, 1970-2002

	1970	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002 <sup>a</sup>
<b>All females receiving late<sup>b</sup> or no prenatal care</b>	7.9	5.1	5.7	6.1	4.2	4.0	3.9	3.9	3.8	3.9	3.7	3.6
<b>Race and Hispanic origin<sup>c</sup></b>												
White	6.3	4.3	4.9	4.9	2.5	2.4	2.4	2.4	2.3	2.3	2.2	2.2
Black	16.6	8.9	10.2	11.3	7.6	7.3	7.3	7.0	6.6	6.7	6.5	—
American Indian/Alaska Native	28.9	15.2	12.9	12.9	9.5	8.6	8.6	8.5	8.2	8.6	8.2	—
Asian/Pacific Islander	6.8	6.5	6.5	5.8	4.3	3.9	3.8	3.6	3.5	3.3	3.4	—
Chinese	6.5	3.7	4.4	3.4	3.0	2.5	2.4	2.2	2.0	2.2	2.4	—
Japanese	4.1	2.1	3.1	2.9	2.3	2.2	2.7	2.1	2.1	1.8	2.0	—
Filipino	7.2	4.0	4.8	4.5	4.1	3.3	3.3	3.1	2.8	3.0	3.0	—
Hawaiian and part Hawaiian	—	6.7	7.4	8.7	5.1	5.0	5.4	4.7	4.0	4.2	4.8	—
Other Asian or Pacific Islander	—	9.0	8.1	7.1	5.0	4.6	4.4	4.2	4.1	3.8	3.8	—
Hispanic origin	—	12.0	12.4	12.0	7.4	6.7	6.2	6.3	6.3	6.3	5.9	5.5
Mexican American	—	11.8	12.9	13.2	8.1	7.2	6.7	6.8	6.7	6.9	6.2	—
Puerto Rican	—	16.2	15.5	10.6	5.5	5.7	5.4	5.1	5.0	4.5	4.6	—
Cuban	—	3.9	3.7	2.8	2.1	1.6	1.5	1.2	1.4	1.4	1.3	—
Central and South American	—	13.1	12.5	10.9	6.1	5.5	5.0	4.9	5.2	5.4	5.7	—
Other and unknown Hispanic	—	9.2	9.4	8.5	6.0	5.9	5.3	6.0	6.3	5.9	5.4	—

<sup>a</sup> Data for 2002 are preliminary.

<sup>b</sup> Late prenatal care is defined as care received during the seventh month or later.

<sup>c</sup> Persons of Hispanic origin may be of any race. Estimates for Whites and Blacks includes persons of Hispanic origin until 1990. After 1990 persons of Hispanic origin are not included. Figures for Hispanic women are based on data from 22 states that reported Hispanic origin on birth certificates in 1980; 23 states and the District of Columbia in 1985; 48 states and the District of Columbia in 1990; and 50 states and the District of Columbia since 1993.

— Data not available.

Note: The data refer to those women who had live births.

Sources: Hamilton, B.E., Martin, J.A., & Sutton, P.D. (2003). Births: Preliminary Data for 2002. *National Vital Statistics Report*, 51(11). Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2); Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., & Park, M. M. (2002). Births: Final Data for 2000. *National Vital Statistics Reports*, 50(5); Ventura, S. J., Martin, J. A., Curtin, S. C., Menacker, F., & Hamilton, B. E. (2001). Births: Final Data for 1999. *National Vital Statistics Reports*, 49(1); Ventura, S. J., Martin, J. A., Curtin, S. C., Mathews, T. J., & Park, M. M. (2000). Births: Final Data for 1998. *National Vital Statistics Reports*, 48(3); National Center for Health Statistics. (1987). Advance Report of Final Natality Statistics, 1985. *Monthly Vital Statistics Report*, 36(4 (Supp)).

**Table HC 1.2.C****Adequacy of Prenatal Care Utilization Index: Selected years, 1989-2001**

Year	Intensive Use	Adequate	Intermediate	Inadequate
1989	24.1	42.0	15.9	18.0
1990	24.6	42.3	15.7	17.4
1995	28.8	43.7	14.7	12.8
1996	29.3	43.6	14.7	12.4
1997	30.7	43.3	14.0	12.0
1998	31.0	43.3	13.8	11.9
1999	31.6	43.1	13.6	11.7
2000	31.2	43.0	14.0	11.9
2001	31.8	42.7	14.0	11.6

Sources: Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., Park, M. M., & Sutton, P. D. (2002). Births: Final Data for 2001. *National Vital Statistics Reports*, 51(2); Martin, J. A., Hamilton, B. E., Ventura, S. J., Menacker, F., & Park, M. M. (2002). Births: Final Data for 2000. *National Vital Statistics Reports*, 50(5); Kotelchuck, M. (1994). An Evaluation of the Kessner Adequacy of Prenatal Care Index and a Proposed Adequacy of Prenatal Care Utilization Index. *American Journal of Public Health*, 89(9), 1414-1420; National Center for Health Statistics. (1987). Advance Report of Final Natality Statistics, 1985. *Monthly Vital Statistics Report*, 36(4 (Supp)).

