

# Child Health USA 2004





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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 2004*, the fifteenth 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, MCHB has compiled this book of secondary data for 55 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 here came from the same sources as the information in the graphs (unless noted otherwise). 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 2004* 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.

The first section, Population Characteristics, 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. The third section, Health Services Financing and Utilization, contains data regarding health care financing and newly implemented health policies. The fourth and fifth sections contain information on selected indicators at the state and city levels.

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# INTRODUCTION

The effectiveness of a health care system is measured not only in how it treats sickness or disease, but in how it utilizes prevention to maintain a population's health. Through services such as prenatal care and immunization, as well as promotion of healthy choices in life, prevention is critical in assuring that children are born healthy and that they maintain good health as they grow older. These choices affect both children and their families, beginning early in pregnancy and continuing throughout childhood, adolescence, and young adulthood, and require the continuing effort of individuals, communities, and health care providers.

As of July 2003, there were 81.2 million children ages 19 and under in the United States, and another 20.7 million young adults ages 20 to 24. The indicators in this book demonstrate that we have thus far achieved mixed success in promoting the health of these children and their families. For instance, 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. In 2002, of every 1,000 live births, 7 babies died in their first year of life, and in some communities the rate of infant mortality is much higher. In 2000 the U.S. infant mortality rate was 27th among industrialized nations.

One important means of preventing infant mortality is improving the health of infants at birth. The rate of low birth weight (LBW) — a weight of less than 2500 grams (5.8 pounds) at birth — has been steadily increasing since 1985, when LBW babies represented 6.8 percent of live births; in 2002, 7.8 percent of all live births were of low weight. Very low birth weight (VLBW) babies — those weighing less than 1500 grams — represented 1.5 percent of births. VLBW babies are particularly likely to have long-term health and developmental problems.

Good health care during pregnancy is a preventive strategy that assures the health of both mother and child. Overall, early entry into prenatal care (in the first 3 months of pregnancy) has been improving, reaching 83.7 percent of pregnant women in 2002. Unfortunately, this rate is lower for younger women as well as Black and Hispanic women. Some pregnant women (3.6 percent in 2002) go without prenatal care entirely or forgo these services until the third trimester of their pregnancy.

Good breastfeeding habits are another important step that parents can take to assure the health of their babies. Breast milk has a number of preventive health benefits for both mother and child. The benefits of breastfeeding include prevention of diarrhea and infections in infants, as well as long-term preventive effects for the mother, including earlier return to pre-pregnancy weight and reduced risk of premenopausal breast cancer and osteoporosis. In 2002, 70.1 percent of mothers breastfed in the hospital, the highest rate yet recorded. However, rates of breastfeeding decline dramatically after the initial months of life, and only 33.2 percent of mothers report that they are still breastfeeding their infants at 6 months of age. These rates are lowest among Black mothers, with 53.9 percent reporting breastfeeding in the hospital, and only 19.2 breastfeeding at 6 months.

As children grow older, prevention efforts are aimed at avoiding injuries and adopting healthy habits for adulthood. Unintentional injuries — most of which are preventable are the leading cause of death for children aged 1-14, causing the deaths of 4,359 children in 2002. The leading causes of death due to all injuries for this age group were motor vehicle crashes, drowning, firearms, and fires. This varies by age group, as fire is a major cause of injury death among young children, while firearms more often affect older children.

Prevention efforts appear to be succeeding in reducing rates of pediatric Acquired Immune Deficiency Syndrome (AIDS). Only 158 new cases of AIDS in children under age 13 were reported in 2002, which represents a drastic reduction over the past decade. Much of this reduction is due to prevention efforts, including an increase in treatment for pregnant women before, during, and after birth to reduce perinatal HIV transmission. A 1994 recommendation by the U.S. Public Health Service that all pregnant women receive such treatments, and a 1995 recommendation for HIV counseling and voluntary testing among all pregnant women, have helped to reduce transmission rates.

Immunization is probably the preventive health service that is most recognized among the public. Vaccines are available for such public health threats as measles, mumps, rubella (German measles), polio, diphtheria, tetanus, pertussis (whooping cough), and *H. Influenzae* type b (the bacterium that causes meningitis). A 2002-2003 survey released by the Centers for Disease Control and Prevention shows that 77.9 percent of children aged 19-35 months have been immunized with the recommended series of vaccines. Although this is a huge public health success, significant progress is still needed to reach the 2010 goal of immunizing at least 90 percent of children by 35 months of age.

Dental care is another important preventive service, one that too few children receive regularly. Overall, 70.6 percent of children visited a dentist within the past year, but among children from low-income families, this proportion was only 61.7 percent. According to the U.S. Surgeon General, dental caries is the single most common chronic disease among children, and it can be prevented with regular dental care.

Adolescence is a time of risk-taking, but it is also the time when life-long health habits are formed. The indicators in this book show improvement in some areas of adolescent health, but teens are still exposed to a number of risks that threaten both their health and their potential for independence and success in life, such as unplanned childbearing. Childbearing among adolescents has been declining in recent years, and in 2002 rates reached an historic low of 43 births per 1,000 teens ages 15 to 19. This represents a 30 percent decrease in adolescent childbearing since 1991. The greatest decrease in adolescent childbearing has been among Black youth, with a 42 percent decline from 1991 to 2002. Although there has been a decline among all racial and ethnic groups, Hispanic youth have experienced the least dramatic decline; the rate among Hispanics has dropped only 20 percent, leaving them with the highest rate — 83.4 births per 1,000 teens in 2002.

Although smoking remains a major threat to the health of adolescents, prevention efforts have resulted in a large decline in cigarette use among teens. Among  $8^{th}$  graders, reports of

cigarette use over a 30-day period declined 51.4 percent between 1996-97 and 2003. There were smaller, although still significant, drops in cigarette smoking among 10<sup>th</sup> and 12<sup>th</sup> graders, as well (45 percent and 33 percent, respectively).

Regular, vigorous exercise is another health habit with benefits that can last a lifetime. Overall, almost two-thirds of high school students regularly participated in sufficient vigorous physical activity in 2003, and nearly one-quarter participated in sufficient moderate activity. These proportions have declined slightly since 2001, but more students report playing on one or more sports teams and being enrolled in physical education classes.

Treatment for mental, emotional, and behavioral problems can be a critical component of adolescent health care. Nationally, nearly 20 percent of teens received mental health treatment or counseling in 2002, primarily for feelings of depression, breaking rules or acting out, suicidal thoughts or attempts, and feeling very afraid or tense. The most common sources of this treatment were private therapists, followed by school counselors or psychologists.

As many of the statistics here reveal, mental health and well-being is a critical component of children's overall health. Mental disorders are the leading cause of hospitalizations for children aged 10 to 14 and the second leading cause of hospitalizations for adolescents. Suicide is the third leading cause of death for adolescents and is the fifth leading cause of death for 5- to 14year-olds. Certain high-risk factors, such as poverty and maternal depression, also affect a child's well-being and overall health. Screening for mental health and substance abuse problems, as appropriate, intervening early, and providing access and linkages to services and supports can help to prevent the tragic consequences of mental health and/or substance abuse problems and mental and/or addictive disorders for children and their families.

Health insurance is critical in assuring that children receive both the preventive and treatment services they need. In 2002, 12 percent (8.5 million) children under 18 were without health coverage. Over one-fourth (26.8 percent) were covered under public insurance. The State Children's Health Insurance Program (SCHIP), created under the Balanced Budget Act of 1997, allows States to extend comprehensive insurance to children in low-income families who are not eligible for the Medicaid program. As of the end of Federal Fiscal Year 2003, 5.8 million children had been enrolled in SCHIP since its inception. As of 2002, children in families at 200% of the Federal poverty level were eligible for insurance through Medicaid or SCHIP in 26 states. In another 12 states, the eligibility

level exceeded 235% of the poverty level.

The statistics presented in *Child Health USA 2004* are essential for both appreciating America's numerous public health achievements and recognizing the challenges that we still face. Prevention and health promotion include a range of public health strategies including providing access to knowledge, skills, and tools; providing drug-free activities for youth; identifying risk factors and linking people to services and supports; building community processes, such as coalitions; and environmental approaches that promote policy changes. These prevention efforts are vital if we are to continue the improvements that we are making in the health and well-being of America's children and families.



# POPULATION CHARACTERISTICS

Socio-demographic characteristics provide a comprehensive picture of the country's diverse maternal and child population. The population of children ages 21 and below comprises roughly one-third of the U.S. population.

At the national, state, and local levels, policymakers use population information to systematically address health-related issues of mothers and children. By carefully analyzing and comparing data, health workers can often isolate high-risk populations that require specific interventions. Policy-makers can then tailor programs to meet the needs of those populations. The following section presents data on several population characteristics that have an impact on maternal and child health program development and evaluation. These include age, poverty status, race and ethnicity, living arrangements, child care trends, and school dropout rates. Also presented in this section are descriptions of specific target populations, including the foreign-born population and children with special health care needs.



#### **POPULATION OF CHILDREN**

#### Age

In 2003, the 73 million children under the age of 18 in the United States represented 25 percent of the total population. Young adults aged 20-24 represented 7.1 percent, adults aged 25-64 represented nearly 53 percent, and persons ages 65 and over represented 12 percent of the total population. The median age in the U.S. for all races was 35.9 years.

In the last decade, the number of children under 5 years of age has increased by 0.2 percent, while the number of children ages 5-19 has increased by 12 percent. In the same period, the number of persons aged 65 and over has increased by 9 percent.

#### **Race and Ethnicity**

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 doubled, as the percentage who are non-Hispanic White has declined. Hispanic children represented 9 percent of children in 1980 and 18 percent in 2003; likewise, Asian/Pacific Islander children represented 2 percent in 1980 and 4 percent in 2003. In the same period, the percentage of children who are White dropped by 18 percent to represent 59 percent of the child population in 2003, while the percentage who are Black remained stable. In addition, nearly 3 percent of children were of more than one racial group in 2003.

# U.S. Resident Population by Age Group: 2003



# Percent Distribution of Children Under 18, by Race/Ethnicity: 2003

Source (I.1): U.S. Census Bureau



\* Includes Hispanic

# CHILDREN OF FOREIGN-BORN PARENTS

The foreign-born population in the United States has increased substantially since 1970, largely due to immigration from Asia and Latin America. In 2002, nearly 20 percent of children in the U.S. or 14 million children, had at least one foreign-born parent: 15.9 percent were born in the U.S., and 3.7 percent were themselves foreign-born. Most children (76.2 percent) were native-born living in households with native-born parents.<sup>1</sup>

# Percent Distribution of Children Under 18, by Nativity of Child and Parents: 2002

Source (I.2): U.S. Census Bureau, Current Population Survey



Compared to native-born children living with native parents, children living with foreign-born parents were more likely to live below 200 percent of the Federal poverty level, more likely to live in cities, and more likely to live in two-parent families. They were also more likely to have parents with less than a high school education, although educational attainment varied by region of birth. Those born in Asia and Europe had the highest percentages of high school graduates (86.8 percent and 84 percent, respectively) compared to those born in Latin America, with only 49.1 percent having graduated from high school. Immigrant children and children of foreign-born parents face the challenges of acculturation and have health and psychosocial risks at home and at school.<sup>2</sup>

- 1 The term "native-born parents" indicates that both parents who live with the child are native-born, while "foreign-born" means that one or both of the child's parents are foreign-born.
- 2 Schmidley, Dianne (2003). The Foreign-born Population in the United States: March 2002. Current Population Reports, P20-539. Washington, D.C.: U.S. Census Bureau.

