Child Health USA 2003









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Suggested Citation:

U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *Child Health USA 2003.* Rockville, Maryland: U.S. Department of Health and Human Services, 2003.

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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 2003,* the fourteenth 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 59 health status indicators. It provides both graphical and textual summaries of data and addresses long-term trends where applicable.

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 2003* 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 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 health of children remains one of our nation's highest priorities. Children under age 21 represent about one-third of the total U.S. population, and the child population has become increasingly racially and ethnically diverse. Largely due to immigration from Asia and Latin America, the foreign-born population has increased in the past several decades. In 2002, approximately 20 percent of children had at least one parent who was born outside the United States, and 3.7 percent were themselves foreign-born. These families are particularly likely to have low incomes and to experience barriers to access to health care. Another particularly vulnerable population of children is children with special health care needs, who represent 12.8 percent of children in the United States, or 9.4 million children.

Children's health depends on a wide range of factors, including the family's economic circumstances, access to health care, and knowledge of children's health care needs and how to address them. The correlation between a family's socioeconomic status and child health and development is well documented; although the 2001 childhood poverty rate is the lowest it has been in the past two decades, 11 million children under 18 still live in families with incomes below the Federal poverty level. Black and Hispanic children are more likely to live in poverty than are White children. In 2001, 30 percent and 27.4 percent of Black and Hispanic children, respectively, were living in families with incomes below the Federal poverty level, compared to 12.8 percent of White children.

Child health begins before birth, with adequate and high quality prenatal care during pregnancy. The National Center for Health Statistics (NCHS) has found that inadequate prenatal care utilization is associated with a reduced number of well-child visits and less than complete immunizations. This suggests that the pattern of health care during the prenatal period may be a predictor of the use of adequate pediatric services during childhood. In 2001, over 83 percent of pregnant women began prenatal care in the first trimester, reflecting a significant increase in the use of early prenatal care over the past ten years. However, this percentage is significantly lower for minority women; only 74.5 percent of Black mothers received early care compared to 85.2 percent of White women.

In the United States, low birth weight (2,500 grams or 5 pounds 8 ounces) is the strongest predictor of infant mortality and morbidity.

Infants who are born at low birth weight are at a greater risk of developing other problems later in life, such as physical disabilities and developmental delays. Despite improvements in the use of prenatal care, the rate of low birth weight has actually risen in recent years. In 2001, 7.7 percent of all live births nationwide were low birth weight. This represented a slight increase from the prior year. Several maternal risk factors have been associated with delivering low birth weight infants. Women who are demographically at risk include those who are Black, have a low level of education, and are low-income. The Black low birth weight rate of 13 percent is considerably higher than the rate for White (6.7 percent) and Hispanic (6.5 percent) births. Low birth weight is the factor most closely associated with neonatal mortality.

The preliminary rate of neonatal mortality, or the death of infants during the first 28 days after birth, was 4.6 deaths per 1,000 live births in 2001 and represents no change from the 2000 rate. Also remaining unchanged was the rate of postneonatal mortality, or death between 28 days and 1 year of age. In 2001, the preliminary rate was 2.3 deaths per 1,000 live births. The leading causes of postneonatal mortality are Sudden Infant Death Syndrome (SIDS) and birth defects. The rate of SIDS has dropped dramatically in the past five years, as parents and caregivers have learned about the importance of putting infants down to sleep on their backs.

The rate of infant mortality or death of children in the first year has consistently declined in the United States. In 2000, the preliminary infant mortality rate was 6.9 deaths per 1,000 live births. However, the rate of death among Black infants of 14.2 deaths per 1,000 live births is still 2.5 times the rate among White infants, and this disparity has not decreased. The United States ranks 26th among developed nations in its rate of infant mortality, reflecting the progress that remains to be made.