### HC 1.3 Immunization

Vaccines are one of the most successful disease prevention strategies in the history of public health. Childhood vaccinations can prevent diseases that killed or permanently impaired children in past decades. Surveillance of vaccination coverage is particularly important before children enter preschool to prevent the spread of disease. One of the goals of the Healthy People 2000 and 2010 initiative was to have at least 90 percent of 2-year old children fully vaccinated with recommended schedule of vaccines. To monitor progress towards achieving those goals the Centers for Disease Control and Prevention (CDC) implemented the National Immunization Survey (NIS) in 1994. The target population for the NIS is children aged 19 to 35 months living in the United States at the time of interview. Details of the sample design and estimation methodology are published elsewhere by Zell et al (2000) and Smith et al (2001a, 2001b). Today, at least 95 percent of children are adequately vaccinated by the time they enter first grade.<sup>1</sup>

Even with the increases of recent years, more than one million preschool children remain unvaccinated for serious preventable diseases.<sup>2</sup> While deaths due to vaccine-preventable diseases such as hepatitis B, measles and varicella (chicken pox) continue to occur in the United States, there were substantial increases in the proportion of children vaccinated between 1995 and 1998 for each of the recommended vaccines. In both 1999 and 2000, there was a small decline in the number of children who received the combined series 4:3:1:3,4:3:1, Diphtheria, Tetanus, Pertussis (DTP), Measles, and Haemophilus influenzae Type B (Hib) vaccinations. In 2002, coverage for 4:3:1:3 increased by two percentage points when compared with the coverage in 2000 (Table HC 1.3). Vaccination coverage for varicella increased significantly from 12 percent in 1996 to 81 percent in 2002. The DTP vaccination (3 doses or more) was the most prevalent of recommended vaccinations with 95 percent in 2002, while the combined series 4:3:1:3 was the least common with 78 percent (Figure HC 1.3).

**Differences by Race and Hispanic Origin.**<sup>3</sup> Vaccination coverage has been higher among White, non-Hispanic infants aged 19 to 35 months than among Black, non-Hispanic children or children of Hispanic origin (Table HC 1.3). By preschool, however, the vaccination levels among children of various racial and ethnic groups are nearly the same, narrowing a gap that once was as wide as 26 percentage points for specific vaccinations.<sup>4</sup> Differences in vaccination rates among racial and ethnic groups are partly accounted for by poverty level.

**Differences by Poverty Status.** Although vaccination levels have increased between 1995 and 2002 among children in households below, at or above the poverty level, poor children are still less likely than children living in homes at or above the poverty level to have received most of the recommended vaccinations.<sup>5</sup> However, vaccination coverage among children in households below the poverty level increased substantially for Hepatitis B from 65 percent in 1995 to 88 percent in 2002 (Table HC 1.3).

<sup>1</sup> Centers for Disease Control and Prevention. (2001). Vaccination Coverage Among Children Enrolled in Head Start Programs and Licensed Child Care Centers and Entering School, United States and Selected Reporting Areas, 1999-2000 School Year. *Morbidity and Mortality Weekly Report*, 50(39).

<sup>2</sup> Ibid.

<sup>3</sup> Persons of Hispanic origin may be of any race.

<sup>4</sup> U.S. Department of Health and Human Services. (1997). *Vaccination Levels for Minority Children in the United States at All-Time High*. Washington, DC: U.S. Department of Health and Human Services.

<sup>5</sup> Centers for Disease Control and Prevention. (1998). Vaccination Coverage by Race/Ethnicity and Poverty Level among Children Aged 19-35 Months: United States, 1997. *Morbidity and Mortality Weekly Report*, 47(44).

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**Table HC 1.3**

Percentage of children ages 19 months to 35 months who have received routinely recommended vaccinations, by poverty status, and race and Hispanic origin: 1995-2002

