SECTION 3

HEALTH CONDITIONS & HEALTH CARE

HC 1.1.A

INFANT MORTALITY

Infancy is commonly divided into the neonatal period, the first 27 days of life, and the postneonatal period, 28 days to less than one year. About two-thirds of infant deaths occur during the neonatal period (although advances in neonatology in recent decades have greatly improved the chances that infants will survive this period). The three leading causes of death to infants (one year and younger) are congenital anomalies, disorders relating to a short gestation period and low birth weight, and sudden infant death syndrome (SIDS).[1] In 1995, SIDS dropped from the second to the third leading cause of infant mortality. The SIDS decline accounted for nearly one-third of the total drop in infant mortality in 1995.[2]

The U.S. infant mortality rate has decreased rapidly over the past three decades. Between 1960 and 1995[3] the rate fell from 26.0 to 7.5 infant deaths per thousand live births (see Figure HC 1.1.A.1). There was a steep decline in the rate of neonatal deaths (from 18.7 to 4.8 infant deaths per thousand live births) and a smaller, more gradual decline in the rate of postneonatal deaths (from 7.3 to 2.7 infant deaths per thousand live births).

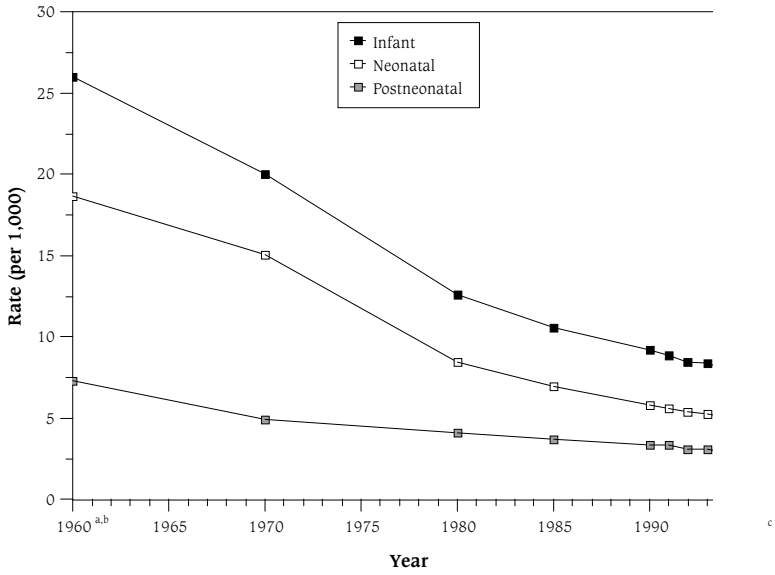
International Comparisons. Despite declines in recent decades, the U.S. infant mortality rate ranks among the highest of industrialized nations. For example, in 1992, the rate of infant deaths per thousand live births was 4.5 in Japan, 6.6 in the United Kingdom, 6.8 in France, and 6.2 in Germany, compared to 8.5 deaths per thousand live births in the United States in that year.[4] The Russian Federation, in contrast, has an infant mortality rate of 18.4 deaths per thousand live births.

Differences by Race and Ethnicity. While infant mortality rates have declined for all races and ethnic groups in the United States, there is nevertheless considerable variation by race and ethnicity (see Figure HC 1.1.A.2). Specifically:[3]

- For white infants, the infant mortality rate has declined by 72 percent between 1960 and 1995 — from 22.9 to 6.3 deaths per thousand live births (see Table HC 1.1.A.1).
- For black infants, the infant mortality rate has declined by 66 percent between 1960 and 1995 — from 44.3 to 14.9 deaths per thousand live births (see Table HC 1.1.A.1).
- For Hispanic infants, the infant mortality rate has declined by 24 percent between 1985 and 1994 — from 8.6 to 6.5 deaths per thousand live births (see Table HC 1.1.A.1).
- For Asian infants, the infant mortality rate has declined by 20 percent from an average of 8.3 deaths per thousand live births during the period 1983-1985 to an average of 6.6 deaths per thousand live births during the period 1989-1991[5] (see Table HC 1.1.A.2).
- For Native American infants, the infant mortality rate declined by nine percent from an average of 13.9 deaths per thousand live births during the period 1983-1985 to an average of 12.6 deaths per thousand live births during the period 1989-1991 (see Table HC 1.1.A.2).

[1] Rosenberg, H.M., Ventura, S.J., Maurer, J.D., Heuser, R.L., and M.A. Freedman. "Births and Deaths:United States, 1995." Monthly Vital Statistics Report. Vol. 45, No. 3 (Supplement 2). Hyattsville, Md.: National Center for Health Statistics. 1996.

Figure HC 1.1.A.1
Infant, Neonatal, and Postneonatal Deaths Per Thousand Live Births, 1960-1995



Notes: [a] Includes births and deaths of persons who were not residents of the 50 states and the District of Columbia.
[b] Data by race for 1960 are by race of child; all other years are by race of mother.
[c] Data for 1995 are preliminary.

Source: National Center for Health Statistics. *Health, United States, 1995*. Hyattsville, Maryland: Public Health Service. 1996. Table 23 for totals and race breaks. Data for 1994 and 1995 data from: "Births and Deaths: United States, 1995." Monthly Vital Statistics Report; Vol. 45, No. 3, Supplement 2. Hyattsville, Maryland: Public Health Service, 1996.

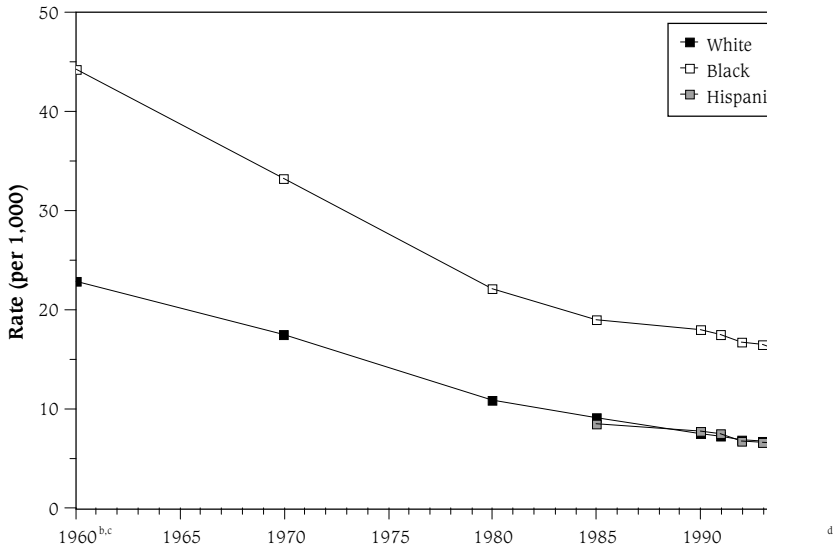
[2] Press release from the U.S. Department of Health and Human Services. "Reduction in SIDS Deaths Helps Bring Low Infant Mortality." October 9, 1996.

[3] 1995 data are preliminary.

[4] National Center for Health Statistics. "Health, United States, 1995." Hyattsville, Maryland: Public Health Service. 1996.

[5] Infant mortality data for Asians and Native Americans are presented from the national linked birth and infant death files in Table HC 1.1.A.1. Rather than relying solely on the often inaccurate reporting of race on death certificates of infants, the linked files use race from birth certificates and, therefore, provide more accurate data for these populations. The National Linked Birth and Infant Death Files data are available from 1983-1991. The linked files will be produced on a regular basis again beginning with 1995 data.

Figure HC 1.1.A.2
Infant Deaths Per Thousand Live Births, by Race and Hispanic Origin,[a] 1960-1995



Note: [a]Hispanic rates not available prior to 1985. Infant mortality by Hispanic-origin reported by 17 States and the District of Columbia in 1985; 45 States, New York State (excluding New York City), and the District of Columbia in 1990; 47 States, New York State (excluding New York City), and the District of Columbia in 1991; 48 states and the District of Columbia in 1992; and 49 States and the District of Columbia in 1993 and 1994.
[b]Includes births and deaths of persons who were not residents of the 50 states and the District of Columbia.
[c]Data by race for 1960 are by race of child; all other years are by race of mother.
[d]Data for 1995 are preliminary.

Source: National Center for Health Statistics. *Health, United States, 1995*. Hyattsville, Maryland: Public Health Service. 1996 (table 23 for totals and race breaks). 1970 data from: National Center for Health Statistics. *Vital Statistics of the United States, 1992*. Vol. II, Mortality, Part A. Washington: Public Health Service. 1996 (table 2-2). Hispanic data for 1985 from: National Center for Health Statistics: *Vital Statistics of the United States, 1985*, Vol. II, Mortality, Part A. Washington: Public Health Service. 1988 (table 2-19). 1990 Hispanic data from: Monthly Vital Statistics Report. Vol. 41, No. 7 (Supplement), January, 1993 (table 26). 1991 Hispanic data from: Monthly Vital Statistics Report, Vol. 42, No. 2 (Supplement), August, 1993 (table 25). 1992 Hispanic data from: Monthly Vital Statistics Report, Vol. 43, No. 6 (Supplement), March, 1995 (table 28). 1993 Hispanic data from: Monthly Vital Statistics Report, Vol. 44, No. 7(s), February, 1996 (table 32). 1994 Hispanic data from: Singh, G.K., Kochanek, K.D., and MacDorman, M.F. "Advance Report of Final Mortality Statistics, 1994." Monthly Vital Statistics Report, Vol. 45, No. 3. Hyattsville, Maryland: Public Health Service, 1996 (table 25). Data for 1994 and 1995 from: Rosenberg, H.M., Ventura, S.J., Maurer, J.D., Heuser, R.L. and Freedman, M.A. " Births and Deaths: United States, 1995." Monthly Vital Statistics Report; Vol. 45, No. 3, Supplement 2. Hyattsville, Maryland: Public Health Service, 1996 (table 13).

Table HC 1.1.A.1
Infant, Neonatal, and Postneonatal Deaths per Thousand Live Births, by Race and Hispanic Origin, 1960-1995

	1960[a,b]	1970	1980	1985	1990	1991	1992	1993	1994	1995[c]
INFANT (UNDER ONE YEAR)										
Death Rate	**26.0**	**20.0**	**12.6**	**10.6**	**9.2**	**8.9**	**8.5**	**8.4**	**8.0**	**7.5**
White	22.9	17.6	10.9	9.2	7.6	7.3	6.9	6.8	6.6	6.3
Black	44.3	33.3	22.2	19.0	18.0	17.6	16.8	16.5	15.8	14.9
Hispanic[d]	—	—	—	8.6	7.8	7.5	6.8	6.7	6.5	—
NEONATAL (UNDER 28 DAYS)										
Death Rate	**18.7**	**15.1**	**8.5**	**7.0**	**5.8**	**5.6**	**5.4**	**5.3**	**5.1**	**4.8**
White	17.2	13.7	7.4	6.0	4.8	4.5	4.3	4.3	4.2	4.0
Black	27.8	23.2	14.6	12.6	11.6	11.2	10.8	10.7	10.2	9.6
Hispanic[d]	—	—	—	5.4	5.0	4.6	4.3	4.1	4.1	—
POSTNEONATAL (28 DAYS TO UNDER ONE YEAR)										
Death Rate	**7.3**	**4.9**	**4.1**	**3.7**	**3.4**	**3.4**	**3.1**	**3.1**	**2.9**	**2.7**
White	5.7	4.0	3.5	3.2	2.8	2.8	2.6	2.5	2.4	2.2
Black	16.5	10.1	7.6	6.4	6.4	6.3	6.0	5.8	5.6	5.3
Hispanic[d]	—	—	—	3.2	2.8	2.8	2.5	2.6	2.5	—

Notes: [a]Includes births and deaths of persons who were not residents of the 50 states and the District of Columbia.
[b]Data by race for 1960 are by race of child; all other years are by race of mother.
[c]Data for 1995 are preliminary.
[d]Infant mortality by Hispanic-origin reported by 17 States and the District of Columbia in 1985; 45 States, New York State (excluding New York City), and the District of Columbia in 1990; 47 States, New York State (excluding New York City), and the District of Columbia in 1991; 48 States and the District of Columbia in 1992; and 49 States and the District of Columbia in 1993 and 1994.

Source: National Center for Health Statistics. *Health, United States, 1995*. Hyattsville, Maryland: Public Health Service. 1996 (table 23 for totals and race breaks). 1970 data from: National Center for Health Statistics. *Vital Statistics of the United States, 1992*. Vol. II, Mortality, Part A. Washington: Public Health Service. 1996 (table 2-2). Hispanic data for 1985 from: National Center for Health Statistics: *Vital Statistics of the United States, 1985*, Vol. II, Mortality, Part A. Washington: Public Health Service. 1988 (table 2-19). 1990 Hispanic data from: Monthly Vital Statistics Report. Vol. 41, No. 7 (Supplement), January, 1993 (table 26). 1991 Hispanic data from: Monthly Vital Statistics Report, Vol. 42, No. 2 (Supplement), August, 1993 (table 25). 1992 Hispanic data from: Monthly Vital Statistics Report, Vol. 43, No. 6 (Supplement), March, 1995 (table 28). 1993 Hispanic data from: Monthly Vital Statistics Report, Vol. 44, No. 7(s), February, 1996 (table 32). 1994 Hispanic data from: Singh, G.K., Kochanek, K.D., and MacDorman, M.F. "Advance Report of Final Mortality Statistics, 1994." Monthly Vital Statistics Report, Vol. 45, No. 3. Hyattsville, Maryland: Public Health Service, 1996 (table 25). Data for 1994 and 1995 from: Rosenberg, H.M., Ventura, S.J., Maurer, J.D., Heuser, R.L. and Freedman, M.A. " Births and Deaths: United States, 1995." Monthly Vital Statistics Report; Vol. 45, No. 3, Supplement 2. Hyattsville, Maryland: Public Health Service, 1996 (table 13).

Table HC 1.1.A.2
Infant, Neonatal, and Postneonatal Deaths Per Thousand Live Births for Asians and Native Americans, Combined Years: 1983-1985, 1986-1988 and 1989-1991

	1983-1985	1986-1988	1989-1991
INFANT (UNDER 1 YEAR)			
Infant Death Rate (All Races)	**10.6**	**9.8**	**9.0**
Asian[a]	8.3	7.3	6.6
Native American[b]	13.9	13.2	12.6
NEONATAL (UNDER 28 DAYS)			
Neonatal Death Rate (All Races)	**6.9**	**6.3**	**5.7**
Asian[a]	5.2	4.5	3.9
Native American[b]	6.7	5.9	5.9
POSTNEONATAL (28 DAYS TO ONE YEAR)			
Postneonatal Death Rate (All Races)	**3.7**	**3.5**	**3.3**
Asian[a]	3.1	2.8	2.6
Native American[b]	7.2	7.3	6.7

[a]Includes Pacific Islanders.
[b]Includes Alaskan Natives.

Source: 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 for the National Linked Files of Live Births and Infant Deaths.

HC 1.1.B

CHILD AND YOUTH MORTALITY

Injuries are a common cause of death for children of all ages.[6] Among children ages one to four, injuries accounted for 44 percent of all deaths in 1993. Following injury, the leading causes of death in this age group were congenital anomalies, malignant neoplasm, diseases of the heart, and HIV or AIDS.[7] Injuries accounted for 52 percent of deaths to children ages five through 14 in 1993, and 80 percent of all deaths to adolescents ages 15 through 19.[8]

Overall, child mortality rates have decreased substantially over the past several decades[9] (see Table HC 1.1.B.1). In 1994, the latest year for which data were available, mortality rates per 100 thousand were 42.9 for one- through four-year-olds, 19.9 for five- through nine-year-olds, 25.2 for 10- through 14-year-olds, and 86.8 for 15- through 19-year-olds.

Differences by Age. The most dramatic declines in mortality occurred among children under age 15 — with decreases of approximately 60 percent among children ages one to four and five to nine, and a 43 percent decrease among children ages 10 through 14 since 1960 (see Figure HC 1.1.B.1). Most of the decline in the mortality rate for these groups occurred between 1960 and 1990; mortality rates since then have been fairly constant. In contrast, mortality rates for youth ages 15 through 19 have decreased by only six percent since 1960. Moreover, unlike the fairly steady declines among the younger age groups, the adolescent mortality rate has had a variable pattern over the last thirty years (see Figure HC 1.1.B.1).

Differences by Race and Ethnicity. Multiyear data from the National Center for Health Statistics is used to examine the differences in the mortality rate of children and youth for several racial and ethnic groups across two time periods — 1989-1991 and 1992-1993 (see Table HC 1.1.B.2). For both children and youth ages one to 14 and ages 15 to 24, blacks have the highest mortality rate, followed by Native Americans, Hispanics and whites. Asian children and youth consistently have the lowest mortality rate. The disparity in mortality rates by race and ethnic group is greater among youth ages 15 to 24 than among children ages one to 14 (see Table HC 1.1.B.2).

The mortality rate for children ages one to 14 decreased for all racial and ethnic groups except Native Americans between the periods 1989-1991 and 1992-1993. In contrast, the mortality rate for youth ages 15 to 24 declined only for whites and Native Americans, and increased for blacks, Hispanics and Asians across these two time periods.

