Child Health USA 2005
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Preface

The Health Resources and Services Administration’s Maternal and Child Health Bureau (MCHB) is pleased to present Child Health USA 2005, the 16th annual report on the health status and service needs of America’s children. To assess the Bureau’s progress toward achieving its vision for a Nation where all individuals enjoy equal access to quality health care in a supportive, culturally competent family and community setting, the MCHB has compiled this book of secondary data for more than 50 health and health care indicators. It provides both graphical and textual summaries of data and addresses long-term trends where applicable.

All of the data discussed in this book came from the same sources as the information in the graphs (unless otherwise noted). Data are presented for the target populations of Title V funding: infants, children, adolescents, children with special health care needs, and women of childbearing age. In addition to population characteristics, this book also addresses health status and health services utilization. Child Health USA 2005 also provides insight into the Nation’s progress toward the goals set out in the MCHB’s strategic plan—to assure quality of care, to eliminate barriers and health disparities, and to improve the health infrastructure and system.

Child Health USA is published to provide the most current data available for public health professionals and other individuals in the private and public sectors. The book’s succinct format is intended to facilitate the use of the information as a snapshot of measures of children’s health in the United States.

Population Characteristics is the first section and presents statistics on factors that influence the well-being of children. The second section, entitled Health Status, contains vital statistics and health behavior information for infants, children, adolescents, and women of childbearing age. Health Services Financing and Utilization, the third section, includes data regarding health care financing and newly implemented health policies. The fourth and fifth sections, State Data and City Data, contain information on selected indicators at the those levels.

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In 2004, approximately 25 percent of the United States population was under the age of 18. The racial and ethnic distribution of these 73 million children demonstrates the growing diversity of this population: 58 percent were non-Hispanic White, 19 percent were Hispanic, 15 percent were Black, 4 percent were Asian or Pacific Islander, and the remaining 4 percent were of other races (including more than one race). The health of these children depends on preventive services such as prenatal care and immunization, as well as the promotion of healthy life choices. These measures help assure that children are born healthy and maintain good health as they age, and to be successful requires the continuing effort of individuals, families, communities, and health care providers.

Preventive care for children begins even before they are born. Timely prenatal care is an important preventive strategy that can help protect the health of both mother and child. Entry into prenatal care during the first trimester has been improving, reaching 84.1 percent of pregnant women in 2003. This rate is lower for younger women and Black and Hispanic women. A small number of pregnant women (3.5 percent in 2003) go without prenatal care until the third trimester, or forgo it entirely. This is more common among Black and Hispanic women, as well as younger women, unmarried women, and women with low levels of education.

Healthy birth weight is an important indicator of young children’s health. Despite high rates of prenatal care utilization, the rate of low birth weight (LBW)—less than 2,500 grams (5 pounds 8 ounces)—is currently at the highest level recorded in the past 3 decades. In 2003, 7.9 percent of all births were considered low birth weight. Very low birth weight (VLBW)—less than 1,500 grams (3 pounds 4 ounces)—is also on the rise, representing 1.4 percent of all live births in 2003, compared to approximately 1 percent in 1980. These babies are significantly more likely to die in the first year of life than babies of normal birth weight, and those who survive are at particularly high risk for severe physical, developmental, and cognitive problems. Although rates of maternal and infant mortality have dropped dramatically in the past century, the United States still has one of the highest rates of infant death in the industrialized world. Of every 1,000 infants born alive in 2003, seven died in their first year.

Breastfeeding can also support the health of infants and mothers. Breastfeeding rates have increased steadily since the beginning of the 1990s. In 2003, the breastfeeding initiation rate reached 70.9 percent, the highest yet recorded. However, the rate declines dramatically as infant age increases, and only 36.2 percent of mothers were still breastfeeding their infants at 6 months. The exclusive breastfeeding at 6 months rate was even lower (14.2 percent).

The preventive health measure that is probably most recognized among the public is childhood immunization. Vaccines are available for public health threats such as measles, mumps, rubella (German measles), polio, diphtheria, tetanus, pertussis (whooping cough), and H. influenzae type b (a bacterium that causes meningitis). The Healthy People 2010 objective is to immunize at least 90 percent of 19- to 35-month-olds with the full series of recommended childhood vaccines. A 2002-03 survey from the Centers for Disease Control and Prevention shows that 80.5 percent of children 19 to 35 months of age had
received the recommended series of vaccines. As a result of the increasing success of immunization, the number of reported cases of vaccine-preventable diseases continues to decrease. In 2003, there were no reported cases of diphtheria, tetanus, rubella, or polio among children under 5 years of age, and very few cases of hepatitis B, measles, and mumps.

Dental care is another important preventive service for children—one that is too often overlooked. In 2003, 70.8 percent of children visited a dentist within the past year, but among children living in families with incomes below 200 percent of the poverty level the rate was only 60.5 percent. To promote good oral hygiene, the American Academy of Pediatrics recommends that children begin annual dental visits within 6 months of the eruption of their first tooth and no later than 12 months of age.

Despite our best preventive efforts, children are still vulnerable to a number of diseases, conditions, and other risks to their health and well-being. Asthma, for instance, is a disease that causes wheezing, chest tightness, and shortness of breath, and can lead to school absences, hospitalization, and even death. In 2003, almost 8 percent of children under 18 years of age were reported by parents to be affected by asthma. This includes all children whose parents reported that a doctor ever told them the child had asthma and that the child still has asthma, and children who, in the past year, used asthma medication, had moderate or severe difficulties combined with an attack, or had been hospitalized for asthma. It was most often reported among non-Hispanic Black children and children living in families with incomes below the poverty level.

According to the Youth Risk Behavior Survey, 13.5 percent of high school students were overweight in 2003, and almost one-third described themselves as overweight. Childhood overweight is associated with significant health problems; for instance, high cholesterol and high blood pressure, which are risk factors for heart disease, occur more frequently among overweight children than those with a healthier weight. Overweight is also closely linked to type 2 diabetes, and can have emotional effects such as poor self-esteem and depression. Regular exercise helps to regulate weight, and in 2003, over 60 percent of high school students engaged in sufficient vigorous activity and over half of high school students performed regular strengthening exercises.

Mental health issues are also a risk to the health of children and adolescents. In 2003, approximately 10 percent of children were reported by their parents to have moderate to severe socioemotional problems; this includes children who
have difficulties with emotions, concentration, behavior, or getting along with other people. Socio-emotional problems were most common among males and non-Hispanic Black children. Over 20 percent of children ages 12 to 17 years received mental health treatment or counseling, most commonly for feeling depressed, breaking rules or acting out, feeling afraid or tense, having suicidal thoughts or attempts, and having problems at home. Most who received treatment did so from a private therapist or counselor, or from school sources; 9 percent were hospitalized for treatment of their mental health problems.

Unfortunately, the health of children and adolescents can also be affected by HIV/AIDS. At the end of 2003, 9,419 cases of AIDS had been reported in children younger than 13 since the epidemic began in the early 1980s. Pediatric AIDS cases represent just over 1 percent of all AIDS cases ever reported. Cases of HIV/AIDS among adolescents and young adults 13 to 24 years of age represented 12 percent of all diagnoses in 2003. Adolescents and young adults represented approximately 4 percent of all people living with HIV/AIDS in 2003, and 1 percent of people who died with the disease.

Adolescents and young adults are also vulnerable to sexually transmitted infections (STIs) such as chlamydia, gonorrhea, and syphilis. These can lead to pelvic inflammatory disease and infertility if left untreated, while increasing the risk of contracting other STIs. Young adults ages 20 to 24 years generally have higher rates of infection than teens, and non–Hispanic Black youth have higher rates than their non–Hispanic White and Hispanic peers.

Many of the decisions that adolescents and young adults make affect their future health and success in life. Some adolescents and young adults never complete high school, which can lead to unemployment and decreased health status. In 2002, there were over 3.7 million high school dropouts in the United States (this comprises 16- to 24-year-olds who have not earned a diploma and are not enrolled in school). Some teens also become parents, although the rate of adolescent childbearing has dropped considerably in the past decade. The birth rate among adolescent females ages 15 to 17 years was 41.7 per 1,000 in 2003, a 33 percent decrease since the most recent peak in 1991. Rates are highest among older teens and Hispanic youth.

The health and well-being of adolescents can also be threatened by the use of alcohol and drugs. In 2003, 18 percent of 12- to 17-year-olds reported using alcohol, and over 11 percent reported using illicit drugs in the past month. The most commonly reported drug is marijuana, followed by the nonmedical use of prescription drugs, such as pain relievers and tranquilizers. Over half of teens reported that marijuana would be fairly or very easy to obtain, and 16 percent of adolescents reported being approached by someone selling drugs in the past month.

Data presented in Child Health USA 2005 are important for both appreciating America’s public health achievements and recognizing the challenges that we still face. The health of our children and adolescents relies on effective public health efforts that include providing access to knowledge, skills, and tools; providing drug-free alternative activities; identifying risk factors and linking people to appropriate services; building community supports; and supporting approaches that promote policy change. Such preventive efforts and health promotion activities are vital to the continued improvement of the health and well-being of America’s children and families.

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The United States has an increasingly diverse population, which is demonstrated by the socio-demographic characteristics of children and their families. Over one-quarter of the population is under 20 years of age.

At the National, State, and local levels, policymakers use population information to address health-related issues that affect mothers and children. By carefully analyzing and comparing data, workers in the health field can often isolate high-risk populations that require specific interventions. Policymakers can then tailor programs to meet the needs of these children and their families.

The following section presents data on several population characteristics that have an impact on maternal and child health program development and evaluation. Included are data on the age distribution of the population of the United States, the racial and ethnic makeup of the child population, poverty status, child care arrangements, and school dropout rates.
Since 2000, the number of children under 5 years of age has risen 4.6 percent, and the number of children ages 5 to 19 years has risen 2 percent. The number of adults ages 65 and older has risen approximately 3.5 percent over the same period.

Reflecting the trends in the general population, the population of children has become increasingly diverse over the past several decades. Since 1980, the percentage of children who are Hispanic or Asian/Pacific Islander has more than doubled, while the percentage who are non-Hispanic White has declined. Hispanic children represented 9 percent of all children in 1980 and almost 19 percent in 2004; likewise, Asian/Pacific Islander children represented 2 percent in 1980 and 4 percent in 2004. In the same period, the percentage of children who are White dropped by approximately 18 percent to represent 58 percent of the child population in 2004, while the percentage of children who are Black remained relatively stable. In addition, nearly 3 percent of children were of more than one racial group in 2004.
CHILDREN OF FOREIGN-BORN PARENTS

The foreign-born population in the United States has increased substantially since the 1970s, largely due to immigration from Asia and Latin America. In 2003, over 20 percent of children living in the United States had at least one foreign-born parent. Of all children, 16.5 percent were born in the United States to foreign-born parents and 4 percent were themselves foreign-born. Most children (76.2 percent) were native-born and lived in households with native-born parents.

Children with foreign-born parents were more likely than children with native-born parents to have family incomes below 100 percent of the Federal poverty level. Health insurance coverage also varies by nativity: native-born children with foreign-born parents were the most likely to have public insurance, while foreign-born children with foreign-born parents were the most likely to be uninsured. Native-born children with native-born parents were most likely to have private insurance.
CHILDREN IN POVERTY

In 2003, more than 12.8 million children under 18 years of age lived in families with incomes below the Federal poverty threshold ($18,400 for a family of four).\(^1\) Of all children living in the United States, 17.2 percent lived in families with incomes below the poverty level. Children represented 36 percent of people in poverty but only 25 percent of the population as a whole.

Poverty affects living conditions and access to health care and nutrition, all of which contribute to health status. Black and Hispanic children were particularly vulnerable. A much higher proportion of Black (33.6 percent) and Hispanic (29.5 percent) related children* under age 18 were poor than were related non-Hispanic White children (9.3 percent).

Children in single-parent families are particularly likely to be poor: of children under age 6 living with a single mother, 52.9 percent lived in poverty, compared to 9.6 percent of children of the same age in married-couple families.