# Percent Distribution of Children Under 18, by Income and Nativity of Child and Parents: 2002

Source (I.2): U.S. Census Bureau, Current Population Survey



\* Federal Poverty Level

# CHILDREN WITH SPECIAL HEALTH CARE NEEDS

Based on the 2001 National Survey of Children with Special Health Care Needs, it is estimated that 12.8 percent of children have special health care needs. Children with special health care needs (CSHCN) are defined by the Maternal and Child Health Bureau as those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally. Based on this definition, the survey estimated that 9.4 million children in the U.S. have special health care needs.

The conditions of CSHCN vary in their impact on children's ability to function. The parents of 23.2 percent of CSHCN report that their children's conditions affect their abilities usually, always, or a great deal; 37.4 percent report that their children's conditions sometimes affect their abilities; and 39.4 percent report that their children's conditions never affect their activities.

State-level data on the prevalence of CSHCN can be found in the National Survey of CSHCN Chartbook.

#### Prevalence of Children with Special Health Care Needs, 2001

Impact on Child's Condition on Functional Ability, 2001

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN



# Source (I.3): Centers for Disease Control and Prevention,

National Center for Health Statistics, National Survey of CSHCN



Affects Activities Usually/Always or a Great Deal

23.2%

Never Affects Activities 39.4%

### CHILDREN IN POVERTY

In 2002, 12.1 million children under 18 years of age lived in families with income below the Federal poverty threshold (e.g., \$18,392 for a family of four).<sup>1</sup> Children living below the poverty level represented 16.7 percent of children in the U.S., a rate that did not change from the previous year. Children represented 35 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 (32.1 percent) and Hispanic (28.2 percent) related\* children under age 18 were poor than were related White children (13.1 percent). Children in single-parent families are particularly likely to be poor: of children under age 6 living with a single mother, 48.6 percent were in poverty, compared to 9.7 percent of children of the same age in married-couple families.

Based on the U.S. Census Bureau's poverty threshold, which is calculated using the Consumer Price Index from the previous year.

# Related Children Under 18 Living in Families\* Below 100% of Poverty Level, by Race/Ethnicity:\*\* 1970-2002



# Families Below 100% of Poverty Level, by Household Status: 2002

Source (I.4): U.S. Census Bureau, Current Population Survey



\* Related children are those under 18 who are related to the householder by birth, marriage, or adoption.

\*\* The 2003 CPS allowed respondents to choose more than one race. For 2001 and earlier years, only one race was allowed.

\*\*\* Hispanic ethnicity not reported prior to 1979.

#### SCHOOL DROPOUTS

As of October 2001, the latest year for which data are available, there were approximately 3,774,000 high school dropouts<sup>1</sup> between the ages of 16 and 24 in the United States. This translates into a total dropout rate of 10.7 percent for youth in this age group, a rate that has remained fairly stable since 1992.

Since 1970, Hispanic students have had the highest dropout rates, representing well over a quarter of Hispanic young adults. The high Hispanic dropout rate (27 percent) is partly driven by the significantly higher dropout rate among foreign-born Hispanics of 43.4 percent in 2001. The corresponding rates for White and Black students were 7.3 percent and 10.9 percent, respectively. Although the gap in the dropout rate between Blacks and Whites narrowed between the 1970's and 1980's, the gap has remained constant since 1990.

According to the National Center for Education Statistics, students who drop out of high school are more likely to be unemployed and earn less when employed, compared to students who complete high school.

1 This term refers to status dropouts, which represents 16- to 24-year-olds who are not enrolled in school and have not earned a high school credential (diploma or equivalent).

#### Status School Dropout Rates for Ages 16-24 by Race/Ethnicity: 1991-2001

Source (I.5): U.S. Department of Education, National Center for Education Statistics



\* Non-Hispanic

\*\* Because of changes in data collection procedures begining in 1992, data may not be comparable with figures for earlier years.

# WORKING MOTHERS AND CHILD CARE

In 2003, 63 percent of mothers with preschool-aged children (younger than 6 years) were in the labor force (either employed or looking for work), and 58 percent were actually employed. Of those mothers, 70 percent worked full-time and 30 percent worked parttime. Of women with children ages 6-17, 78 percent were in the labor force in 2003 and nearly all of those were actually employed. Among these employed mothers, 77 percent worked full-time and 23 percent worked part-time.

# Percent of Mothers in the Work Force: 1975-2003

Source (I.6): U.S. Department of Labor



\* Data for 1995 and later are not strictly comparable with data for earlier years due to changes in the survey and estimation process.

### Child Care Arrangements for Children Under Age 5 with Employed Mothers, by Family Income: 2002

Source (I.7): Urban Institute, National Survey of America's Families



\* Low income is defined as below 200 percent of the federal poverty level; higher-income is 200 percent and above.

\*\* Care by a non-relative in the child's home.

\*\*\* Care by a non-relative in the provider's home.

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#### **EXPENDITURES FOR CSHCN**

#### **Out-of-Pocket Expenditures**

Payment for services not covered by a health plan — such as therapies, home health care, prescription drugs, and dental services — may be a particular burden for families of children with special health care needs, who may need a wide variety of services and who may use more services than other children. Families of nearly half of CSHCN report spending \$250 or more a year for the care of their child with special health care needs. Thirteen percent reported spending between \$501 and \$1,000, and 11 percent spent more than \$1,000 a year.

#### **Financial Burden**

Both the out-of-pocket expenses associated with their children's care and the need of some parents to cut down their work hours to care for their children can create financial burdens for families of CSHCN. The parents of just over 20 percent of CSHCN report financial problems due to their children's conditions. Financial burdens are twice as common in low-income families of CSHCN as in higher-income families.

#### Annual Out-of-Pocket Expenditures for Care of CSHCN\*



Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN

#### Percent of CSHCN\* Whose Families Experience Financial Problems Due to Child's Condition

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN



\* CSHCN are defined as those who have a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.

#### MATERNAL AGE

The general fertility rate declined to 64.8 births per 1,000 women in 2002. The birth rates among older mothers ages 35-44 continued to increase, while rates for women in their twenties and early thirties declined or remained stable. Birth rates for teenagers have fallen steadily in the past decade and reached a record low in 2002.

Among 2002 births, almost 11 percent were to women under 20, over half to women in their twenties, one third to women in their thirties, and about 2.5 percent to women in their forties and early fifties. The average age of women having their first birth in 2002 was 25.1 years, the highest yet recorded. The average age at first birth has risen from 21.4 years in 1970. Among both Black and White women, over half of births in 2002 were to women in their twenties. The proportion of births that were to women under 20 years of age were higher among Black (18.0 percent) than White (9.7 percent) women. White births were more likely to be to women in their thirties, forties and early fifties.

#### Percent Distribution of Births by Maternal Age and Race: 2002

Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System





#### **20** HEALTH STATUS

# **HEALTH STATUS**

The systematic assessment of the health status of children enables health professionals to determine the impact of past and current health intervention and prevention programs. Program planners and policy-makers identify trends by examining and comparing information from one data collection year to the next. Although indicators are often assessed on an annual basis, some surveillance systems may only collect data every two, three, or five years.

In the following section, mortality, disease, injury, and health behavior indicators are presented by age groups. The health status indicators in this section are based on vital statistics and national surveys. Population-based samples are designed to yield data that are representative of the maternal and child population that are affected by, or in need of, specific health services.



#### BREASTFEEDING

The percentage of new mothers who began to breastfeed their babies in the hospital has increased steadily since 1990, reaching a high of 70.1 percent in 2002. Breastfeeding initiation rates have increased among all racial and ethnic groups, and especially among the populations that have traditionally been least likely to breastfeed, such as Black and Hispanic women. These increases have contributed to a substantial reduction in the gap in breastfeeding rates between White and non-White women.

Breastfeeding rates for all women decreased substantially between delivery and 6 months postpartum, the period recommended as most critical for the infant's health by the U.S. Surgeon General. The percentage of women who report that they are still breastfeeding at 6 months postpartum reached a high of 33.2 percent in 2002. At six months postpartum, 36.0 percent, 19.2 percent, and 32.7 percent of White, Black, and Hispanic women, respectively, were still breastfeeding.

Average breastfeeding rates were highest among women who are over 30 years of age, college educated, and not participating in the Women, Infants, and Children (WIC) supplementary food program. Overall breastfeeding rates were lowest among women under 20 years of age, Black, low-income, those with less than a high school education, and women living in the southeastern United States.

#### Breastfeeding\* Rates, by Race/Ethnicity: 2002

Source (II.1): Mothers' Survey, Ross Products Division, Abbott Laboratories



#### In-Hospital Breastfeeding\* Rates, by Race/Ethnicity: 1990-2002

Source (II.1): Mothers' Survey, Ross Products Division, Abbott Laboratories



\* Includes exclusive and supplemental breastfeeding

#### LOW BIRTH WEIGHT

In 2002, 314,077 babies (7.8 percent of all live births) were of low birth weight, weighing less than 2,500 grams, or 5 pounds 8 ounces, at birth. This rate represented a slight increase from the previous year. 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.

The highest rates of delivering a low birth weight infant are among mothers younger than 15 years and older than 45. Much of the incidence of low birth weight among older mothers (older than 44) is due to an increase in the proportion of multiple births, as the use of assisted reproductive technologies increases. Multiple births accounted for 24 percent of low birth weight infants in 2002 compared to only 15 percent in 1980. However, the low birth weight rate among singleton infants increased as well.

Although the non-Hispanic Black low birth weight has declined slightly from a high of 13.6 percent in 1991, it remains considerably higher than the rate for non-Hispanic White (6.9 percent) and Hispanic (6.5 percent) infants. In 2002, the percent of low birth weight infants born to smokers (12.2 percent) was substantially higher than among nonsmokers (7.5 percent). 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: 1985-2002\*

Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



\* 1985-1988 data based on race of child; 1989-2002 data based on race of mother. \*\* Non-Hispanic

#### **VERY LOW BIRTH WEIGHT**

In 2002, the rate of very low birth weight (less than 1500 grams or 3 pounds 4 ounces) newborns was 1.5 percent of live births, a rate that has been relatively stable since 1997.

Because chance for survival increases as birth weight increases, infants born at a very low birth weight have the lowest survival rates. Infants born at such low birth weights are approximately 100 times more likely to die by age one 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 is two and a half times greater than that among non-Hispanic Whites and is twice the rate of the population as a whole. This disparity is a major contributor to the disparity in infant mortality rates between non-Hispanic Black and non-Hispanic White infants.