Vaccination type	All races			White, non-Hispanic <sup>a</sup>			Black, non-Hispanic <sup>a</sup>			Hispanic <sup>a</sup>		
	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>
<b>Combined series (4:3:1:3)<sup>c</sup></b>												
1995	74	67	77	76	69	78	70	70	73	68	63	72
1996	76	69	79	79	68	80	74	69	79	71	68	73
1997	76	71	79	79	72	80	73	71	77	73	70	77
1998	79	74	82	82	77	83	73	72	74	75	73	79
1999	78	73	81	81	76	82	74	72	77	75	73	78
2000	76	71	78	79	73	80	71	69	72	73	70	74
2001	77	72	79	79	71	80	71	69	74	77	73	79
2002	78	72	79	80	72	81	71	68	72	76	75	76
<b>Combined series (4:3:1)<sup>d</sup></b>												
1995	76	69	79	78	71	80	72	72	75	72	65	75
1996	78	72	81	80	70	82	77	73	81	74	71	75
1997	78	72	80	80	73	82	74	72	78	75	71	77
1998	81	76	83	83	79	84	74	74	76	77	76	80
1999	80	75	82	82	77	83	75	74	78	77	76	80
2000	78	72	79	80	74	81	72	70	73	75	73	75
2001	79	73	80	80	72	81	73	71	75	79	76	80
2002	79	73	80	81	73	82	72	69	73	77	76	77
<b>DTP (3 doses or more)<sup>e</sup></b>												
1995	95	91	96	95	94	96	92	94	91	93	88	97
1996	95	91	96	96	92	96	93	90	95	94	92	94
1997	95	93	96	96	93	97	94	95	96	93	92	95
1998	96	94	97	97	94	97	92	93	92	94	95	96
1999	96	94	97	97	95	97	94	94	96	95	94	97
2000	94	92	95	95	93	95	92	91	93	93	92	94
2001	94	92	95	95	91	95	92	91	93	95	95	95
2002	95	93	95	96	93	96	94	91	96	95	95	94

continued

## Health Care

**Table HC 1.3 continued**

Percentage of children ages 19 months to 35 months who have received routinely recommended vaccinations, by poverty status, and race and Hispanic origin: 1995-2002

Vaccination type	All races			White, non-Hispanic <sup>a</sup>			Black, non-Hispanic <sup>a</sup>			Hispanic <sup>a</sup>		
	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>
<b>DTP (4 doses or more)<sup>e</sup></b>												
1995	78	71	81	80	73	82	74	74	77	75	67	77
1996	81	74	84	83	72	85	79	74	83	77	74	78
1997	82	76	84	84	76	85	77	76	80	78	75	81
1998	84	80	86	87	82	88	77	77	79	81	79	83
1999	83	79	85	86	81	86	79	78	83	80	78	82
2000	82	76	84	84	78	85	76	75	78	79	76	80
2001	82	77	84	84	75	85	76	74	78	83	79	83
2002	82	75	84	84	75	86	76	73	77	79	78	80
<b>Polio (3 doses or more)</b>												
1995	88	85	89	89	86	90	84	82	83	87	85	89
1996	91	88	92	92	88	93	90	87	93	89	88	90
1997	91	89	92	92	90	92	89	89	91	90	88	90
1998	91	90	92	92	91	93	88	88	87	89	90	90
1999	90	87	91	90	88	91	87	86	88	89	89	90
2000	90	87	90	91	88	91	87	85	87	88	88	87
2001	89	87	90	90	87	91	85	84	86	91	90	91
2002	90	88	91	91	88	92	87	87	87	90	89	91
<b>Measles-containing<sup>f</sup></b>												
1995	90	86	91	91	86	92	87	85	86	88	84	91
1996	91	87	92	91	85	93	90	88	91	88	87	89
1997	90	86	92	91	84	93	89	87	91	88	85	90
1998	92	90	93	93	90	94	89	89	90	91	90	92
1999	92	90	92	92	90	93	90	90	91	90	90	91
2000	91	89	91	92	88	92	88	88	87	90	90	90
2001	91	89	92	92	87	92	89	88	90	92	91	93
2002	92	90	92	93	90	93	90	90	90	91	91	89

continued

SECTION 3. HEALTH CONDITIONS AND HEALTH CARE

Table HC 1.3 continued

Percentage of children ages 19 months to 35 months who have received routinely recommended vaccinations, by poverty status, and race and Hispanic origin: 1995-2002