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Related Children* Under Age 18 Living in Families Below 100 Percent of Poverty Level, by Race/Ethnicity: ** 1970-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Non-Hispanic White</th>
<th>Black</th>
<th>Hispanic</th>
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<tr>
<td>1970</td>
<td>14.9</td>
<td>10.5</td>
<td>1.4</td>
<td>3.0</td>
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<tr>
<td>1980</td>
<td>41.5</td>
<td>33.0</td>
<td>11.3</td>
<td>7.2</td>
</tr>
<tr>
<td>1990</td>
<td>42.1</td>
<td>37.7</td>
<td>4.2</td>
<td>7.7</td>
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<tr>
<td>2003</td>
<td>33.0</td>
<td>29.5</td>
<td>3.6</td>
<td>4.9</td>
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*Related children are those under 18 who are related to the householder by birth, marriage, or adoption.

**The CPS currently allows respondents to choose more than one race. Prior to 2002, only one race was reported. Figures reported here are for respondents who chose one race; however, Hispanics may be of any race.

***Hispanic ethnicity was not reported until 1973.

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Families Below 100 Percent of Poverty Level, by Family Type: 2003

- Married Couple: 40.9%
- Male Householder, No Wife Present: 8.4%
- Female Householder, No Husband Present: 50.7%

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1 Following the Office of Management and Budget’s Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty.
SCHOOL DROPOUTS

As of October 2002, the latest year for which data are available, there were approximately 3,721,000 high school dropouts in the United States. This translates into a total dropout rate of 10.5 percent among people in this age group, a rate that has been in decline over the past several decades.

Since 1970, Hispanic students have had the highest dropout rates, representing 25.7 percent of Hispanic young adults in 2003. The high Hispanic dropout rate is partly due to the high dropout rate among Hispanics born outside of the United States (41.4 percent). First generation Hispanics, those who were born in the U.S. but have at least one parent born elsewhere, have a much lower dropout rate (14.4 percent), and the rate among second generation or higher Hispanics, those who were born in the U.S. to American-born parents, is comparable to that of other racial/ethnic groups (11.3 percent). The dropout rates among non-Hispanic Whites and non-Hispanic Blacks in 2002 were 6.5 and 11.3 percent, respectively.

According to the U.S. Department of Commerce, high school dropouts are more likely to be unemployed and, when they are employed, earn less than those who completed high school. According to the National Center for Health Statistics, those who did not complete high school report worse health than their peers who did complete high school, regardless of income.


*Status dropouts refers to 16- to 24-year-olds who are not enrolled in school and have not earned high school credentials (diploma or equivalent.)
MATERNAL AGE

The general fertility rate rose to 66.1 births per 1,000 women ages 15 to 44 years in 2003. The birth rate among mothers ages 35 to 44 years continued to increase; rates for women in their mid twenties to early thirties also increased, but to a lesser extent. The birth rates among teenagers and women in their early twenties declined. The rate among 15- to 17-year-olds was 42 percent lower than a recent peak in 1991, and the rate among 18- and 19-year-olds declined 25 percent during the same period.

In 2003, 10 percent of births were to women under 20, over half were to women in their twenties, just over one third were to women in their thirties, and almost 3 percent were to women in their forties and early fifties. The average age at first birth in 2003 was 25.2 years, the highest yet recorded. The average age at first birth has risen from 21.4 years in 1970.

Among non-Hispanic Black and Hispanic women, over half of births in 2003 were to women in their twenties. Among non-Hispanic White women, a smaller proportion of births were to women in that age group (49.5 percent). The proportion of births that were to women under 20 years of age was higher among non-Hispanic Black and Hispanic women (17.4 and 14.3 percent, respectively) than non-Hispanic White women (7.5 percent). Births to non-Hispanic White women were more likely to be to women in their thirties, forties, and early fifties.
WORKING MOTHERS AND CHILD CARE

In 2004, 70.4 percent of women with children under 18 years of age were in the labor force (either employed or looking for work). Of mothers with preschool-aged children (younger than 6 years), 61.8 percent were in the labor force and over 57 percent were actually employed. Of women with children ages 6 to 17 years, 77.3 percent were in the labor force and almost 74 percent were employed. Employed mothers of children in the older age group were more likely to work full time than mothers of children under 6 years of age (76.7 versus 69.8 percent). Married mothers with a present spouse were less likely than mothers in other marital situations to be in the labor force (67.8 versus 77.1 percent); however, almost all married women in the labor force were employed, while women in other situations were more likely to be looking for work. The unemployment rate among married mothers was 3.7 percent, compared to a rate of 9.7 percent among mothers of other marital statuses.

Among children under age 5 with employed mothers, child care arrangements varied by family income. In 2002, children with family incomes of less than 200 percent of the Federal poverty level (FPL) were most likely to be in relative or parent/other care, while children with family incomes of 200 percent FPL or more were more likely to be in center-based care. Family child care and nanny/babysitter care were the least common types of care among children of both income groups, although each was more common among children with higher family incomes.
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The systematic assessment of the health status of infants, children, and adolescents allows health professionals to gauge the impact of past and current health intervention and prevention programs. Program planners and policymakers can identify trends by examining and comparing data from one year to the next. Although indicators are often assessed on an annual basis, some surveillance systems collect data at intervals, such as every 2, 3, or 5 years.

In the following section, mortality, disease, injury, and health behavior indicators are presented by age group. The health status indicators in this section are based on vital statistics and National surveys. Population-based samples are designed to yield information that is representative of the maternal and child populations that are affected by, or in need of, specific health services.
Breastfeeding has been shown to promote the health and development of infants, as well as their immunity to disease; it has also been shown to have a number of benefits to maternal health. For this reason, the American Academy of Pediatrics (AAP) recommends exclusive breastfeeding—without supplemental foods or liquids—through the first 6 months of age and continued breastfeeding through at least the first year.

Breastfeeding initiation rates in the United States have fluctuated over the past several decades but have increased steadily since the beginning of the 1990s. In 2003, 70.9 percent of mothers ever breastfed their infants. Asian women were most likely to breastfeed their infants (79.3 percent), followed by Hispanic and non-Hispanic White women (77.8 and 72.2 percent, respectively). Breastfeeding rates increased with maternal age, higher educational achievement and higher income. Married women were more likely than unmarried women to breastfeed (76.8 versus 57.8 percent, respectively).

Breastfeeding rates decrease as infant age increases. In 2003, 36.2 percent of mothers breastfed their infants at 6 months, and 17.2 percent breastfed at 12 months. Exclusive breastfeeding rates have not shown the same improvement over time as breastfeeding initiation. In 2003, only 14.2 percent of women practiced exclusive breastfeeding at 6 months. As with breastfeeding initiation, exclusive breastfeeding rates were higher among Asian, Hispanic, and non-Hispanic White women, and women who were older, educated, and of higher income.

Breastfeeding Rates, by Recommended Duration* and Maternal Education: 2003
Source (II.1): Centers for Disease Control and Prevention, National Immunization Survey

Breastfeeding Rates, by Race/Ethnicity: 2003
Source (II.1): Centers for Disease Control and Prevention, National Immunization Survey

*Includes exclusive and supplemental breastfeeding.

*The American Academy of Pediatrics recommends exclusive breastfeeding through 6 months of age, and continued supplemental breastfeeding through 1 year.
LOW BIRTH WEIGHT

In 2003, 324,064 infants were born at low birth weight (less than 2,500 grams, or 5 pounds 8 ounces); this represented 7.9 percent of all live births. The percentage of newborns born at low birth weight has risen steadily from a low of 6.7 percent in 1984 and is currently at the highest level recorded in the past three decades.

Low birth weight rates differ by maternal age, with mothers younger than 15 and older than 45 years of age most likely to deliver low birth weight infants. Much of the incidence of low birth weight among older mothers is due to an increase in the proportion of multiple births. Multiple births are much more likely to be low birth weight than are singletons: in 2003, 58.2 percent of all multiple births were low birth weight. The increased frequency of multiple births among older mothers is largely due to the increasing use of assisted reproductive technologies and the fact that older mothers are also more likely than younger mothers to conceive multiples naturally. Although the increase in multiple births is a contributing factor to the increase in low birth weight rates, low birth weight also increased among singleton deliveries.

The low birth weight rate among non-Hispanic Black infants (13.6 percent) has not declined significantly since 1991. The rates among non-Hispanic White and Hispanic infants were considerably lower in 2003 (7.0 and 6.7 percent, respectively). The rate of low birth weight among infants born to smokers was substantially higher than among nonsmokers (12.4 versus 7.7 percent) in 2003. This significant differential has been consistently observed among both non-Hispanic Black and non-Hispanic White infants. Other factors associated with increased risk of low birth weight include maternal poverty and low levels of educational attainment.

Low birth weight is one of the leading causes of neonatal mortality. Low birth weight infants are more likely to experience long-term disability or to die during the first year of life than are infants of normal weight.

Low Birth Weight Among Infants, by Race/Ethnicity: 1985-2003*

*1985-88 data are based on the race of the infant; data after 1989 are based on the race of the mother.
**VERY LOW BIRTH WEIGHT**

In 2003, 1.4 percent of live births were infants of very low birth weight (less than 1,500 grams, or 3 pounds 4 ounces). This has slowly climbed from a rate of just over one percent in 1980.

Because the chance of survival increases as birth weight increases, very low birth weight infants have the lowest survival rates. Infants born at such low birth weights are approximately 100 times more likely to die in the first year of life than are infants of normal birth weight. Very low birth weight infants who survive are at a significantly increased risk of severe problems, including physical and visual difficulties, developmental delays, and cognitive impairment requiring increased levels of medical, educational, and parental care.

The overall rate of very low birth weight among non-Hispanic Black newborns (3.1 percent) is over two and a half times greater than the rate among most other racial and ethnic groups, including non-Hispanic Whites (1.2 percent), Hispanics (1.2 percent), and Asian/Pacific Islanders (1.1 percent). This difference is a major contributor to the disparity in infant mortality rates between non-Hispanic Black infants and infants of other racial and ethnic groups.
NEONATAL AND POSTNEONATAL MORTALITY

Neonatal. In 2003, 19,108 infants died before reaching 28 days of age, representing a neonatal mortality rate of 4.7 deaths per 1,000 live births. This rate is unchanged from the previous year.

Neonatal mortality is generally related to short gestation and low birth weight, congenital malformations, and conditions occurring in the perinatal period.

Postneonatal. In 2003, 9,320 infants died between the ages of 28 days and 1 year, representing a postneonatal mortality rate of 2.3 deaths per 1,000 live births. This rate is unchanged from the previous year.

Postneonatal mortality is generally related to Sudden Infant Death Syndrome (SIDS), congenital malformations, and unintentional injuries.

Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System
MATERNAL MORTALITY

During the past several decades, the rate of maternal mortality in the United States has declined dramatically. However, the rate in 2003 (12.1 per 100,000 live births) was significantly different from the rate reported in 2002 (8.9 per 100,000). This may partly be due to a change in how pregnancy is recorded on death certificates.

Overall, there were 495 maternal deaths resulting from complications during pregnancy, childbirth, or up to 42 days postpartum in 2003. The maternal mortality rate among non-Hispanic Black women (31.2 per 100,000 live births) is about four times the rate among non-Hispanic White women (8.1 per 100,000 live births). This disparity has widened since 2000.

According to the National Center for Health Statistics, the risk of maternal death increases for women over age 30, regardless of race. Women ages 35 to 39 years have over three times the risk of maternal death as women ages 20 to 24 years.1

INFANT MORTALITY

In 2003, 28,428 infants died before their first birthday, representing an infant mortality rate of 6.9 deaths per 1,000 live births. The leading cause of infant mortality was congenital malformations, deformations and chromosomal abnormalities, which accounted for 20 percent of infant deaths.

The infant mortality rate declined from the 1960s into this century, but increased slightly between 2001 and 2002. This was largely due to an increase in the percentage of infants born weighing less than 750 grams, reasons for which include a rise in both preterm and multiple births. The rapid decline in infant mortality that began in the mid-1960s slowed among both Blacks and Whites during the 1980s. Major advances, including the approval of synthetic surfactants and the recommendation that infants be placed on their backs when sleeping, may have contributed to a renewed decline during the 1990s.