Infant health and development can be greatly enhanced through breastfeeding. Healthy People 2010 issued the goals of 75 percent of new mothers breastfeeding in the hospital, 50 percent maintaining breastfeeding for at least 6 months, and 25 percent continuing for 1 year. In 2001, breastfeeding rates were the highest recorded since national breastfeeding data have been collected. The initiation rate or in-hospital breastfeeding rate was 69.5 percent for all women. This rate increased most among groups of mothers that have traditionally been the least likely to breastfeed, Black and Hispanic women. In 2001, 52.9 percent of Black women and 73 percent of Hispanic women initiated breastfeeding in the hospital. In fact, 2001 is the first year that the highest in-hospital breastfeeding rates were among Hispanic women. The American Academy of Pediatrics reports that infants who are breastfed have fewer bacterial and viral infections, such as ear infections and pneumonia. There is research supporting that breastfeeding has long-term benefits such as improving a child's immune system and even enhancing cognitive functioning.

Another indicator of child health is the percentage of children who are adequately immunized. Children who are not fully immunized are at high risk for serious, preventable diseases and are most likely not receiving adequate preventive health care. The percentage of children who receive a full series of immunizations—including those for measles, mumps, rubella (German measles), polio, diphtheria, tetanus, pertussis (whooping cough), and Haemophilus influenzae type b (the bacterium that causes meningitis)—was reported to be 74.8 percent in 2002, a slight increase from the rate reported in 2001. Although the number of reported cases of vaccine-preventable diseases has decreased steadily since the introduction of the Childhood Immunization Initiative, significant progress is still needed to reach the goal of immunizing at least 90 percent of children by their second birthday.

Childhood mortality rates have generally declined over the past several decades. In 2001, there were 12,249 deaths among children ages 1-14. Injuries are the leading cause of death for children in this age group. Injuries accounted for 33.2 percent of all deaths among children ages 1-4 and 39.4 percent of all deaths among children ages 5-14. The leading cause of injury death among children ages 1-14 was motor vehicle crashes. Unintentional injury was also the leading cause of death among adolescents ages 15-19, which accounted for 48 percent of deaths in 2001. Of deaths due to injury, motor vehicle crashes were the most common cause of death (77 percent), followed by deaths due to firearms (38 percent).

Reducing violence among adolescents is another approach to reducing the rate of death and disability due to injury. In this area, we are making significant progress; between 1993 and 2001, the percentage of high school students carrying weapons declined by 21 per-

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cent and the percentage of high school students bringing weapons to school declined by 46 percent. However, violence among adolescents remains a problem. Nearly 9 percent of students reported being threatened or injured with a weapon on school property in 2001, and this rate has increased 22 percent since 1993.

When identifying ways to improve overall child well being, the issue of health coverage is of critical importance. Health insurance status is often a determinant of access to and use of health care services among children. In 2001, 11.9 percent or 8.5 million children remained uninsured. The rise in health insurance rates among children is attributable to both the strong economy of the late 1990's and the State Children's Health Insurance Program (SCHIP) implemented in 1997. The SCHIP was established as part of the Balanced Budget Act of 1997, to expand medical coverage to low-income children ineligible for Medicaid. In 2002, 22.8 percent of children were enrolled in SCHIP and Medicaid nationwide.

Health insurance can provide an essential link to critical preventive care as well as acute care in the case of illness or injury. In 2001, most children with a usual source of care received their health care at either a physician's office or an HMO. However, differences were observed based on income. A greater percentage of low-income children (36.4 percent) received their care at a clinic or health center than higher-income children (16.8 percent). Children with family incomes above poverty were much more likely to visit a physician's office or HMO as their usual source of care.

The data presented here paint a picture of continued progress toward the goal of healthy children and families, but we still have a long way to go in many areas. By monitoring the health of children throughout their lives, we can identify opportunities for the prevention of disease and injury. It is expected that the data in this book will be one source of the information needed by policymakers, program planners, and the public to improve the health and well-being of our nation's children.

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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 2001, the 89 million children through the age of 21 in the United States represented 31.2 percent of the total population, adults ages 22-64 accounted for 56.4 percent, and persons ages 65 and over represented 12.4 percent of the total population. The median age in the United States for all races was 35.6 years.

In the last decade, the number of children under 5 years of age has increased by 0.8 per-

cent, while the number of children ages 5-19 years has increased by 15.1 percent. In the same period, the number of persons ages 65 and over has increased by 10.9 percent.