Vaccination type	All races			White, non-Hispanic <sup>a</sup>			Black, non-Hispanic <sup>a</sup>			Hispanic <sup>a</sup>		
	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>	Total	Below poverty <sup>b</sup>	At or above poverty <sup>b</sup>
<b>HiB (3 doses or more)<sup>g</sup></b>												
1995	91	88	93	93	89	93	88	88	90	89	85	93
1996	91	87	93	93	87	94	89	86	93	89	87	90
1997	93	90	94	94	90	95	91	91	94	90	89	92
1998	93	91	95	95	92	96	90	90	90	92	92	94
1999	94	91	95	95	93	95	92	91	94	92	91	95
2000	93	90	95	95	92	95	93	92	93	91	88	93
2001	93	90	94	94	89	95	90	87	91	93	91	94
2002	93	90	94	94	88	95	92	88	94	92	93	92
<b>Hepatitis B (3 doses or more)</b>												
1995	68	65	69	68	59	69	66	66	69	70	69	68
1996	82	78	83	82	76	83	82	78	85	81	80	81
1997	84	81	85	85	80	85	82	82	84	81	79	84
1998	87	85	88	88	87	88	84	86	83	86	83	88
1999	88	87	89	89	88	89	87	86	90	87	87	89
2000	90	87	91	91	88	92	89	89	90	88	87	90
2001	89	87	90	90	86	90	85	85	85	90	88	91
2002	90	88	90	91	86	92	88	89	88	90	89	89
<b>Varicella</b>												
1995	—	—	—	—	—	—	—	—	—	—	—	—
1996	12	5	15	15	6	16	9	—	13	8	6	11
1997	26	17	29	28	17	29	21	16	27	22	18	25
1998	43	41	44	42	38	43	42	40	44	47	44	49
1999	58	55	58	56	51	57	58	57	60	61	59	62
2000	68	64	69	66	58	68	67	60	72	70	70	70
2001	76	74	77	75	67	76	75	71	77	80	81	82
2002	81	79	81	79	75	80	83	80	84	82	82	81

<sup>a</sup> Persons of Hispanic origin may be of any race.

<sup>b</sup> Poverty status is based on family income and family size using U.S. Census Bureau poverty thresholds.

<sup>c</sup> The 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.

<sup>d</sup> The combined series 4:3:1 consists of four doses of DTP vaccine, three doses of polio vaccine, and one doses of a measles-containing vaccine.

<sup>e</sup> Diphtheria-tetanus-pertussis vaccine.

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

<sup>g</sup> Haemophilus influenzae type b (HiB) vaccine.

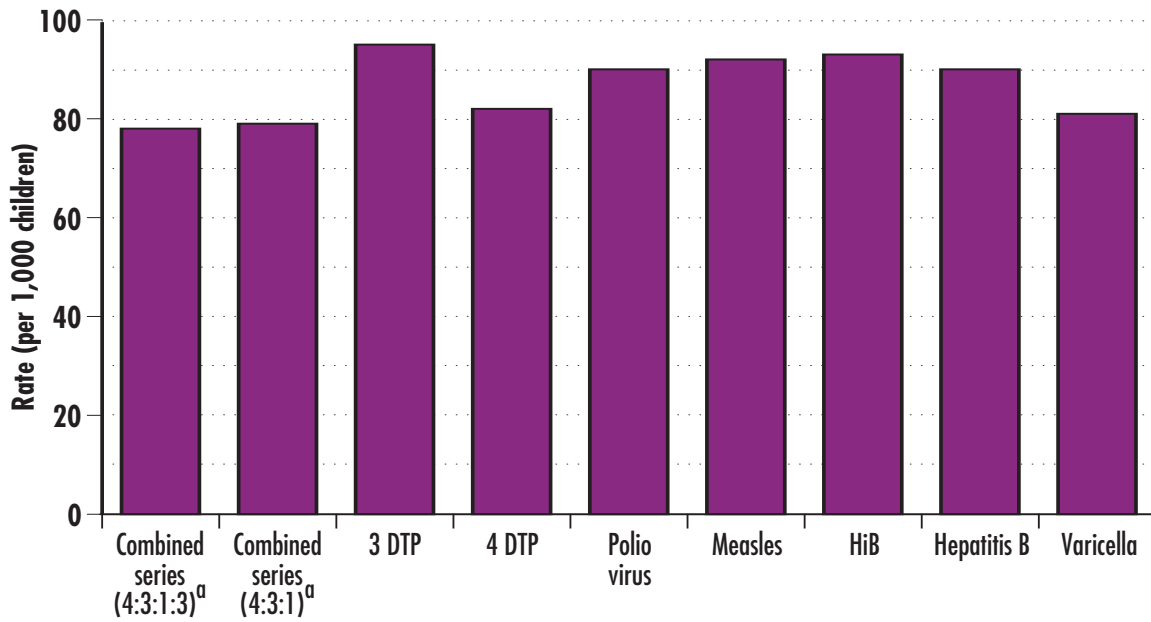
— Data not available.

Note: In 1998 the National Center for Health Statistics began using the response propensity score method. All data presented in this table reflect this change and are therefore not comparable to previous issues of this report.

Source: Centers for Disease Control and Prevention. (2003). *National Immunization Survey*. Unpublished work. National Center for Health Statistics and National Immunization Program.

Figure HC 1.3

Percentage of children ages 19 to 35 months who have received routinely recommended vaccines: 2002



<sup>a</sup> The 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.

Source: Centers for Disease Control and Prevention. (2003). *National Immunization Survey*. Unpublished work. National Center for Health Statistics and National Immunization Program.