Based on preliminary data, the mortality rate among Black infants was 14.1 infant deaths per 1,000 live births in 2003. This is almost two and one-half times the rate among non-Hispanic White infants (5.8 per 1,000 live births).

Although the trend in infant mortality rates among both Blacks and non-Hispanic Whites has generally declined throughout the last century, the proportional discrepancy in rates between the two races remains largely unchanged.

The Maternal and Child Health Block Grant and the MCHB’s Healthy Start Program provide health and support services to pregnant women and infants with the goal of reducing infant mortality rates.

Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

*Under 1 year of age.
INTERNATIONAL INFANT MORTALITY RATES

Although the United States has substantially reduced its infant mortality rate in recent decades, it was still ranked below many industrialized nations in 2002 with a rate of 7.0 deaths per 1,000 live births. This represents a slight increase from the rates of 6.9 and 6.8 per 1,000 in 2000 and 2001, respectively, but is well below the rate of 26.0 per 1,000 reported in 1960. Differences in infant mortality rates among industrialized nations may reflect disparities in the health status of women before and during pregnancy, as well as the quality and accessibility of primary care for pregnant women and their infants. However, some of these differences may, in part, be the result of international variation in the definition, reporting, and measurement of infant mortality.

According to data reported by individual countries, seven industrialized countries or territories had infant mortality rates that were half the rate of the United States or less. Hong Kong had the lowest rate (2.3 per 1,000), followed by Sweden (2.8 per 1,000). Overall, the United States was ranked 28th in the world.

International Infant Mortality Rates:* 2002
Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics

<table>
<thead>
<tr>
<th>Country</th>
<th>Deaths per 1,000 Live Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>2.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.8</td>
</tr>
<tr>
<td>Singapore</td>
<td>2.9</td>
</tr>
<tr>
<td>Finland</td>
<td>3.0</td>
</tr>
<tr>
<td>Japan</td>
<td>3.0</td>
</tr>
<tr>
<td>Spain</td>
<td>3.4</td>
</tr>
<tr>
<td>Norway</td>
<td>3.5</td>
</tr>
<tr>
<td>Austria</td>
<td>4.1</td>
</tr>
<tr>
<td>France</td>
<td>4.1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>4.2</td>
</tr>
<tr>
<td>Germany</td>
<td>4.3</td>
</tr>
<tr>
<td>Denmark</td>
<td>4.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>4.5</td>
</tr>
<tr>
<td>Italy</td>
<td>4.7</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>4.7</td>
</tr>
<tr>
<td>Belgium</td>
<td>4.9</td>
</tr>
<tr>
<td>Austria</td>
<td>5.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.0</td>
</tr>
<tr>
<td>Portugal</td>
<td>5.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>5.1</td>
</tr>
<tr>
<td>England and Wales</td>
<td>5.2</td>
</tr>
<tr>
<td>Scotland</td>
<td>5.3</td>
</tr>
<tr>
<td>Canada</td>
<td>5.4</td>
</tr>
<tr>
<td>Israel**</td>
<td>5.4</td>
</tr>
<tr>
<td>Greece</td>
<td>5.9</td>
</tr>
<tr>
<td>New Zealand</td>
<td>6.2</td>
</tr>
<tr>
<td>Cuba</td>
<td>6.5</td>
</tr>
<tr>
<td>United States</td>
<td>7.0</td>
</tr>
<tr>
<td>Hungary</td>
<td>7.2</td>
</tr>
<tr>
<td>Poland</td>
<td>7.5</td>
</tr>
</tbody>
</table>

*Includes countries, territories, cities, or geographic areas with at least 1 million population and with "complete" counts of live births and infant deaths as indicated in the United Nations Demographic Yearbook. Some of the variation in infant mortality rates is due to differences among countries in distinguishing between fetal and infant deaths.**Includes data for East Jerusalem and Israeli residents in certain other territories under occupation by Israeli military forces since June 1967.
Health Status - Children
HEALTH STATUS OF CHILDREN

In 2003, 84.1 percent of children were in excellent or very good health, according to parent reports. Males were slightly less likely to be in excellent or very good health than females (83.5 versus 84.7 percent). The percent of children in excellent or very good health decreases with increased age: 86.0 percent of children under age 5 were in excellent or very good health, compared to 83.8 percent of 6- to 11-year-olds and 82.6 percent of 12- to 17-year-olds.

The rate of children in excellent or very good health varies by several other factors, including family income and race and ethnicity. Non-Hispanic White children were the most likely to be in excellent or very good health (90.7 percent) while Hispanic children were the least likely (64.4 percent). Children with family incomes below 100 percent of the Federal poverty level (FPL) were least likely to be reported by parents to be in excellent or very good health (66.8 percent), followed by those with family incomes of 100 to 199 percent of FPL (80.9 percent), and those with family incomes of 200 to 399 percent of FPL (90.2 percent); children with family incomes of 400 percent of FPL or above were the most likely to be in excellent or very good health (93.8 percent).

*Federal poverty level, equal to $18,400 for a family of four in 2003.
Asthma is a disease in which the airways become blocked or narrowed. It is triggered by allergies or other factors, and symptoms include wheezing, chest tightness, and shortness of breath. In 2003, almost 8 percent of children in the United States were affected by asthma. This includes all children whose parents reported that a doctor ever told them the child had asthma and that the child still has asthma, and children who, in the past year, used asthma medication, had moderate or severe difficulties combined with an attack, or had been hospitalized for asthma.

In 2003, males were more likely to be affected by asthma than females (9.2 versus 6.6 percent). A greater proportion of children ages 6 to 11 years and 12 to 17 years were affected by asthma (8.8 and 8.7 percent, respectively) than children from birth to age 5 (6.2 percent). Non-Hispanic Black children were most likely to be affected by asthma, while Hispanic children were least likely to be affected. Children with lower family incomes were more likely to be affected than children with higher family incomes.

The effects of asthma also vary by insurance status. Children with public insurance were more likely to be affected by asthma than children with private insurance (10.6 versus 7.2 percent); of children with no insurance, 5.0 percent were affected in the ways described above. It is important to note that uninsured children may be less likely to have access to doctors and prescription drugs, which may affect whether parents report that their child has been affected by asthma.

### Children Aged 0-17 Years Affected by Asthma,* by Race/Ethnicity: 2003

Source (I.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Children's Health

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>7.9</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>7.2</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>12.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.4</td>
</tr>
</tbody>
</table>

### Children Aged 0-17 Years Affected by Asthma,* by Family Income: 2003

Source (I.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Children's Health

<table>
<thead>
<tr>
<th>Family Income</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100% FPL**</td>
<td>10.0</td>
</tr>
<tr>
<td>100-199% FPL</td>
<td>8.6</td>
</tr>
<tr>
<td>200-399% FPL</td>
<td>7.7</td>
</tr>
<tr>
<td>400% or More FPL</td>
<td>6.8</td>
</tr>
</tbody>
</table>

*Includes all children whose parents reported that a doctor ever told them the child had asthma and that the child still has asthma, and children who, in the past year, used asthma medication, had moderate or severe difficulties combined with an attack, or had been hospitalized for asthma. **Federal poverty level, equal to $18,400 for a family of four in 2003.
MENTAL HEALTH

In 2003, almost 10 percent of children in the United States had moderate to severe socio-emotional problems. This includes children whose parents reported that they have moderate to severe difficulties with emotions, concentration, behavior, or getting along with others.

Rates of socio-emotional difficulties vary by a number of factors, including sex, age, race/ethnicity, family income, and insurance type. In 2003, a greater proportion of males under age 18 experienced socio-emotional difficulties than their female counterparts (11.3 versus 6.9 percent). Children of multiple races had the highest rate of socio-emotional problems (12.7 percent) followed by non-Hispanic Black children (11.6 percent), and non-Hispanic White children (9.0 percent); Hispanic children had the lowest rate (8.3 percent).

Older children were more likely to experience socio-emotional difficulties than younger children, with 12- to 17-year-olds experiencing the highest rate (10.9 percent) and 3- to 5-year olds experiencing the lowest rate (4.9 percent). Rates declined consistently with increased family income: children with family incomes below 100 percent of the poverty level experienced the highest rate (14.0 percent), while children with family incomes at or above 400 percent of the poverty level experienced the lowest rate (6.1 percent). Children with public insurance had a higher rate of socio-emotional problems than children with private insurance (14.9 versus 7.0 percent); they also had a higher rate than children without insurance (8.0 percent).

Children Aged 3-17 Years with Socio-Emotional Difficulties,* by Race/Ethnicity: 2003
Source (I.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Children's Health

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9.2</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>9.0</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>11.6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8.3</td>
</tr>
<tr>
<td>More Than One Race</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Children with Socio-Emotional Difficulties,* by Age: 2003
Source (I.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Children's Health

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-5 Years</td>
<td>4.9</td>
</tr>
<tr>
<td>6-11 Years</td>
<td>9.6</td>
</tr>
<tr>
<td>12-17 Years</td>
<td>10.9</td>
</tr>
</tbody>
</table>

*Includes all children whose parents said that they have moderate to severe difficulties with emotions, concentration, behavior, or getting along with other people.
CHILD ABUSE AND NEGLECT

State child protective services (CPS) agencies received 2.9 million referrals alleging child abuse or neglect in 2003. Over half of these reports were received from community professionals, while the remainder were received from family, friends, relatives, or neighbors of these children.

In 2003, investigations by State CPS agencies determined that an estimated 906,000 children were victims of abuse or neglect, equivalent to a rate of 12.4 per 1,000 children under 18 years of age. Approximately 63 percent of all victims suffered neglect or medical neglect, 19 percent physical abuse, 10 percent sexual abuse, 5 percent psychological maltreatment, and 17 percent other forms of maltreatment. Some children suffered multiple types of maltreatment.

Victimization was highest among the youngest children. In 2003, the rate of victimization among children from birth to age 3 was 16.4 per 1,000 children of the same age; the rates declined steadily as age increased. Among the estimated 1,500 children who died of abuse and neglect, children under 1 year of age accounted for nearly 44 percent, and children under 7 years accounted for 90 percent. Of the child fatalities that occurred in 2003, 78 percent were caused by a parent.

The data were obtained from the National Child Abuse and Neglect Data System, the primary source of National information on abused and neglected children known to State CPS agencies.

<table>
<thead>
<tr>
<th>Percent of Abused/Neglected Children*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Neglect/Medical Neglect</td>
<td>63.2</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>18.9</td>
</tr>
<tr>
<td>Other</td>
<td>16.9</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>9.9</td>
</tr>
<tr>
<td>Psychological Maltreatment</td>
<td>4.9</td>
</tr>
</tbody>
</table>

*Percentages total more than 100 because some children are victims of more than one type of maltreatment.

Sources of Maltreatment Reports: 2003

<table>
<thead>
<tr>
<th>Source (II.4): Administration on Children, Youth, and Families, National Child Abuse and Neglect Data System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators</td>
</tr>
<tr>
<td>Legal/Law Enforcement Personnel</td>
</tr>
<tr>
<td>Social Service/Mental Health Personnel</td>
</tr>
<tr>
<td>Other/Unknown</td>
</tr>
<tr>
<td>Anonymous</td>
</tr>
<tr>
<td>Medical Personnel</td>
</tr>
<tr>
<td>Relatives (Excluding Parents)</td>
</tr>
<tr>
<td>Parents</td>
</tr>
<tr>
<td>Friends/Neighbors</td>
</tr>
<tr>
<td>Child Daycare/Foster Care Providers</td>
</tr>
<tr>
<td>Alleged Victim</td>
</tr>
<tr>
<td>Alleged Perpetrator</td>
</tr>
</tbody>
</table>
PEDIATRIC AIDS

At the end of 2003, 9,419 cases of Acquired Immunodeficiency Syndrome (AIDS) in children younger than 13 had been reported in the United States since the beginning of the epidemic. Pediatric AIDS cases represented just over one percent of all cases ever reported.