#### Very Low Birth Weight Among Infants, by Race/Ethnicity: 1985-2002

Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



\* Non-Hispanic

## INTERNATIONAL INFANT MORTALITY RATES

Differences in the infant mortality rates among industrialized nations 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. Although the United States has greatly reduced its infant mortality rate since 1965, the nation ranked 27th among industrialized nations in 2000.

This graph comparing international infant mortality rates includes countries, territories, cities, or geographic areas with a population of at least 1 million that have complete counts of live births and infant deaths. In 2000, four of these jurisdictions had infant mortality rates less than half that of the United States.

#### Comparison of International Infant Mortality Rates: 2000

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



\* Includes data for East Jerusalem and Israeli residents in certain other territories under occupation by Israel military forces since June 1967.

#### INFANT MORTALITY

In 2002, 27,970 infants died before their first birthday. The infant mortality rate was 7.0 deaths per 1,000 live births, representing a small but significant increase from the previous year, the first such increase in 40 years. The leading causes of infant mortality include birth defects, low birth weight and prematurity, and pregnancy complications. Approximately 25 percent of the increase in infant mortality is due to multiple births.<sup>1</sup>

The rapid decline in infant mortality, which began in the mid-1960's, slowed among both Blacks and Whites during the 1980's. 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 1990's. In 2002, the leading cause of infant mortality was congenital malformations, deformations and chromosomal abnormalities, which accounted for 20.2 percent of infant deaths.

Based on preliminary data, mortality among non-Hispanic Black infants remained stable at 13.9 deaths per 1,000 live births in 2002. The rate of 5.8 deaths per 1,000 live births among non-Hispanic White infants represented a slight increase over the rate in 2001. The infant mortality rate for non-Hispanic Black infants continues to be 2.5 times that of non-Hispanic White infants. Although the trend in infant mortality rates among non-Hispanic Blacks and non-Hispanic Whites has generally declined throughout the 20<sup>th</sup> century, the proportional discrepancy between the non-Hispanic Black and non-Hispanic White rates 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.

 MacDorman MF et al. Explaining the 2001-02 Infant Mortality Increase: Data from the Linked Birth/Infant Death Set. NVSR 2005; 53(12).

#### U.S. Mortality Rates Among Infants, by Race/Ethnicity of Mother, 1997-2002

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



\* Non-Hispanic

# NEONATAL AND POSTNEONATAL MORTALITY

#### Neonatal

In 2002, 18,791 infants younger than 28 days died, resulting in a neonatal mortality rate of 4.7 deaths per 1,000 live births. This neonatal mortality rate represents a small increase from the rate recorded in 2001.

Neonatal mortality is generally related to congenital anomalies and disorders resulting from preterm delivery and low birth weight.

#### Postneonatal

In 2002, 9,179 infants between 28 days and 1 year of age died; the postneonatal mortality rate was 2.3 deaths per 1,000 live births. The 2002 rate is not different from the 2001 rate.

The leading causes of postneonatal mortality in 2002 were Sudden Infant Death Syndrome and congenital anomalies.

# Neonatal Mortality Rates, by Race/Ethnicity of Mother: 2002



\* Non-Hispanic

#### Postneonatal Mortality Rates, by Race/Ethnicity of Mother: 2002

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



\* Non-Hispanic

#### MATERNAL MORTALITY

During the past several decades, the rate of maternal mortality in the United States has declined dramatically. Since 1982, however, the maternal mortality rate has not declined significantly.

In 2002, 357 maternal deaths resulted from complications during pregnancy, childbirth, or up to 42 days postpartum. The maternal mortality rate of 8.9 per 100,000 live births was not significantly different from those reported in recent years.

The maternal mortality rate among non-Hispanic Black women (24.9 per 100,000 live births) is more than four times the rate among non-Hispanic White women (5.6 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 aged 35-39 years have over three times the risk of maternal death as women aged 20-24 years.<sup>1</sup>



### Maternal Mortality Rates, by Race/Ethnicity: 2002

Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



### VACCINE-PREVENTABLE DISEASES

The number of reported cases of vaccinepreventable diseases has decreased steadily over the past decade. While the number of cases of H. Influenzae, mumps, and pertussis increased between 2001 and 2002, cases of rubella, measles, Hepatitis B, and Hepatitis A all decreased among children under 5. However, 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 young children. In 2002, the highest number of cases of pertussis was reported since 1964. Of these cases, 21 percent were among infants under 6 months of age, too young to have received the first three of the five doses of the vaccine. Mumps and rubella were at record low levels across all ages.

Although much progress has been made in reducing the number of reported cases of vaccinepreventable 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 highrisk areas, the number of cases has decreased; in 2002, the overall rate of Hepatitis A was the lowest ever recorded at 3.1 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 an effect.

#### Vaccine-Preventable Diseases Among Children Under 5: 2002

Source (II.4): Centers for Disease Control and Prevention





#### CHILD ABUSE AND NEGLECT

State child protective services agencies received reports alleging the maltreatment of approximately 4.5 million children in 2002. Over half of these reports were received from community professionals, while the remainder was received from family, friends, relatives, or neighbors of these children.

In 2002, investigations by state child protective services agencies determined that an estimated 896,000 children were victims of

# Child Abuse and Neglect Among Children Under 18, by Type of Maltreatment: 2002\*

abuse or neglect, equivalent to a rate of 12.3 per 1,000 children under 18 years of age. Approximately 60 percent of all victims suffered neglect, 19 percent physical abuse, 10 percent sexual abuse, 7 percent psychological maltreatment, and 19 percent other forms of maltreatment. Some children suffered multiple types of maltreatment.

Victimization was highest among the youngest children. In 2002, 16 percent of victims were newborns to age 3, while 6 percent were 16 to 17 years old. Among the estimated 1,400 children who died of abuse and neglect, children under one year of age accounted for 41.2 percent of fatalities and children under 7 years accounted for 87.9 percent. Of the child fatalities that occurred in 2002, 79 percent involved a parent as a perpetrator.

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 child protective services agencies.

#### Sources of Maltreatment Reports: 2002\*

Source (II.5): National Child Abuse and Neglect Data System



\* Percentages total more than 100 because children may have been the victims of more than one type of maltreatment.



#### Child Health USA 2004

Source (II.5): National Child Abuse and Neglect Data System

#### **PEDIATRIC AIDS**

As of December 31, 2002, 9,220 cases of AIDS in children younger than 13 had been reported in the United States. Pediatric AIDS cases represented less than 2.1 percent of all cases reported through 2002.

In 2002, 158 new AIDS cases in children were reported, with 88 percent of them transmitted before or during birth (perinatal transmission). Since 1993, the number of new cases of pediatric AIDS due to perinatal transmission has declined substantially. A major factor in this decline is the increasing use of treatment before, during and after pregnancy to reduce perinatal HIV transmission. 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. The number of pediatric AIDS cases ever reported in Black non-Hispanic children is 3.4 times that of White non-Hispanic children and 2.6 times that of Hispanic children.

# AIDS Cases Among Children Under 13, by Exposure Category and Race/Ethnicity: 1981-2002\*

Source (II.6): Centers for Disease Control and Prevention, HIV/AIDS Surveillance System



\* Graph does not include 13 children of unkown race/ethnicity.

\*\* Receipt of blood/blood components includes: receipt of clotting factor for hemophilia coagulation disorder or receipt of blood transfusions, blood components, or tissue.

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#### HOSPITALIZATION

In 2002, there were 3.7 million hospital discharges among children ages 1 to 21, or 4.4 discharges per 100 children. This represents a slight increase from 2001. Hospital discharge rates generally decrease until about age 8 and increase during later adolescence.

Diseases of the respiratory system were the major cause of hospitalization for children 1-9 years of age and accounted for 33 percent of their discharges.

While injuries are the leading cause of death among children older than 1 year, this category accounted for only 8 percent of the hospital discharges of children aged 10-14 in 2002. Pregnancy and childbirth accounted for 64 percent of discharges among young women ages 15-21. Mental disorders were the second leading cause of hospitalization for adolescents.

#### Major Causes of Hospitalization by Age: 2002

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



# HOSPITAL DISCHARGE TRENDS

Since 1985, overall hospital discharge rates for children ages 1-14 years have declined by 33 percent.

Between 1985 and 2002, hospital discharge rates for diseases of the respiratory systems declined 42 percent for children in this age group.

Three diagnostic categories (respiratory diseases, injury, and digestive diseases) accounted for 44 percent of discharges among children ages 1-14 years in 2002.

# Discharge Rates Among Children Ages 1-14 by Selected Diagnoses: 1985-2002

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



#### **34** HEALTH STATUS — Children

#### CHILD MORTALITY

Childhood death rates have generally declined over the past several decades. In 2002, a total of 12,008 children ages 1-14 died. Unintentional injury continues to be the primary cause of death for this age group. Among children ages 1-4, unintentional injuries accounted for 33.8 percent of all deaths, followed by deaths due to congenital malformations (birth defects), malignant neoplasms (cancer), homicide, and diseases of the heart. Unintentional injuries comprised 38.0 percent of all deaths among children 5 to 14, followed by malignant neoplasms, congenital malformations, homicides, suicides, and diseases of the heart.

## Leading Causes of Death Among Children Ages 1-14: 2002

Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System


# CHILDHOOD DEATHS DUE TO INJURY

In 2002, unintentional injuries caused the deaths of 1,641 children ages 1-4 and 2,718 children ages 5-14. Among children ages 1-4, motor vehicle crashes, drowning, and fire were the most common causes of unintentional injury death. Motor vehicle crashes were the most common cause of unintentional injury death among children ages 5-14, followed by deaths due to drowning, fire, and suffocation.

In addition, 423 children ages 1-4 were the victims of homicide and 620 children ages 5-14 were the victims of homicide or suicide.

# Deaths Due to Unintentional Injury Among Children Ages 1-14: 2002

Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



# ADOLESCENTS

In 2002, individuals ages 13-19 accounted for roughly 10 percent of the U.S. population. (Adolescence may be defined differently by different health programs or for different health issues.) Generally, adolescents are a healthy population. Adolescence is a period during which many lifelong health habits are formed, such as diet, exercise, and the use of health care services. National data related to physical activity and overweight are presented in this section.

Adolescence is also a time of physical and emotional growth and exploration. As a result, many adolescents engage in risk-taking behaviors that may result in acute illnesses and infections, poor long-term health outcomes, and even disability and death. For example, adolescents may experiment with cigarettes and drugs, engage in sex, or be involved in motor vehicle crashes. This section features many health status indicators related to cigarette smoking, use of illicit drugs, adolescent mortality, injury, sexual intercourse, sexually transmitted diseases, and pregnancy. Many of these data are presented by age, gender, race and ethnicity.



# ADOLESCENT CHILDBEARING

Between 2001 and 2002, the birth rate among adolescents ages 15-19 dropped 5 percent to 43.0 per 1,000 teenagers. This represents a historic low and a decrease of 30 percent since 1991. The birth rate among adolescents ages 10-14 also fell, to 0.7 per 1,000 teenagers. Birth rates were highest among the oldest adolescents, those ages 18-19, at 72.8 births per 1,000.