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[6] *Injury-related mortality includes death from motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, among others.*

[7] *Gardner, P., and Hudson, B.L. (1996) "Advance Report of Final Mortality Statistics, 1993."* Monthly Vital Statistics Report. *Vol. 44, No.7 (S). Hyattsville, Maryland: National Center for Health Statistics; and, National Center for Health Statistics (1996). 1993 Detail Mortality File. Unpublished data. Cited in: Health Resources & Services Administration.* Child Health USA '95. *DHHS Pub. No. HRSA-M-DSEA-96-5. Public Health Service, Washington, 1996.*

[8] *Discussion and data regarding motor vehicle crashes, the largest category of injury-related death for 15-19 year olds, follows in the next section [HC 1.2].*

[9] *Health Resources & Services Administration.* Child Health USA '95. *DHHS Pub. No. HRSA-M-DSEA-96-5. Public Health Service, Washington, 1996.*

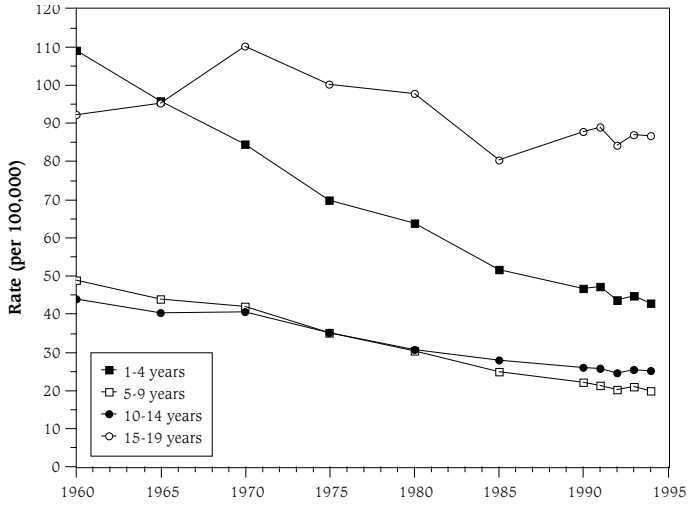
Differences by Race for Younger Children. Data for earlier decades are available only for black and white children (see Table HC 1.1.B.1). These data show substantial differences between white and black children since at least 1970 for children ages one through four, five through nine, and 10 through 14. By 1994, the mortality rate for black children ages 10 through 14 was nearly 65 percent higher than the rate for white children in that age group, 81 percent higher for children ages five though nine, and twice as high for children ages one through four.

Differences by Race For Adolescents. The black–white disparity among adolescents ages 15 through 19 was substantial in 1970, but had declined by 1980 to the point where black youth registered lower mortality rates than white youth (see Figure HC 1.1.B.2). This reversal was short lived, however. Black mortality rates surged from a low of 85.2 per 100 thousand in 1985 to 145.0 per 100 thousand by 1994, while white mortality rates remained fairly stable. Much of this recent increase in black teen mortality reflects a substantial increase in black teen male homicide rates, which are reviewed in Section HC 1.2.B of this report.

Differences by Gender. Male child death rates are higher than female rates for all age groups, but the differences are far more pronounced for the older age groups, for whom violent and injury-related deaths disproportionately affect males[10] (see Table HC 1.1.B.1).

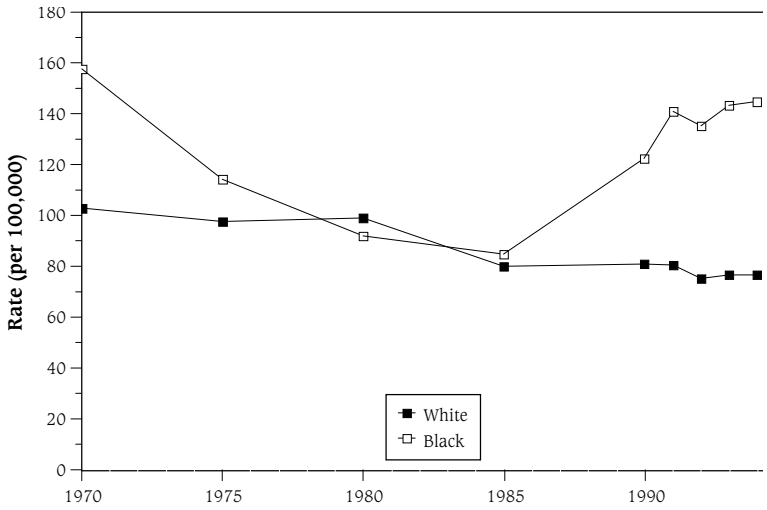
[10] Section HC 1.2 further highlights the differences in mortality rates between males and females ages 15-19 for violent and injury-related deaths.

Figure HC 1.1.B.1
Child and Youth Mortality Rates by Age Group, 1960-1994
(rates per 100,000 population in age group)



Source: National Center for Health Statistics (NCHS), unpublished data provided by the Statistical Resources Branch and Gardner, P. and Hudson, B.L. "Advance Report of Final Mortality Statistics, 1993." National Center for Health Statistics. 1996.

Figure HC 1.1.B.2
Mortality Rates for White and Black Youth Ages 15 to 19, 1970-1994
(rates per 100,000 population in age group)



Source: National Center for Health Statistics (NCHS), unpublished data provided by the Statistical Resources Branch and Gardner, P. and Hudson, B.L. "Advance Report of Final Mortality Statistics, 1993." National Center for Health Statistics. 1996.

Table HC 1.1.B.1
Child and Youth Mortality Rates by Age Group, Gender and Race: Selected Years, 1960 to 1994 (rates per 100,000 population in age group)

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994
1-4 YEARS											
ALL CHILDREN	**109.1**	**95.9**	**84.5**	**69.9**	**63.9**	**51.8**	**46.8**	**47.4**	**43.6**	**44.8**	**42.9**
Gender											
Male	119.5	104.3	93.2	76.7	72.6	58.5	52.4	52.0	48.0	49.5	47.3
Female	98.4	87.1	75.4	62.7	54.7	44.8	41.0	42.7	39.0	39.9	38.2
Race											
White	95.2	83.2	75.1	63.3	57.9	46.6	41.1	41.7	38.1	38.4	36.5
Black	—	—	140.0	106.2	97.6	80.7	76.8	79.7	73.2	79.1	77.2
5-9 YEARS											
ALL CHILDREN	**49.0**	**43.9**	**42.1**	**35.2**	**30.4**	**25.0**	**22.2**	**21.5**	**20.4**	**21.1**	**19.9**
Gender											
Male	56.3	50.8	49.7	41.4	35.0	28.5	25.6	24.5	23.7	23.2	22.6
Female	41.5	36.8	34.2	28.6	25.6	21.4	18.5	18.4	16.8	19.0	17.0
Race											
White	46.2	40.8	39.9	33.0	28.4	22.9	20.3	19.8	18.3	19.0	17.6
Black	—	—	56.4	47.4	41.7	36.2	32.3	32.0	32.1	32.9	31.8
10-14 YEARS											
ALL CHILDREN	**44.0**	**40.5**	**40.6**	**35.3**	**30.8**	**28.0**	**26.0**	**25.8**	**24.6**	**25.6**	**25.2**
Gender											
Male	55.0	50.9	51.3	44.9	38.3	35.0	31.6	32.9	30.7	31.7	31.2
Female	32.6	29.7	29.5	25.3	22.9	20.6	20.2	18.2	18.2	19.2	18.8
Race											
White	41.4	38.6	38.4	33.7	29.8	27.0	24.3	24.2	22.8	23.7	23.0
Black	—	—	54.6	44.3	36.6	34.8	36.6	36.4	35.3	37.2	37.9
15-19 YEARS											
ALL CHILDREN	**92.2**	**95.3**	**110.3**	**100.2**	**97.9**	**80.5**	**87.9**	**89.0**	**84.3**	**86.9**	**86.8**
Gender											
Male	130.1	136.0	157.8	145.4	141.4	113.4	127.2	128.6	122.4	126.0	126.6
Female	54.0	53.9	61.7	53.8	53.1	46.2	46.4	47.2	44.0	45.6	44.8
Race											
White	87.9	90.9	103.1	98.0	99.1	80.2	81.4	80.5	75.6	77.0	76.8
Black	—	—	158.0	114.4	92.3	85.2	127.7	141.2	135.5	143.6	145.0

Source: National Center for Health Statistics (NCHS), unpublished data provided by the Statistical Resources Branch and Gardner, P. and Hudson, B.L. "Advance Report of Final Mortality Statistics, 1993." National Center for Health Statistics. 1996.

Table HC 1.1.B.2
Child and Youth Mortality Rates by Age Group, Gender, Detailed Race and Hispanic Origin[a] for 1989-1991 and 1992-1993 (rates per 100,000 population in age group)

	Combined Years 1989-1991			Combined Years 1992-1993		
	Total	**Male**	**Female**	**Total**	**Male**	**Female**
ONE TO 14 YEARS						
All Races	**31.4**	**36.2**	**26.3**	**29.3**	**33.7**	**24.6**
White	28.4	32.8	23.8	26.1	30.3	21.7
Black	48.3	56.1	40.3	47.1	53.4	40.7
Asian[b]	22.7	25.3	20.0	20.3	23.1	17.4
Native American[c]	37.3	45.1	29.2	38.9	47.0	30.6
Hispanic Origin	30.2	34.7	25.5	28.4	32.4	24.2
15 TO 24 YEARS						
All Races	**99.1**	**146.1**	**50.0**	**97.0**	**144.0**	**47.9**
White	89.3	129.5	47.0	84.2	122.3	44.1
Black	161.9	254.9	69.8	174.8	279.5	70.6
Asian[b]	50.1	70.8	28.1	56.1	80.1	31.1
Native American[c]	142.0	208.3	71.1	129.4	184.2	71.4
Hispanic Origin	103.3	156.5	40.9	107.5	167.3	40.2

Note: [a]Persons of Hispanic origin may be of any race. The four race groups listed in the table include persons of Hispanic and non-Hispanic origin. Death rates reported for white, black, and Hispanic persons are based on highly consistent information. However, persons identified as American Indian or Asian in the data from the Census Bureau (denominator of death rates) are sometimes misreported as white on the death certificate (numerator), resulting in underestimate of about 22-30 percent for death rates of American Indians and 12 percent for death rates of Asians (National Centers for Health Statistics, Health United States 1993, Table 33; Sorlie, P.D., Rogot E., and Johnson, N.J. "Validity of demographic characteristics on the death certificate," Epidemiology 3(2): 181-184, 1992).
[b]Asian and Pacific Islander.
[c]Native American or Alaskan Native.

Source: 1989-1991 data from: Centers for Disease Control and Prevention, National Center for Health Statistics (1994), *Health United States 1993*, Table 32; NCHS: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from national population for race groups from national population estimates for race groups. 1992-1993 data computed by Infant and Child Health Studies Branch, National Center for Health Statistics from Mortality Data compiled by Division of Vital Statistics.

HC 1.2.A

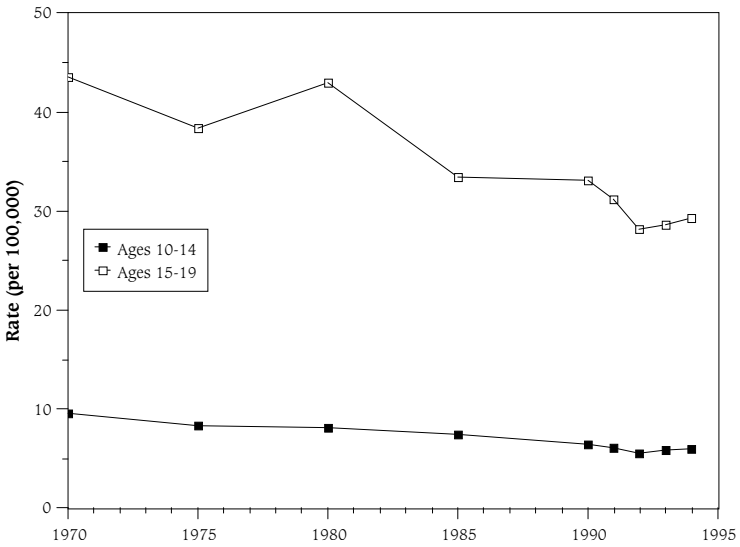
YOUTH MOTOR VEHICLE CRASH DEATHS

Motor vehicle deaths are among the leading causes of injury-related mortality[11] for 15- to 19-year-olds, accounting for approximately 40 percent of all teenage injury deaths in 1993.[12] However, as a fraction of all violent deaths to teens, motor vehicle crashes have declined. In 1994, motor vehicle deaths claimed 29.3 lives per 100 thousand teens ages 15 through 19, compared to 43.6 per 100 thousand teens in 1970 (see Figure HC 1.2.A). Slight increases in the rate of motor vehicle crash deaths among youths were seen in 1993 and 1994.

Differences by Gender and Race. The decrease in the rate of youth motor vehicle deaths between 1970 and 1994 has been greatest among males, falling from 67.1 to 41.7 deaths per 100 thousand among white males, and from 43.4 to 29.0 deaths per 100 thousand among black males (see Table HC 1.2.A). Among females ages 15 through 19, rates declined less dramatically over this period, from 24.4 to 21.3 per 100 thousand for whites, and from 11.1 to 10.4 per 100 thousand for blacks.

Differences by Age. Among youth ages 10 through 14, motor vehicle death rates are quite low in comparison to older youth, and have dropped from 9.6 to 6.0 per 100 thousand between 1970 and 1994. This decline was evident for both white and black males and females, with most of the decline occurring before 1990.

Figure HC 1.2.A
Youth Motor Vehicle Crash Deaths: 1970-1994
(rate per 100,000)



Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics, 1995, and 1996.

[11] Injury-related mortality is the leading cause of death for 15-19 year old teenagers, accounting for 80% of all deaths. Injury-related mortality includes death from motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, among others.

[12] National Center for Health Statistics (1996). 1993 Detail Mortality File. Unpublished data.

Table HC 1.2.A
Youth Motor Vehicle Crash Deaths: Selected Years, 1970-1994
(rate per 100,000)

POPULATION GROUPS	1970	1975	1980	1985	1990	1991	1992	1993	1994
ALL YOUTH									
Ages 10-14	9.6	8.4	8.1	7.4	6.4	6.1	5.5	5.9	6.0
Ages 15-19	43.6	38.4	43.0	33.5	33.1	31.2	28.2	28.6	29.3
WHITE MALES									
Ages 10-14	12.6	10.9	10.9	9.8	7.7	7.8	7.0	7.1	7.5
Ages 15-19	67.1	61.7	69.1	51.3	49.3	44.5	39.6	41.6	41.7
WHITE FEMALES									
Ages 10-14	6.6	5.8	5.7	5.6	5.3	4.4	4.1	4.4	4.8
Ages 15-19	24.4	20.6	25.6	22.6	22.2	23.0	21.0	20.2	21.3
BLACK MALES									
Ages 10-14	11.9	9.6	7.9	8.9	7.9	8.8	7.8	8.3	7.6
Ages 15-19	43.4	24.6	24.4	22.1	28.7	29.5	26.2	26.7	29.0
BLACK FEMALES									
Ages 10-14	6.4	4.2	4.0	3.0	3.8	3.3	3.6	4.8	4.8
Ages 15-19	11.1	7.1	6.7	7.5	9.7	9.0	9.1	8.2	10.4

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics, 1995 and 1996.

HC 1.2.B

YOUTH HOMICIDES

The rate of death from homicide for teens ages 15 through 19 more than doubled between 1970 and 1994, increasing from 8.1 per 100 thousand in 1970 to 20.3 per 100 thousand in 1994 (see Table HC 1.2.B.1). Virtually all of this increase has taken place since 1985 (see Figure HC 1.2.B.1).

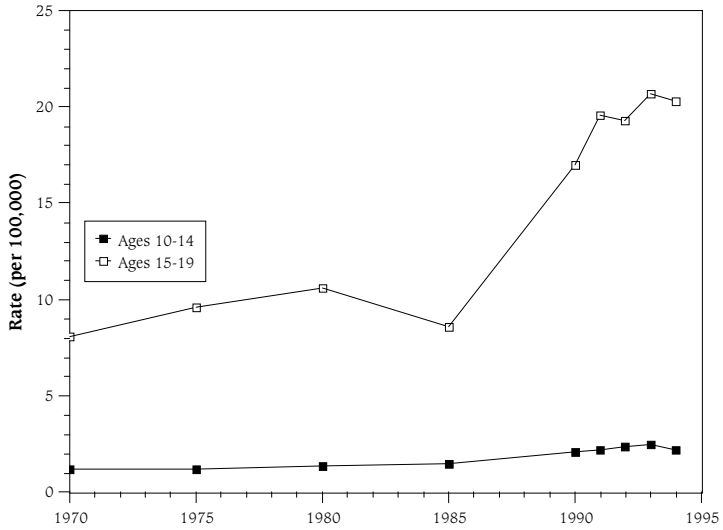
Male Youth Homicide Rates by Race. As large as the overall increase has been, this trend has been most alarming for males ages 15 to 19. The rate of death from homicide for this age group of black males has increased dramatically from 46.7 per 100 thousand in 1985 to 135.8 per 100 thousand in 1994, a rate nearly nine times that for white males of the same age (see Figure HC 1.2.B.2). The homicide rate for black males aged 15 to 19 actually declined nearly 30 percent from 1970 to 1985, but rose again after 1985. Even with slight declines in the homicide rate in 1992 and 1994, the rate for young black males has nearly tripled since 1985. While the homicide rate for white males of the same age group (15 through 19) is substantially less than that of black males, this rate has also doubled since 1985 (from 7.2 to 15.4 per 100 thousand), and has tripled since 1970.

Female Youth Homicide Rates by Race. Homicide rates for females ages 15 through 19 of both races are considerably lower than among males in this age group. For example, the rate for black females was 15.1 per 100 thousand in 1994, approximately one-ninth the rate for black males. The gender disparity in homicide rates is also large for whites, although it is not as great as that between black males and females. In 1994, the homicide rate for white females ages 15 through 19 was 3.4 deaths per 100 thousand, nearly a quarter of that for white males. As is the case for males, the youth homicide rate for black females is higher than the rate for white females — four and one half times higher in 1994.

Homicide Rates for Younger Youth. The homicide rate for youth ages 10 through 14 was 2.2 per 100 thousand in 1994 — substantially lower than the rate for older youth. Nevertheless, this rate has nearly doubled between 1970 and 1994. For whites, there is little difference in the homicide rates of males and females in this younger age group. For blacks, however, there is a disparity between males and females, although it is not as pronounced as the difference for older black males and females. In 1994, the homicide rate of 9.1 for young black males was virtually twice that of females in the same age group, with a rate of 4.6 per 100 thousand.