In 2003, an estimated 59 new AIDS cases were diagnosed among children, almost 100 percent of which were transmitted before or during birth (perinatal transmission). Since 1993, the number of new cases of pediatric AIDS due to perinatal transmission has declined substantially, and from 1999 to 2003 the number of new cases among children under 13 years of age, regardless of transmission method, decreased 68 percent. A major factor in this decline is the increasing use of treatment before, during, and after pregnancy to reduce perinatal transmission of the Human Immunodeficiency Virus (HIV), the virus that causes AIDS. In 1994, the U.S. Public Health Service recommended this treatment for all HIV-positive pregnant women, and in 1995 routine HIV counseling and voluntary testing for all pregnant women was recommended. It is expected that the perinatal transmission rate will continue to decline with increased use of aggressive treatments and obstetric procedures, such as elective cesarean section.

Racial and ethnic minorities are disproportionately represented among pediatric AIDS cases. As of 2003, the number of pediatric AIDS cases ever reported among non-Hispanic White children was less than one-third the number among non-Hispanic Black children, and 25 percent less than that among Hispanic children.

AIDS Cases Among Children Under Age 13, by Race/Ethnicity: Through 2003*

Source (II.5): Centers for Disease Control and Prevention, HIV/AIDS Surveillance System

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td>1,620</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>2,128</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5,562</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>56</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>30</td>
</tr>
</tbody>
</table>

Estimated Numbers of AIDS Cases in Children Under Age 13, by Year of Diagnosis: 1993-2003

Source (II.5): Centers for Disease Control and Prevention, HIV/AIDS Surveillance System

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>926</td>
</tr>
<tr>
<td>1994</td>
<td>826</td>
</tr>
<tr>
<td>1995</td>
<td>688</td>
</tr>
<tr>
<td>1996</td>
<td>522</td>
</tr>
<tr>
<td>1997</td>
<td>335</td>
</tr>
<tr>
<td>1998</td>
<td>246</td>
</tr>
<tr>
<td>1999</td>
<td>187</td>
</tr>
<tr>
<td>2000</td>
<td>117</td>
</tr>
<tr>
<td>2001</td>
<td>119</td>
</tr>
<tr>
<td>2002</td>
<td>105</td>
</tr>
<tr>
<td>2003</td>
<td>59</td>
</tr>
</tbody>
</table>

*Includes children with a diagnosis of AIDS, from the beginning of the epidemic through 2003.
VACCINE-PREVENTABLE DISEASES

The number of reported cases of vaccine-preventable diseases has decreased steadily over the past decade. The number of cases of *H. Influenzae* among children under 5 years of age increased from 2002 to 2003, but the number of cases of measles, mumps, pertussis, and Hepatitis A and B decreased over the same period. It is important to note that since most Hepatitis B infections among infants and young children are asymptomatic, the reported number of cases likely underestimates the incidence of Hepatitis B in these age groups. In 2003, the highest number of cases of pertussis (3,700) was reported since 1964; however, the number of cases among children under 5 decreased by almost 10 percent. Of all pertussis cases, 17 percent were among infants under 6 months of age who are too young to have received the full schedule of pertussis vaccine.

Although much progress has been made in reducing the number of reported cases of vaccine-preventable diseases, several of these diseases are still common. The number of cases of pertussis, Hepatitis A, and *H. Influenzae* remain substantial and indicate a continuing need to promote immunization efforts. Since childhood vaccination for Hepatitis A was recommended in 1996 for children living in high-risk areas, the number of cases has decreased; in 2003, it reached the lowest rate ever recorded (2.7 cases per 100,000). Rates of Hepatitis A have shown the greatest decline among children in States where routine vaccination was recommended, suggesting that immunization policies are having a positive impact on the incidence of the disease.

### Vaccine-Preventable Diseases Among Children Under Age 5: 2003

Source (II.6): Centers for Disease Control and Prevention

<table>
<thead>
<tr>
<th>Disease</th>
<th>Number of Reported Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diptheria and Tetanus</td>
<td>0</td>
</tr>
<tr>
<td>Rubella</td>
<td>0</td>
</tr>
<tr>
<td>Polio</td>
<td>0</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>13</td>
</tr>
<tr>
<td>Measles</td>
<td>19</td>
</tr>
<tr>
<td>Mumps</td>
<td>32</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>231</td>
</tr>
<tr>
<td><em>H. Influenzae</em></td>
<td>376</td>
</tr>
<tr>
<td>Pertussis</td>
<td>3,355</td>
</tr>
</tbody>
</table>

Number of Reported Cases

0 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400
HOSPITALIZATION

In 2003, there were 3.7 million hospital discharges among children ages 1 to 21, or 4.4 discharges per 100 children. This represents little change from 2002. Hospital discharge rates generally decrease until about age 7 and increase during later adolescence.

While injuries are the leading cause of death among children older than 1 year, they accounted for only 9 percent of hospital discharges among children 1 to 14 years old in 2003. Diseases of the respiratory system were the major cause of hospitalization for children 1 to 9 years of age, accounting for 34 percent of discharges. Pregnancy and childbirth accounted for 67 percent of discharges of young women ages 15 to 21. Mental disorders were the second leading cause of hospitalization for adolescents.

Overall, there has been a significant decrease in hospital discharge rates among children over the past 20 years. From 1985 to 2003, there was a 33 percent decrease in discharge rates for children ages 1 to 14 years. During this period, hospital discharge rates for diseases of the respiratory system declined 35 percent for children in this age group.

Major Causes of Hospitalization, by Age: 2003

Source (II.7): Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Discharge Survey
**CHILD MORTALITY**

In 2003, 11,841 children between the ages of 1 and 14 years died of various causes; this was 190 fewer than the previous year. The overall death rate among 1- to 4-year-olds was 31.1 per 100,000, and the rate among 5- to 14-year-olds was 16.9 per 100,000. The leading cause of death among 1- to 4-year-olds continues to be unintentional injury, which accounted for 34.2 percent of all deaths in this age group in 2003. The next most common cause of death was congenital malformations (birth defects), followed by malignant neoplasms (cancer), homicide, and diseases of the heart. Unintentional injury was also the leading cause of death among 5- to 14-year-olds in 2003, accounting for 37.0 percent of deaths among this age group. This was followed by malignant neoplasms, congenital malformations, homicide, suicide, and diseases of the heart.

### Leading Causes of Death Among Children Ages 1-14: 2003

Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System
CHILDHOOD DEATHS DUE TO INJURY

In 2003, unintentional injuries caused the deaths of 1,679 children aged 1-4 years and 2,562 children aged 5-14 years. In 2003, motor vehicle crashes, drowning, and fires and burns were the most common causes of unintentional injury death among children aged 1-4 years. Motor vehicle crashes were the most common cause of unintentional injury death among children aged 5-14 years, followed by deaths due to drowning, suffocation, and fires and burns.

In addition, 342 children aged 1-4 years were the victims of homicide in 2003, and 565 children aged 5-14 years were the victims of homicide or suicide (data not shown).

Deaths Due to Unintentional Injury Among Children Ages 1-14: 2003

Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System
The birth rate among adolescents ages 15 to 19 decreased to 41.6 births per 1,000 females in 2003. This is 3 percent below the rate in 2002 and represents a 33 percent decrease since the most recent peak in 1991. The birth rate among the youngest adolescents, those ages 10 to 14 years, declined to 0.6 per 1,000. The number of births to this age group dropped to 6,661—the fewest reported in 45 years. Teenage birth rates were highest among the oldest adolescents, 18 to 19 years, at 70.7 per 1,000.

Teenage birth rates have historically differed considerably by race and ethnicity. Among adolescents ages 15 to 19 years, Asian/Pacific Islanders had the lowest birth rate in 2003 (17.4 per 1,000), followed by non-Hispanic Whites (27.4 per 1,000). Although non-Hispanic Black teens had one of the highest birth rates for this age group (64.7 per 1,000), they have also experienced the largest percentage drop since 1991 (45 percent). Hispanic females had the highest birth rate among 15- to 19-year-olds (82.3 per 1,000) and the lowest percentage drop since 1991 (21 percent). Among 10- to 14-year-olds, non-Hispanic Black females had the highest birth rate (1.6 per 1,000), followed by Hispanic females (1.3 per 1,000).
**SEXUAL ACTIVITY**

In 2003, 46.7 percent of high school students reported ever having sexual intercourse, representing a slight increase since 2001. Although non-Hispanic Black students were most likely to report ever having sexual intercourse (67.3 percent), they were also most likely to report condom use during their last sexual encounter (72.8 percent of sexually active students). Hispanic students were second most likely to report ever having intercourse (51.4 percent), followed by non-Hispanic White students (41.8 percent).

Almost half of all 12th grade students reported having sexual intercourse in the 3 months preceding the survey. Among 9th grade students, more males were currently sexually active (24 percent) than females (18.3 percent). By 12th grade, however, females were more likely to be currently sexually active (51 percent) than males (46.5 percent). More than half of all high school students reported that they have never had sexual intercourse. Abstinence Education Programs provide funding for education, mentoring, counseling, and adult supervision to promote abstinence from sexual activity.

In 2003, 63 percent of sexually active students reported using a condom during their last sexual intercourse. Condom use by male students is reportedly higher than condom use by females in every grade, and younger students reported more condom use during their last sexual intercourse (69 percent of 9th and 10th graders) than older students (57.4 percent of 12th graders).

---

**Sexual Activity Among High School Students: 2003**

Source (II.8): Centers for Disease Control and Prevention, Youth Risk Behavior Survey

![Chart showing sexual activity among high school students in 2003.](chart)

- **Abstinent**: 53.3%
- **No Intercourse in Past 3 Months**: 12.4%
- **Intercourse in Past 3 Months, No Condom at Last Intercourse**: 12.7%
- **Intercourse in Past 3 Months, Used Condom at Last Intercourse**: 21.6%

*Have never had intercourse.

**Condom Use Among Sexually Active High School Students, by Grade: 2003**

Source (II.8): Centers for Disease Control and Prevention, Youth Risk Behavior Survey

![Chart showing condom use among sexually active high school students by grade in 2003.](chart)

- **Total Sexually Active**
  - **Condom Use at Last Intercourse**: 21.2%
  - **No Condom Use at Last Intercourse**: 14.6%
- **9th Grade**
  - Condom Use: 30.6%
  - No Condom Use: 21.1%
- **10th Grade**
  - Condom Use: 41.1%
  - No Condom Use: 25.0%
- **11th Grade**
  - Condom Use: 48.9%
  - No Condom Use: 20.8%

*Had sexual intercourse during the 3 months preceding the survey.*
SEXUALLY TRANSMITTED INFECTIONS

Adolescents (ages 15 to 19 years) and young adults (ages 20 to 24 years) are at much higher risk of contracting sexually transmitted infections (STIs) than are older adults. Within these age groups, reported rates of chlamydia, gonorrhea, and syphilis are significantly higher among non-Hispanic Black youth than youth of all other reported racial and ethnic categories. Rates of STIs among Hispanic adolescent and young adults are about twice those of non-Hispanic Whites.

Chlamydia continues to be the most common STI in adolescents and young adults, with a rate of 1,524 cases per 100,000 adolescents and 1,605 per 100,000 young adults. Gonorrhea followed in prevalence with an overall rate of 443 cases per 100,000 adolescents and 529 cases per 100,000 young adults. Syphilis is less common among young people and the population as a whole. In 2003, the rate of syphilis was 1.6 cases per 100,000 adolescents and 4.3 cases per 100,000 young adults. For each of these conditions, rates are slightly higher among 20- to 24-year-olds than among adolescents.

Although these conditions are treatable with antibiotics, STIs can have serious health consequences. Active infections can increase the likelihood of contracting HIV and untreated STIs can lead to pelvic inflammatory disease and infertility in women.

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Sexually Transmitted Infections Among Adolescents and Young Adults, by Age and Race/Ethnicity: 2003

Source (II.9): Centers for Disease Control and Prevention, STD Surveillance System
**ADOLESCENT AND YOUNG ADULT HIV/AIDS**

In 2003, 3,897 people between 13 and 24 years of age were diagnosed with HIV/AIDS,* representing 12 percent of all diagnoses. The number of AIDS cases diagnosed among this age group was 2,050 in 2003, and 38,490 since the epidemic began in the early 1980s.