Birth rates among adolescents varied considerably by race and ethnicity. In 2002, birth rates for adolescents 15-19 were 18.3 per 1,000 Asian/Pacific Islanders, 28.5 per 1,000 non-Hispanic Whites, 53.8 per 1,000 American Indians, 68.3 per 1,000 non-Hispanic Blacks, and highest at 83.4 per 1,000 Hispanics. Although all racial and ethnic groups saw a decline in adolescent births in the past decade, the steepest declines have occurred among non-Hispanic Black adolescents. Between 1991 and 2002, the birth rate among Black adolescents ages 15-19 decreased by 42 percent. In the same time period, the birth rate among Hispanic adolescents fell the least, by just 20 percent, leaving Hispanic teens with the highest birth rate among the five racial and ethnic groups.

# Birth Rates Among Adolescents Ages 10-19, by Age and Race/Ethnicity of Mother: 2002

Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



\* Non-Hispanic

\* Non-Hispanic

## 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 12<sup>th</sup> grade students reported having sexual intercourse in the three months preceding the survey. Among 9<sup>th</sup> grade students, more males were currently sexually active (24 percent) than females (18.3 percent). By 12<sup>th</sup> 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. The Maternal and Child Health Bureau's Abstinence Education Program provides 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 9<sup>th</sup> and 10<sup>th</sup> graders) than older students (57.4 percent of 12<sup>th</sup> graders).

## Sexual Activity Among High School Students: 2003

Source (III.1): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



# Sexual Activity and Condom Use Among High School Students by Grade: 2003

Source (III.1): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



\* Sexual intercourse during the 3 months preceding the survey

\*\* Percent of students who are sexually active and used a condom at last sexual intercourse

Child Health USA 2004

\* Have never had intercourse

# SEXUALLY TRANSMITTED DISEASES

Adolescents (ages 15-19) and young adults (ages 20-24) are at much higher risk of contracting sexually transmitted diseases (STDs) 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/ethnic categories. Rates of STDs among Hispanic adolescents and young adults are about twice those of non-Hispanic Whites.

Chlamydia continues to be the most common STD in adolescents and young adults, with a rate of 1,488 cases per 100,000 adolescents and 1,619 per 100,000 young adults. Gonorrhea followed in prevalence with an overall rate of 476 cases per 100,000 adolescents and 593 cases per 100,000 young adults. Syphilis is less common among young people, with only 1.7

White\*

cases per 100,000 adolescents and 4.4 cases per 100,000 young adults in 2002. For each of these diseases, rates are slightly higher among 20- to 24-year-olds than among adolescents.

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

20.7

2.8

# Sexually Transmitted Diseases Among Adolescents and Young Adults, by Age and Race: 2002

Source (III.2): Centers for Disease Control and Prevention, STD Surveillance System



#### Child Health USA 2004

1.1

20-24 Years

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# ADOLESCENT HIV INFECTION

Of the 7,446 cases of HIV infection ever reported among adolescents (ages 13-19), males made up close to 44 percent and represented the same proportion of the new HIV infection cases reported in 2002 among adolescents. Over half of these new cases were transmitted by men having sex with men. In 33 percent of new adolescent male cases, the risk category was not reported. From 1981 through 2002, Black males were more likely to report HIV infection and comprised almost 60 percent of the infected male adolescent population.

More than half of adolescent HIV infection cases ever reported, 56 percent, were among females. The percentage of new HIV infection cases in adolescent females has been decreasing in recent years. Of the new cases in 2002, about 40 percent acquired HIV infection through heterosexual contact and 5.2 percent were injecting drug users. The risk category was not reported for 54 percent of new adolescent female cases in 2002. Similar to the trend among adolescent males, Black females are significantly more likely to contract HIV and comprised 60 percent of female adolescents living with HIV infection.

# HIV Infection Among Adolescents Ages 13-19, by Sex and Race/Ethnicity: 1981-2002\*

Source (II.6): Centers for Disease Control and Prevention, HIV/AIDS Surveillance System



<sup>\*</sup> Includes persons reported with HIV infection who have not developed AIDS in the 39 areas with confidential HIV infection reporting.
\*\* Total includes 35 persons of unknown race/ethnicity.

## **ADOLESCENT AIDS**

An adult or adolescent with HIV is defined as having AIDS if he or she has a CD4 count of less than 200 cells/uL or a CD4 percentage of less than 14 or if he or she is diagnosed with pulmonary tuberculosis, recurrent pneumonia, or invasive cervical cancer. Males comprised about 57 percent of the 4,819 AIDS cases ever reported among adolescents ages 13-19 years old, and represented 50 percent of the new AIDS cases reported among adolescents in 2002. Of the 204 new cases reported in 2002 among adolescent males, the largest exposure category (47 percent) was identified as men who have sex with men. In 38.7 percent of new cases, a risk category was not reported or identified. Approximately 43 percent of adolescent AIDS cases ever reported were among females. Females comprised of 50% percent of new AIDS cases reported in 2002 among adolescents, which is a 4 percent decrease from 54 percent in 2000. Among adolescent females, there were 704 new AIDS cases. In 34.8 percent of these new cases, heterosexual contact was reported as the risk category, but in most cases (59.3 percent), a risk category was not reported or identified.

# AIDS Cases Among Adolescents Ages 13-19, by Sex and Exposure Category, 1981-2002

Source (II.6): Centers for Disease Control and Prevention, HIV/AIDS Surveillance System



\* Receipt of blood/blood components includes: receipt of clotting factor for hemophilia coagulation disorder or receipt of blood transfusions, blood components, or tissue. Heterosexual contact includes sex with: an injecting drug user, a person with hemophilia; a transfusion recipient infected with HIV; an HIV-infected person, risk not specific; a bisexual male (females only). The category "Men Having Sex with Men" also includes men who have sex with men and inject drugs.

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## MENTAL HEALTH TREATMENT

In 2002, 19.3 percent of youth 12 to 17 years of age received mental health treatment or counseling. Non-Hispanic White and non-Hispanic Black youths were most likely to receive treatment, at 20.1 and 19.3 percent, respectively. Among Hispanic youth, 17.5 percent received treatment, followed by 13.4 percent of Asian youth. The most commonly reported reasons for seeking counseling were feeling depressed (49.5 percent), breaking rules or "acting out" (26.7 percent), suicidal thoughts or attempts (19.5 percent), and feeling very afraid or tense (19.5 percent).

Among youth receiving mental health treatment/counseling, 47.6 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, at 44.6 percent. Only 4.7 percent of youths received treatment through an overnight or longer stay in a residential treatment center. In some instances, source of treatment varied greatly by age group. For example, 40.8 percent of 12- to 13- year-olds who received treatment used private therapists, compared to 50.6 percent of 16- to 17-year-olds. The percentage of youth using school counselors or regular teacher meetings as a source of counseling drops from 48.5 percent among 12- to 13-year-olds to only 37.9 percent of 16- to 17-year-olds. A number of other options were also reported, and respondents could choose more than one source of treatment.

# Reasons for Mental Health Treatment/Counseling\* Among Persons Aged 12-17 Who Received Treatment: 2002

Source (III.3): Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\* Mental health treatment/counseling for youths is defined as having received treatment or counseling from any of 10 specific sources for emotional or behavioral problems not caused by alcohol or drug use.

\*\* Respondents could indicate multiple reasons; therefore, response categories total more than 100%.

# VIOLENCE

Violence among adolescents is a critical public health issue in the United States: homicide was the second leading cause of death among persons ages 15-24 in 2002.

Results from the 2003 Youth Risk Behavior Surveillance reveal that 17.1 percent of students had carried a weapon, such as a gun, knife, or club, on at least one of the preceding 30 days; just over 6 percent had carried a gun. Males were significantly more likely to carry a weapon (26.9 percent) than females (6.7 percent). The percentage of students that carry weapons steadily decreased from 1991 to 1999, then began to level off at around 17 percent.

Some high school students also reported carrying weapons to school. In 2003, 6.1 percent of students reported carrying a weapon on school property in the past 30 days—nearly a 50 percent decrease since 1993. Despite this decline, more than 9 percent of students were threatened or injured with a weapon on school property at some point during the 12 months before the survey. In addition, over 5 percent of students did not go to school in the preceding 30 days because they felt unsafe at school or while traveling before or after school. Younger students and non-Hispanic Black and Hispanic students expressed the most concern for their safety.

# High School Students Who Carried a Weapon in the Past 30 Days, by Sex and Race: 1993-2003

Source (III.1): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



Source (III.1): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



\* Non-Hispanic

# PHYSICAL ACTIVITY AND OVERWEIGHT

Results from the 2003 National Youth Risk Behavior Survey show that almost two-thirds (62.6 percent) of high school students regularly participated in sufficient vigorous physical activity, and almost one-quarter (24.7 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 students were enrolled in a physical education class, 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 29.6 percent of high school students described themselves as overweight in 2003, 43.8 percent of students were trying to lose weight. Among all racial and ethnic groups, males were more likely to be overweight, while females were more likely to perceive themselves as such. Among high-school males, 17.4 percent were overweight compared to 9.4 percent of females, while 36.1 percent of females described themselves as overweight compared to 23.5 percent of males.

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 (www.healthier us.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 (III.1): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



\* 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 weight-lifting on 3 of the 7 preceding days.



## **CIGARETTE SMOKING**

Cigarette smoking declined significantly among 8th, 10th, 12th graders in 2003 from 2002, as reported by the University of Michigan's Monitoring the Future Study. In 2003, 10.2 percent, 16.7 percent, and 24.4 percent of 8th, 10th, and 12th graders, respectively, reported smoking in the 30 days preceding the survey, compared to 10.7, 17.7, and 26.7 percent in 2002. These figures represent a 51.4 percent, 45 percent, and 33 percent decline in smoking for 8th, 10th, and 12th graders, respectively, since these levels peaked in 1996 and 1997. The younger age groups have shown the largest improvement over this time period. Researchers speculate that these declines resulted from an increase in the perceived risk and disapproval of smoking, an increase in cigarette price, and a decline in access to cigarettes.

The prevalence of smoking among teens increased substantially between 1991 and 1996. These increases occurred in virtually every socio-demographic group: both sexes, those planning on attending college and not, those living in all four regions of the country, those living in rural or urban areas, and among Whites, Blacks, and Hispanics. Since 1996, rates have consistently declined across all demographic groups. 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 White adolescents. The decline in rates of cigarette smoking since 1996 is likely to have important long-term health consequences for this generation of adolescents.

# Cigarette Use Among High School Students in the Past 30 Days, by Grade: 1975-2003

Source (III.4): The Monitoring the Future Study, University of Michigan



## SUBSTANCE ABUSE

## Prevalence and Incidence

In 2002, 11.6 percent of adolescents ages 12-17 reported using illicit drugs in the previous month. The use of illicit drugs within the past month increased with age: 4.2 percent of 12- to 13-year-olds reported drug use, compared to 11.2 percent of 14- to 15-year-olds and 19.8 percent of 16- to 17-year-olds.