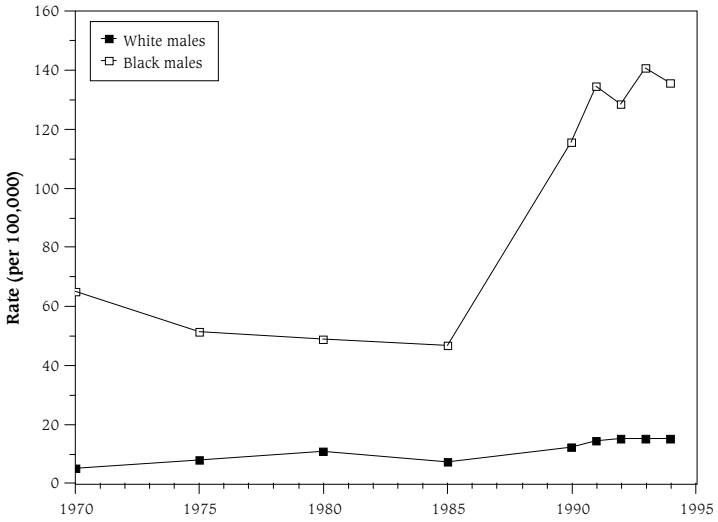
Homicides Involving Firearms. In examining the rate of homicides due to firearms in proportion to total homicides, it is evident that firearms have been involved in the majority of youth homicides since 1980 (see Figure HC 1.2.B.3). Deaths to youth ages 15 through 19 involving firearms accounted for 66 percent of the total deaths due to homicide in 1980 (7.0 firearm deaths per 100 thousand out of a total of 10.6 deaths per 100 thousand due to homicide). The percentage of firearm-related homicides increased to 87 percent by 1994. Homicides due to firearms are more likely among black youth than among white youth, and most particularly among black males ages 15 through 19 (see Table HC 1.2.B.2). In 1994, 93 percent of homicides among older male black youth (ages 15 through 19) involved a firearm, compared to 84 percent among white male youth. Homicides among female youth involve a firearm less often, although firearms are still the means of the majority of female homicides.

Figure HC 1.2.B.1
Youth Homicides: 1970-1994
(rate per 100,000)



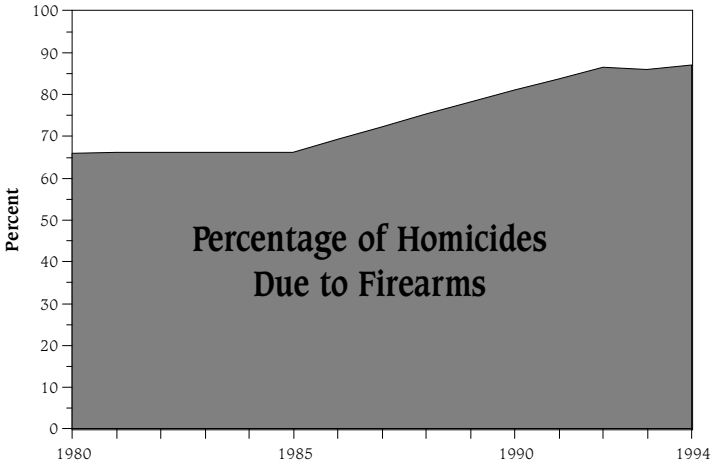
Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics, 1995 and 1996.

Figure HC 1.2.B.2
Male Youth Homicides Ages 15-19, by Race: 1970-1994
(rate per 100,000)



Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics, 1995 and 1996.

Figure HC 1.2.B.3
Percentage of Homicides to Youth Ages 15-19 Due to Firearms[a]: 1980-1994



Note: [a]Includes assault by handguns and all other and unspecified firearms.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics, 1996.

Table HC 1.2.B.1
Youth Homicides[a]: Selected Years, 1970-1994 (rate per 100,000)

	1970	1975	1980	1985	1990	1991	1992	1993	1994
ALL YOUTH									
Ages 10-14	1.2	1.2	1.4	1.5	2.1	2.2	2.4	2.5	2.2
Ages 15-19	8.1	9.6	10.6	8.6	17.0	19.6	19.3	20.7	20.3
WHITE MALES									
Ages 10-14	0.6	1.0	1.1	1.4	1.7	1.8	2.0	1.9	1.8
Ages 15-19	5.2	8.1	10.9	7.2	12.5	14.4	15.2	15.2	15.4
WHITE FEMALES									
Ages 10-14	0.6	0.8	1.1	0.9	0.9	0.9	1.0	1.2	0.9
Ages 15-19	2.1	3.2	3.9	2.7	3.6	3.6	3.6	3.6	3.4
BLACK MALES									
Ages 10-14	6.8	4.1	3.9	4.2	8.1	9.1	9.6	10.5	9.1
Ages 15-19	65.2	51.4	48.8	46.7	115.7	134.6	128.5	140.7	135.8
BLACK FEMALES									
Ages 10-14	2.3	2.3	2.4	1.7	4.8	3.8	5.1	5.2	4.6
Ages 15-19	10.6	15.3	11.0	10.4	15.6	15.6	14.2	18.4	15.1

Note: [a]Homicide includes death by legal intervention.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics, 1995 and 1996.

Table HC 1.2.B.2
Youth Homicides Due to Firearms[a]: Selected Years, 1980-1994
(rate per 100,000)

	1980	1985	1990	1991	1992	1993	1994
ALL YOUTH							
Ages 10-14	0.8	0.8	1.5	1.6	1.9	1.9	1.7
Ages 15-19	7.0	5.7	13.8	16.4	16.7	17.8	17.7
WHITE MALES							
Ages 10-14	0.7	0.8	1.1	1.2	1.5	1.3	1.3
Ages 15-19	7.2	4.9	9.4	11.6	12.9	12.5	13.0
WHITE FEMALES							
Ages 10-14	0.4	0.4	0.4	0.4	0.6	0.6	0.4
Ages 15-19	1.7	1.1	1.7	1.9	2.1	2.0	2.2
BLACK MALES							
Ages 10-14	3.2	2.8	6.1	7.6	7.7	9.2	7.1
Ages 15-19	38.4	36.7	104.4	122.5	118.7	130.1	126.6
BLACK FEMALES							
Ages 10-14	1.0	*	2.9	2.5	3.2	3.3	3.0
Ages 15-19	6.3	4.7	9.6	10.3	9.8	13.4	9.9

Note: Calculations by Child Trends, Inc., to combine rates of assault by handguns and rates of assault by all other and unspecified firearms may affect overall rates due to previous rounding.
[a] Includes assault by handguns and all other and unspecified firearms.
* = Not calculated because of unreliability due to infrequency of the event

Source: National Center for Health Statistics. Unpublished work tables prepared by the Morality Statstics Branch, Division of Vital Statistics, 1996.

HC 1.2.C

YOUTH SUICIDES

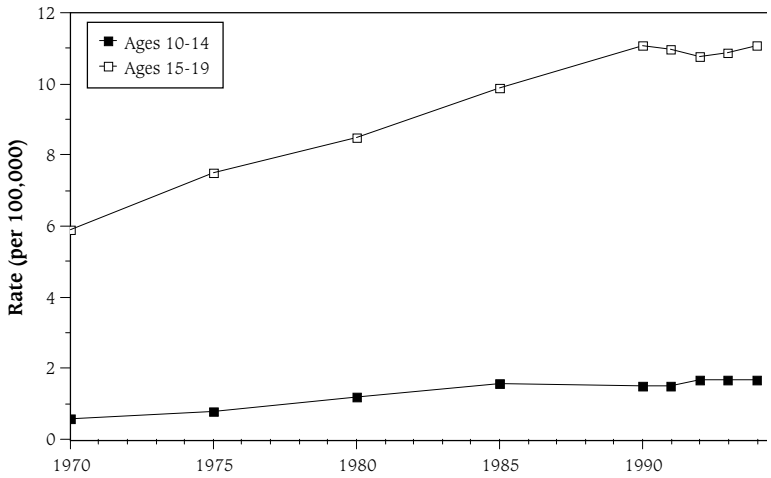
Suicide, like homicide, has come to play a proportionately larger role in teen deaths over the past several decades. Between 1970 and 1990, the suicide death rate for youth ages 15 through 19 nearly doubled, from 5.9 to 11.1 per 100 thousand (see Figure HC 1.2.C). Since 1990, the overall suicide death rate has stabilized at approximately 11 deaths per 100 thousand youth ages 15 through 19.

Differences by Gender. Male teens are more likely than females to commit suicide (see Table HC 1.2.C). The suicide rate for white males ages 15 through 19 was 18.7 per 100 thousand in 1994, more than five times the rate of 3.5 per 100 thousand for white females. The suicide rate for black males ages 15 through 19 is 16.6 deaths per 100 thousand, compared to 2.4 per 100 thousand for black females in this age group.

Differences by Race. White male youth ages 15 through 19 have long had a higher suicide rate than their black male peers (see Table HC 1.2.C). In 1970, white males ages 15 through 19 were twice as likely as black males to die from suicide (9.4 versus 4.7 per 100 thousand). However, the gap between white and black male suicide rates has narrowed in recent years, with suicide rates of 18.7 and 16.6 per 100 thousand in 1994 for white and black males, respectively. Among females ages 15 through 19, white females and black females were equally likely to commit suicide in 1970 with rates of 2.9 per 100 thousand. By 1975, white female suicide rates were twice that of their black peers ages 15 through 19. This trend held in all subsequent years in which data could be calculated for black females until 1994, when the suicide rate for ages 15 through 19 was 2.4 per 100 thousand among black females and 3.5 per 100 thousand among white females.

Suicide Rates for Younger Youth. While considerably lower, suicide rates for youth ages 10 through 14 have followed trends similar to those among older youth, with males having higher rates of suicide than females, and whites having higher suicide rates than blacks (see Table HC 1.2.C). In this age group, suicide is infrequent for both sexes and races, making gender or racial differences small as well.

Figure HC 1.2.C
Youth Suicides: Selected Years 1970-1994
(rate per 100,000)



Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics, 1995 and 1996.

Table HC 1.2.C
Youth Suicides: Selected Years 1970-1994
(rate per 100,000)

	1970	1975	1980	1985	1990	1991	1992	1993	1994
ALL YOUTH									
Ages 10-14	0.6	0.8	1.2	1.6	1.5	1.5	1.7	1.7	1.7
Ages 15-19	5.9	7.5	8.5	9.9	11.1	11.0	10.8	10.9	11.1
WHITE MALES									
Ages 10-14	1.1	1.4	1.4	2.5	2.3	2.4	2.6	2.4	2.5
Ages 15-19	9.4	12.9	15.0	17.1	19.3	19.1	18.4	18.5	18.7
WHITE FEMALES									
Ages 10-14	0.3	0.4	0.3	0.9	0.9	0.8	1.1	1.0	1.0
Ages 15-19	2.9	3.1	3.3	4.1	4.0	4.2	3.7	4.2	3.5
BLACK MALES									
Ages 10-14	0.3	0.2	0.5	*	1.6	2.0	2.0	2.3	2.1
Ages 15-19	4.7	6.1	5.6	8.2	11.5	12.2	14.8	14.4	16.6
BLACK FEMALES									
Ages 10-14	0.4	0.3	0.1	*	*	*	*	*	*
Ages 15-19	2.9	1.5	1.6	1.5	1.9	*	1.9	*	2.4

* = Not calculated because of unreliability due to infrequency of the event.

Source: National Center for Health Statistics, unpublished work tables prepared by the Mortality Statistics Branch, Division of Vital Statistics, 1995 and 1996.

HC 2.1

HEALTHY BIRTHS

A healthy birth is defined here as a birth with the following characteristics: a five-minute Apgar[13] score of nine or more out of ten, weight at birth of at least 2,500 grams (5.5 pounds), a gestational age of at least 37 weeks, and maternal receipt of prenatal care within the first trimester.

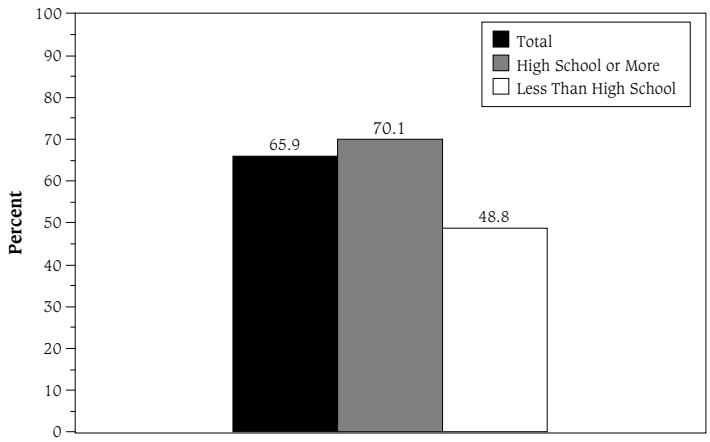
Increasing Percentages of Healthy Births. Table HC 2.1 reports the percentage of all births qualifying as healthy births for 1985, 1991 and 1994, by race and ethnic group, and by the mother's marital status and educational background. The table shows an increase in the percentage of all healthy births between 1985 and 1994, as well as increases for each population subgroup presented. The percent of all births qualifying as healthy increased from 59.1 percent to 65.9 percent during that period of time.

Continued Disparities Across Population Subgroups. While healthy births are increasing for all the subgroups presented in Table HC 2.1, there are also persistent disparities across subgroups. For example:

- In 1994, 49.7 percent of births to black women were defined as healthy, compared to 55.4 percent of births to Hispanic women and 69.8 percent of births to white women.
- In 1994, 73 percent of births to married women were healthy, compared to 50.6 percent of births to single women.
- In 1994, 70.1 percent of births to mothers with at least a high school education were healthy, compared to 48.8 percent of births to mothers with less than a high school education (see Figure HC 2.1).

[13] The Apgar score is a numerical expression of the physical condition of an infant shortly after delivery. The infant is rated, 0, 1, or 2 on color, heart rate, reflex irritability, muscle tone and breathing. The maximum score is 10, and a score of 4 or less indicates examination and treatment are warranted. As defined in: Apgar, V., Holiday, D.A., James, L.S., Weisbrot, I.N., and C. Berrien. (1953). "Evaluation of the Newborn Infant-2nd Report." Current Research in Anesthesia and Analgesia, *Vol. 32: 260-267.*

Figure HC 2.1
Percentage of All Births Defined as Healthy,[a] by Mother's Education: 1994



Note: [a]Healthy birth is defined as follows: 5-minute Apgar score of 9+, birth weight 2,500+ grams, gestational age of 37+ weeks, prenatal care in the first trimester.

Source: Special tabulation for 1994 birth data by Sally C. Clarke, National Center for Health Statistics.

Table HC 2.1
Percentage of All Births Defined as Healthy,[a] by Selected Sociodemographic Characteristics: 1985, 1991, and 1994

	1985	1991	1994
TOTAL	**59.1**	**61.1**	**65.9**
Race/Ethnicity			
White	62.7	65.0	69.8
Black	41.5	43.3	49.7
Hispanic	48.6	49.8	55.4
Mother's Marital Status			
Married	65.0	68.6	73.0
Single[b]	37.9	43.1	50.6
Mother's Education			
High school or more	64.0	67.1	70.1
Less than high school	40.0	43.3	48.8

Notes: [a]Healthy birth is defined as follows: 5 - minute Apgar score of 9+, birth weight 2,500+ grams, gestational age of 37+ weeks, prenatal care in the first trimester.
[b]Single status includes mothers who have never been married, or are divorced or widowed.

Source: 1985 and 1991 data from: Morrison, D.R. (1994). "Healthy Birth Index". Final Report. Submitted to the Annie E. Casey Foundation, Kids Count Indicator Development Project, Child Trends, Inc., Washington, DC, 1994. Special tabulation for 1994 birth data by Sally C. Clarke, National Center for Health Statistics.

HC 2.2.A

LOW BIRTH WEIGHT

Low birth weight infants (babies born weighing less than 2,500 grams or 5.5 pounds) face an increased risk of physical and developmental complications and death.[14] These babies account for nearly two-thirds of all neonatal deaths (deaths under 28 days of age).[15]

The percentage of all infants born at low birth weight declined between 1970 and 1985, from 7.9 percent to 6.8 percent (see Table HC 2.2.A). By 1995, however, that percentage had increased to 7.3 percent of all infants.[16] This pattern is evident for both white and black births and across almost all age groups of mothers.

Differences by Race and Ethnicity. Low birth weight rates are consistently higher for blacks than for whites and Hispanics. In 1970, 6.9 percent of white infants and 13.9 percent of black infants born in the U.S. were low birth weight. This gap continued into the 1990s; by 1995, 13.0 percent of black infants and 6.2 percent of white infants were born at low birth weight. The rates for Hispanics have remained at or slightly below 6.3 percent between 1980 (the first year for which Hispanic data are available) and 1995.

Differences by Age of Mother. For mothers in all age groups, there was a decline in the percentage of low weight births between 1970 and 1985. Since 1985, however, that percentage increased slightly across nearly all age groups. The following trends, illustrated in Table HC 2.2.A, are particularly noteworthy:

- Mothers under age 15 consistently have the highest rates of low weight births (see Figure HC 2.2.A). While the percentage of low weight births to mothers under age 15 improved between 1970 and 1994, the trend has not been one of consistent improvement. Instead, the percentage of low weight births to these very young mothers decreased considerably between 1970 and 1985 — from 16.6 percent to 12.9 percent — but then increased to 13.3 percent in 1990 and to 13.7 percent in 1994.

- For mothers in all other age groups, rates of low weight births have stayed within 1.5 percentage points of their 1970 rate.

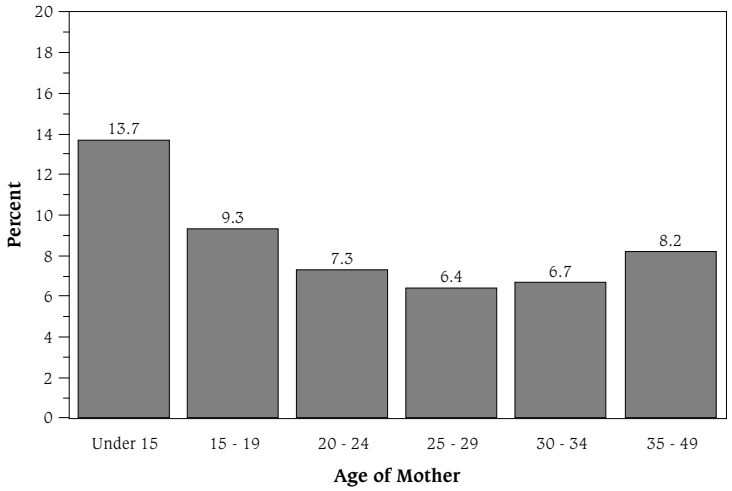
- Mothers between the ages of 25 and 29 consistently have the lowest rates of low weight births.

[14] Disorders relating to short gestation and unspecified low birth weight were the second leading cause of death to infants in 1995 as reported in Rosenberg, H.M., Ventura, S.J., Maurer, J.D., Heuser, R.L., and M.A. Freedman. "Births and Deaths: United States, 1995." Monthly Vital Statistics Report. Vol. 45, No. 3 (Supplement 2). Hyattsville, Maryland: National Center for Health Statistics. 1996.