There were 13,752 people 13 to 24 years of age living with HIV/AIDS in 2003, representing approximately 4 percent of all cases. Among people who died with AIDS in 2003, just over 1 percent (237 persons) were 13 to 24 years of age. Since the beginning of the epidemic, over 10,000 adolescents and young adults have died with the disease. While the number of people living with HIV/AIDS has increased in recent years, the number dying with the disease has decreased due in part to the availability of effective prescription drugs to combat the disease.

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*This includes persons with a diagnosis of HIV infection only, a diagnosis of HIV infection and a later AIDS diagnosis, and concurrent diagnoses of HIV infection and AIDS.*
PHYSICAL ACTIVITY AND OVERWEIGHT

Results from the 2003 National Youth Risk Behavior Survey show that 62.6 percent of high school students regularly participated in sufficient vigorous physical activity, and almost 25 percent participated in sufficient moderate physical activity. Just over half (51.9 percent) performed regular strengthening exercises, while 57.6 percent played on one or more sports teams. Nationwide, 55.7 percent of high school students were enrolled in a physical education class on one or more days a week, although the percentage is far higher in the younger grades (71 percent of 9th graders) than in the older grades (39.5 percent of 12th graders). The percentage of students attending daily physical education classes has dropped from 42 percent in 1991 to 28.4 percent in 2003.

While 12.1 percent of high school students were overweight in 2003, 29.6 percent described themselves as overweight and 43.8 percent were trying to lose weight. Among all racial and ethnic groups, males were more likely to be overweight than females (17.4 versus 9.4 percent), while females were more likely than males to perceive themselves as such (36.1 versus 23.5 percent).

In an attempt to lose weight or to prevent themselves from gaining weight, 42.2 percent of students engaged in healthy behaviors such as eating less food, fewer calories, or foods lower in fat. In addition, 57.1 percent of students exercised for the same purpose. Females were more likely to engage in such weight control behaviors than males; 56.2 percent of females used food as a way to control weight compared to 28.9 percent of males, and 65.7 percent used exercise compared to 49 percent of males. In contrast to these healthy behaviors, 13.3 percent of students went without eating for more than 24 hours in an attempt to lose weight, 9.2 percent took diet pills, powders, or liquids without the advice of a doctor, and 6.0 percent vomited or took laxatives. Again, such behaviors are more common among female students than males.

The HealthierUS Initiative—available online at www.healthierus.gov—provides credible, accurate information about physical fitness, nutrition, and prevention to help Americans of all ages to make healthy choices.

Physical Activity Among High School Students, by Race/Ethnicity: 2003
Source: (I.II.8): Centers for Disease Control and Prevention, Youth Risk Behavior Survey

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Non-Hispanic White</th>
<th>Non-Hispanic Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigorous*</td>
<td>62.6</td>
<td>65.2</td>
<td>54.8</td>
<td>59.3</td>
</tr>
<tr>
<td>Moderate**</td>
<td>24.7</td>
<td>26.2</td>
<td>21.7</td>
<td>22.0</td>
</tr>
<tr>
<td>Strength***</td>
<td>51.9</td>
<td>53.6</td>
<td>45.4</td>
<td>51.5</td>
</tr>
</tbody>
</table>

* Activities that caused sweating and hard breathing for at least 20 minutes on 3 of the 7 preceding days.
** Activities that did not cause sweating or hard breathing for at least 30 minutes on 5 of the 7 preceding days.
*** Activities such as push-ups, sit-ups, or weightlifting on 3 of the 7 preceding days.
MENTAL HEALTH TREATMENT

In 2003, 20.6 percent of youth 12 to 17 years of age received mental health treatment or counseling. The most commonly reported reasons for seeking counseling were feeling depressed (50.2 percent), breaking rules or “acting out” (25.7 percent), feeling afraid or tense (21.4 percent), and suicidal thoughts or attempts (18.9 percent).

There was little variation in mental health treatment rates among youth by age group or race and ethnicity in 2003. Females ages 12 to 17 years were more likely to receive treatment or counseling than males of the same age (22.4 versus 19.0 percent). Treatment rates also varied by family income, with the highest rate among youths with family incomes of less than $20,000 (24.8 percent). Rates decrease as income increases, and youths with family incomes of $75,000 or more had the lowest treatment rate (18.7 percent).

Among youth receiving mental health treatment/counseling, 48 percent went to a private therapist, psychologist, psychiatrist, social worker, or counselor. The second most common source of treatment was school counselors, school psychologists, or regular meetings with teachers (46 percent). Of youths receiving treatment, 9 percent were hospitalized for treatment of mental health problems.

Reasons for Mental Health Treatment/Counseling* Among Children Ages 12-17 Who Received Treatment: 2003

Source (II.10): Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health

*Having received treatment or counseling from any of 10 specific sources for emotional or behavioral problems not caused by alcohol or drug use.
**Total is equal to more than 100% because respondents could indicate more than one reason for treatment.
VIOLENCE

Violence among adolescents is a critical public health issue in the United States. In 2003, homicide was the second leading cause of death among persons ages 15 to 24 years.

The Youth Risk Behavior Survey (YRBS) asks adolescents about their exposure to violence both in general and on school property. The 2003 survey found that 17.1 percent of high school students had carried a weapon (such as a gun, knife, or club) at some point during the 30 days preceding the survey. Males were four times as likely as females to carry a weapon (26.9 versus 6.7 percent); however, there was little difference among grades or racial and ethnic groups in likelihood of carrying weapons. Just over 6 percent of students admitted to carrying a gun in the preceding 30 days, and males were more than six times as likely as females to do so. Thirty percent of students had been in a physical fight at least once in the 12 months preceding the survey, and 4.2 percent had been injured in such a fight.

According to the YRBS, violence reaches high school students during school time. In 2003, over 6 percent of students carried a weapon on school property on at least one of the preceding 30 days. Older students were slightly more likely than ninth graders to do so. Over 9 percent of students were threatened or injured with a weapon on school property in the preceding 30 days, a rate that consistently declined with increased grade level. Almost 13 percent of high school students had engaged in a fight on school property in the preceding 12 months, over 5 percent of students missed school on at least one of the 30 preceding days because of safety concerns.
SUBSTANCE ABUSE

Prevalence and Incidence. In 2003, 11.2 percent of adolescents ages 12 to 17 years reported using illicit drugs in the past month. The use of illicit drugs within the past month increased with age. Among 12- to 13-year-olds, 3.8 percent reported past-month use, compared to 19.2 percent of 16- to 17-year-olds. Rates of past-month illicit drug use were similar among non-Hispanic White, non-Hispanic Black, and Hispanic adolescents (ranging from 9.6 to 11.8 percent); American Indian/Alaska Native adolescents had the highest rate of past-month use among 12- to 17-year-olds (19.6 percent), while Asian adolescents had the lowest (6.5 percent).

Alcohol is the most commonly used drug among adolescents, with almost 18 percent of 12- to 17-year-olds reporting past-month use in 2003. Marijuana is the most commonly used illicit drug (7.9 percent), followed by the non-medical use of prescription psychotherapeutic drugs, such as pain relievers, tranquilizers, and stimulants (4.0 percent). Marijuana use is more common among male adolescents than their female counterparts (8.6 versus 7.2 percent), while prescription drug abuse is more common among females (4.2 versus 3.7 percent).

In 2003, 48.4 percent of 12- to 17-year-olds who smoked cigarettes in the past month also used an illicit drug, compared to only 6.1 percent of adolescents who didn’t smoke.

Perception of Risk and Access to Drugs. In 2003, 34.9 percent of adolescents perceived smoking marijuana once a month as a great risk, while 51.4 percent perceived the same risk regarding cocaine use. Smoking one pack of cigarettes a day was considered a great risk by 64.2 percent of adolescents. Among those youths who perceived marijuana as a great risk, 1.8 percent admitted to using the drug within the past month; however, among youths who perceived it as a moderate, slight, or nonexistent risk, 11.2 percent reported marijuana use in the past 30 days.

In 2003, almost 54 percent of teens reported that marijuana would be fairly or very easy to obtain. The same was reported by 25.0 percent of youths for cocaine, 17.6 percent for LSD, and 15.3 percent for heroin. Just over 16 percent of adolescents reported being approached by someone selling drugs in the past month.

Past Month Drug Use Among Adolescents Ages 12-17: 2003
Source: (II.10): Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health

<table>
<thead>
<tr>
<th>Drug Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Illicit Drug*</td>
<td>11.2</td>
</tr>
<tr>
<td>Alcohol</td>
<td>17.7</td>
</tr>
<tr>
<td>Marijuana</td>
<td>7.9</td>
</tr>
<tr>
<td>Non-Medical Use of Psychotherapeutics**</td>
<td>4.0</td>
</tr>
<tr>
<td>Hallucinogens**</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*Does not include alcohol.
**Psychotherapeutics include prescription-type pain relievers, tranquilizers, stimulants, and sedatives; hallucinogens include LSD, PCP, and Ecstasy.
CIGARETTE SMOKING

As reported in the Monitoring the Future Study by the University of Michigan, cigarette smoking declined among 8th and 10th graders but increased slightly among 12th graders from 2003 to 2004. Among 8th graders, 9.2 percent reported smoking at least one time during the 30 days preceding the survey in 2004, compared to 10.2 percent during the previous year. The rate among 10th graders in 2004 was 16.0 percent, and the rate among 12th graders was 25.0 percent; this is compared to 16.7 and 24.4 percent, respectively, in 2003. These figures represent a 56 percent decline for 8th graders and a 47 percent decline for 10th graders since use peaked among those grades in 1996. Among 12th graders, use peaked in 1997 and has seen a more modest decline of 33 percent. Factors that appear to have contributed to the decline include increases in perceived risk and disapproval of smoking, high cigarette prices, and anti-smoking advertising campaigns.

The prevalence of smoking among teens increased substantially between 1991 and 1996. These increases occurred in virtually every sociodemographic group: both sexes, those planning on attending college and not, those living in all four regions of the country, those living in rural and urban areas, and among Whites, Blacks, and Hispanics. Since 1996, rates have declined across all demographic groups consistently. Although absolute rates of smoking have declined among adolescents, certain subgroups are less likely to smoke than others. Students who are not college-bound are more likely to smoke than college-bound high school students, and Black adolescents are less likely to smoke cigarettes than their White counterparts. The decline in rates of cigarette smoking since 1996 is likely to have important long-term health consequences for this generation of adolescents.

Any Cigarette Use Among High School Students in the Past 30 Days, by Grade: 1975-2004

Source (II.11): University of Michigan, Monitoring the Future Study
ADOLESCENT MORTALITY

In 2003, 13,595 deaths were reported of adolescents aged 15-19 years. After a moderate increase for this age group in the early 1980s, death rates have since gradually declined. Unintentional injury remains the leading cause of death among this age group and accounted for approximately 50 percent of all deaths among adolescents 15-19 years of age in 2003. Homicide and suicide were the next leading causes of death, accounting for 14 and 11 percent, respectively, of all deaths within this age group.

Deaths Due to Injury. Within the classification of deaths due to injury or other external causes, motor vehicle crashes were the leading cause of mortality among 15- to 19-year-olds in 2003, and accounted for 50 percent of injury-related deaths among adolescents. Alcohol is a significant contributor to these deaths; nearly one-third of adolescent drivers killed in crashes had been drinking. Firearms were the next leading cause of injury death, accounting for 29 percent of injury-related deaths in this age group. Adolescent death rates due to motor vehicle injuries and firearms were similar in the early 1990s until 1994, when they began to diverge. The rate of adolescent firearm deaths was recorded at 12.1 per 100,000 population in 2003, less than half the rate of motor vehicle injury deaths of 25.2 per 100,000.