Alcohol, used by 17.6 percent of teens aged 12 to 17, is the most commonly used drug among adolescents, and marijuana is the most commonly used illicit drug. The next most common is nonmedical use of prescription drugs, such as pain relievers, tranquilizers, or stimulants; this was reported by 4 percent of adolescents. Marijuana use is more common among males, with 9.1 percent reporting use in the past month compared to 7.2 percent of females, while prescription drug abuse is more likely to be reported by females (4.3 percent, compared to 3.6 percent of males).

Data also indicate that other habits, such as cigarette smoking, influence adolescents' use of illicit drugs. In 2002, 48.1 percent of youths who smoked cigarettes currently used illicit drugs, while only 6.2 percent of nonsmokers used illicit drugs.

### Perception of Risk and Access to Drugs

The National Survey on Drug Use and Health (NSDUH) included questions about perceived risk and access to illicit drugs among youths aged 12-17. According to the 2002 survey results, 32.4 percent of youths perceive smoking marijuana as a great risk while 50.5 percent believed that using cocaine once a month was a great risk. In the same year, 63.1 percent of youths believed that smoking at least one pack of cigarettes a day was a great risk. Among those youths that believed smoking marijuana was a great risk, 1.9 percent admitted to using the drug within the past month. But for youths that perceived smoking marijuana as a moderate, slight, or nonexistent risk, 11.3 percent reported using marijuana in the past 30 days.

In 2002, 55 percent of youths aged 12-17 reported that marijuana would be fairly or very easy to obtain, 25 percent reported the same for cocaine, 19.4 percent for LSD and 15.8 percent for heroin. Little variation existed between youths from large metropolitan areas, small metropolitan areas, and non-metropolitan areas in the proportion that reported that marijuana was fairly or easily obtainable.

# Drug Use Among Adolescents, Ages 12-17, in the Past 30 Days: 2002

Source (III.3): Substance Abuse and Mental Health Service: Administration, National Survey on Drug Use and Health



# ADOLESCENT MORTALITY

In 2002, 13,812 deaths were reported of adolescents aged 15-19 years. After a moderate increase in death rates for this age group in the early 1980's, there has been a gradual decrease since that time. Unintentional injury remains the leading cause of death and accounted for approximately 52 percent of all deaths among adolescents 15-19 years of age in 2002. 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 2002, and accounted for 52 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 23 percent of injury-related deaths in this age group. Adolescent death rates due to motor vehicle injuries and firearms were similar in the early 1990's until 1994, when they began to diverge. The rate of adolescent firearm deaths decreased much faster and was recorded at a rate of 12.2 per 100,000 population in 2002, less than half the rate of motor vehicle injury deaths, which was 27.1 per 100,000.

# Leading Causes of Death Among Adolescents Ages 15-19: 2002

Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

## Deaths Due to Injury Among Adolescents Ages 15-19: 2002

Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



# ADOLESCENT DEATHS DUE TO INJURY

The two leading causes of death due to injuries among adolescents are motor vehicle crashes and firearms. In 2002, motor vehicle traffic caused the deaths of 5,522 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 2002, 2,474 adolescents ages 15-19 were killed by firearms. Of these, homicide accounted for 63 percent of firearm deaths, suicide accounted for 30 percent, and 4 percent were considered to be unintentional.

# Traffic and Firearm Mortality Among Adolescents Ages 15-19: 2002

Source (II.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



# HEALTH SERVICES FINANCING AND UTILIZATION

The availability of, and access to, quality health care directly affects the health of mothers and children, especially those at high risk due to chronic medical conditions or low socioeconomic status.

Children may receive health coverage through private insurance purchased by their parents or their parents' employers; or public programs, such as Medicaid or the State Children's Health Insurance Program (SCHIP). Eligibility for these programs is based on a family's income compared to the Federal Poverty Level, which was \$18,100 for a family of four in 2002. Every state has implemented a SCHIP program, expanding coverage to many uninsured children. Outreach and consumer education are key components of the expansion in health insurance for children. Despite the progress achieved through public programs such as Medicaid and SCHIP, 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. Data are presented by age, income, race and ethnicity.



# HEALTH CARE FINANCING

Nearly 12 percent (8.5 million) of children younger than 18 years of age had no insurance coverage in 2002, a proportion that has remained relatively stable since 2000.

In 2002, just over one quarter of all children (26.8 percent) were publicly insured, primarily through Medicaid, and two-thirds were covered by private insurance. By comparison, children living in families with incomes below the Federal poverty level were more likely to have public insurance (63.8 percent) or be uninsured (20.7 percent). Only 21.6 percent of low-income children had private coverage.

In 2002, most uninsured children (64.7 percent) lived in families whose head was employed year-round, on a full-time basis. Even when parents are employed, coverage may not be offered or may be prohibitively expensive. Most privately insured children (88.7 percent) received insurance through a parent's employer.

Created in response to the growing number of uninsured children in low-income working families, the State Children's Health Insurance Program (SCHIP) has enrolled 5.8 million children through the end of Federal Fiscal Year 2003. As of 2002, children with family incomes up to 200% of the Federal poverty level were eligible for coverage through SCHIP or Medicaid in 26 states. Twelve states implemented eligibility levels exceeding 235 percent of the Federal poverty level.

#### Health Insurance Coverage\* Among Children Under 18: 2002

Source (IV.1): U.S. Census Bureau, Current Population Study



# Health Insurance Coverage\* Among Children Living in Families Below 100% of Poverty Level: 2002

Source (IV.2): Employee Benefit Research Institute, Analysis of Current Population Survey



\* Children may have more than one source of coverage.

\* Children may have more than one source of coverage.

# HEALTH CARE FINANCING: CHILDREN WITH SPECIAL HEALTH CARE NEEDS

According to the 2001 National Survey of Children with Special Health Care Needs (CSHCN), nearly two-thirds (64.7 percent) of CSHCN have private or employment-based coverage, 21.7 percent had public coverage, 8.1 percent had both, and 5.2 percent reported having no insurance at the time of the interview.

However, many of the families interviewed reported that their children's coverage was not adequate to meet their needs. Twelve percent said that their plan did not usually or always allow their children to see the providers they needed; 14.5 percent said their benefits did not meet their children's needs; and 28.4 percent reported that the costs not covered by the plan were not reasonable. In all, one-third of parents of CSHCN reported that their coverage did not usually or always meet at least one of these criteria.

# Health Insurance Coverage for Children with Special Health Care Needs: 2001

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN

# Percent of CSHCN Whose Insurance Does Not Meet Each Criterion for Adequacy

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN



\* Percent whose insurance does not usually or always meet this criterion.



## 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 CDC's 2002-2003 National Immunization Survey revealed that 77.9 percent of children ages 19-35 months have received the recommended 4:3:1:3:3 series of vaccines (4 DTaP, 3 polio, 1 MCV, 3 Hib, 3 hepatitis B). In the past 5 years, the greatest increases in vaccination rates have occurred with the hepatitis B vaccine and the varicella (chicken pox) vaccine, which was added to the schedule in 1996. Since 1997. the vaccination rate for hepatitis B has increased by almost 9 percent to 91.9 percent in 2002. The varicella vaccination rate rose to 82.5 percent, which represents a more than 2-fold increase since 1997. Despite this progress, approximately 900,000 children under two years of age have not received the recommended immunization series to be fully protected.1 Among children aged 19-35 months, non-Hispanic Black children have the lowest immunization rates of any racial/ethnic group and they are consistently below the national average for each of the major vaccines.

In April 2004, the CDC published an updated immunization schedule (see facing page).

The 2004 schedule continues to encourage the routine use of hepatitis B vaccine for all infants before hospital discharge and also recommends the expansion of routine influenza immunization to include all children 6 to 23 months of age.

 American Academy of Pediatrics. (2003). Vaccination Fact Sheets from the Childhood Immunization Support Program (CISP). Elk Grove Village, Illinois: AAP.

# Estimated Vaccination Rates Among Children Ages 19-35 Months, by Race/Ethnicity: 2002-2003

Source (IV.3): Centers for Disease Control and Prevention, National Immunization Survey



\* Non-Hispanic

### **Recommended Childhood Immunization Schedule, United States, 2004**

Source (IV.4): Centers for Disease Control and Prevention

AGE		Range of recor	nmended ages			Catch-up vacc	ination		Preadolescent assessment			
VACCINE	Birth	1 mo.	2 mos.	4 mos.	6 mos.	12 mos.	15 mos.	18 mos.	24 mos.	4-6 yrs.	11-12 yrs.	13-18 yrs.
Hepatitis B <sup>1</sup>	Hep B #1	only if moth	er HBsAg(-)									
			Hep B #2		Hep B #3			Hep B series				
Diphtheria,Tetanus, Pertussis²			DTaP	DTaP	DTaP		DT	āP		DTaP	Td	Td
<i>H. influenzae</i> type b³			Hib	Hib	Hib	н	lib					
Inactivated Poliovirus			IPV	IPV		I	PV	•		IPV		
Measles, Mumps, Rubella⁴						MM	IR#1			MMR #2	MM	R #2
Varicella⁵						Varicella			Varicella			
Pneumococcal <sup>6</sup>			PCV	PCV	PCV	P	CV		PCV		PPV	
Influenza <sup>7</sup>	– Vassinas b	alow this line of	ra for colociad r	opulationa		Influenza	a (yearly)			Influenza	(yearly)	
Hepatitis A <sup>8</sup>			e ioi selecteu p	opulations – –	<b></b>	<b></b>	[ <b></b>			Hepatitis	A series	

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of April 1, 2004, for children through age 18 years. Any dose not given at the recommended age should be given at any subsequent visit when indicated and feasible. Graphic Indicates age groups that warrant special effort to administer those vaccines not previously given. 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 the vaccine's other components are not contraindicated. Providers should consult the manufacturers' package inserts for detailed recommendations. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting Systems (VAERS). Guidance about how to obtain and complete a VAERS form is available at http://www.vaers.org or by telephone, 800-822-7967.

1 Hepatitis B Vaccine (HepB). All infants should receive the first dose of HepB vaccine scon after birth and before hospital discharge; the first dose may also be given by age 2 months if the infant's mother is HbsAg-negative. Only monovalent HepB vaccine can 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 given 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. The last dose in the vaccination series (third or fourth dose) should not be administered before age 6 months.

Infants born to HbsAg-positive mothers should receive HepB and 0.5 mL hepatitis B immune globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1-2 months. The last dose in the vaccination series should not be administered before age 6 months. These infants should be tested for HbsAg and anti-HBs at 9-15 months of age.

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 vaccination series should not be administered before age 6 months.

2 Diphtheria and tetanus toxids and acellular pertussis vaccine (DTaP). The fourth dose of DTaP may be administered at 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  $\ge 4$  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 © [Merck]) 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 vaccination in infants at ages 2, 4 or 6 months, but can be used as boosters following any Hib vaccine.
- 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 that 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 the visit at age 11-12 years.
- 5 Varicella vaccine (VAR). 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 >13 years should receive two doses, given at least 4 weeks apart.
- 6 Pneumococcal vaccine. The heptavalent pneumococcal conjugate vaccine (PCV) is recommended for all children age 2-23 months and for certain children aged 24-59 months. Pneumococcal polysaccharide vaccine (PPV) is recommended in addition to PCV for certain high-risk groups. See MMWR 2000;49(RR-9):1-35.
- 7 Hepatitis A vaccine. Hepatitis A vaccine is recommended for children and adolescents in selected states and regions, and for certain high-risk groups; consult your local public health authority and MMWR 1999;48(RR-12):1-37. Children and adolescents in these

states, regions, and high-risk groups who have not been immunized against hepatitis A can begin in the hepatitis A vaccination series during any visit. The two doses in the series should be administered at least 6 months apart.