Race and Ethnicity

Reflecting the trends in the general population, the child population 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 White has decreased. Hispanic children represented 9 percent of children in 1980 and 18 percent in 2001; likewise, Asian/Pacific Islander children represented 2 percent in 1980 and 4 percent in 2001. In the same time period, the percentage of children who are White dropped by 16 percent to represent 62 percent of the child population in 2001, while the percentage who are Black has remained stable. These trends are expected to continue.

U.S. Resident Population by Age Group: July 1, 2001 Source (I.I): U.S. Census Bureau



Percent Distribution of Children Under 18, by Race/Ethnicity: 2001 Source (I.1): U.S. Census Bureau



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.1

Compared to native-born children living

with native parents, children living with foreign-born parents were more likely to have family incomes 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.²

¹ The term "native-born parents" indicates that both parents who live with the child are nativeborn, 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.

At or Above

200% FPL*







Percent Distribution of Children Under 18, by Income and Nativity of Child and Parents: 2002 Source (1.2): U.S. Census Bureau 80 Native Child and Parent 70 66.2 Native Child. Foreign-born Parent 60 Foreign-born Child, 51.1 Foreign-born Parent 50 Percent 39.9 40 33.2 29.0 26.8 30 20.0 19.6 20 14.2 10 0 Below 100% 100 to 199%

FPL*

FPL

* 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 United States have special health care needs. The survey identified CSHCN as those children who have a condition that has lasted or is expected to last at least one year, and which results in at least one of five consequences: the need for prescription medication; the need for more medical, mental health, or educational services than other children of the same age; the need for emotional, behavioral, or developmental counseling; a limitation in the child's ability to do the things most children of the same age do; or the need for special therapy, such as physical, occupational, or speech therapy. Of these five criteria, the need for prescription drugs was the most common, reported for 74.3 percent of CSHCN, followed by the need for extra medical care, which was cited by 45.6 percent of CSHCN.

Percent Distribution of Children with Special Health Care Needs Under 18 in U.S. Households: 2001 Source (I.3): U.S. Department of Health and Human Services



Percent Distribution of Children with Special Health Care Needs by Type of Special Need: 2001



Children in Poverty

In 2001, there were 11 million related children¹ under 18 years of age living in families with income below the Federal poverty threshold (e.g., \$18,104 for a family of four)². Children living below the poverty level comprised 15.8 percent of all related children living in families, with children under six more likely (18.2 percent) to live in poverty. The rate for 2001 is the lowest childhood poverty rate in the past two decades.

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 (30.0 percent) and Hispanic (27.4 percent) related children under age 18 were poor than were related White children (12.8 percent).

Of the 11 million related children living in poverty, just over 50 percent lived in homes headed by a single mother, 40.5 percent lived

in homes headed by married parents, and 8.6 percent lived in families headed by a single father.

¹ Related children in a family include a householder's own children and all other children in the household who are related to the householder by blood, marriage, or adoption.

² 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: 1970-2001 Source (1.4): U.S. Census Bureau



Related Children Under 18 Living in Families Below 100% of Poverty Level, by Household Status: 2001

Source (1.4): U.S. Census Bureau



* Hispanic ethnicity not reported prior to 1979.

School Dropouts

As of October 2001, there were approximately 3,774,000 high school dropouts¹ 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).





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

Working Mothers

In 2001, 64 percent of mothers with preschool aged children (younger than 6 years) were in the labor force (either employed or looking for work), with 60 percent 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 2001 and 75 percent were actually employed. Of employed mothers, 78 percent worked full-time and 23 percent worked part-time.

Child Care

The issue of child care is essential to working parents. The 2001 National Household Education Survey collected information about types of child care arrangements. In 2001, 61 percent of children through age 6 spent time in the care of an individual other than a parent. Overall, 23 percent were cared for by a relative, 16 percent by a non-relative in a home, and 34 percent received care in a center-based program.¹ Older children, ages 3 to 6, were more likely to receive center-based care than were children under 3 years of age. Only 17 percent of children under 3 received care in a center-based program, compared to 56 percent of children ages 3 to 6.