<table>
<thead>
<tr>
<th>Cause</th>
<th>Death Rate per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unintentional Injury</td>
<td>33.0</td>
</tr>
<tr>
<td>Homicide</td>
<td>9.5</td>
</tr>
<tr>
<td>Suicide</td>
<td>7.3</td>
</tr>
<tr>
<td>Malignant Neoplasms (Cancer)</td>
<td>3.4</td>
</tr>
<tr>
<td>Diseases of the Heart</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Deaths Due to Injury Among Adolescents Ages 15-19: 2003

<table>
<thead>
<tr>
<th>Cause</th>
<th>Death Rate per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Vehicle Traffic</td>
<td>25.2</td>
</tr>
<tr>
<td>Firearms</td>
<td>12.1</td>
</tr>
<tr>
<td>Poisoning</td>
<td>3.5</td>
</tr>
<tr>
<td>Drowning</td>
<td>1.5</td>
</tr>
</tbody>
</table>
ADOLESCENT MORTALITY FROM TRAFFIC AND FIREARM INJURIES

The two leading mechanisms of injury deaths among adolescents are motor vehicle crashes and firearms. In 2003, motor vehicle traffic caused the deaths of 5,169 adolescents 15-19 years of age. The vast majority of those killed were in motor vehicle accidents either as a passenger or driver. Deaths of pedestrians, motorcyclists, and others accounted for the remainder of motor vehicle mortality among adolescents.

Results of the 2003 Youth Risk Behavior Survey revealed that 18.2 percent of high school students had rarely or never worn seat belts when riding in a car driven by someone else. Additionally, 30.2 percent of students had ridden on one or more occasions with a driver who had been drinking alcohol in the 30 days preceding the survey.

In 2003, 2,469 adolescents aged 15-19 were killed by firearms. Of these, homicide accounted for 65 percent of firearms deaths, suicide accounted for 30 percent, and 4 percent were considered to be unintentional.

Adolescent Mortality from Traffic and Firearm Injuries: 2003
Source (II.2): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

### Traffic Mortality by Person Injured
- Motor Vehicle Occupant: 14.0
- Pedestrian: 1.5
- Motorcyclist: 1.0
- Pedal Cyclist: 0.3

### Firearms Mortality by Intent
- Homicide: 7.9
- Suicide: 3.6
- Unintentional: 0.5
- Unknown: 0.2

Death Rate per 100,000 Population in Specified Age Group
The availability of, and access to, quality health care directly affects the health of mothers and children. This is especially true of those populations at high risk due to chronic medical conditions or low socio-economic status.

Children may receive health coverage through a number of sources, including private insurance or public programs such as Medicaid or the State Children’s Health Insurance Program (SCHIP). Eligibility for public programs is based on a family’s income compared to the Federal poverty level. Every State has SCHIP programs that help expand coverage to many uninsured children. Outreach and consumer education are also key components in that expansion. Despite the progress achieved through public programs, approximately 8.5 million children remain uninsured in the United States.

The following section presents data on the utilization of health services within the maternal and child population. The most recent data are summarized by source of payment, type of care, and place of service delivery and are presented by age, income, and race and ethnicity.
**VACCINATION COVERAGE**

The Healthy People 2010 objective for the complete series of routinely recommended childhood vaccinations is immunization of at least 90 percent of 19- to 35-month-olds with the full series of vaccines. Data released from the CDC’s 2003-04 National Immunization Survey show that 80.5 percent of children 19 to 35 months of age had received the recommended 4:3:1:3:3 series of vaccines (4 DTP, 3 polio, 1 MCV, 3 Hib, 3 HepB); 74.5 percent of 19- to 35-month-olds had received the 4:3:1:3:3:1 series, which includes the varicella (chicken pox) vaccine. In the past 5 years, the greatest increases in vaccination rates have occurred with the hepatitis B and varicella vaccines (varicella was added to the schedule in 1996). Since the 1998-99 survey, the vaccination rate for hepatitis B has increased 5 percent to 92.3 percent, while the varicella vaccination rate has risen over 60 percent, from 52.1 percent in 1998-99 to 86.2 percent in 2003-04. Racial and ethnic disparities exist in vaccination rates, and non-Hispanic Black children and American Indian/Alaska Native children (data not shown) have the lowest vaccination rates for each of the major vaccines.

Each year, the CDC publishes an update of the recommended childhood immunization schedule (see facing page). The 2005 schedule continues to encourage the routine use of hepatitis B vaccines for all infants before hospital discharge and the use of yearly influenza vaccines for all children 6 to 23 months of age.

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**Estimated Vaccination Rates Among Children Aged 19-35 Months, by Race/Ethnicity: 2003-04**

Source: (III.1): Centers for Disease Control and Prevention, National Immunization Survey

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Total</th>
<th>Non-Hispanic White</th>
<th>Non-Hispanic Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>4+ DTP</td>
<td>85.6</td>
<td>87.9</td>
<td>79.2</td>
<td>84.3</td>
</tr>
<tr>
<td>3+ Polio</td>
<td>91.6</td>
<td>92.7</td>
<td>89.0</td>
<td>91.0</td>
</tr>
<tr>
<td>1+ MMR*</td>
<td>92.9</td>
<td>93.3</td>
<td>90.5</td>
<td>92.9</td>
</tr>
<tr>
<td>3+ Hib</td>
<td>93.8</td>
<td>94.9</td>
<td>91.5</td>
<td>93.3</td>
</tr>
<tr>
<td>3+ HepB</td>
<td>92.3</td>
<td>93.1</td>
<td>90.2</td>
<td>91.5</td>
</tr>
<tr>
<td>1+ Varicella</td>
<td>86.2</td>
<td>85.1</td>
<td>86.1</td>
<td>87.4</td>
</tr>
</tbody>
</table>

*The immunization schedule calls for one dose of measles-containing vaccine (MCV), which can include the measles-mumps-rubella (MMR) vaccine shown above.
Recommended Childhood and Adolescent Immunization Schedule, United States, 2005

Source (III.2): Centers for Disease Control and Prevention

<table>
<thead>
<tr>
<th>Vaccines below line are for selected populations</th>
<th>Influenza (Yearly)</th>
<th>Hepatitis A Series</th>
</tr>
</thead>
</table>

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2004, for children through age 18 years. Any dose not administered at the recommended age should be administered at any subsequent visit when indicated and feasible.

The graphic indicates age groups that warrant special effort to administer those vaccines not previously administered. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and other components of the vaccine are not contraindicated. Providers should consult the manufacturers’ package inserts for detailed recommendations. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form is available at www.vaers.org or by telephone, 800-822-7967.

1. **Hepatitis B**

   **Hepatitis B vaccine.** All infants should receive the first dose of HepB vaccine soon after birth and before hospital discharge; the first dose may also be administered by age 2 months if the mother is hepatitis B surface antigen (HBsAg) negative. Only monovalent HepB may be used for the birth dose. Monovalent or combination vaccine containing HepB may be used to complete the series. Four doses of vaccine may be administered when a birth dose is given. The second dose should be administered at least 4 weeks after the first dose, except for combination vaccines which cannot be administered before age 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after the second dose. The last dose in the vaccination series (third or fourth dose) should not be administered before age 24 weeks.

   **Infants born to HBsAg-positive mothers** should receive HepB and 0.5 mL of hepatitis B immune globulin (HBIG) at separate sites within 12 hours of birth. The second dose is recommended at age 1-2 months. The final dose in the immunization series should not be administered before age 24 weeks. These infants should be tested for HBsAg and antibody to HBsAg (anti-HBs) at age 9-15 months.

   **Infants born to mothers whose HBsAg status is unknown** should receive the first dose of the HepB series within 12 hours of birth. Maternal blood should be drawn as soon as possible to determine the mother’s HBsAg status; if the HBsAg test is positive, the infant should receive HBIG as soon as possible (no later than age 1 week). The second dose is recommended at age 1-2 months. The last dose in the immunization series should not be administered before age 24 weeks.

2. **Diphtheria, Tetanus, and Pertussis (DTP) vaccine.** The fourth dose of DTP may be administered as early as age 12 months; provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15-18 months. The final dose in the series should be given at age 4-6 years. Tetanus and diphtheria toxoids (Td) is recommended at age 11-12 years if at least 5 years have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine. Subsequent routine Td boosters are recommended every 10 years.

3. **Haemophilus influenzae type b (Hib) conjugate vaccine.** Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB® or ComVax®/MenHIT®) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTap/Hib combination products should not be used for primary immunization in infants at ages 2, 4 or 6 months but can be used as boosters after any Hib vaccine. The final dose in the series should be administered at age 12 months.

4. **Measles, mumps, and rubella vaccine (MMR).** The second dose of MMR is recommended routinely at age 4-6 years but may be administered during any visit, provided at least 4 weeks have elapsed since the first dose and both doses are administered beginning at or after age 12 months. Those who have not previously received the second dose should complete the schedule by age 11-12 years.

5. **Varicella vaccine.** Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children (i.e., those who lack a reliable history of chickenpox). Susceptible persons aged ≥12 years should receive 2 doses administered at least 4 weeks apart.

6. **Pneumococcal conjugate vaccine (PCV) is recommended for all children aged 2-11 months and for certain children aged 24-59 months. The final dose in the series should be given at age ≥12 months. Pneumococcal polysaccharide vaccine (PPV) is recommended in addition to PCV for certain high-risk groups. See MMWR 2004;53[RR-6]:1-40. In addition, healthy children aged 6-23 months and dose contacts of healthy children aged 0-23 months are recommended to receive influenza vaccine because children in this age group are at substantially increased risk for influenza-related hospitalizations. For healthy persons aged 5-49 years, the intramuscular vaccine is preferred. See MMWR 2004;53[RR-6]:1-40. Four doses of inactivated influenza vaccine (IIV) is an acceptable alternative to a trivalent inactivated influenza vaccine (TIV). See MMWR 2004;53[RR-6]:1-40. Children receiving TIV should be administered a dose appropriate for their age (0.25 mL if aged 6-23 months or 0.5 mL if aged ≥3 years). Children aged ≥8 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV). healthy children aged ≥23 months and dose contacts of healthy children aged 0-23 months are recommended to receive influenza vaccine because children in this age group are at substantially increased risk for influenza-related hospitalizations. For healthy persons aged 5-49 years, the intramuscular vaccine is preferred. See MMWR 2004;53[RR-6]:1-40. Four doses of inactivated influenza vaccine (IIV) is an acceptable alternative to a trivalent inactivated influenza vaccine (TIV). See MMWR 2004;53[RR-6]:1-40. Children receiving TIV should be administered a dose appropriate for their age (0.25 mL if aged 6-23 months or 0.5 mL if aged ≥3 years). Children aged ≥8 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV).
TIMING OF DENTAL CARE

In a 2000 report on oral health, the Surgeon General identified dental caries (tooth decay) as the single most common chronic disease among children in the United States, a condition even more common among children living in families with low incomes. This is a preventable health problem that can significantly affect children’s health, ability to concentrate in school, and quality of life.

To promote good oral hygiene, the American Academy of Pediatrics recommends that all children receive an oral health risk assessment by 6 months of age and a dental referral by 3 years; earlier referrals are appropriate for children found to be at risk. In Federal Fiscal Year 2002, only 23 percent of children eligible for services under the Medicaid Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program received a preventive dental service.

In 2003, 70.8 percent of children had seen a dentist in the past year. Frequency of dental visits among children varies by family income and race and ethnicity. Non-Hispanic White children between the ages of 1 and 18 years were most likely to have visited a dentist or other dental specialist within the past year (75.6 percent), while Hispanic children were least likely (61.3 percent). Children with family incomes at or above 200 percent of the poverty level were almost 30 percent more likely to have seen a dentist in the past year than children living with family incomes below 200 percent of the poverty level.

Children Receiving an EPSDT Preventive Dental Service: 1990-2002

Source (III.3): Centers for Medicare and Medicaid Services

Children Receiving Dental Care in the Past 12 Months, by Family Income: 2003

Source (III.4): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

*Federal poverty level, equal to $18,400 for a family of four in 2003.