8 Influenza vaccine. Influenza vaccine is recommended annually for children age ≥ 6 months with certain risk factors (including but not limited to asthma, cardiac disease, sickle cell disease, HIV, diabetes), health care workers, and other persons (including household members) in close contact with persons in groups at high risk (see MMWR 2004;53;[RR] (in press)) and can be administered to all others wishing to obtain immunity. In addition, healthy children age 6-23 and close contacts of healthy children age 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 intranasally administered live, attenuated influenza vaccine (LAIV) is an acceptable alternative to the intranuscular trivialent inactivated influenza vaccine (TIV). See MMWR 2003;52(RR-13):1-8. Children receiving TIV should be administered a dosage appropriate for their age (0.25 mL if 6-35 months of 0.5 mL if ≥ 3 years). Children aged ≤ 4 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).

For additional information about vaccines, including precautions and contraindications for immunization and vaccine shortages, please visit the National Immunization Program Website at www.cdc.gov/nip or call the National Immunization Hotline at (800) 232-2522 (English) or (800) 232-0233 (Spanish).

Included above the text is the July-December 2004 recommended immunization schedule from MMWR 2004;53(16):2.

# DENTAL CARE

According to the Surgeon General's Report on Oral Health, dental caries (tooth decay) is the single most common chronic disease among children in the U.S., and is twice as common among poor children as those with higher family incomes. This is a preventable health problem that can significantly affect children's health, ability to concentrate in school, and quality of life. With half of children experiencing tooth decay by the age of 8, beginning dental checkups early in life is essential. Some professional associations recommend that a child have his or her first dental visit by age 1.

Preventive services such as regular dental health screenings may not always be available to those children who need them most; twice as many children lack dental insurance as lack medical insurance. In Federal Fiscal Year 2001, only 21 percent of children eligible for dental services under the Medicaid Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program received a preventive dental service.

Problems related to oral health are more common among particular populations, including Black and Hispanic children, as well as children from low-income families. Analysis of the 2002 National Health Interview Survey found that 76 percent of children with family incomes at or above 200 percent of the Federal Poverty Level saw a dentist in the past year, compared to 62 percent of low-income children.

## Children Receiving an EPSDT Preventive Dental Service: 1990-2001

Source (IV.5): Center for Medicare and Medicaid Services



# Children Receiving Dental Care in the Past 12 Months, by Income: 2002

Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\* Includes data from 47 states.

\* Federal Poverty Level



### 58 HEALTH SERVICES FINANCING AND UTILIZATION

### **PHYSICIAN VISITS**

Based on data from the 2002 National Health Interview Survey, approximately 11.4 percent of children under the age of 18 had not seen a physician or other health care professional in the prior year. Older children were more likely than younger children to go without a physician visit. Nearly 16 percent of children ages 15-17 had not had a physician visit in the prior year, compared to only 5.9 percent of children under 5.

Across all age groups, Hispanic children were the least likely to have seen a physician in the prior year, compared to non-Hispanic White and non-Hispanic Black children. At every age group, Hispanic children were at least 50 percent more likely than non-Hispanic White children to have had no physician visits.

The American Academy of Pediatrics recommends that children have eight health care visits in their first year, three in their second year, and one a year, generally, from middle childhood through adolescence.

# Children Reported Not to Have Seen a Physician or Other Health Professional in the Past 12 Months, by Age and Race/Ethnicity: 2002\*

Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\* Percent answering "zero" to the question: "During the past 12 months, how many times has [the child] seen a doctor or other health care professional about his or her health at a doctor's office, a clinic, or some other place?"

\*\* Non-Hispanic



# PLACE OF PHYSICIAN CONTACT

Regardless of age or family income, most children with a usual source of health care received care at either a physician's office or an HMO in 2002. Across all age groups, 31.4 percent of children living in poverty used a clinic or health center as their usual source of acute care, compared to 15.4 percent of children not living in poverty. Children with family incomes above poverty were less likely to obtain care at a hospital emergency department than children in poverty.

# Place of Physician Contact, by Age and Poverty Status: 2002

Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



# FAMILY-CENTERED CARE FOR CHILDREN WITH SPECIAL HEALTH CARE NEEDS

The National Survey of Children With Special Health Care Needs measured families' satisfaction with their children's care using five indicators: whether or not the child's provider spends enough time with the family, listens carefully to the parents, makes the parent feel like a partner in the child's care, is sensitive to the family's values and customs, and provides the specific information that the parent needs. Taken together, these questions provide an indication of how family-centered the care that CSHCN receive is.

Approximately one-third of families reported that their children's care did not meet at least one of these five criteria. The one most commonly reported missing is the provision of information: over 19 percent of CSHCN see providers who do not usually provide their families with the information they need. Over 16 percent said that their children's providers did not spend enough time with the family, and 14 percent said that their children's providers did not usually make them feel like a partner in their children's care.

## Percent of CSHCN Not Receiving Family-Centered Care

## **Receipt of Family-Centered Care by CSHCN**

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN



Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN



## HOSPITAL UTILIZATION

In 2002, the vast majority of children were not admitted to a hospital overnight. However, children in low-income families (those with family incomes below the Federal Poverty Level) were more likely to spend at least one night in the hospital than children in higherincome families: 7.2 percent of low-income children had hospital stays of at least one night, compared to 5.9 percent of children in higher-income families. In addition, hospital stays lasting four nights or longer were more common among children in low-income families than children in higher-income families. The proportion of children staying between 1 and 3 nights was similar in the two income groups.

# Number of Nights in the Hospital, by Poverty Level: 2002

Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



FPL = Federal Poverty Level



# PRENATAL CARE

## **Timely Prenatal Care**

Receiving early and continuous prenatal care throughout pregnancy has been linked to improved pregnancy and health outcomes for mother and child. The proportion of mothers beginning prenatal care in the first trimester improved again to 83.7 percent in 2002.

In the last decade, the rate of women beginning prenatal care in the first trimester has risen steadily (by 10 percent) overall and substantially among racial and ethnic minorities. The proportion of non-Hispanic Black, Hispanic, and American Indian women receiving early prenatal care increased by 20 percent or more between

Source (I.8): Centers for Disease Control and Prevention,

National Center for Health Statistics, National Vital Statistics System

Mothers Beginning Prenatal Care in the First Trimester, by Age and Race: 2002

White\* 100 92.3 89.5 Black\* 83.2 81.9 80.6 79.4 77.5 80 75.8 73.6 64.6 Percent 56.1 40 20 0 <15 15-19 20-24 25-29 30-34 35-39 40+ Age of Mother

1990 and 2000. Although gains have occurred across all racial groups, racial disparities persist. On average, 88.6 percent of non-Hispanic White women, compared to 76.7 percent of Hispanic women and 75.2 percent of non-Hispanic Black women, began prenatal care in the first trimester in 2002.

A woman's age is also related to prenatal care initiation. Women younger than 20 years of age were much less likely than older women to begin prenatal care in the first trimester, although rates of early entry into care have increased in this age group.

# Late or No Prenatal Care

The percentage of pregnant women beginning prenatal care in the third trimester or going without prenatal care decreased slightly to 3.6 percent in 2002. Regardless of age, Black and Hispanic women were over twice as likely as White women to receive late or no prenatal care.

Other risk factors for not using prenatal care included being younger than 20 years old, being unmarried, and having low educational attainment.

# Mothers Receiving Late or No Prenatal Care, by Age and Race: 2002

Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



\* Non-Hispanic



# STATE DATA

While the indicators presented in the previous sections of this book are representative of the U.S. as a whole, the next section presents state-level health and health care indicators; specifically, 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 across states. Women living in the District of Columbia and Delaware, and the southern states of Alabama, Louisiana, Mississippi, and South Carolina were more likely to give birth to low birth weight babies (less than 2,500 grams or 5 pounds 8 ounces) than women in other regions of the country. 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 U.S. has risen over the past three years. Poverty affects living conditions and access to health care and nutrition, all of which contribute to health status. Title XIX of the Social Security Act (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. In 2002, New Mexico and the District of Columbia had the greatest proportion of children with Medicaid/SCHIP coverage (over 40 percent), followed closely by Vermont (39.9 percent), while Maryland and Nevada had the smallest proportion (12.5 percent). Wisconsin had the lowest proportion of uninsured children (4.9 percent) while Texas led the nation with the highest proportion of uninsured children (23.0 percent).



# Percentage of Infants Born at Low Birth Weight, Women Receiving First Trimester Prenatal Care, and Births to Women Under 18, by State and Race of Mother: 2002