[15] Ventura, S.J., Martin, J.A., Mathews, T.J., Clarke, S.C. "Advance Report of Final Natality Statistics, 1994." Monthly Vital Statistics Report, Vol. 44, No. 11 (S). Hyattsville, Maryland: National Center for Health Statistics, 1996.

[16] Data for 1995 are preliminary.

Figure HC 2.2.A
Percentage of All Births Born at Low Birth Weight, by Age of Mother:[a] 1994



Notes: [a]Before 1979, low birth weight defined as: Infants weighing $\leq$ 2,500 grams (5.5 pounds). 1979 and beyond, low birth weight defined as: Infants weighing < 2,500 grams (5.5 pounds).

Source: Ventura, S.J., Martin, J.A., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1994." Monthly Vital Statistics Report, Vol. 44, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1996 (tables 24 and 44).

Table HC 2.2.A
Percentage of All Births Born at Low Birth Weight,[a] Selected Years: 1970-1995

	1970	1975	1980	1985	1990	1992	1993	1994	1995[d]
TOTAL	**7.9**	**7.4**	**6.8**	**6.8**	**7.0**	**7.1**	**7.2**	**7.3**	**7.3**
Race/Ethnicity[b,c]									
Black	13.9	13.2	12.7	12.7	13.3	13.3	13.3	13.2	13.0
White	6.9	6.3	5.7	5.7	5.7	5.8	6.0	6.1	6.2
Hispanic	--	--	6.1	6.2	6.1	6.1	6.2	6.3	6.3
Age of Mother									
Under 15	16.6	14.1	14.6	12.9	13.3	13.2	13.5	13.7	--
15-19	10.5	10.0	9.4	9.3	9.3	9.3	9.2	9.3	--
20-24	7.4	7.1	6.9	6.9	7.1	7.1	7.2	7.3	--
25-29	6.9	6.1	5.8	5.9	6.2	6.2	6.4	6.4	--
30-34	7.5	6.8	5.9	6.1	6.4	6.5	6.7	6.7	--
35-49	8.8	8.4	7.2	7.1	7.4	7.8	8.1	8.2	--

Notes: [a]Before 1979, low birth weight defined as: Infants weighing $\leq$ 2,500 grams ($\leq$ 5.5 pounds). 1979 and beyond, low birth weight defined as: Infants weighing < 2,500 grams (<5.5 pounds).
[b]Percentages are based on the race and ethnicity of the mother.
[c]Percentage low birth weight by ethnicity are not available before 1980. Birth figures for Hispanic infants in 1980 are based on data from 22 States which report 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 in 1993.
[d]Data for 1995 are preliminary.

Sources: National Center for Health Statistics. Health, United States, 1995. Hyattsville, Maryland: Public Health Service. 1996. Table 11 for totals and race/ethnicity breaks for 1970-1993. 1970 data from: National Center for Health Statistics, Health, United States, 1982, Table 24; 1975 data from: Vital Statistics of the U.S., 1975, Table 1-37; 1980 data from: Monthly Vital Statistics Report, Vol. 31 No. 8 , Supplement. 1982; 1985 data from: National Center for Health Statistics: Vital Statistics of the United States, 1985, Vol. I, Natality. DHHS Pub. No. (PHS) 81-1113. Public Health Service; Washington. 1988. Table 1-81. 1990 data from: Monthly Vital Statistics Report, Vol. 41, No. 9(s), February, 1993, Tables 13 and 26; 1992 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1992." Monthly Vital Statistics Report, Vol. 43, No. 5, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1994 (tables 24 and 44); 1993 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1993." Monthly Vital Statistics Report, Vol. 44, No. 3, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1995 (tables 24 and 44); 1994 data from: Ventura, S.J., Martin, J.A., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1994." Monthly Vital Statistics Report, Vol. 44, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1996 (tables 24 and 44). 1995 preliminary data from: Rosenberg, H.M., Ventura, S.J., Maurer, J.D., Heuser, R.L., Freedman, M.A. "Births and Deaths: United States, 1995." Monthly Vital Statistics Report, Vol 45, No. 3, Supplement 2. Hyattsville, Maryland: National Center for Health Statistics. 1996.

HC 2.2.B

VERY LOW BIRTH WEIGHT

Very low birth weight infants (babies born weighing less than 1,500 grams, or 3.3 pounds) are at particularly high risk of severe physical and developmental complications and death. Advances in medical technology in recent years have made it possible for increasing numbers of very low weight infants to survive.

The percentage of infants born at very low birth weight has remained constant for the last 24 years (see Table HC 2.2.B). Between 1970 and 1989 (not shown), 1.2 percent of all infants were classified as very low birth weight.[17] The proportion then increased slightly to 1.3 percent, where it has remained from 1990 to 1994.

Differences by Race and Ethnicity. The percentage of babies born at very low birth weight varies by race and ethnicity (see Table HC 2.2.B). For whites, the percentage of very low weight births has remained at or about 1.0 percent from 1970 through 1994. For blacks, the percentage of very low birth weight babies increased from 2.4 percent in 1970 to 3.0 percent by 1992, where it has remained through 1994. In contrast, the percentage of low birth weight babies (as distinct from "very low") decreased for both blacks and whites from 1970 to the mid-1980s, then increased (see Table HC 2.2.A in the previous discussion). The percentage of very low weight births among Hispanics was 1.0 percent for the years shown between 1980 and 1992, and 1.1 percent in 1993 and 1994.

Differences by Age of Mother. Age of mother appears to be an important factor in the likelihood of very low birth weight, particularly at the youngest ages. The percentage of very low weight infants born to mothers under age 15 has increased since 1975, reaching its highest proportion in 1993 at 3.6 percent, and then decreasing slightly to 3.4 percent by 1994. The percentage of very low weight births among mothers age 15 to 19 is lower than the proportion of such births to their younger counterparts but remains slightly higher than the proportion observed for women age 20 and older.

[17] Data for individual years indicate that the rate remained at 1.2 percent through 1989 (not shown).

Table HC 2.2.B
Percentage of All Births Born at Very Low Birth Weight,[a] Selected Years: 1970-1994

	1970	1975	1980	1985	1990	1992	1993	1994
TOTAL	**1.2**	**1.2**	**1.2**	**1.2**	**1.3**	**1.3**	**1.3**	**1.3**
Race/Ethnicity[b,c]								
White	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0
Black	2.4	2.4	2.5	2.7	2.9	3.0	3.0	3.0
Hispanic	—	—	1.0	1.0	1.0	1.0	1.1	1.1
Age of Mother								
Under 15	—	3.1	3.4	3.1	3.2	3.1	3.6	3.4
15-19	—	1.8	1.7	1.8	1.8	1.8	1.8	1.7
20-24	—	1.1	1.1	1.2	1.3	1.3	1.3	1.3
25-29	—	0.9	1.0	1.0	1.1	1.1	1.1	1.2
30-34	—	1.0	1.0	1.1	1.2	1.2	1.2	1.2
35-49	—	1.2	1.2	1.3	1.4	1.5	1.5	1.6

Notes: [a]Before 1979, very low birth weight defined as: $\leq$ 1,500 grams, 1979 and beyond, very low birth weight defined as: Infants Weighing < 1,500 grams.
[b]Percentages are based on the race and ethnicity of the mother.
[c]Percentage very low birth weight by ethnicity are not available before 1980. Birth figures for Hispanic infants in 1980 are based on data from 22 States which reported Hispanic origin of the mother 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 in 1993 and 1994.

Sources: National Center for Health Statistics. *Health, United States, 1995*. Hyattsville, Maryland: Public Health Service. 1996. Table 11 for totals and race/ethnicity breaks for 1970-1993. 1975 data from: Vital Statistics of the U.S., 1975, Table 1-37; 1980 data from: Monthly Vital Statistics Report, Vol. 31 No. 8, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1982 (table 13); 1985 data from: Monthly Vital Statistics Report, Vol. 36 No.4, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 198 (table 17); 1990 data from: Monthly Vital Statistics Report, Vol. 41, No. 9, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1993 (table 13); 1992 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1992." Monthly Vital Statistics Report, Vol. 43, No. 5, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1994 (tables 24 and 44); 1993 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1993." Monthly Vital Statistics Report, Vol. 44, No. 3, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1995 (tables 24 and 44); 1994 data from: Ventura, S.J., Martin, J.A., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1994." Monthly Vital Statistics Report, Vol. 44, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1996 (tables 24 and 44).

HC 2.3

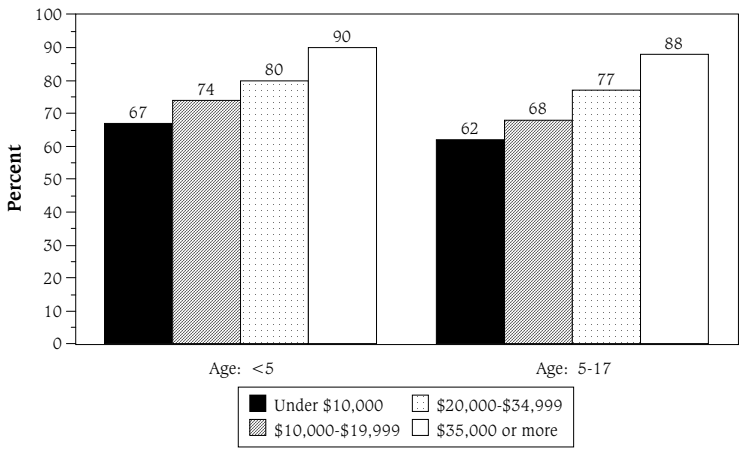
GENERAL HEALTH CONDITION: PERCENTAGE OF CHILDREN IN VERY GOOD OR EXCELLENT HEALTH

Most children in the United States are reported by their parents to be in very good or excellent health. The percentage of all children under age 18 reported to be in very good or excellent health has remained at about 80 percent since 1984. These reports vary little by gender; there are modest differences by age of child for some population subgroups (see Table HC 2.3).

Differences by Race. Parents' reports of their children's health vary by race. Between 1984 and 1994, black parents were less likely than white parents to report that their children were in very good or excellent health. In 1994, 72 percent of black children under age five were reported in very good or excellent health, compared to 83 percent of white children. Sixty-eight percent of black children ages five to 17 were reported in very good or excellent health, compared to 81 percent of white children in this age group (see Table HC 2.3).

Differences by Family Income. Parents' reports of their children's health also vary by family income, with higher-income families more likely to report that their children are in very good or excellent health. For example, in 1994, 67 percent of children under age five in families with annual incomes under $10 thousand were reported to be in very good or excellent health, compared to 90 percent of children in families with incomes of $35 thousand or more. A similar pattern exists for children ages five to 17 (see Figure HC 2.3).

Figure HC 2.3
Percentage of Children Under Age 18 Reported by Their Parents to Be in Very Good or Excellent Health, by Family Income: 1994



Source: National Center for Health Statistics. "Current Estimates from the National Health Interview Survey: United States, 1994." Vital and Health Statistics, Series 10, No. 193 (table 70).

Table HC 2.3
Percentage of Children Under Age 18 Reported by Their Parents to Be in Very Good or Excellent Health: Selected Years, 1984-1994

	AGE: <5						AGE: 5-17					
	1984	1987	1990	1992	1993	1994	1984	1987	1990	1992	1993	1994
TOTAL	**79**	**81**	**81**	**80**	**80**	**81**	**77**	**80**	**80**	**80**	**79**	**79**
Race												
Black	67	71	72	70	71	72	65	66	68	68	70	68
White	81	84	83	82	82	83	80	83	83	82	81	81
Gender												
Male	78	—	80	79	80	81	78	—	81	80	79	79
Female	79	—	82	81	80	81	77	—	80	79	78	78
Family Income[a]												
Under $10,000						67						62
$10,000-$19,999						74						68
$20,000-$34,999						80						77
$35,000 or more						90						88

Notes: [a]Family income is not adjusted in the National Health Interview Survey for comparison over time, therefore family income is shown only for the most recent year.

Source: National Center for Health Statistics. "Current Estimates from the National Health Interview Survey: United States," 1984, 1987, 1990, 1992, 1993, 1994; Vital and Health Statistics, Series 10, Nos. 156, 166, 181, 189, 190, and 193, Table 70 in each.

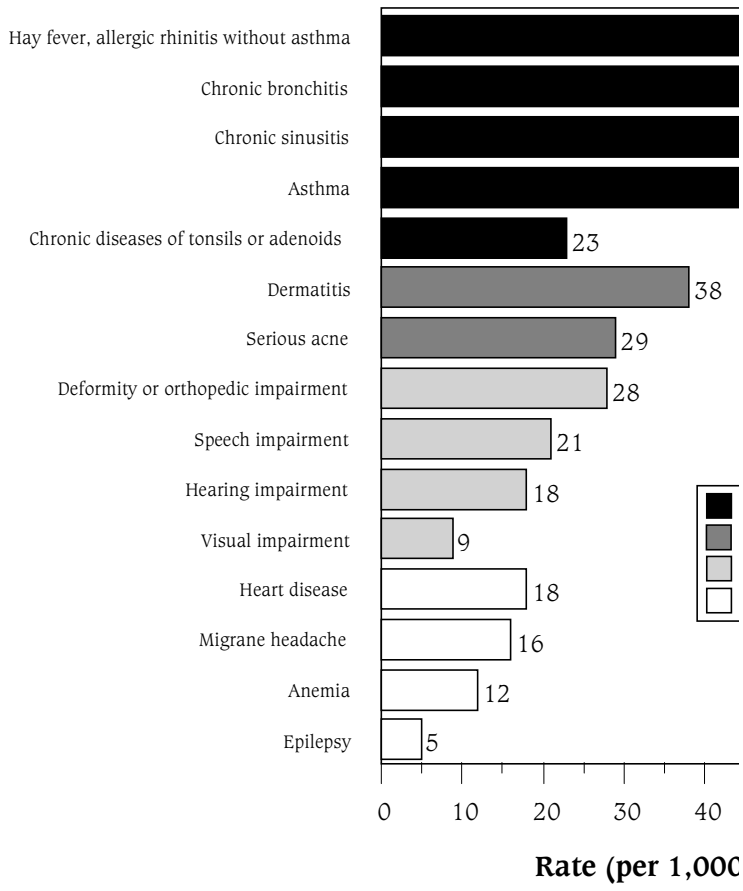
HC 2.4

CHRONIC HEALTH CONDITIONS

Chronic health problems can cause children to miss school and often require medical assistance and follow-up. Chronic conditions can also create stress for children and their parents, cause parents to lose time from work, and increase a family's medical expenses.

Over the period from 1984 to 1994, respiratory conditions have been the most prevalent chronic health problems experienced by children under age 17, followed by skin conditions, and impairments (see Figure HC 2.4). In general, there are few pronounced patterns of improvement or deterioration among those conditions shown (see Table HC 2.4). Two exceptions, however, are asthma and chronic sinusitis. The prevalence of these two chronic conditions increased incrementally from 1984 to 1993, but declined slightly in 1994. In 1984, asthma affected 43 children per thousand, compared with 69 children per thousand in 1994; chronic sinusitis affected 47 children per thousand in 1984, and 65 children per thousand by 1994.

Figure HC 2.4
Selected Chronic Health Conditions per 1,000 Children Ages 0-17: 1994



Source: National Center for Health Statistics, "Current Estimates from the National Health Interview Survey: United States 1994", Vital and Health Statistics, Series 10, No. 193, Table 70.

Table HC 2.4
Selected Chronic Health Conditions[a] per 1,000 Children Ages 0-17: Selected Years, 1984-1994

Type of Conditions	NUMBER PER 1,000					
	1984	1987	1990	1992	1993	1994
Respiratory Conditions						
Hay fever, allergic rhinitis without Asthma	61	64	57	71	57	61
Chronic bronchitis	50	62	53	54	59	55
Chronic sinusitis	47	58	57	69	80	65
Asthma	43	53	58	63	72	69
Chronic diseases of tonsils or adenoids	34	30	23	28	26	23
Skin Conditions						
Dermatitis	39	32	31	41	36	38
Serious acne	26	26	26	25	28	29
Impairments						
Deformity or orthopedic impairment	35	36	29	33	29	28
Speech impairment	16	19	14	21	20	21
Hearing impairment	24	16	21	15	17	18
Visual impairment	9	10	9	10	7	9
Other Conditions						
Heart disease	23	22	19	19	20	18
Migraine headache	11	8	14	13	13	16
Anemia	11	8	10	11	9	12
Epilepsy	7	4	4	3	5	5

Notes: [a]Chronic conditions as defined in the National Health Interview Survey are conditions that either a) were first noticed three months or more before the reference date of the interview; or b) belong to a group of conditions (including heart diseases, diabetes, and others) that are considered chronic regardless of when they began. The prevalence estimates are based on reports by parents or other adult respondents in response to checklists administered in household interviews.

Source: National Center for Health Statistics, "Current Estimates from the National Health Interview Survey: United States," 1984, 1987, 1990, 1992, 1993, 1994; Vital and Health Statistics, Series 10, Nos. 150, 156, 166, 181, 189, 190, and 1993, Tables 57 and 62.

HC 2.5

OVERWEIGHT PREVALENCE OF CHILDREN AND ADOLESCENTS

Persons who are overweight in adolescence are at greater risk of being overweight as adults, and adults who are overweight are at higher risk of numerous health problems including hypertension, coronary heart disease, gallbladder disease, non–insulin dependent diabetes, and some cancers.[18] Because being overweight in childhood and adolescence increases the risk of being overweight in adulthood, the trends in overweight prevalence among children and youth have become an important public health concern.

Differences by Age. Overweight prevalence was similar among children ages six to 11 years old and adolescents 12 to 17 years old (see Table HC 2.5). For both age groups and sexes, overweight prevalence has increased from 15 percent in the earliest time period to approximately 22 percent in 1988-1991.