*Includes data from 49 States.
TIMING OF PHYSICIAN VISITS

In 2003, 12.2 percent of children under 18 years of age had not seen a physician or other health care professional in the previous year (not including overnight hospitalization, trips to the emergency room, home visits, or dental visits). Older children were more likely than younger children to go without a physician visit. Nearly 16 percent of 15- to 17-year-olds had not had a physician visit in the previous year, compared to only 5.8 percent of children under 5 years of age.

Across all age groups, Hispanic children were the least likely to have seen a physician in the prior year; non-Hispanic White children were most likely to have seen a physician, except among 10- to 14-year-olds where non-Hispanic Black children were the most likely. At all ages, Hispanic children were at least 45 percent more likely than non-Hispanic White children to have had no physician visits.

Children Reported Not to Have Seen a Physician or Other Health Professional in the Past 12 Months, by Age and Race/Ethnicity: 2003
Source (III.4): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

<table>
<thead>
<tr>
<th>Percent of Children</th>
<th>Total</th>
<th>0-4 Years</th>
<th>5-9 Years</th>
<th>10-14 Years</th>
<th>15-17 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td>9.9</td>
<td>11.2</td>
<td>10.1</td>
<td>10.4</td>
<td>12.1</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>4.2</td>
<td>6.8</td>
<td>12.0</td>
<td>13.2</td>
<td>15.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>19.5</td>
<td>6.8</td>
<td>19.0</td>
<td>25.5</td>
<td>29.2</td>
</tr>
</tbody>
</table>
RECEIPT OF PREVENTIVE CARE

In 2003, 58.8 percent of children were reported by parents to have had both a preventive medical and dental visit in the past year. The American Academy of Pediatrics (AAP) recommends that children have eight health care visits in their first year, three in their second year, and at least one per year from middle childhood through adolescence. The AAP also recommends that all children receive an oral health risk assessment by 6 months of age and a dental referral by 3 years; earlier referrals are appropriate for children found to be at risk. The traditional recommendation for oral health supervision is every 6 months thereafter; however, this should also be adjusted based on each child’s individual risk.

Males and females were equally as likely to have had both a preventive medical and dental visit in the past year; however, the rate of preventive visits varied by age, race and ethnicity, and family income. Children ages 6 to 11 years are most likely to have received both preventive and dental visits (63.0 percent), followed by children ages 12 to 17 years (61.9 percent). Receipt of regular preventive care rose with family income: children with family incomes below 100 percent of the Federal poverty level (FPL) were least likely to have received care in the past year (48.3 percent), while children with family incomes at 400 percent of the FPL or higher were most likely (69.8 percent). By race and ethnicity, Hispanic children were least likely to have received both types of care in the past year (48.8 percent) while non-Hispanic White children were most likely (62.4 percent).
In 2003, a doctor’s office or HMO was the usual place of sick care (not including routine or preventive care) for nearly 79 percent of children in the United States, a rate that varies by age and family income. Children with family incomes above the poverty level were more likely to visit a doctor’s office or HMO for sick care than children in poverty (82.3 versus 58.9 percent), and were less likely to visit a clinic or health center (16.2 versus 36.7 percent). Only a small proportion of children used a hospital emergency room or outpatient department as a source of sick care, but children with family incomes below the poverty level were more likely to do so than children from families with higher incomes.

Younger children were more likely than older children to visit clinics or health centers, hospital emergency rooms, and hospital outpatient departments when sick. Children ages 5 to 12 years were more likely than their older and younger counterparts to use a doctor’s office or HMO as a source of care.

*The place where the child usually goes when sick; does not include routine or preventive care visits.
HOSPITAL UTILIZATION

In 2003, over 20 percent of children went to a hospital emergency room or emergency department (ER/ED) at least once. Children with family incomes above the Federal poverty level (FPL) were less likely than children living below the FPL to have visited the ER/ED. Children in low-income families were more likely to have gone one to three times (24.0 versus 19.2 percent) and four or more times (3.0 versus 1.0 percent). Despite this difference, there was little disparity in the number of nights spent in the hospital by FPL.

The rate of ER/ED visits also varied by a number of other factors, including sex, age, and race and ethnicity. Males under 18 years of age were more likely than their female counterparts to have made any trips to the ER/ED (22.4 versus 19.3 percent). More specifically, males were more likely than females to have gone one to three times, while both sexes were equally likely to have made four or more visits. By age, children under 5 years had the highest rate of ER/ED visits (27.3 percent), followed by children 15 to 17 years (20.8 percent). Non-Hispanic Black children had the highest rate of ER/ED visits (24.1 percent), followed by Hispanic and non-Hispanic White children (20.3 and 20.6 percent, respectively).
HEALTH CARE FINANCING

In 2003, 8.4 million children younger than 18 years of age (11.4 percent) had no health insurance coverage, and almost one-third of children were publicly insured.

Children with family incomes below the Federal poverty level (FPL) were more likely than children with family incomes of 200 percent of FPL or above to have public insurance (66.8 versus 12.6 percent) or be uninsured (19.5 versus 6.7 percent). Only 12.4 percent of children with family incomes below the FPL had employment-based coverage, compared to 78.6 percent with family incomes of 200 percent of FPL or above.

Although over 90 percent of privately insured children received insurance that was employment-based, children of employed adults may not receive coverage because it is not offered by the employer or it is prohibitively expensive. In 2003, almost two-thirds of uninsured children lived in families whose head was employed year-round on a full-time basis.

In 1997, the State Children’s Health Insurance Program (SCHIP) was created in response to the growing number of uninsured children in low-income working families. In 2003, 5.8 million children were enrolled in SCHIP. Although designed to cover children with a family income of below 200 percent of FPL, many States have expanded eligibility to children with higher family income; as of September 2003, 39 States and the District of Columbia had SCHIP coverage for children living at 200 percent of FPL and higher.

---

Health Insurance Coverage* Among Children Under Age 18: 2003

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Coverage</td>
<td>29.1</td>
</tr>
<tr>
<td>Public Coverage</td>
<td>65.9</td>
</tr>
<tr>
<td>Private Coverage</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Health Insurance Coverage* Among Children Living in Families Below 100 Percent of Poverty Level: 2003
Source (III.5): Employee Benefit Research Institute, Analysis of Current Population Survey

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>No Coverage</td>
<td>11.4</td>
</tr>
<tr>
<td>Public Coverage</td>
<td>66.8</td>
</tr>
<tr>
<td>Private Coverage</td>
<td>19.8</td>
</tr>
</tbody>
</table>

*Total equals more than 100% because children may have more than one source of coverage.
Prenatal Care

Timely Prenatal Care. Prenatal care—especially care beginning in the first trimester—improves pregnancy outcomes by identifying and managing chronic and pregnancy-related conditions and providing expectant parents with relevant health care advice. The rate of first trimester prenatal care utilization has been increasing fairly steadily since the early 1990s, and in 2003, 84.1 percent of women received prenatal care during the first trimester of pregnancy.

The increase in prenatal care utilization over the past decade has been especially remarkable among racial and ethnic groups with historically low rates of prenatal care. The proportion of non-Hispanic Black, Hispanic, and American Indian women receiving early prenatal care increased by 20 percent or more since 1990; however, disparities still exist. In 2003, non-Hispanic White women had the highest rates of early prenatal care utilization (89.0 percent), followed by Asian/Pacific Islander women (85.4 percent), non-Hispanic Black women (75.9 percent), and Hispanic women (77.5 percent); American Indian women had the lowest rate of early prenatal care utilization (70.8 percent).

Late or No Prenatal Care. The percentage of women beginning prenatal care in the third trimester or going without prenatal care decreased slightly to 3.5 percent in 2003. Hispanic and non-Hispanic Black women are more than twice as likely than non-Hispanic White women to receive late or no prenatal care. Other risk factors for late or no prenatal care include being younger than 20 years old, being unmarried, and having low educational attainment.

Mothers Beginning Prenatal Care in the First Trimester, by Age and Race: 2003
Source (I.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

Mothers Receiving Late or No Prenatal Care, by Age and Race: 2003
Source (I.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System
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While the indicators presented in previous sections are representative of the United States as a whole, the next section presents data on a number of health indicators at the State level. Included are data on infant, neonatal, and perinatal mortality, low birth weight, early prenatal care, births to women under 18, health care financing for children, Medicaid enrollment and expenditures, and SCHIP enrollment.

The following pages reveal stark differences in these measures across States. For instance, the rates of low birth weight births (less than 2,500 grams or 5 pounds 8 ounces) were highest in the District of Columbia and the southern States of Alabama, Louisiana, Mississippi, and South Carolina (all greater than 10 percent). These States, in addition to New Mexico and Texas, were among those with the highest rates of births to women under 18 years of age.

Poverty in the United States has risen over the past several years. Poverty affects living conditions and access to health care and nutrition, all of which contribute to health status. Medicaid and the State Children’s Health Insurance Program (SCHIP) were designed to assure that children living in low-income families have access to insurance coverage and receive adequate health care services. Alaska, New Mexico, and the District of Columbia had the greatest proportion of children with Medicaid/SCHIP coverage (over 40 percent), followed closely by Mississippi (39.9 percent), while New Jersey and Utah had the smallest proportions (16 percent or less). Vermont had the lowest proportion of uninsured children (5.2 percent) while Texas led the Nation with the highest proportion of uninsured children (20.2 percent).
## State Children’s Health Insurance Program (SCHIP) Aggregate Enrollment Statistics: FY 2004