Source (I.8 and V.1): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

Nebraska

7.2

6.8 13.7

83.4

87.0

70.4

2.9

2.4

9.3

6.1

	Low Early Birthweight Prenatal Care non-Hispanic non-Hispanic		Births Under 18				Low Birthweight non-Hispanic			Early Prenatal Care non-Hispanic			Births Under 18								
State	All**	White	Black	All**	White	Black	All** V	Vhite† I	Black† H	lispanic	State	All**	White	Black	All**	White	Black	All** V	Vhite†	Black <sup>†</sup> H	ispanic
United States	7.8	6.9	13.4	83.7	88.6	75.2	3.6	3.1	6.9	5.6	Nevada	7.5	7.0	14.6	75.9	85.3	70.5	3.8	3.6	6.8	5.6
Alabama	9.9	7.9	14.3	83.3	90.0	73.6	5.2	3.8	8.4	5.6	New Hampshire	6.3	6.5	*	91.5	92.2	79.7	1.5	1.6	*	*
Alaska	5.8	4.6	10.1	80.3	83.5	84.6	3.4	2.2	*	5.1	New Jersey	8.0	6.9	13.3	80.3	89.0	63.8	2.3	1.7	5.7	4.4
Arizona	6.8	6.7	12.2	76.5	87.2	77.4	4.8	4.7	5.9	7.3	New Mexico	8.0	7.8	14.3	69.0	76.8	68.6	6.2	6.4	5.1	8.6
Arkansas	8.6	7.5	13.6	79.6	83.7	70.4	5.1	4.1	9.0	5.6	New York	7.9	6.5	12.3	81.6	88.2	71.9	2.5	2.1	4.6	4.4
California	6.4	6.0	11.6	86.4	90.4	83.0	3.3	3.5	4.7	4.9	North Carolina	9.0	7.6	14.1	84.3	90.9	75.5	4.2	3.2	7.3	5.4
Colorado	8.9	8.6	14.6	79.1	86.2	70.7	3.7	3.6	6.4	7.4	North Dakota	6.3	6.0	*	86.1	88.9	81.6	2.2	1.5	*	*
Connecticut	7.8	6.7	12.7	88.3	92.2	82.1	2.5	2.1	5.4	7.2	Ohio	8.3	7.3	13.9	87.8	89.8	78.9	3.4	2.7	7.8	5.8
Delaware	9.9	8.3	15.0	87.1	91.1	82.3	3.7	2.5	7.7	5.5	Oklahoma	8.0	7.5	13.8	76.8	80.8	69.3	4.7	4.1	7.3	6.9
DC	11.6	6.1	14.5	76.4	90.8	70.6	4.9	1.8	6.9	4.2	Oregon	5.8	5.7	9.8	81.6	84.6	75.8	3.0	2.9	7.1	5.5
Florida	8.4	7.3	12.8	85.4	89.8	77.0	3.8	3.1	6.6	4.0	Pennsylvania	8.2	7.0	14.1	84.6	88.0	71.1	3.2	2.3	8.6	8.0
Georgia	8.9	7.0	13.3	84.7	90.5	78.9	4.4	3.4	6.8	4.9	Rhode Island	7.9	7.4	11.1	89.6	92.4	79.2	3.2	2.9	5.0	7.1
Hawaii	8.3	6.9	10.9	83.9	89.1	94.7	2.5	0.7	*	3.9	South Carolina	10.0	7.6	14.8	78.4	84.7	70.3	4.6	3.3	7.4	4.9
Idaho	6.1	6.0	*	82.1	84.3	81.3	2.9	2.8	*	6.1	South Dakota	7.2	7.0	*	77.7	82.4	61.2	2.9	1.9	*	*
Illinois	8.2	7.0	14.3	84.9	90.8	74.2	3.5	2.6	8.7	4.8	Tennessee	9.2	7.9	14.5	82.8	87.8	72.3	4.4	3.5	7.9	5.4
Indiana	7.6	7.0	13.0	81.4	84.5	69.7	3.6	3.1	7.8	4.8	Texas	7.7	7.1	12.8	80.5	87.8	76.7	5.3	5.2	7.2	7.1
lowa	6.6	6.5	10.2	88.8	90.4	78.3	2.8	2.5	8.9	5.6	Utah	6.4	6.3	15.7	79.5	83.6	58.4	2.1	2.0	*	5.0
Kansas	7.0	6.7	12.4	86.8	90.0	79.6	3.4	3.1	7.1	6.9	Vermont	6.4	6.6	*	88.9	89.2	71.1	2.1	2.1	*	*
Kentucky	8.6	8.0	14.4	86.8	88.0	80.7	4.0	3.8	6.6	4.2	Virginia	7.9	6.5	12.6	85.2	90.7	76.6	2.9	2.1	6.2	3.2
Louisiana	10.4	7.6	14.6	83.8	90.7	74.7	5.4	3.2	8.6	3.7	Washington	5.9	5.5	10.4	83.4	86.0	77.8	2.8	2.8	4.0	6.0
Maine	6.3	6.3	*	87.9	88.3	72.5	2.4	2.4	*	*	West Virginia	9.0	8.7	14.2	85.9	86.4	75.5	3.7	3.6	7.1	*
Maryland	9.0	7.0	13.2	84.1	90.8	76.5	3.3	2.1	5.9	3.8	Wisconsin	6.6	5.9	13.3	84.3	88.2	71.4	2.9	2.0	10.2	6.1
Massachusetts	7.5	6.7	12.1	89.9	92.7	79.2	1.9	1.7	3.9	6.4	Wyoming	8.4	8.3	*	84.9	86.0	78.8	3.4	3.1	*	4.8
Michigan	8.0	6.7	14.0	85.6	89.4	71.2	3.1	2.4	6.9	5.7											
Minnesota	6.3	5.7	10.8	85.5	89.8	70.1	2.4	1.8	6.3	6.0											
Mississippi	11.2	8.2	15.2	83.8	90.7	76.1	6.2	4.0	9.0	5.3	* Figure does no	t meet s	tandard	s of reliabil	lity or pre	ecision.					
Missouri	8.0	7.0	13.9	87.8	89.9	79.7	3.7	3.0	8.2	5.3	** Includes races	other th	an White	e and Blac	к.						
Montana	6.8	6.7	*	83.7	86.4	68.8	3.4	2.7	*	6.5	T includes Hispanic.										

# 68 STATE-SPECIFIC DATA

# Medicaid Enrollees, Expenditures, and Reported EPDST Utilization for Children Under 21: FY 2001

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

State	Medicaid Enrollees*	Per Enrollee Expenditure**	Participation Ratio***	State	Medicaid Enrollees*	Per Enrollee Expenditure**	Participation Ratio***			
Alabama	422,948	\$1,618.85	47.7%	Nevada	108,479	\$1,899.87	75.4%			
Alaska	80,927	\$3,042.18	50.0%	New Hampshire	68,064	\$2,413.45	50.0%			
Arizona	411,152	\$2,002.40	56.0%	New Jersey	490,064	\$1,929.16	39.0%			
Arkansas	267,003	\$1,861.04	25.3%	New Mexico	283,234	\$1,920.11	49.0%			
California	3,160,766	\$1,274.44	36.0%	New York	1,627,851	\$2,602.05	85.0%			
Colorado	229,944	\$2,114.55	50.0%	North Carolina	750,563	\$1,777.88	N/R			
Connecticut	244,083	\$1,243.96	54.2%	North Dakota	36,575	\$1,782.38	44.0%			
Delaware	67,836	\$2,608.09	51.0%	Ohio	982,881	\$1,592.83	39.0%			
District of Columbia	86,075	\$2,594.56	64.0%	Oklahoma	413,302	\$1,359.09	36.4%			
Florida	1,378,135	\$1,564.00	47.0%	Oregon	265,599	\$1,758.23	50.0%			
Georgia	1,058,369	\$1,434.91	37.0%	Pennsylvania	866,718	\$2,373.01	65.0%			
Hawaii	105,769	N/R	70.0%	Rhode Island	N/R	\$2,612.23	N/R			
Idaho	122,526	\$1,703.09	N/R	South Carolina	534,374	\$1,520.70	33.0%			
Illinois	1,082,020	\$1,594.03	67.1%	South Dakota	69,837	\$1,754.71	42.2%			
Indiana	500,916	\$2,459.44	51.0%	Tennessee	555,961	\$1,340.79	36.0%			
Iowa	182,821	\$2,150.54	100.0%	Texas	1,816,774	\$1,773.88	52.0%			
Kansas	178,612	\$1,668.93	69.7%	Utah	123,679	\$2,102.06	58.0%			
Kentucky	388,361	\$2,186.76	40.0%	Vermont	71,548	\$2,242.46	36.0%			
Louisiana	562,625	\$1,276.80	55.0%	Virginia	419,840	\$1,534.19	54.0%			
Maine	N/R	\$4,162.36	N/R	Washington	N/R	\$1,187.85	N/R			
Maryland	426,587	\$2,699.68	46.0%	West Virginia	N/R	\$1,791.15	N/R			
Massachusetts	468,854	\$1,924.21	67.0%	Wisconsin	357,339	\$1,580.25	52.0%			
Michigan	852,610	\$1,231.46	43.0%	Wyoming	30,021	\$1,706.71	35.0%			
Minnesota	343,268	\$2,400.49	55.0%							
Mississippi	413,995	\$1,358.76	28.0%							
Missouri	584,003	\$1,551.92	56.0%	* Unduplicated number	of individuals determined to b	e eligible for EPSDT services	6			
Montana	56,968	\$2,337.61	45.4%	(FY 2001 416 Report). ** Represents total Medi	caid vendor navments divide	t by Medicaid eligibles under	ana 21			
Nebraska	148,676	\$1,775.35	64.5%	(FY 2001 MSIS Report).						

(FY 2001 MSIS Report). \*\*\* This ratio indicates the extent to which Medicaid eligibles received any initial and

periodic screening services during FY 2001 (416 Report).

# State Children's Health Insurance Program (SCHIP) Aggregate Enrollment Statistics: FY 2003

Source (V.4): Centers for Medicare and Medicaid Services

State	Type of SCHIP Program*	Date Implemented	Upper Eligibility	Total SCHIP Enrollment	State	Type of SCHIP Program*	Date Implemented	Upper Eligibility	Total SCHIP Enrollment			
Alabama	SEPARATE	02/01/98	200%	78,554	Nevada	SEPARATE	10/01/98	200%	47,183			
Alaska	MEDICAID	03/01/99	200%	22,934	New Hampshire	COMBO	05/01/98	300%	9,893			
Arizona	SEPARATE	11/01/98	200%	90,468	New Jersey	COMBO	03/01/98	350%	119,272			
Arkansas	MEDICAID	10/01/98	200%	NR	New Mexico	MEDICAID	03/31/99	235%	18,841			
California	COMBO	03/01/98	250%	955,152	New York	COMBO	04/15/98	250%	795,111			
Colorado	SEPARATE	04/22/98	185%	74,144	North Carolina	SEPARATE	10/01/98	200%	149,979			
Connecticut	SEPARATE	07/01/98	300%	21,471	North Dakota	COMBO	10/01/98	140%	4,955			
Delaware	SEPARATE	02/01/99	200%	9,744	Ohio	MEDICAID	01/01/98	200%	204,114			
District of Columbia	MEDICAID	10/01/98	200%	5,875	Oklahoma	MEDICAID	12/01/97	185%	91,914			
Florida	COMBO	04/01/98	200%	443,177	Oregon	SEPARATE	07/01/98	185%	44,752			
Georgia	SEPARATE	11/01/98	235%	251,711	Pennsylvania	SEPARATE	05/28/98	200%	160,015			
Hawaii	MEDICAID	07/01/00	200%	12,022	Rhode Island	COMBO	10/01/97	250%	24,505			
Idaho	MEDICAID	10/01/97	150%	16,877	South Carolina	MEDICAID	10/01/97	150%	76,128			
Illinois	COMBO	01/05/98	185%	126,855	South Dakota	COMBO	07/01/98	200%	11,361			
Indiana	COMBO	10/01/97	200%	73,762	Tennessee	MEDICAID	10/01/97	100%	NR			
lowa	COMBO	07/01/98	200%	37,060	Texas	SEPARATE	07/01/98	200%	726,428			
Kansas	SEPARATE	01/01/99	200%	45,662	Utah	SEPARATE	08/03/98	200%	37,766			
Kentucky	COMBO	07/01/98	200%	94,053	Vermont	SEPARATE	10/01/98	300%	6,467			
Louisiana	MEDICAID	11/01/98	200%	104,763	Virginia	COMBO	10/22/98	200%	83,716			
Maine	COMBO	07/01/98	200%	29,474	Washington	SEPARATE	02/01/00	250%	9,571			
Maryland	COMBO	07/01/98	300%	130,161	West Virginia	SEPARATE	07/01/98	200%	35,320			
Massachusetts	COMBO	10/01/97	200%	125,177	Wisconsin	MEDICAID	04/01/99	185%	68,332			
Michigan	COMBO	05/01/98	200%	77,467	Wyoming	SEPARATE	12/01/99	133%	5,241			
Minnesota	SEPARATE	10/01/98	275%	NR								
Mississippi	SEPARATE	07/01/98	200%	75,010								
Missouri	MEDICAID	09/01/98	300%	150,292	* Program type as	of January 30,2004						
Montana	SEPARATE	01/01/99	150%	13,084	** Reflects upper eli	gibility level approved as	s of April 2003					
Nebraska	MEDICAID	05/01/98	185%	45,490	NIX - State un not repolt data							