Analysis of the National Household



Percent of Mothers in the Work Force: 1980-2001



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







^{*}Some children participate in more than one type of arrangement.

POPULATION CHARACTERISTICS 17

Education Survey also revealed variations by race and ethnicity. A comparison of child care arrangements for children through age 6 across racial and ethnic groups revealed that Hispanic children were least likely to be enrolled in a center-based program and most likely to receive only parental care. Slightly more than half (53 percent) of Hispanic children were in the care of a parent, compared to 38 percent of non-Hispanic White and 26 percent of non-Hispanic Black children. The percentage of children receiving care in center-based programs was highest for non-Hispanic Black (41 percent) and lowest for Hispanic (20 percent) children.

¹ Some children participate in more than one type of arrangement.



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Children with Special Health Care Needs

Impact on Parental Employment

The medical needs of a child with special health care needs (CSHCN) can often affect the employment of a parent, as a parent may reduce work hours or stop working entirely in order to care for a child. Analysis of the 2001 National Survey of Children with Special Health Care Needs showed that 16.8 percent of parents reported having to cut back on work and another 13.2 percent stopped working due to their children's needs. Since giving up a job affects a family's income, it is not surprising that parents of CSHCN in lowerincome families are those most likely to have stopped working.

Time Spent Providing Care

Caring for CSHCN may require families to spend time either providing direct care or coordinating care for their child. In the 2001 National Survey of Children with Special Health Care Needs, more than half (57.5 percent) of families reported spending an hour or less per week in these activities. Just over onefifth (20.2 percent) indicated spending 6 or more hours each week providing, arranging, or coordinating care for CSHCN.

The time burden was greatest on lowincome families. The families of more than one-quarter of poor children spent at least 11 hours a week providing, arranging, or coordinating their children's care, compared to the 6 percent of families with incomes of 400 percent of poverty or more.

Children With Special Health Care Needs and Parental Employment, by Income: 2001



Time Spent Per Week Providing, Arranging, or Coordinating Care for Children with Special Health Care Needs: 2001 Source (I.8): U.S. Department of Health and Human Services



Maternal Age

The overall birth rate declined to 64.8 per 1,000 women in 2002, the lowest level since national health data have been available. The birth rates among older mothers ages 35-44 increased, while rates for women in their twenties and early thirties declined. Birth rates for teenagers have fallen steadily in the past decade and reached a record low in 2002.

Among 2002 births, approximately 11 percent were to women under 19, over half to women in their twenties, one third to women in their thirties, and about 3 percent to women in their forties and early fifties.

Among both Black and non-Hispanic White women, about half of births in 2002 were to women in their twenties. However, non-Hispanic White births were more likely to be to women in their thirties, forties and early fifties, while the proportion of births that were to teens was about twice as large among Blacks than among non-Hispanic Whites.





* Preliminary data

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 group. 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.



Infant Feeding

Throughout the 1970's and early 1980's, the percentage of mothers who began breastfeeding in the hospital increased steadily to 61.9 percent, but then gradually declined to 51.5 percent by 1990. In 2001, breastfeeding rates in the hospital reached 69.5 percent, the highest rate recorded since national breastfeeding data have been collected.

Since 1991, the breastfeeding initiation rates have steadily increased across all racial and ethnic groups. In the past decade, rates of breastfeeding immediately after delivery grew the most among groups of mothers that have traditionally been the 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. In fact, 2001 is the first year that the highest inhospital breastfeeding rates were among Hispanic women (73.0 percent), compared to White (72.2 percent) and Black women (52.9 percent). Women were also more likely to initiate breastfeeding with their first child, but women with more than one child were more likely to continue breastfeeding at 6 and 12 months postpartum.

Breastfeeding rates for all women decrease substantially between delivery and 6 months postpartum, the breastfeeding period recommended as most critical for the infant's health by the Surgeon General of the United States. The percentage of women who report that they are still breastfeeding at 6 months post-

partum reached a high of 32.5 percent in 2001. At six months postpartum, 34.2 percent, 32.8 percent, and 21.9 percent of White, Hispanic, and Black 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) dietary supplement 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.