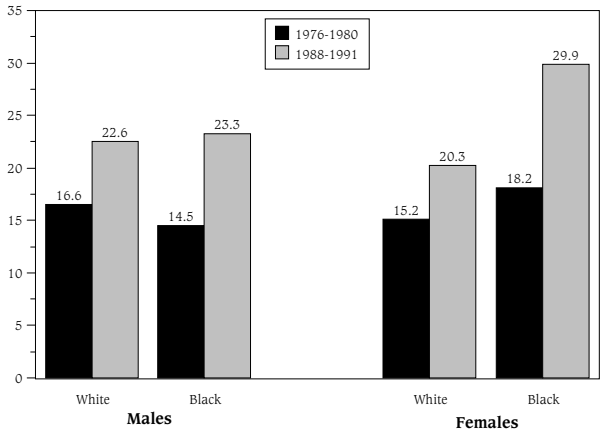
Differences by Gender. During the time period 1988-1991, there was little difference in the overweight prevalence of male and female children and adolescents — 22 percent of male children and 23 percent of female children were overweight, and 22 percent of male adolescents and 21 percent of female adolescents were overweight.

Differences by Race Among Male Children and Adolescents. In the earliest time periods (1963-1965 and 1971-1974), the percentage of black male children who were overweight was at least six percentage points lower than that of white male children. This was reversed in the most recent period (1988-1991), with black male children recording an overweight prevalence rate that is five percentage points higher than that of their white peers. Black–white differences were less among the older age group, but the same pattern is evident (see Figure HC 2.5).

Differences by Race for Female Children and Adolescents. With the exception of the earliest time period, the percentage of black females who were overweight was higher than that of white females for both children and adolescents. By the most recent time period 31 percent of black female children and 30 percent of black female adolescents were overweight compared with 22 percent of white female children and 20 percent of white female adolescents (see Figure HC 2.5).

[18] *Troiano, Richard P. and Katherine M. Flegal, Robert J. Kuczmarski, Stephen M. Campbell, Clifford L. Johnson, 1995. "Overweight Prevalence and Trends for Children and Adolescents: The National Health and Nutrition Examination Surveys, 1963-1991."* Archives of Pediatrics and Adolescent Medicine. *Vol. 149 (October).*

Figure HC 2.5
Age-Adjusted Prevalence of Overweight Adolsecents (Ages 12-17) from National Surveys, by Sex: 1976-1980 and 1988-1991[a]



Note: [a]Prevalence of overweight is determined by those children and adolescents who were at or above the 85th percentile of body mass index (BMI) from the National Health and Nutrition Examination Surveys II and III. Determinations of overweight with BMI were sex- and age-specific.

Source: Troiano, Richard P. and Katherine M. Flegal, Robert J. Kuczmarski, Stephen M. Campbell, Clifford L. Johnson, 1995. "Overweight Prevalence and Trends for Children and Adolescents: The National Health and Nutrition Examination Surveys, 1963-1991." Archives of Pediatrics and Adolescent Medicine. Vol. 149 (October). Estimates were calculated from National Health and Nutrition Examination Survey (NHANES); 1976 to 1980 for NHANES II, and 1988 to 1991 for NHANES III.

Table HC 2.5
Age-Adjusted Prevalence of Overweight Children and Adolescents: Selected Years, 1963-1991[a]

	1963-1965	1966-1970	1971-1974	1976-1980	1988-1991
AGES 6 THROUGH 11					
Male[b]	**15.2**	—	**18.2**	**19.9**	**22.3**
White	16.0	—	19.5	20.8	22.3
Black	10.3	—	12.3	15.1	27.2
Female[b]	**15.2**	—	**13.9**	**15.8**	**22.7**
White	15.7	—	13.4	15.4	22.0
Black	12.1	—	16.8	18.4	30.7
AGES 12 THROUGH 17					
Male[b]	—	**15.1**	**14.9**	**16.3**	**21.7**
White	—	15.8	15.3	16.6	22.6
Black	—	10.4	12.3	14.5	23.3
Female[b]	—	**15.2**	**19.7**	**15.5**	**21.2**
White	—	15.0	19.7	15.2	20.3
Black	—	16.5	20.8	18.2	29.9

Notes: [a]Prevalance of overweight is determined by those children and adolescents who were at or above the 85th percentile of body mass index (BMI) from the National Health Examination Surveys II and III. Determinations of overweight with BMI were sex- and age-specific. [b]Totals for male and female children and adolescents include data for race groups not shown separately.

Source: Troiano, Richard P. and Katherine M. Flegal, Robert J. Kuczmarski, Stephen M. Campbell, Clifford L. Johnson, 1995. "Overweight Prevalence and Trends for Children and Adolescents: The National Health and Nutrition Examination Surveys, 1963-1991." Archives of Pediatrics and Adolescent Medicine. Vol. 149 (October). Estimates were calculated from National Health Examination Survey; 1963-1965 for ages 6 through 11, and 1966 to 1970 for ages 12 through 17 years and from the National Health and Nutrition Examination Survey (NHANES); 1971 to 1974 for NHANES I, 1976 to 1980 for NHANES II, and 1988 to 1991 for NHANES III.

HC 2.6

ABUSE AND NEGLECT

Abuse and neglect cause physical and/or emotional harm to children. They can produce short-term psychological consequences that range from poor peer relations to violent behavior, as well as untold long-term psychological and economic consequences when children reach adulthood.[19] They can result in serious injury or, in extreme cases, death.

The National Research Council distinguishes four categories of child maltreatment: (1) physical abuse, (2) sexual abuse, (3) emotional maltreatment, and (4) neglect.[20] The first three are commonly grouped together under the term "abuse," although there are currently no universally accepted definitions of any of these terms. (For example, the point at which corporal punishment becomes physical abuse is not agreed upon by child welfare professionals or lay people).

According to data from the most comprehensive annual data collection efforts undertaken to date, there were about 875 thousand substantiated cases[21] of child abuse and neglect in 1994—a rate of 12.9 cases per thousand children under age 18 (see Figure HC 2.6). This is a substantial increase over the roughly 720 thousand cases substantiated in 1990, when the rate was only 11.4 cases per thousand.[22] Although maltreatment was about evenly split between abuse and neglect, abuse accounted for a somewhat smaller share of the total in 1994 than in 1990.

The number of *substantiated* cases shown in Figure HC 2.6 may substantially understate the *actual* number of cases of maltreatment. In order for a case to be substantiated, it must first be reported to child welfare authorities, and child protective services workers must undertake an investigation which finds sufficient evidence of abuse or neglect to proceed further with the case.

Another data source, the third National Incidence Study of Child Abuse and Neglect, yields a much higher estimate of the total number of cases of child maltreatment — possibly as high as 2.8 million cases in 1993. This study includes (1) all cases *reported* to child protective services (regardless of whether they were investigated and substantiated)[23] and (2) cases known to community professionals but not necessarily reported to child protective services.

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[19] *Many studies have demonstrated a correlation between child abuse and neglect and serious adult problems including violence, incarceration, and mental illness. However, these studies have not been able to separate the effects of child abuse and neglect from other factors that are correlated with it including poverty, education, parenting skills, etc.*

[20] *National Research Council, Panel on Child Abuse and Neglect,* Understanding Child Abuse and Neglect. *Washington, DC: National Academy Press, 1993.*

[21] *In most states, each reported incident is counted even if multiple incidents are reported for the same child..*

[22] *The apparent drop between 1993 and 1994 should be viewed with caution since there are important inconsistencies in data collection methodology from year to year.*

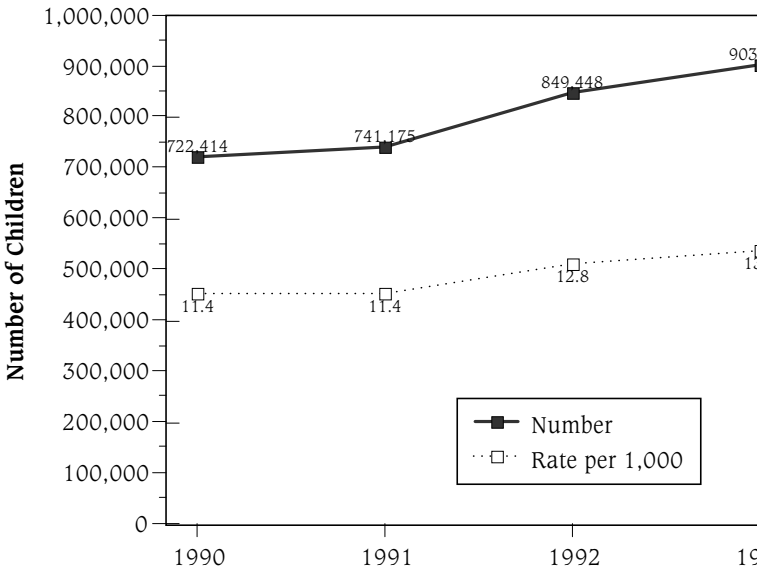
[23] *According to the National Incidence Study, in 1993, only 28 percent of maltreatment cases identified by the Study were investigated--a significant decrease from the 44 percent investigated in 1986. The cause of this drop is not clear.*

Differences by Race. Black children account for a disproportionate share of substantiated maltreatment cases relative to their share of the child population (see Table HC 2.6).

- Black children, who constituted only 16 percent of all children under age 18, accounted for 26 percent of the abuse and neglect cases in 1994.
- White children, who constituted 79 percent of all children under age 18, accounted for only 56 percent of abused and neglected children in 1994.
- Hispanic children, who constituted about 14 percent of all children under age 18, accounted for only nine percent of the abuse and neglect cases.

Differences by Age. No age group accounts for an obviously disproportionate share of abuse and neglect cases. In 1994, (see Table HC 2.6) infants under age one accounted for about seven percent of substantiated cases; children ages one to five accounted for about 33 percent of substantiated cases; children ages six to 12 accounted for 38 percent of substantiated cases; and children ages 13 to 17 accounted for about 20 percent of substantiated cases.

Figure HC 2.6
Substantiated Cases of Child Maltreatment, 1990-1994
(number, and rate per 1,000 children under age 18)



Note: Statistics for 1990-1992 have been revised, to obtain consistent representation of the same number of jurisdictions over the entire 1990-1994 period. Statistics are for the 50 states plus the District of Columbia.

Sources: 1994, National Center on Child Abuse and Neglect, "Child Maltreatment, 1994: Reports from the States to the National Center on Child Abuse and Neglect" (Washington, D.C.: U.S. Government Printing Office, 1996). 1993, National Center on Child Abuse and Neglect, "Child Maltreatment, 1993: Reports from the States to the National Center on Child Abuse and Neglect" (Washington, D.C.: U.S. Government Printing Office, 1995). 1992, National Center on Child Abuse and Neglect, Child Maltreatment, 1992: Reports from the States to the National Center on Child Abuse and Neglect (Washington, D.C.: U.S. Government Printing Office, 1994). 1990- 91, National Center on Child Abuse and Neglect, 1991 Summary Data Component. (Washington, DC: U.S. Government Printing Office, 1993). U.S. Bureau of the Census, Statistical Abstract of the United States, 1994 (Washington, D.C.: U.S. Government Printing Office, 1995). U.S. Bureau of the Census, Statistical Abstract of the United States, 1995 (Washington, D.C.: U.S. Government Printing Office, 1996).

Table HC 2.6
Substantiated Cases of Child Maltreatment, 1990-1994
(number, and rate per 1,000 children under age 18)

	1990	1991	1992	1993	1994
TOTAL					
NUMBER	**722,414**	**741,175**	**849,448**	**903,342**	**875,560**
RATE PER THOUSAND	**11.4**	**11.4**	**12.8**	**13.5**	**12.9**
Type of Maltreatment (% of Total Cases)					
Abuse	51	50	45	46	44
Neglect	49	50	55	54	56
Race/Ethnicity (% of Total Cases)					
White	55	56	55	54	56
Black	25	27	26	25	26
Hispanic	9	10	10	9	9
Other	4	4	4	4	4
Unknown	7	5	6	9	4
Sex (% of Total Cases)					
Male	47	46	46	47	47
Female	53	54	54	53	53
Age (% of Total Cases)					
Under 1	8	8	7	7	7
1 to 5	31	32	32	33	33
6 to 12	37	38	37	38	38
13 to 17	20	20	19	20	20
18+/unknown	5	2	5	2	2

Note: Statistics for 1990-1992 have been revised, to obtain consistent representation of the same number of jurisdictions over the entire 1990-1994 period. Statistics are for the 50 states plus the District of Columbia.

Sources: 1994, National Center on Child Abuse and Neglect, "Child Maltreatment, 1994: Reports from the States to the National Center on Child Abuse and Neglect" (Washington, D.C.: U.S. Government Printing Office, 1996). 1993, National Center on Child Abuse and Neglect, "Child Maltreatment, 1993: Reports from the States to the National Center on Child Abuse and Neglect" (Washington, D.C.: U.S. Government Printing Office, 1995). 1992, National Center on Child Abuse and Neglect, Child Maltreatment, 1992: Reports from the States to the National Center on Child Abuse and Neglect (Washington, D.C.: U.S. Government Printing Office, 1994). 1990- 91, National Center on Child Abuse and Neglect, "1991 Summary Data Component." (Washington, DC: U.S. Government Printing Office, 1993). U.S. Bureau of the Census, "Statistical Abstract of the United States, 1994" (Washington, D.C.: U.S. Government Printing Office, 1995). U.S. Bureau of the Census, "Statistical Abstract of the United States, 1995" (Washington, D.C.: U.S. Government Printing Office, 1996).

HC 2.7

SUICIDAL TEENS: YOUTH WHO THOUGHT SERIOUSLY ABOUT OR ATTEMPTED SUICIDE

Suicide is a major cause of death among American youth (see Section HC 1.2.C). Attempted suicide has been related to mental health problems including depression and adjustment or stress reactions, as well as to substance abuse.[24]

In 1995, 24 percent of youth in grades nine through 12 report having seriously considered suicide during the previous 12 months (see Table HC 2.7.A). During the same time period, nine percent, or one in eleven, report having actually attempted suicide during the previous year (see Table HC 2.7.B). These rates are considerably higher than the proportion of youth who actually commit suicide (see Section HC 1.2.C).

Rates for contemplation of suicide range from 29 percent in 1991 to 24 percent in 1993 and 1995 (see Table HC 2.7.A). The percentage of youth who report actually attempting suicide has remained around nine percent in recent years (see Table HC 2.7.B).

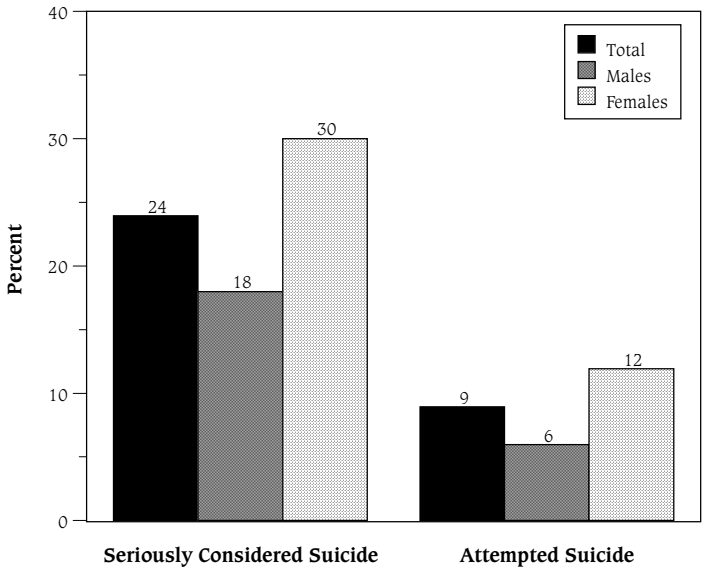
Differences by Race/Ethnicity.[25] Black youths report somewhat lower rates of considering suicide in comparison with their white and Hispanic peers (20 percent for black youth versus 25 percent for both whites and Hispanics in 1995). Rates of reported attempted suicide are similar across the three groups, ranging from eight to ten percent.

Differences by Gender. In 1995, female youth were more likely than male youth to report having thought seriously about suicide (30 percent versus 18 percent) and having attempted suicide (12 percent versus six percent) during the previous year (see Figure HC 2.7). However, the rate of actual suicides, particularly among teens ages 15 to 19, are considerably higher for males than for females, as discussed in section HC 1.2.C.

[24] *Alcohol, Drug Abuse, and Mental Health Administration.* Report of the Secretary's Task Force on Youth Suicide. *Publication No. (ADM)899-1621. Washington, D.C.: U.S. Department of Health and Human Services, 1989. Cited in* Healthy People 2000: National Health Promotion and Disease Prevention Objectives, Conference Edition. *U.S. Department of Health and Human Services, 1990.*

[25] *Estimates for whites and blacks exclude Hispanics of those races.*

Figure HC 2.7
Suicide: Percentage of Students in Grades 9-12 Who Report Having Seriously Considered or Attempted Suicide in the Previous 12 Months: 1995



Source: Youth Risk Behavior Surveillance - United States 1995. In: CDC Surveillance Summaries, MMWR 1996; Vol. 45 (No. 55-4): 1-85.

Table HC 2.7.A
Suicidal Teens: Percentage of Teens in Grades 9-12 Who Report Having Seriously Considered Suicide in the Previous 12 Months: For Selected Years 1990-1995

	1990	1991	1993	1995
TOTAL	**27**	**29**	**24**	**24**
Male	21	21	19	18
Female	34	37	30	30
Grade				
9	30	29	24	26
10	26	30	25	25
11	29	32	25	26
12	33	26	23	20
Race/Ethnic Group				
White non-Hispanic	28	30	24	25
Black non-Hispanic	20	22	20	20
Hispanic	30	27	26	25

Source: Data for 1990 from "1990-1991 Youth Risk Behavior Surveillance System," Morbidity and Mortality Weekly Report reprints, Centers for Disease Control and Prevention. Data for 1991 from Public Health Reports, Vol. 108, Supplement 1, U.S. Public Health Service. Data for 1993 from "Youth Risk Behavior Surveillance- United States 1993," Vol. 44, No. SS-1, U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention. Data for 1995 from Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance -- United States, 1995." In: CDC Surveillance Summaries, September 27, 1996. Morbidity and Mortality Weekly Report 1996; 45 (No. 55-4): 1-85. All data from Youth Risk Behavior Surveys 1990-1995.