Source (IV.1): Centers for Medicare and Medicaid Services

<table>
<thead>
<tr>
<th>State</th>
<th>Type of SCHIP Program</th>
<th>Date Implemented</th>
<th>Upper Eligibility</th>
<th>Total SCHIP Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Separate</td>
<td>02/01/98</td>
<td>200%</td>
<td>79,407</td>
</tr>
<tr>
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<td>175%</td>
<td>21,966</td>
</tr>
<tr>
<td>Arizona</td>
<td>Separate</td>
<td>11/01/98</td>
<td>200%</td>
<td>87,681</td>
</tr>
<tr>
<td>Arkansas</td>
<td>Combo</td>
<td>10/01/98</td>
<td>200%</td>
<td>799</td>
</tr>
<tr>
<td>California</td>
<td>Combo</td>
<td>03/01/98</td>
<td>250%</td>
<td>1,035,752</td>
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<tr>
<td>Colorado</td>
<td>Separate</td>
<td>04/22/98</td>
<td>185%</td>
<td>57,244*</td>
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<tr>
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<td>Separate</td>
<td>07/01/98</td>
<td>300%</td>
<td>21,438</td>
</tr>
<tr>
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<td>Combo</td>
<td>02/01/99</td>
<td>200%</td>
<td>10,250</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>Medicaid</td>
<td>10/01/98</td>
<td>200%</td>
<td>6,093</td>
</tr>
<tr>
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<td>Combo</td>
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<td>200%</td>
<td>419,707</td>
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<td>235%</td>
<td>280,083</td>
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</tr>
<tr>
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<td>185%</td>
<td>19,054</td>
</tr>
<tr>
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<td>Combo</td>
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<td>200%</td>
<td>234,027</td>
</tr>
<tr>
<td>Indiana</td>
<td>Combo</td>
<td>10/01/97</td>
<td>200%</td>
<td>80,698</td>
</tr>
<tr>
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<td>Combo</td>
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<td>200%</td>
<td>41,636</td>
</tr>
<tr>
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<td>Separate</td>
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<td>200%</td>
<td>44,350</td>
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<tr>
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<td>Combo</td>
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<td>94,500</td>
</tr>
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<td>Louisiana</td>
<td>Medicaid</td>
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<td>200%</td>
<td>105,580</td>
</tr>
<tr>
<td>Maine</td>
<td>Combo</td>
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<td>200%</td>
<td>29,171</td>
</tr>
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<td>Combo</td>
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<td>300%</td>
<td>111,488</td>
</tr>
<tr>
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<td>200%</td>
<td>166,508</td>
</tr>
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<td>200%</td>
<td>87,563</td>
</tr>
<tr>
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<td>Combo</td>
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<td>275%</td>
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<tr>
<td>Mississippi</td>
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<td>07/01/98</td>
<td>200%</td>
<td>82,900</td>
</tr>
<tr>
<td>Missouri</td>
<td>Medicaid</td>
<td>09/01/98</td>
<td>300%</td>
<td>176,014</td>
</tr>
<tr>
<td>Montana</td>
<td>Separate</td>
<td>01/01/99</td>
<td>150%</td>
<td>15,281</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Medicaid</td>
<td>05/01/98</td>
<td>185%</td>
<td>33,314</td>
</tr>
<tr>
<td>Nevada</td>
<td>Separate</td>
<td>10/01/98</td>
<td>200%</td>
<td>38,519</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Combo</td>
<td>05/01/98</td>
<td>300%</td>
<td>10,969</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Combo</td>
<td>03/01/98</td>
<td>350%</td>
<td>127,244</td>
</tr>
<tr>
<td>New Mexico</td>
<td>Medicaid</td>
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<td>20,804</td>
</tr>
<tr>
<td>New York</td>
<td>Combo</td>
<td>04/15/98</td>
<td>250%</td>
<td>826,611</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Separate</td>
<td>10/01/98</td>
<td>200%</td>
<td>174,434</td>
</tr>
<tr>
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<td>Combo</td>
<td>10/01/98</td>
<td>140%</td>
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<tr>
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<td>Medicaid</td>
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<tr>
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<td>Medicaid</td>
<td>12/01/97</td>
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<td>100,761</td>
</tr>
<tr>
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<td>Separate</td>
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<td>185%</td>
<td>46,720</td>
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<tr>
<td>Pennsylvania</td>
<td>Separate</td>
<td>05/28/98</td>
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<td>Combo</td>
<td>10/01/97</td>
<td>250%</td>
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<tr>
<td>South Carolina</td>
<td>Medicaid</td>
<td>10/01/97</td>
<td>150%</td>
<td>75,597</td>
</tr>
<tr>
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<td>Combo</td>
<td>07/01/98</td>
<td>200%</td>
<td>13,397</td>
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<tr>
<td>Tennessee*</td>
<td>Medicaid</td>
<td>10/01/97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>Separate</td>
<td>07/01/98</td>
<td>200%</td>
<td>650,856</td>
</tr>
<tr>
<td>Utah</td>
<td>Separate</td>
<td>08/03/98</td>
<td>200%</td>
<td>38,693</td>
</tr>
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<td>Vermont</td>
<td>Separate</td>
<td>10/01/98</td>
<td>300%</td>
<td>6,693</td>
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<td>Virginia</td>
<td>Combo</td>
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<td>Washington</td>
<td>Separate</td>
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<td>West Virginia</td>
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<td>Medicaid</td>
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<td>Wyoming</td>
<td>Separate</td>
<td>12/01/99</td>
<td>185%</td>
<td>5,525</td>
</tr>
</tbody>
</table>

*Enrollment data is only available for 10.5 months of the year.
**Tennessee does not currently cover any children in an SCHIP program.

Source (IV.2, IV.3): Centers for Medicare and Medicaid Services

<table>
<thead>
<tr>
<th>State</th>
<th>Medicaid Enrollees</th>
<th>Per Enrollee Expenditure</th>
<th>Participation Ratio</th>
<th>State</th>
<th>Medicaid Enrollees</th>
<th>Per Enrollee Expenditure</th>
<th>Participation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>459,844</td>
<td>$1,706.53</td>
<td>48%</td>
<td>Montana</td>
<td>59,968</td>
<td>$2,520.95</td>
<td>51%</td>
</tr>
<tr>
<td>Alaska</td>
<td>83,976</td>
<td>$3,511.01</td>
<td>45%</td>
<td>Nebraska</td>
<td>160,967</td>
<td>$2,038.89</td>
<td>52%</td>
</tr>
<tr>
<td>Arizona</td>
<td>490,898</td>
<td>$2,397.82</td>
<td>60%</td>
<td>Nevada</td>
<td>130,486</td>
<td>$1,579.71</td>
<td>78%</td>
</tr>
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<td>Arkansas</td>
<td>316,411</td>
<td>$2,327.45</td>
<td>66%</td>
<td>New Hampshire</td>
<td>73,974</td>
<td>$2,417.12</td>
<td>54%</td>
</tr>
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<td>California</td>
<td>3,401,740</td>
<td>$1,765.72</td>
<td>37%</td>
<td>New Jersey</td>
<td>530,508</td>
<td>$1,985.07</td>
<td>48%</td>
</tr>
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<td>Colorado</td>
<td>257,877</td>
<td>$2,152.11</td>
<td>53%</td>
<td>New Mexico</td>
<td>303,439</td>
<td>$589.93</td>
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</tr>
<tr>
<td>North Carolina</td>
<td>780,846</td>
<td>$2,048.18</td>
<td>75%</td>
<td>North Dakota</td>
<td>35,328</td>
<td>$1,905.72</td>
<td>26%</td>
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<td>1,475,561</td>
<td>$1,624.44</td>
<td>53%</td>
<td>Ohio</td>
<td>1,033,705</td>
<td>$1,710.91</td>
<td>42%</td>
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<td>1,174,535</td>
<td>$1,230.73</td>
<td>39%</td>
<td>Oklahoma</td>
<td>420,165</td>
<td>$1,561.63</td>
<td>45%</td>
</tr>
<tr>
<td>Hawaii</td>
<td>107,259</td>
<td>$1,419.54</td>
<td>70%</td>
<td>Oregon</td>
<td>279,936</td>
<td>$1,909.36</td>
<td>50%</td>
</tr>
<tr>
<td>Idaho</td>
<td>133,479</td>
<td>$1,178.58</td>
<td>16%</td>
<td>Pennsylvania</td>
<td>903,940</td>
<td>$2,504.14</td>
<td>53%</td>
</tr>
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<td>Illinois</td>
<td>1,133,694</td>
<td>$1,679.00</td>
<td>70%</td>
<td>Rhode Island</td>
<td>107,847</td>
<td>$2,833.95</td>
<td>56%</td>
</tr>
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<td>549,454</td>
<td>$1,670.62</td>
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*Unduplicated number of individuals under age 21 determined to be eligible for EPSDT services (FY 2002 416 Report).

**Represents total Medicaid vendor payments (FY 2002 MSIS Report) divided by Medicaid eligibles under 21.

***This ratio indicates the extent to which Medicaid eligibles received any initial and periodic screening services during FY 2002.
## Health Insurance Status of Children Through Age 18: 2003*

*Estimates for 2003 should not be compared directly to estimates prior to 2000 due to changes in survey design.

**Includes children covered by Medicare and Indian Health Services.

***See map on facing page.

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<tr>
<th>State</th>
<th>Percent with Private/Employer-Based Insurance</th>
<th>Percent Enrolled in Medicaid/SCHIP**</th>
<th>Percent Uninsured***</th>
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<th>State</th>
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<th>Percent Enrolled in Medicaid/SCHIP**</th>
<th>Percent Uninsured***</th>
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Percent of Children Under the Age of 19 Who Are Uninsured: 2003
Source (IV.4): American Academy of Pediatrics

< 7.5%
7.5 - 10%
10.1 - 12%
12.1 - 23%

State Data
### Percent of Infants Born at Low Birth Weight, Women Receiving First Trimester Prenatal Care, and Births to Women Under Age 18, by State and Race of Mother: 2003

Source (I.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

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<th>Non-Hispanic Total*</th>
<th>White</th>
<th>Black</th>
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*Includes races other than White and Black.
**Includes Hispanics.

N/A Figure does not meet standards of reliability or precision.
### Infant and Neonatal Mortality Rates, by Race of Mother and State: 2002

**Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System**

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* N/A Figure does not meet standards of reliability or precision.
* Includes races other than White or Black.
** Includes Hispanics.
*** Rates are deaths less than one year per 1,000 live births in specified group.
**** Rates are deaths under 28 days per 1,000 live births in specified group.
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The following section presents data on the health of infants and children living in cities compared to that of children nationwide. Included are data on infant mortality, low birth weight, and prenatal care for those women and children who reside in U.S. cities with over 100,000 residents.

The following measures indicate that the health status of children living in large U.S. cities is generally poorer than that of children in the Nation as a whole. In 2003, the percentage of infants born at low birth weight was 8 percent higher in cities compared to the National average (8.5 versus 7.9 percent). Infant mortality was also higher in cities, likely due at least in part to the higher rate of low birth weight. In 2002, the city infant mortality rate was 7.5 per 1,000 live births, compared to a rate of 7.0 nationwide. The percentage of pregnant women receiving first trimester prenatal care was lower in cities (81.7 percent) than it was nationwide (84.1 percent).
BIRTH WEIGHT

Low Birth Weight. Disorders related to short gestation and low birth weight are the second leading cause of neonatal mortality in the United States. In 2003, 114,085 babies born to residents of U.S. cities with populations over 100,000 were of low birth weight (weighing less than 2,500 grams, or 5 pounds 8 ounces); this represents a rate of 8.5 percent. The 2003 percentage of urban infants born at low birth weight was 8 percent higher than the National rate of 7.9 percent.

Very Low Birth Weight. Infants born at very low birth weight (less than 1,500 grams, or 3 pounds 4 ounces) are at highest risk for poor health outcomes. In 2003, 1.6 percent of live births in cities with populations over 100,000 were of very low birth weight. This exceeded the National very low birth weight rate by 14 percent.

Infants Born at Low Birth Weight in U.S. Cities with Populations over 100,000: 1990-2003
Source (V.1): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

<table>
<thead>
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<th>Year</th>
<th>Total U.S. Population</th>
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Infants Born at Very Low Birth Weight in U.S. Cities with Populations over 100,000: 1990-2003
Source (V.1): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

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<tr>
<td>2003</td>
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</tbody>
</table>
INFANT MORTALITY

In 2002, 9,204 infants born to residents of cities in the United States with populations over 100,000 died in the first year of life. The city infant mortality rate was 7.5 deaths per 1,000 live births, higher than the rate of 7.0 for the Nation as a whole. Although the infant mortality rate in cities has routinely been higher than the rate nationwide, it has declined over the past decade. Between 1990 and 2000, infant mortality in cities declined by roughly one-third; the decline nationwide in the same period was 25 percent. Between 2001 and 2002, there was an increase of 0.1 and 0.2 deaths per 1,000 live births, respectively, in cities and nationwide.
**PRENATAL CARE**

**Early Prenatal Care.** Women living in U.S. cities with a population of over 100,000 are less likely to begin prenatal care in the first 3 months of pregnancy than women nationwide. The gap in early entry into prenatal care between urban women and the Nation as a whole has narrowed since 1991.

In 2003, 81.7 percent of pregnant women living in U.S. cities began prenatal care in the first trimester of pregnancy, compared to 84.1 percent nationwide. The percentage of women receiving prenatal care has increased steadily in the past decade at both the city and nationwide levels. The Healthy People 2010 objective is for 90 percent of pregnant women to begin prenatal care in the first trimester.

**Late or No Prenatal Care.** In 2003, 4.4 percent of pregnant women living in U.S. cities with a population over 100,000 either began prenatal care in the third trimester or received no prenatal care. The percentage of women receiving late or no prenatal care is 26 percent higher among women living in cities than among the overall population of the United States.

---

**Pregnant Women Receiving First Trimester Prenatal Care in U.S. Cities with Populations Over 100,000: 1990-2003**

Source (V.1): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

<table>
<thead>
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<th>Year</th>
<th>Total U.S. Cities (Percent)</th>
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**Pregnant Women Receiving Late or No Prenatal Care in U.S. Cities with Populations Over 100,000: 1990-2003**

Source (V.1): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

<table>
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*2003 data includes 48 states and the District of Columbia.*
Population Characteristics


Health Status


II.3 Centers for Disease Control and Prevention, National Center for Health Statistics. Health, United States, 2005. Hyattsville, MD: 2005


Health Services Financing and Utilization


State Data


City Data

V.1 Centers for Disease Control and Prevention, National Center for Health Statistics. Unpublished data.
Contributors

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National Institute on Drug Abuse
Substance Abuse and Mental Health Services Administration

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