# Health Insurance Status of Children Through Age 18: 2002\*

Source (V.5): Analysis of 2003 Current Population Survey by the American Academy of Pediatrics

State	Percent with Private/Employer- Based Insurance	Percent Enrolled in Medicaid/SCHIP**	Percent Uninsured***	State	Percent with Private/Employer- Based Insurance	Percent Enrolled in Medicaid/SCHIP**	Percent Uninsured***				
Alabama	68.3	20.8	10.9	Nevada	68.2	12.5	19.3				
Alaska	51.4	38.8	9.8	New Hampshire	78.9	16.1	5.0				
Arizona	60.5	25.0	14.5	New Jersey	72.1	17.8	10.1				
Arkansas	52.4	36.9	10.8	New Mexico	45.3	40.2	14.6				
California	59.2	26.5	14.3	New York	59.8	29.7	10.4				
Colorado	72.1	12.9	15.1	North Carolina	60.0	27.0	13.1				
Connecticut	74.0	17.9	8.1	North Dakota	74.1	20.6	5.3				
Delaware	69.2	20.8	10.0	Ohio	72.5	19.2	8.3				
District of Columbia	45.9	44.9	9.2	Oklahoma	59.3	30.1	10.6				
Florida	62.1	22.8	15.1	Oregon	63.7	24.2	12.1				
Georgia	63.5	23.8	12.7	Pennsylvania	70.1	19.7	10.2				
Hawaii	72.5	19.8	7.6	Rhode Island	64.0	30.7	5.3				
Idaho	64.2	21.9	14.0	South Carolina	57.5	34.9	7.5				
Illinois	69.5	19.0	11.6	South Dakota	68.2	25.5	6.4				
Indiana	74.2	15.8	9.9	Tennessee	58.4	34.4	7.2				
Iowa	73.1	21.1	5.8	Texas	50.8	26.2	23.0				
Kansas	75.1	16.8	8.0	Utah	73.3	18.0	8.7				
Kentucky	61.0	26.4	12.6	Vermont	54.3	39.9	5.8				
Louisiana	51.2	36.4	12.4	Virginia	73.2	14.1	12.7				
Maine	60.6	31.2	8.2	Washington	62.0	27.1	10.9				
Maryland	77.4	12.5	10.2	West Virginia	50.4	39.2	10.4				
Massachusetts	72.9	21.0	6.1	Wisconsin	74.2	20.9	4.9				
Michigan	68.0	24.7	7.3	Wyoming	64.5	21.8	13.7				
Minnesota	77.8	16.2	6.0								
Mississippi	50.5	38.0	11.5								
Missouri	69.5	24.9	5.7	* Estimates for 2002 should not be compared directly to estimates prior to 2000							
Montana	59.3	29.0	11.7	www.condinges.in.survey.design. ** Includes children covered by Medicare and Indian Health Services							
Nebraska	69.2	24.9	5.8	*** See map on facing page.							

\*\*\* See map on facing page.
### Percentage of Children Under the Age of 19 Who Are Uninsured: 2002

Source (V.5): Analysis of 2003 Current Population Survey by the American Academy of Pediatrics



Nebraska

## Infant and Neonatal Mortality Rates, by Race of Mother and State: 2002

7.0

6.1

20.8

4.8

4.2

15.3

Source (V.6): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System (2004)

	Infant Mortality***			Neonatal Mortality****				Infant Mortality***			Neonatal Mortality****		
State	All**	White <sup>†</sup>	Black <sup>†</sup>	All**	White <sup>†</sup>	Black <sup>†</sup>	State	All**	White <sup>†</sup>	Black <sup>†</sup>	All**	White <sup>†</sup>	Black <sup>†</sup>
Alabama	9.1	7.1	13.9	5.9	4.6	8.9	Nevada	6.0	5.1	18.4	3.9	3.3	10.7
Alaska	5.5	4.2	*	2.0	*	*	New Hampshire	5.0	5.3	*	3.5	3.7	*
Arizona	6.4	6.2	13.0	4.1	4.1	*	New Jersey	5.7	4.5	12.8	4.1	3.2	9.2
Arkansas	8.3	6.9	13.9	5.1	4.2	8.3	New Mexico	6.3	5.7	*	4.3	4.0	*
California	5.5	5.2	12.9	3.7	3.5	8.0	New York	6.0	5.4	9.9	4.3	3.9	6.7
Colorado	6.1	5.5	21.1	4.0	3.6	13.6	North Carolina	8.2	5.9	15.6	5.6	3.8	11.5
Connecticut	6.5	5.5	14.2	4.7	4.2	9.0	North Dakota	6.3	5.6	*	4.1	3.7	*
Delaware	8.7	7.3	12.9	7.0	6.1	10.3	Ohio	7.9	6.2	17.7	5.4	4.2	12.1
District of Columbia	11.3	*	14.5	7.6	*	9.3	Oklahoma	8.1	7.1	17.2	5.1	4.4	11.1
Florida	7.5	5.8	13.6	5.0	3.9	9.1	Oregon	5.8	5.6	*	3.8	3.8	*
Georgia	8.9	6.6	13.7	5.9	4.2	9.4	Pennsylvania	7.6	6.6	15.1	5.6	4.9	10.2
Hawaii	7.3	*	*	4.7	*	*	Rhode Island	7.0	6.4	*	4.8	4.3	*
Idaho	6.1	6.1	*	4.0	4.1	*	South Carolina	9.3	6.0	15.8	6.3	3.9	11.2
Illinois	7.4	5.6	16.3	5.0	4.0	10.2	South Dakota	6.5	4.9	*	3.6	2.9	*
Indiana	7.7	6.8	15.3	5.3	4.7	9.6	Tennessee	9.4	7.0	18.3	5.9	4.2	12.5
lowa	5.3	5.1	*	3.6	3.5	*	Texas	6.4	5.6	13.5	3.9	3.4	8.3
Kansas	7.1	6.5	15.2	4.8	4.4	10.0	Utah	5.6	5.5	*	3.8	3.8	*
Kentucky	7.2	6.6	14.2	4.2	4.0	6.7	Vermont	4.4	4.5	*	*	*	*
Louisiana	10.3	6.9	15.0	6.6	4.4	9.7	Virginia	7.4	5.5	14.6	5.1	3.6	10.8
Maine	4.4	4.3	*	3.2	3.1	*	Washington	5.8	5.5	12.7	3.7	3.5	8.8
Maryland	7.5	5.3	12.3	5.4	3.9	8.5	West Virginia	9.1	8.5	*	5.3	5.0	*
Massachusetts	4.9	4.5	9.1	3.7	3.5	6.1	Wisconsin	6.9	5.6	18.9	4.8	4.0	12.9
Michigan	8.1	6.0	18.5	5.5	4.2	12.1	Wyoming	6.7	6.8	*	3.8	3.9	*
Minnesota	5.4	5.0	10.3	3.5	3.5	4.9							
Mississippi	10.3	6.9	14.8	6.8	4.4	9.8							
Missouri	8.5	7.1	17.1	5.5	4.7	11.0	* Figure does not meet standards of re	eliability or	precision.				
Montana	7.5	7.1	*	4.9	4.7	*	*** Rates are deaths less than one year	per 1.000	live births	in specified a	roup.		

\*\*\*\* Rates are deaths under 28 days per 1,000 live births in specified group.

† Includes Hispanic.

#### CITY DATA

How does the health of infants and children in America's cities compare to that of children nationwide? This section presents data on infant mortality, low birth weight, and health care for children and pregnant women who reside in the nation's cities with populations over 100,000 residents.

As the following data indicate, the health status of children living in large U.S. cities is generally inferior to that of children in the nation as a whole. In 2002, the percentage of infants born at low birth weight was 9 percent higher for residents of U.S. cities compared to the national average (8.5 percent versus 7.8 percent). While the infant mortality rate has decreased in both cities and the nation as a whole, a difference in rates remains. Higher rates of low birth weight contributed to the city infant mortality rate of 7.4 deaths per 1,000 live births in 2001; the national rate for 2001 was 6.9 per 1,000. The percentage of pregnant women receiving first trimester prenatal care is lower in cities (80.8 percent) than it is nationwide (83.7 percent).



#### 74 CITY-SPECIFIC DATA

### BIRTHWEIGHT

#### Low Birth Weight

Disorders related to short gestation and low birth weight are the second leading cause of neonatal mortality in the United States.<sup>1</sup> In 2002, 103,932 babies (8.5 percent) born to residents of U.S. cities with populations over 100,000 were of low birth weight (weighing less than 2,500 grams, or 5.5 pounds). The 2002 percentage of urban infants born at low birth weight was 9 percent higher than the national rate of 7.8 percent.

#### Very Low Birth Weight

Infants born at very low birth weight (less than 1,500 grams, or 3 pounds and 4 ounces) are at highest risk for poor health outcomes. In 2002, 1.7 percent of live births in cities with populations over 100,000 were of very low birth weight. This rate exceeded the national very low birth weight rate by 13 percent.

1 The leading cause of neonatal mortality is congenital anomalies.

# Infants Born at Low Birth Weight in U.S. Cities with Populations Over 100,000: 1990-2002

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



## Infants Born at Very Low Birth Weight in U.S. Cities with Populations Over 100,000: 1990-2002

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



#### CITY-SPECIFIC DATA 75

#### **INFANT MORTALITY**

In 2001, 9,139 infants born to residents of U.S. cities with populations over 100,000 died in the first year of life. The city infant mortality rate was 7.4 deaths per 1,000 live births, which was higher than the rate of 6.9 for the nation as a whole. Although the infant mortality rate in cities has routinely been higher than the rate nationwide, it has steadily 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.

## Infant Mortality Rates in U.S. Cities with Populations Over 100,000: 1990-2001

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



#### **76** CITY-SPECIFIC DATA

## 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 three 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 2002, 80.8 percent of pregnant women living in U.S. cities began prenatal care in the first trimester of pregnancy, compared to 83.7 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 2002, 4.6 percent of pregnant women living in U.S. cities with a population over 100,000 either began prenatal care in the 3rd trimester or received no prenatal care. The percentage of women receiving late or no prenatal care is 28 percent higher among women living in cities than among the overall U.S. population.

# Pregnant Women Receiving First Trimester Prenatal Care in U.S. Cities with Populations Over 100,000: 1990-2002

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



### Pregnant Women Receiving Late or No Prenatal Care in U.S. Cities with Populations Over 100,000: 1990-2002

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



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## U.S. Department of Health and Human Services Health Resources and Services Administration Maternal and Child Health Bureau

5600 Fishers Lane • Room 18-05 Rockville, MD 20857 Tel: 301-443-2170 Fax: 301-443-1797 www.hrsa.gov