Table HC 2.7.B
Suicidal Teens: Percentage of Teens in Grades 9-12 Who Report Having Attempted Suicide in the Previous 12 Months: Selected Years, 1990-1995

	1990	1991	1993	1995
TOTAL	**8**	**7**	**9**	**9**
Male	6	4	5	6
Female	10	11	13	12
Grade				
9	9	9	10	11
10	9	8	9	10
11	8	6	8	9
12	7	6	7	6
Race/Ethnic Group				
White non-Hispanic	8	7	8	8
Black non-Hispanic	7	7	8	10
Hispanic	12	8	14	13

Source: Data for 1990 from "1990-1991 Youth Risk Behavior Surveillance System," Morbidity and Mortality Weekly Report reprints, Centers for Disease Control and Prevention. Data for 1991 from Public Health Reports, Vol. 108, Supplement 1, U.S. Public Health Service. Data for 1993 from "Youth Risk Behavior Surveillance- United States 1993," Vol. 44, No. SS-1, U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention. Data for 1995 from Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance -- United States, 1995." In: CDC Surveillance Summaries, September 27, 1996. Morbidity and Mortality Weekly Report, 1996; 45 (No. 55-4): 1-85. All data from Youth Risk Behavior Surveys 1990-1995.

HC 2.8

ACTIVITY LIMITATIONS

Activity limitations refer to long term reductions in activities resulting from a chronic disease or impairment.[26] Two types of activity limitations are examined here: limitations in major activities and limitations in any activity. A person is classified as having an activity limitation if he or she reports (a) an inability to perform the major activity for a person in his or her age group, (b) being able to perform the major activity but being limited in the kind or amount of this activity, or (c) not being limited in the major activity but being limited in the kind or amount of other activities. For children under age 5, the major activity consists of ordinary play. For children ages five to 17, the major activity is attending school. Children are classified as being limited in a major activity if they are unable to engage in the major activity or are limited in the kind or amount of this activity.

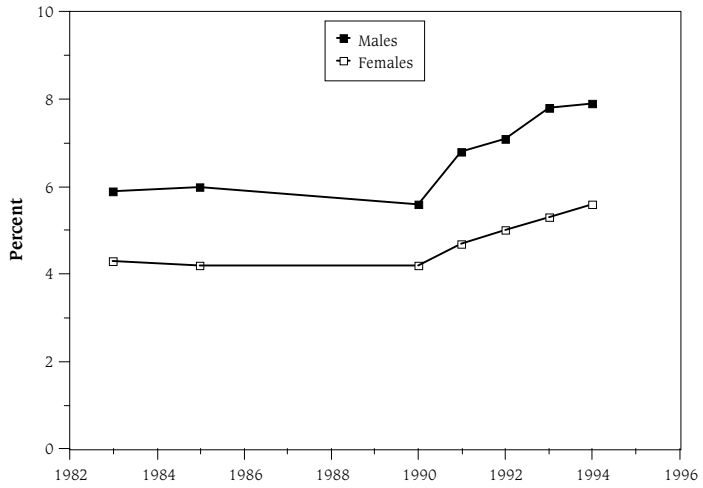
Between 1990 and 1994 the percentage of children under age 18 with chronic conditions that limit any of their activity has risen from 4.9 percent to 6.7 percent (see Table HC 2.8.A). This trend is true for both males and females and whites and blacks, although the percentages are higher for males and for blacks. The percentage of children with limitations in major activities follows a similar upward trend since 1990 (see Table HC 2.8.B).

Differences by Gender. Males have consistently accounted for a greater percentage of youth with an activity limitation due to a chronic condition. In 1994, 7.9 percent of males compared to 5.6 percent of females had activity limitations that were caused by a chronic condition (see Figure HC 2.8.A). Looking only at limitations in major activities in 1994, 6.0 percent of males had such limitations compared to 3.8 percent of females (see Figure HC 2.8.B).

Differences by Race. Black youth are more likely than white youth to have activity limitations due to chronic conditions (see Table HC 2.8.A). In 1994, 8.8 percent of black youth had activity limitations compared to 6.4 percent of white youth. A similar gap existed for major activity limitations with 6.7 percent of black youth being limited in major activities and 4.7 percent of white youth.

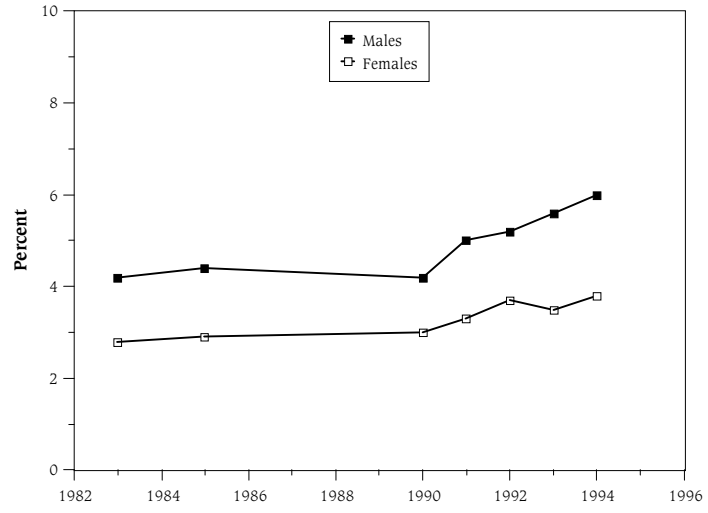
[26] A disease or impairment is classified as chronic if it has been apparent for at least three months or is a new condition that will ordinarily last for more than three months.

Figure HC 2.8.A
Percentage Under Age 18 With an Activity Limitation Due to Chronic Conditions, by Gender: Selected Years, 1983-1994



Source: National Center for Health Statistics, "Current Estimates from the National Health Interview Survey: United States" 1983, 1985, 1990, 1991, 1992, 1993, 1994.

Figure HC 2.8.B
Percentage Under Age 18 With a* Major *Activity Limitation Due to Chronic Conditions, by Gender: Selected Years, 1983-1994



Source: National Center for Health Statistics, "Current Estimates from the National Health Interview Survey: United States" 1983, 1985, 1990, 1991, 1992, 1993, 1994.

Table HC 2.8.A
Activity Limitations:[a] Percentage Under Age 18 With an Activity Limitation Due to Chronic Conditions[b]

	1983	1985	1990	1991	1992	1993	1994
TOTAL	**5.1**	**5.1**	**4.9**	**5.8**	**6.1**	**6.6**	**6.7**
Gender							
Males	5.9	6.0	5.6	6.8	7.1	7.8	7.9
Females	4.3	4.2	4.2	4.7	5.0	5.3	5.6
Race/Ethnicity							
White	5.0	5.1	4.8	5.7	5.9	6.5	6.4
Black	5.7	5.8	5.5	6.8	7.5	7.7	8.8

Notes: [a]An activity limitation is defined as follows: Persons are classified in terms of the major activity usually associated with their particular age group. The major activities for the age groups are a) ordinary play for children under 5 years of age, b) attending school for those 5-17 years of age. A person is classified as having an activity limitation if he or she is: a) unable to perform the major activity, b) able to perform the major activity but limited in the kind or amount of this activity, c) not limited in the major activity but limited in the kind or amount of other activities. [b]A condition is considered chronic if a) the respondent indicates it was first noticed more than 3 months before the reference date of the interview or b) it is a type of condition that ordinarily has a duration of more than 3 months.

Source: National Center for Health Statistics, "Current Estimates from the National Health Interview Survey: United States" 1983, 1985, 1990, 1991, 1992, 1993, 1994.

Table HC 2.8.B
Major *Activity Limitations:[a] Percentage Under Age 18 With an Activity Limitation In a Major Activity Due to Chronic Conditions[b]*

	1983	1985	1990	1991	1992	1993	1994
TOTAL	**3.5**	**3.7**	**3.6**	**4.2**	**4.4**	**4.6**	**4.9**
Gender							
Males	4.2	4.4	4.2	5.0	5.2	5.6	6.0
Females	2.8	2.9	3.0	3.3	3.7	3.5	3.8
Race/Ethnicity							
White	3.4	3.5	3.5	4.1	4.3	4.5	4.7
Black	4.5	4.6	4.2	5.2	6.0	5.7	6.7

Notes: [a]An activity limitation is defined as follows: Persons are classified in terms of the major activity usually associated with their particular age group. The major activities for the age groups are a) ordinary play for children under 5 years of age, b) attending school for those 5-17 years of age. A person is classified as having an activity limitation if he or she is: a) unable to perform the major activity, b) able to perform the major activity but limited in the kind or amount of this activity, c) not limited in the major activity but limited in the kind or amount of other activities. [b]A condition is considered chronic if a) the respondent indicates it was first noticed more than 3 months before the reference date of the interview or b) it is a type of condition that ordinarily has a duration of more than 3 months.

Source: National Center for Health Statistics, "Current Estimates from the National Health Interview Survey: United States" 1983, 1985, 1990, 1991, 1992, 1993, 1994.

HC 2.9

LEAD EXPOSURE

Exposure to lead has long been recognized as a serious health hazard, particularly for infants, toddlers, and preschool-age children, whose developing nervous systems are sensitive to lead. Research during the past two decades has shown that adverse health effects can occur from blood lead levels (BLLs) that had previously been considered safe. Based on this research the Centers for Disease Control and Prevention now consider BLLs at least as low as ten micrograms per deciliter of blood as hazardous for children ages one to five.[27]

Dramatic Decreases in Blood Lead Levels. The percentage of very young children who have been exposed to potentially dangerous levels of lead declined dramatically in the 1980s (see Table HC 2.9). Data gathered between 1976 and 1980 revealed that 88.2 percent of children between the ages of one and five had blood lead levels which have been shown to have adverse health effects. Subsequent data gathered between 1988 and 1991 found that only 8.9 percent of children had hazardous levels of lead in their blood. This dramatic decrease has been attributed primarily to the removal of lead from gasoline and from soldered food and soft drink cans. Other contributing factors have been the ban on leaded paint for residential use in 1978, the ban on lead in solder for household plumbing, and the ongoing screening of children for lead exposure. Deteriorating lead-based paint and lead-contaminated dust in older homes are the primary source of lead exposure for children in the United States today.[28]

Differences by Race/Ethnicity,[29] Family Income, and Place of Residence. The decline in blood lead levels occurred among both non-Hispanic black and non-Hispanic white children.[30] However, non-Hispanic black children, poor and near-poor children, and children living in the central areas of large cities still faced considerably higher risks of being exposed to high levels of lead (see Figure HC 2.9 and Table HC 2.9). For many children, these higher risks were probably related to residence in older homes which contained deteriorated lead-based paint.

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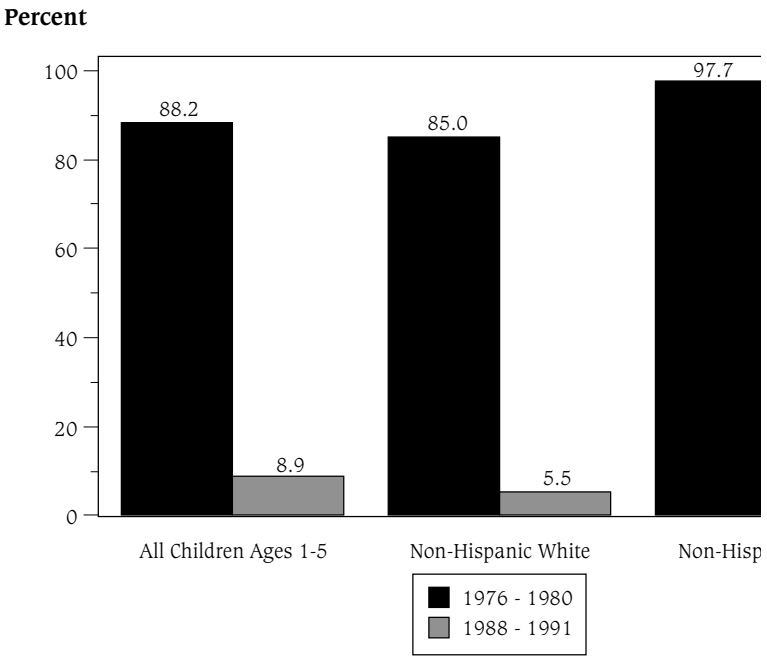
[27] *Centers for Disease Control.* Preventing Lead Poisoning in Young Children: A Statement by the Centers for Disease Control. *Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service: 1991.*

[28] *Centers for Disease Control. " Blood Lead Levels -- United States, 1988-1991.* Morbidity and Mortality Weekly Report *August 5, 1994, Vol. 43, No. 30; and, Pirkle, James L., Brody, Debra J., Gunter, Elaine W., Kramer, Rachel A., Paschal, Daniel C., Flegal, Katherine M., and Matte, Thomas D. (1994) "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES)" in* Journal of the American Medical Association *Volume 272, pp. 284-291.*

[29] *Estimates for whites and blacks exclude Hispanics of those races.*

[30] *Data for Mexican-American children for 1982-1984 and 1988-1991 show a similar trend. While 61.5 percent of 4-5 year old Mexican-American children had hazardous levels of lead in their blood in 1982-1984 the total was 4.9 percent by 1988-91. Pirkle, James L., Brody, Debra J., Gunter, Elaine W., Kramer, Rachel A., Paschal, Daniel C., Flegal, Katherine M., and Matte, Thomas D. (1994) "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES)" in* Journal of the American Medical Association *Volume 272, pp. 284-291.*

Figure HC 2.9
Percentage of Children Ages 1-5 With Blood Lead Levels Greater Than or Equal To Ten Micrograms per Deciliter



Source: Pirkle, James L., Brody, Debra J., Gunter, Elaine W., Kramer, Rachel A., Paschal, Daniel C., Flegal, Katherine M., and Matte, Thomas D. (1994) "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES)" in *Journal of the American Medical Association* Volume 272, pp. 284-291. Brody, Debra J., Pirkle, James L., Kramer, Rachel A., Flegal, Katherine M., Matte, Thomas D., Gunter, Elaine W., and Paschal, Daniel C. (1994). "Blood Lead Levels in the U.S. Population: Phase 1 of the Third National Health and Nutrition Examination Survey (NHANES III, 1988 to 1991)" in *Journal of the American Medical Association* Volume 272, pp. 277-283.

Table HC 2.9
Percentage of Children Ages 1-5 With Blood Lead Levels Greater Than or Equal To Ten Micrograms per Deciliter

	1976-1980	1988-1991
ALL CHILDREN AGES 1-5	**88.2**	**8.9**
Ages 1-2	88.3	11.5
Ages 3-5	88.1	7.3
Race/Ethnicity		
White, non-Hispanic	85.0	5.5
Black, non-Hispanic	97.7	20.6
Income		
0 to 129% of Poverty	—	16.3
130% to 299% of Poverty	—	5.4
300% of Poverty or Greater	—	4.0
Urban Status		
Central City Greater Than 1 Million	—	21.0
Central City Less Than 1 Million	—	16.4
Non–Central City	—	5.8

Source: Pirkle, James L., Brody, Debra J., Gunter, Elaine W., Kramer, Rachel A., Paschal, Daniel C., Flegal, Katherine M., and Matte, Thomas D. (1994) "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES)" in *Journal of the American Medical Association* Volume 272, pp. 284-291. Brody, Debra J., Pirkle, James L., Kramer, Rachel A., Flegal, Katherine M., Matte, Thomas D., Gunter, Elaine W., and Paschal, Daniel C. (1994). "Blood Lead Levels in the U.S. Population: Phase 1 of the Third National Health and Nutrition Examination Survey (NHANES III, 1988 to 1991)" in *Journal of the American Medical Association* Volume 272, pp. 277-283.

HC 2.10

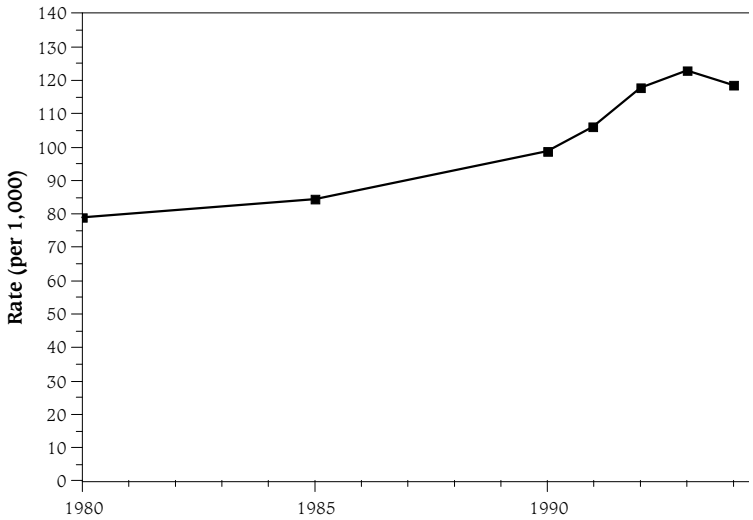
VIOLENT VICTIMIZATION OF TEENS

Violent crimes include simple and aggravated assaults, rape, and robbery (stealing by force or threat of violence). In order to keep track of the incidence of these and other crimes, the United States has been administering the National Crime Victimization Survey on an annual basis since 1972.

Among youth ages 12 to 17, rates of victimization for violent crimes rose from 79 to 99 per thousand between 1980 and 1990 (see Figure HC 2.10) Rates continued to increase to a high of 123 per thousand in 1993 before declining to 118 per thousand in 1994.

Differences by Gender. Boys are considerably more likely than girls to be victims of violent crimes. In 1994, 141 per thousand boys ages 12 to 17 were victims of violent crimes compared to 95 per thousand girls.

Figure HC 2.10
Violent Victimization of Youth:
Rates (per 1,000) for Youth Ages 12-17



Notes: Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology. Victimization rates were calculated using population estimates from the Bureau of the Census Current Population Reports. Such population estimates normally differ somewhat from population estimates derived from survey data. The rates may therefore differ marginally from rates based upon survey derived population estimates.

Source: Unpublished tables, Bureau of Justice Statistics, National Crime Victimization Survey, 1980-1994.

Table HC 2.10
Violent Victimization of Youth: Rates (per 1,000) for Youth Ages 12-17

	1980	1985	1990	1991	1992	1993	1994
Age							
12-17	79.0	84.3	98.6	106.2	117.9	123.1	118.4
12-14	70.4	81.4	102.1	97.6	119.3	121.0	118.2
15-17	86.6	87.1	95.1	115.0	116.4	125.2	118.6
Race/Ethnicity							
White	77.7	87.7	95.4	105.1	121.4	125.7	118.4
Black	91.1	69.3	122.1	127.6	111.8	132.9	135.8
Other	49.7	71.7	76.1	54.2	79.2	49.4	64.7
Sex							
Male	106.4	113.0	131.0	148.9	146.2	149.3	140.5
Female	50.4	54.3	64.4	61.2	88.1	95.5	95.1

Notes: Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology. Victimization rates were calculated using population estimates from the Bureau of the Census Current Population Reports. Such population estimates normally differ somewhat from population estimates derived from survey data. The rates may therefore differ marginally from rates based upon survey-derived population estimates.

Source: Unpublished tables, Bureau of Justice Statistics, National Crime Victimization Survey, 1980-1994.

HC 2.11

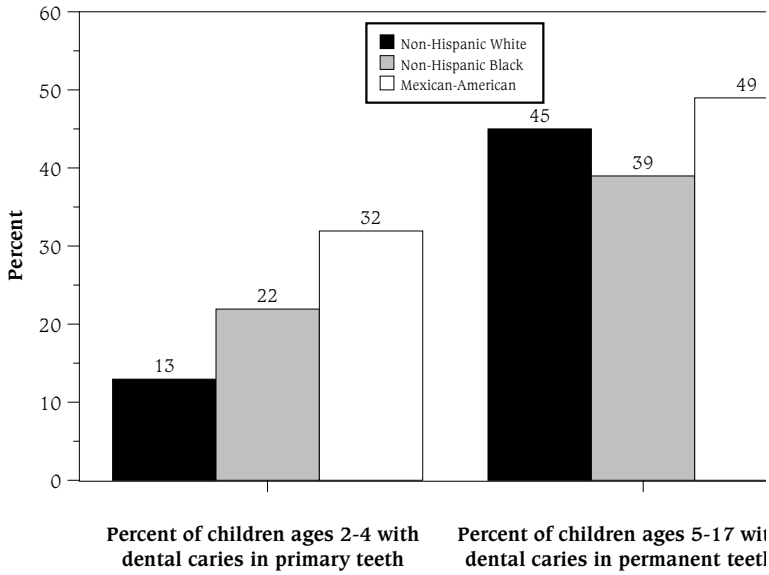
DENTAL CARIES

"Dental caries" is a technical term referring to either treated or untreated tooth decay in one or more teeth. Proper preventive care reduces the incidence of dental caries. The presence of dental caries may indicate a lack of access to preventive care or a lack of information about preventive techniques.[31]

Racial and Ethnic Differences in Dental Caries. Mexican American children ages two through four had the highest prevalence of dental caries in their primary teeth (see Figure HC 2.11). Almost one-third of Mexican American children had dental caries compared to 22 percent of black children and 13 percent of white children. Mexican American children also had the highest prevalence of dental caries in permanent teeth, but the gap among children ages five through 17 was much smaller than it was for younger children. Black children had the lowest percentage of dental caries with 39 percent, compared to 45 percent for white children and 49 percent for Mexican American children.

[31] *Kaste, L.M., R.H. Selwitz, R.J. Oldakowski, J.A. Brunelle, D.M. Winn and L.J. Brown (1996). "Coronal Caries in the Primary and Permanent Dentition of Children and Adolescents 1-17 Years of Age: United States 1988-1991."* Journal of Dental Research 75: 631-641. *Rockville, MD: National Institutes of Health. National Institute of Dental Research, Division of Epidemiology and Oral Disease Prevention.*

Figure HC 2.11
Percentage of Children with Dental Caries
1988-1991



Source: Kaste, L.M., Selwitz, R.H., Oldakowski, R.J., Brunelle, J.A., Winn, D.M., & Brown, L.J. (1996) "Coronal Caries in the Primary and Permanent Dentition of Children and Adolescents 1-17 Years of Age: United States, 1988-1991." Journal of Dental Research, 75, 631-641. Rockville, MD: National Institutes of Health. National Institute of Dental Research, Division of Epidemiology and Oral Disease Prevention.

Table HC 2.11
Percentage of Children with Dental Caries
1988-1991

	Non-Hispanic White	Non-Hispanic Black	Mexican-American
Percent of children ages 2-4 w/dental caries in primary teeth	13	22	32
Percent of children ages 5-17 w/dental caries in permanent teeth	45	39	49

Source: Kaste, L.M., Selwitz, R.H., Oldakowski, R.J., Brunelle, J.A., Winn, D.M., & Brown, L.J. (1996) "Coronal Caries in the Primary and Permanent Dentition of Children and Adolescents 1-17 Years of Age: United States, 1988-1991." Journal of Dental Research, 75, 631-641. Rockville, MD: National Institutes of Health. National Institute of Dental Research, Division of Epidemiology and Oral Disease Prevention.

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.[32] Regular care increases the continuity of care, which is important to the maintenance of good health.

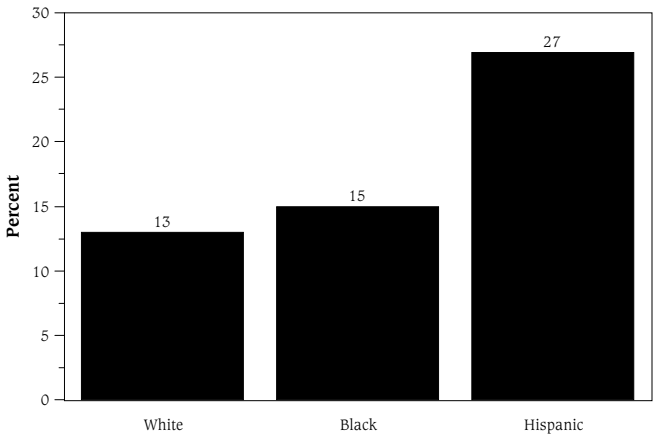
Since 1987, the percentage of children who are not covered by health insurance has stayed stable at 13 to 14 percent (see Table HC 3.1.A). Rates of coverage vary little by age of child, though older children are slightly less likely to be covered.

Differences by Race and Ethnicity. Hispanic children are far less likely to be covered than either white or black children. In 1995, 27 percent of Hispanic children were not covered by health insurance, compared to 13 percent of whites and 15 percent of black children (see Figure HC 3.1.A).

Children Covered by Medicaid. The proportion of children who are covered by Medicaid has grown substantially over time, increasing from 15 percent in 1987 to a high of 24 percent in 1993, before declining slightly to 23 percent in 1994 and 1995 (see Figure HC 3.1.B). Young children are considerably more likely to be covered by Medicaid. In 1995, 30 percent of children under age six were covered, compared to 17 percent of children ages 12 through 17. Finally, a very large proportion of black and Hispanic children rely on Medicaid for their medical coverage. In 1995, 45 percent of black and 37 percent of Hispanic children were covered by Medicaid, compared to 18 percent of white children.

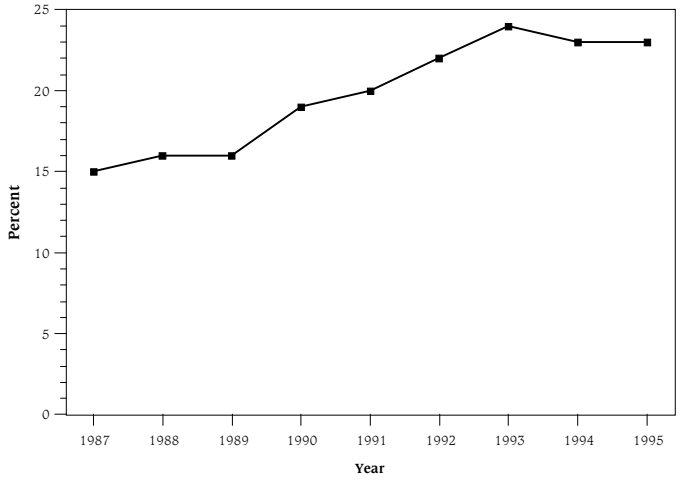
[32] *National Center for Health Statistics, "Health of Our Nation's Children" 1988. Vital Statistics Health Series, No. 191.*

Figure HC 3.1.A
Percentage of Children Under Age 18 Not Covered by Health Insurance, by Race and Ethnicity Group: 1995



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.B
Percentage of Children Under Age 18 Who Were Covered by Medicaid: 1987-1995



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.A
Percentage of Children Under Age 18
Not Covered by Health Insurance: 1987-1995

	1987	1988	1989	1990	1991	1992	1993	1994	1995
All Children	**13**	**13**	**13**	**13**	**13**	**13**	**14**	**14**	**14**
Age 0-5	12	13	13	11	11	11	12	14	13
Age 6-11	13	13	13	13	12	12	13	13	13
Age 12-17	14	14	14	15	15	15	17	15	14
Race/Ethnicity									
White	12	12	12	13	12	12	13	13	13
Black	17	16	16	15	15	14	16	17	15
Hispanic	28	29	30	28	27	25	26	28	27

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 Covered by Medicaid: 1987-1995

	1987	1988	1989	1990	1991	1992	1993	1994	1995
All Children	**15**	**16**	**16**	**19**	**20**	**22**	**24**	**23**	**23**
Age 0-5	18	19	20	24	27	30	32	30	30
Age 6-11	15	15	15	17	19	20	22	22	23
Age 12-17	12	12	11	14	15	15	17	16	17
Race/Ethnicity									
White	11	11	11	14	16	17	19	18	18
Black	38	38	37	42	44	46	47	44	45
Hispanic	26	25	25	30	34	37	39	37	37

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.A

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 number 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.[33]

The percentage of mothers receiving prenatal care in the first trimester has increased from 68.0 percent in 1970 to 81.2 percent in 1995 (see Table HC 3.2.A). 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 white, black, and Hispanic women.[34] While the gains have been greatest for black and Hispanic women, white women are still the most likely to receive prenatal care in their first trimester (see Figure HC 3.2.A).

- 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 70.3 percent by 1995.

- The percentage of Hispanic women who receive early prenatal care has increased steadily, from 60.2 percent in 1980 to 70.4 percent by 1995.

- The percentage of white women receiving early prenatal care increased from 72.3 percent to 79.2 percent between 1970 and 1980, was stable through the 1980s, then increased during the 1990s to 83.5 percent by 1995.

Differences by Age of Mother. 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.

- Receipt of early prenatal care among women under age 15 improved considerably between 1975 and 1994, increasing from 30.9 percent to 45.7 percent.

- 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 86.2 percent by 1994.

- More than 80 percent of mothers age 25 and older received early prenatal care throughout the 1990s.

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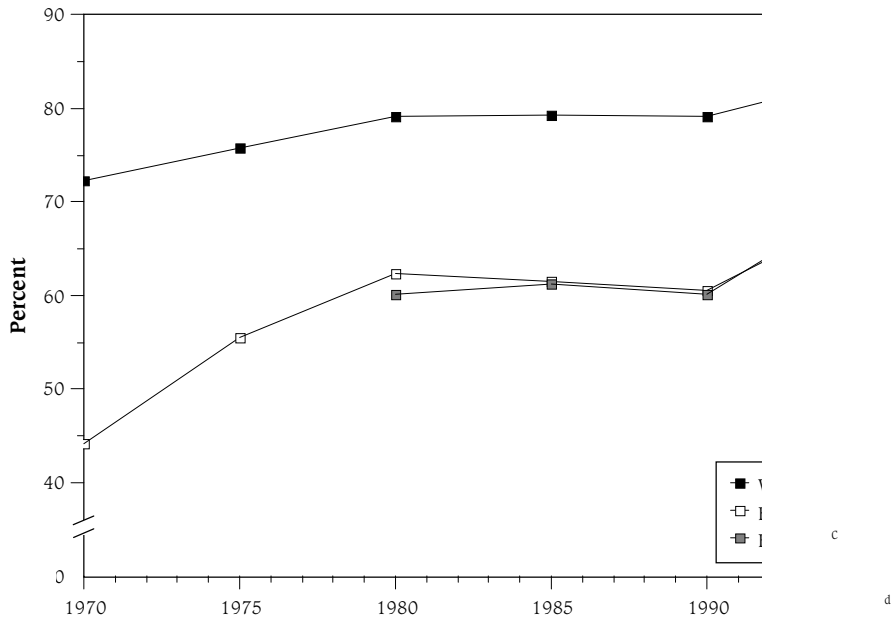
[33] *U.S. Public Health Service. "Caring for Our Future: The Content of Prenatal Care." Washington, D.C.: U.S. Department of Health and Human Services. 1989.*

[34] *This data includes only those women who gave birth, not all women who were pregnant.*

Figure HC 3.2.A
Percentage of Mothers Receiving Prenatal Care[a] in the First Trimester, by Race/Ethnicity,[b] for Selected Years 1970-1995



Notes: [a]The data refer to those women who had live births.
[b]Percentages are based on the race and ethnicity of the mother.
[c]Figures for Hispanic women in 1980 are based on data from 22 States which report 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.
[d]Data for 1995 are preliminary.

Source: National Center for Health Statistics. *Health, United States, 1995*. Hyattsville, Maryland: Public Health Service. 1996. (table 7 for totals and race/ethnicity breaks for 1970-1993); 1975 data from: Monthly Vital Statistics Report. Vol. 25, No. 10, Supplement. 1976 (table 17); 1980 data from: Monthly Vital Statistics Report. Vol. 31, No. 8, Supplement. 1982 (table 20); 1985 data from: Monthly Vital Statistics Report. Vol. 36, No. 4, Supplement. 1987 (table 25); 1990 data from: Monthly Vital Statistics Report. Vol. 41, No. 9, Supplement. 1993 (tables 26 and 30); 1992 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1992." Monthly Vital Statistics Report, Vol. 43, No. 5, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1994 (tables 24 and 33); 1993 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1993." Monthly Vital Statistics Report, Vol. 44, No. 3, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1995 (tables 24 and 33); 1994 data from: Ventura, S.J., Martin, J.A., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1994." Monthly Vital Statistics Report, Vol. 44, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1996 (tables 24 and 33). 1995 preliminary data from: Rosenberg, H.M., Ventura, S.J., Maurer, J.D., Heuser, R.L., Freedman, M.A. "Births and Deaths: United States, 1995." Monthly Vital Statistics Report, Vol 45, No. 3, Supplement 2. Hyattsville, Maryland: National Center for Health Statistics. 1996 (table A).

Table HC 3.2.A
Percentage of Mothers Receiveing Prenatal Care in the First Trimester: Selected Years, 1970-1995[a]

	1970	1975	1980	1985	1990	1992	1993	1994	1995[d]
Total	**68.0**	**72.4**	**76.3**	**76.2**	**75.8**	**77.7**	**78.9**	**80.2**	**81.2**
Race/Ethnicity[b,c]									
White	72.3	75.8	79.2	79.3	79.2	80.8	81.8	82.8	83.5
Black	44.2	55.5	62.4	61.5	60.6	63.9	66.0	68.3	70.3
Hispanic	—	—	60.2	61.2	60.2	64.2	66.6	68.9	70.4
Age of Mother									
Under 15	—	30.9	34.5	36.0	37.9	42.9	44.8	45.7	—
15-19	—	53.3	56.3	53.9	55.1	59.5	61.9	64.3	—
20-24	—	73.4	74.9	71.7	68.9	71.2	72.8	74.6	—
25-29	—	81.5	84.0	83.1	81.7	82.9	83.6	84.5	—
30-34	—	78.9	84.4	85.5	85.3	86.4	86.9	87.7	—
35 and older	—	68.4	76.1	81.3	83.4	84.6	85.3	86.2	—

Note: [a]The data refer to those women who had live births.
[b]Percentages are based on the race and ethnicity of the mother.
[c]Figures for Hispanic women in 1980 are based on data from 22 States which report 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.
[d]Data for 1995 are preliminary.

Sources: National Center for Health Statistics. *Health, United States, 1995*. Hyattsville, Maryland: Public Health Service. 1996. (table 7 for totals and race/ethnicity breaks for 1970-1993); 1975 data from: Monthly Vital Statistics Report. Vol. 25, No. 10, Supplement. 1976 (table 17); 1980 data from: Monthly Vital Statistics Report. Vol. 31, No. 8, Supplement. 1982 (table 20); 1985 data from: Monthly Vital Statistics Report. Vol. 36, No. 4, Supplement. 1987 (table 25); 1990 data from: Monthly Vital Statistics Report. Vol. 41, No. 9, Supplement. 1993 (tables 26 and 30); 1992 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1992." Monthly Vital Statistics Report, Vol. 43, No. 5, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1994 (tables 24 and 33); 1993 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1993." Monthly Vital Statistics Report, Vol. 44, No. 3, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1995 (tables 24 and 33); 1994 data from: Ventura, S.J., Martin, J.A., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1994." Monthly Vital Statistics Report, Vol. 44, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1996 (tables 24 and 33). 1995 preliminary data from: Rosenberg, H.M., Ventura, S.J., Maurer, J.D., Heuser, R.L., Freedman, M.A. "Births and Deaths: United States, 1995." Monthly Vital Statistics Report, Vol 45, No. 3, Supplement 2. Hyattsville, Maryland: National Center for Health Statistics. 1996 (table A).

HC 3.2.B

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 low birth weight, who are stillborn, or who die within the first year of life.[35] Between 1970 and 1994, the percentage of women receiving late or no prenatal care declined from 7.9 percent to 4.4 percent (see Figure HC 3.2.B).

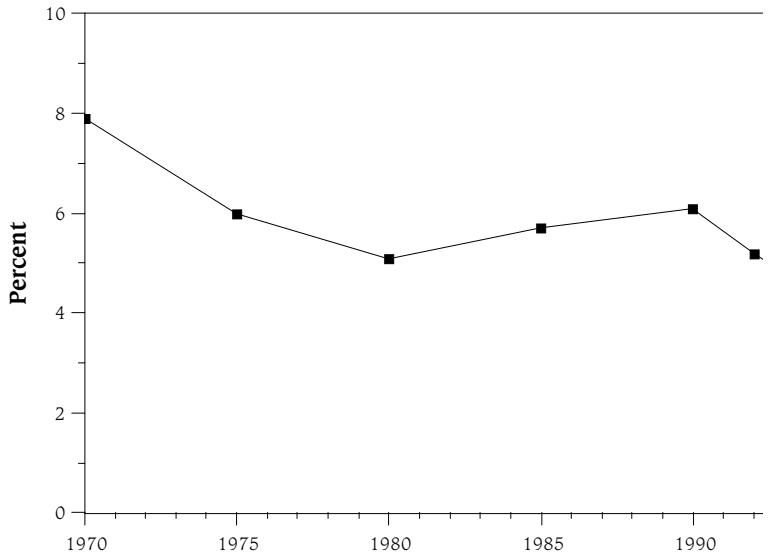
Differences by Race and Ethnicity. The percentage of mothers who receive late or no prenatal care has declined substantially for mothers in all race and ethnic groups (see Table HC 3.2.B):

- Black mothers have seen the most dramatic improvement, with the percentage receiving late or no prenatal care dropping by half between 1970 and 1994. In 1994, 8.2 percent of black mothers received late or no prenatal care.
- The percentage of Hispanic women receiving late or no prenatal care has decreased every year since 1990, and at 7.6 percent in 1994 was lower than the rate for black women.
- White women have consistently been least likely to receive late or no prenatal care. In 1994, 3.6 percent of white women received late or no prenatal care.

Differences by Age. In general, as the age of the mother increases, the likelihood of receiving late or no prenatal care decreases. The percentage of mothers age 15 and younger who received late or no prenatal care is nearly double that of mothers ages 15 through 19, and three to five times greater than mothers 20 years and older. Although their rates remain much higher than any other age group, the percentage of mothers age 15 and under who received late or no prenatal care has improved dramatically since 1975, decreasing to 15.9 percent by 1994. Percentages among mothers age 15 through 19 have also improved over this time period, decreasing to 8.0 percent in 1994. Less than four percent of women in each age group over 25 received late or no prenatal care during pregnancy, especially women age 30 through 34 whose rate of late or no prenatal care reached a new low of 2.7 percent in 1994.

[35] *U.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.*

Figure HC 3.2.B
Percentage of Mothers Receiving Late[a] or No Prenatal Care: Selected Years, 1970-1994[b]



Notes: [a]Late prenatal care is defined as 7th month or later.
[b]The data refer to those women who had live births.

Source: 1970 and 1975 data from: Unpublished tabulations, National Center for Health Statistics. 1980 - 1993 data from: National Center for Health Statistics. *Health United States, 1995*. Hyattsville, Maryland: Public Health Service, 1996 (table 7). 1994 data from: Ventura, S.J., Martin, J.A., Mathews, T.J. and Clarke, S.C. "Advance Report of Final Natality Statistics, 1994." Monthly Vital Statistics Report, Vol. 44, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1996 (tables 24 and 33).

Table HC 3.2.B
Percentage of Mothers Receiving Late[a] or No Prenatal Care: Selected Years, 1970-1994[b]

	1970	1975	1980	1985	1990	1992	1993	1994
Total	**7.9**	**6.0**	**5.1**	**5.7**	**6.1**	**5.2**	**4.8**	**4.4**
Race/Ethnicity[c,d]								
White	6.3	5.0	4.3	4.8	4.9	4.2	3.9	3.6
Black	16.6	10.5	8.9	10.2	11.3	9.9	9.0	8.2
Hispanic	—	—	12.0	12.4	12.0	9.5	8.8	7.6
Age								
< 15	—	21.1	20.0	20.5	20.3	17.2	16.6	15.9
15-19	—	10.8	10.3	12.0	11.9	9.7	8.9	8.0
20-24	—	5.8	5.4	6.9	8.0	6.7	6.2	5.6
25-29	—	3.6	3.1	3.8	4.4	3.9	3.7	3.4
30-34	—	4.3	3.0	3.1	3.4	3.0	2.9	2.7
35 and older	—	7.5	5.4	4.5	4.1	3.6	3.4	3.1

Notes: [a]Late prenatal care is defined as 7th month or later.
[b]The data refer to those women who had live births.
[c]Percentages are based on the race and ethnicity of the mother.
[d]Figures for Hispanic women in 1980 are based on data from 22 States which report 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: 1970 and 1975 data from: Unpublished tabulations, National Center for Health Statistics. *Health, United States, 1995*. Hyattsville, Maryland: Public Health Service. 1996. (table 7 for totals and race/ethnicity breaks for 1980-1993); 1980 data from: Monthly Vital Statistics Report. Vol. 31, No. 8, Supplement. 1982 (table 20); 1985 data from: Monthly Vital Statistics Report. Vol. 36, No. 4, Supplement. 1987 (table 25); 1990 data from: Monthly Vital Statistics Report. Vol. 41, No. 9, Supplement. 1993 (tables 26 and 30); 1992 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke, S.C. "Advance Report of Final Natality Statistics, 1992." Monthly Vital Statistics Report, Vol. 43, No. 5, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1994 (tables 24 and 33); 1993 data from: Ventura, S.J., Martin, J.A., Taffel, S.M., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1993." Monthly Vital Statistics Report, Vol. 44, No. 3, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1995 (tables 24 and 33); 1994 data from: Ventura, S.J., Martin, J.A., Mathews, T.J. and Clarke S.C. "Advance Report of Final Natality Statistics, 1994." Monthly Vital Statistics Report, Vol. 44, No. 11, Supplement. Hyattsville, Maryland: National Center for Health Statistics. 1996 (tables 24 and 33).

HC 3.2.C

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 mothers receiving inadequate prenatal care has decreased since 1990.

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 receiving inadequate care. This gap has existed since at least 1984 (see Table HC 3.2.C). For example, in 1994, 12.0 percent of black women received inadequate prenatal care, compared to 4.9 percent of white women.

Table HC 3.2.C
Percentage Receiving Inadequate Prenatal Care (Based on the Kessner Index[a]), by Race for Selected Years: 1984-1994[b]

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

Notes: [a]The 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*

[b]Based on 49 states for 1984-1988 and all 50 states of the United States, 1989-1994. Births with period of gestation, number of prenatal visits or month pregnancy care began not stated were excluded from tabulation.

[c]In 1990, 1991, 1992, 1993 and 1994 race is of mother; for 1984, 1986 and 1988, race is of child.

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

HC 3.3

IMMUNIZATION: PERCENTAGE OF CHILDREN AGED 19 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.

There were substantial increases in the proportion of children vaccinated between 1991 and 1994 for each of the recommended vaccines presented in Table HC 3.3.A. These improvements are observed for all children, but particularly for low-income children, minority children, and children living in urban and rural areas (see Table HC 3.3.A). Between 1991 and 1994 there was also a substantial improvement in the proportion of children receiving the combined series of DTP, OPV and MMR (4:3:1)[36] vaccination (see Figure HC 3.3.A).

Even with the increases of recent years, more than one million children remain unvaccinated for serious preventable diseases.[37] In particular, there are differences in immunization rates by income, race, and place of residence.

Differences by Income. Children in households at or above poverty are more likely to have received each of the vaccinations specified in each year from 1991 to 1994 than are children in households below poverty. However, the gap between vaccination levels of poor and non-poor children decreased from 1991 to 1994. For instance, the percentage of poor children vaccinated for polio was 38.7 percent in 1991, compared to 59.5 percent of children at or above the poverty line, nearly a 21 percentage point gap. By 1994, that gap had closed to less than one percentage point, with respective percentages at 79.4 and 79.9.

Differences by Race. White infants ages 19 to 35 months have higher percentages of vaccination receipt than do black children or children of other races. The disparity in vaccination levels between white and black infants has narrowed from 1991 to 1994, as the vaccination levels of black children have greatly improved.

Differences by Place of Residence. For many, but not all diseases, suburban children are more likely than either rural or urban children to have been vaccinated.

Provider-Adjusted Estimates. Unlike data for previous years, which were based only on parent reports, 1994-1995 immunization estimates are based on information from parents and health care providers. These newer estimates are more accurate and reflect higher rates of immunization than those based on parent reports alone. Data for 1994-1995 cannot be compared to estimates for 1991-1994, however, since an undetermined portion of the observed increase is due to this change in methodology.

The most recent provider-adjusted estimates (July 1994–June 1995) indicate that 75 percent of children ages 19 to 35 months received their 4:3:1 combined series vaccinations. Fifty-one percent of all children in that age group had received their Hepatitis B vaccination (see Table HC 3.3.B).

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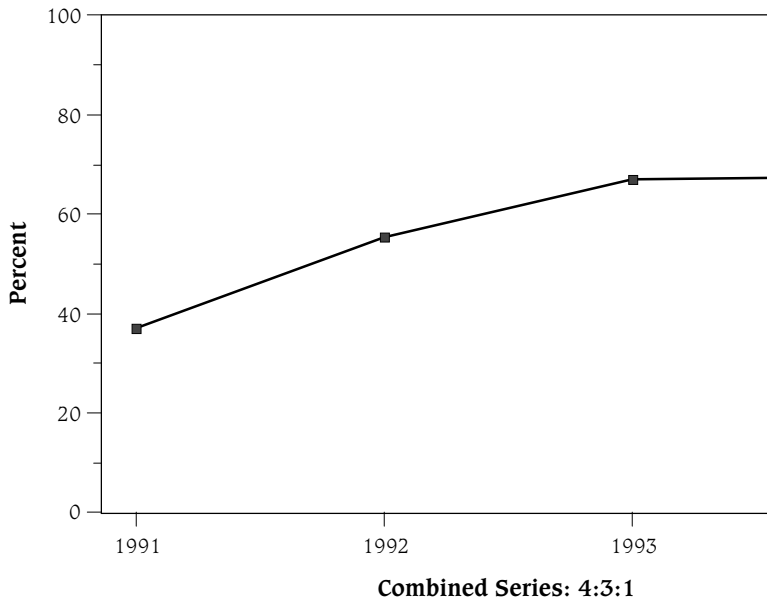
[36] Four doses diphtheria, tetanus toxoids and pertussis vaccine (DTP); three doses poliovirus vaccine (OPV); and one dose measles-mumps-rubella vaccine (MMR).

[37] Centers for Disease Control and Prevention. "Vaccination Coverage Levels Among Children Aged 19-35 Months -- United States, April-December 1994." Morbidity and Mortality Weekly Report. Vol. 44, No. 33, August 25, 1995

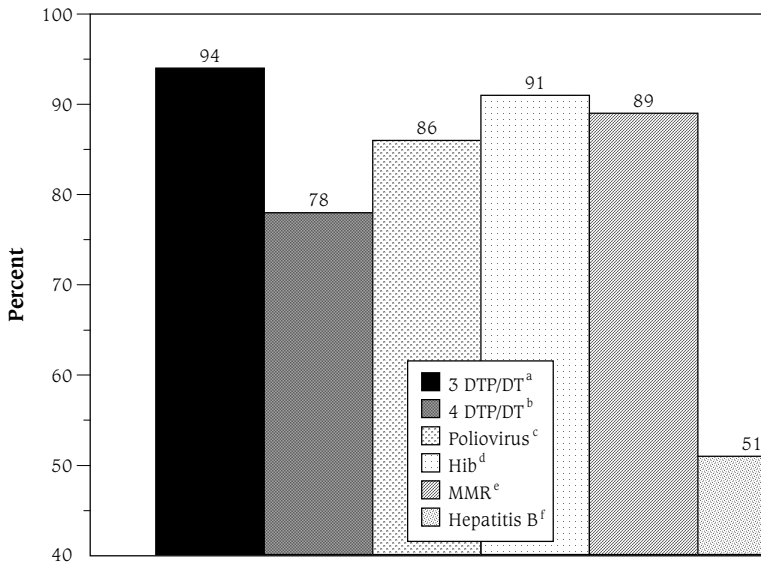
Figure HC 3.3.A
Percentage of Children 19-35 Months Who Received the Combined Series[a] Immunizations:[b] 1991-1994



Note: [a]Four doses DTP, three doses poliovirus, one dose measles-mumps-rubella vaccine.
[b]Data are based on household interviews of a sample of the non-civilian, non- institutionalized population. Refusals and unknowns were excluded.

Source: Centers for Disease Control and Prevention. Data computed by the National Immunization Program, Center for Prevention Services from data compiled by the Division of Health Interview Statistics, National Center for Health Statistics.

Figure HC 3.3.B
Vaccination Coverage Levels Among Children Aged 19-35 Months, by Selected Vaccines—National Immunization Survey, U.S., July 1994–June 1995



Note: [a]3 DTP/DT is 3 or more doses of diphtheria and tetanus toxoids and pertussis vaccine/diphtheria and tetanus toxoids.
[b]4 DTP/DT is 4 or more doses of DTP/DT.
[c]Poliovirus is 3 or more doses of poliovirus vaccine.
[d]Hib is 3 or more doses of Haemophilus influenzas type b vaccine.
[e]MMR is 1 or more doses of measles-mumps-rubella vaccine.
[f]Hepatitis B is 3 or more doses of Hepatitis B vaccine.

Source: Morbidity and Mortality Weekly Reports. "National, State and Urban Area Vaccination Coverage Levels Among Children Aged 19-35 Months - United States, July 1994 - June 1995," June 21, 1996, Vol. 45, No. 24, Table 1.

Table HC 3.3.A
Percentage of Children Aged 19-35 Months Who Have Received Vaccinations for Routinely Recommended Vaccines[a], by Selected Characteristics—U.S.: 1991-1994

		RACE			POVERTY STATUS[b]		LOCATION OF RESIDENCE[c]		
	Total	White	Black	Other[d]	Below Poverty	At/Above Poverty	Urban	Suburban	Rural
≥3 Doses DTP*									
1991	68.8	73.4	50.6	58.0	53.0	75.7	64.8	72.3	67.6
1992	83.1	84.8	74.7	79.3	79.7	84.6	82.5	84.4	80.7
1993	88.2	89.4	82.6	84.5	80.6	90.8	85.8	89.8	88.5
1994	89.5	90.6	84.4	87.9	88.8	90.3	87.7	90.4	90.0
≥4 Doses DTP*									
1991	43.3	47.3	27.9	33.1	29.9	48.6	36.4	46.4	47.5
1992	59.0	59.5	55.0	62.4	54.4	61.0	59.7	60.0	55.4
1993	72.1	73.0	69.2	64.7	65.3	74.6	68.5	75.6	70.6
1994	70.1	70.8	64.4	77.3	67.7	71.2	67.2	72.1	69.9
≥3 Doses Poliovirus									
1991	53.2	57.3	35.6	49.8	38.7	59.5	49.9	55.8	52.5
1992	72.4	74.1	62.7	75.5	66.6	74.7	74.1	72.6	69.0
1993	78.9	79.8	73.4	80.8	73.3	81.0	75.3	79.7	82.5
1994	79.2	80.3	73.2	81.7	79.4	79.9	76.4	80.9	79.5
≥3 Doses Hib**									
1991	1.7	1.9	1.4	0.0	0.0	2.2	0.9	2.5	1.2
1992	28.2	29.1	25.5	23.0	23.0	29.8	27.5	31.8	20.8
1993	55.0	56.9	44.8	56.9	43.9	59.6	47.8	60.5	55.2
1994	75.0	76.6	67.2	72.3	72.1	76.6	70.6	76.7	77.6
Measles†									
1991	82.0	82.9	77.4	83.8	73.4	86.6	78.4	85.0	81.1
1992	82.5	83.6	77.9	79.9	80.2	84.3	84.5	83.3	77.2
1993	84.1	86.0	76.9	72.5	78.4	86.9	84.2	86.2	79.8
1994	90.3	91.7	86.0	81.1	88.3	91.8	87.9	91.7	91.0
≥3 Doses Hepatitis B									
1991	—	—	—	—	—	—	—	—	—
1992	—	—	—	—	—	—	—	—	—
1993	16.3	16.3	16.0	16.7	11.3	18.2	17.4	19.0	9.3
1994	34.4	33.7	36.2	39.7	31.6	35.2	33.8	37.8	27.1
Combined Series: 4:3:1†									
1991	37.0	41.4	20.8	27.5	23.8	42.2	31.7	38.6	41.9
1992	55.3	55.9	50.9	57.5	51.4	56.7	57.7	55.4	50.5
1993	67.1	68.4	61.8	58.4	58.7	70.5	62.1	71.4	66.0
1994	67.5	68.4	61.2	72.4	64.9	68.8	63.5	69.7	68.3
Combined Series: 3:3:1§									
1991	50.0	54.5	31.4	44.2	34.3	56.6	46.6	52.8	49.4
1992	68.7	70.0	60.2	71.9	65.0	70.2	72.4	68.2	63.2
1993	74.5	75.7	69.2	68.0	66.8	77.7	71.5	76.3	75.3
1994	77.3	78.7	70.5	76.3	76.6	78.4	72.9	79.5	78.9

*Diphtheria, tetanus toxoids, and pertussis vaccine.
**Hemophilus influenzas type b vaccine.
†Any vaccination containing measles vaccine.
†Four doses DTP, three doses poliovirus, one dose measles-mumps-rubella vaccine.
§Three doses DTP, three doses poliovirus, one dose measles-mumps-rubella vaccine.
[a]Data are based on household interviews of a sample of the non-civilian, non-institutionalized population. Refusals and unknowns were excluded. Exclusions included unknown vaccine type.
[b]Poverty status is based on family income and family size using Bureau of the Census poverty thresholds.
[c]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 the MSA.
[d]Limitations in sample size precluded collection of data about ethnicity and analysis of data for races other than black and white.

Source: Centers for Disease Control and Prevention. Data computed by the National Immunization Program, Center for Prevention Services from data compiled by the Division of Health Interview Statistics, National Center for Health Statistics.

Table HC 3.3.B
Percentage of Children Aged 19-35 Months Who Have Received Vaccinations for Routinely Recommended Vaccine, by Selected Vaccines—National Immunization Survey, U.S.[a] July 1994–June 1995

Vaccine/Dose	July 1994 - June 1995
DPT/DT*	
≥3 Doses	94
≥4 Doses	78
Poliovirus	
≥3 Doses	86
Hib¶	
≥3 Doses	91
MMR§	
≥1 Dose	89
Hepatitis B	
≥3 Doses	51
19-24 Months	64
25-30 Months	51
31-35 Months	34
Combined Series	
4 DTP/3 Polio/1 MMR†	75
4 DTP/3 Polio/1 MMR/3 Hib†	73

*Diphtheria and tetanus toxoids and pertussis vaccine/Diphtheria and tetanus toxoids.
¶Hemophilus influenzas type b vaccine.
§Measles-mumps-rubella vaccine.
†Four doses DTP/DT, three doses poliovirus vaccine, and one dose MMR.
†Four doses DTP/DT, three doses poliovirus vaccine, one dose MMR, three doses Hib.
[a]Data are based on household interviews of a sample of the non-civilian, non-institutionalized population. Refusals and unknowns were excluded.

Note: In 1994-1995, data from the household interviews is supplemented 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," June 21, 1996, Vol. 45, No. 24, Table 1. (Data from the National Immunization Survey.)