*Includes exclusive and supplemented breastfeeding

Low Birth Weight

In 2001, 308,747 babies (7.7 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 6.8 percent in 1985 and is currently at the highest level recorded in the past three decades. Mothers younger than 15 years and older than 45 are at the highest risk of delivering a low birth weight infant. Much of the incidence of low birth weight among older mothers (older than 45) is due to an increase in the proportion of multiple births, as these infants are at a much greater risk of weighing less than 2,500 grams at birth. Twins and other multiples are approximately ten times as likely to be born at a low birth weight than singleton newborns.

Although the Black low birth weight rate has declined from a high of 13.6 percent in 1991, it remains considerably higher than the rate for White (6.7 percent) and Hispanic (6.5 percent) births. The rate among infants of White mothers has increased more than 20 percent in the past decade, largely due to the higher prevalence of multiple births among White women. In 2001, the rate of low birth weight among infants born to smokers (11.9 percent) was substantially higher than among nonsmokers (7.3 percent). This significant differential has been observed since 1989 among both Black and 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 the factor most closely associated with 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.





* 1985-1988 data based on race of child; 1989-2001 data based on race of mother. ** Hispanic can be of any race.

Very Low Birth Weight

In 2001, the rate of very low birth weight newborns remained at 1.4 percent of live births to U.S. women, and has been relatively stable since 1997.

Because chance for survival increases as birth weight increases, infants born at a very low birth weight (less than 1500 grams, or 3 pounds 4 ounces) have the lowest survival rates. Approximately 24 percent of all infants weighing less than 1500 grams die by age one, compared to 2 percent of infants born at 1,500-2,499 grams and 0.3 percent of infants born at 2,500 grams or more. Very low birth weight infants who survive are at 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 Black babies is two and a half times higher than that among Whites and is more than twice the rate for the total birth population. This disparity is a major contributor to the disparity in infant mortality rates between Black and White infants.

Very Low Birth Weight Among Infants, by Race/Ethnicity: 1985-2001

Source (II.2): National Center for Health Statistics



* Hispanic can be of any race.

Comparison of National Infant Mortality Rates

Differences in the infant mortality rates among industrialized nations reflect differences 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 26th among industrialized nations in 1999.

This graph comparing "national 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 as indicated in the United Nations Demographic Yearbook. In 1999, four of these jurisdictions had infant mortality rates that were half that of the United States.

Comparison of National Infant Mortality Rates: 1999 Source (II.3): United Nations



* Reflect rates for 1998 because data for 1999 not available.

Infant Mortality

In 2001, 27,801 infants died before their first birthday. The preliminary infant mortality rate was 6.9 deaths per 1,000 live births, representing no change from the previous year.

The rapid decline in infant mortality, which began in the mid 1960's, slowed for 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 caused a renewed decline during the 1990's. In 2001, the leading causes of infant mortality were congenital malformations, deformations and chromosomal abnormalities, which accounted for 20.2 percent of infant deaths.

Based on preliminary data, mortality among Black infants increased slightly to 14.2 deaths per 1,000 live births in 2001, although this difference was not statistically significant. The preliminary rate of 5.7 for White infants was not different from the reported 2000 rate. The infant mortality rate for Black infants continues to be 2.5 times that of White infants. Although the trend in infant mortality rates among Blacks and Whites has been on a continual decline throughout the 20th century, the proportional discrepancy between the Black and White rates remains largely unchanged.





^{**}Includes the ethnic classification of Hispanic.

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Neonatal and Postneonatal Mortality

Neonatal

In 2001, 18,491 infants younger than 28 days died, resulting in a preliminary neonatal mortality rate of 4.6 deaths per 1,000 live births. This neonatal mortality rate represents no change from the rate recorded in 2000.

Postneonatal

In 2001, 9,310 infants between 28 days and 1 year of age died; the preliminary postneonatal mortality rate was 2.3 deaths per 1,000 live births. The 2001 rate is not different from the 2000 rate.

Neonatal Mortality Rates, by Race of Mother: 2001* Source (II.4): National Center for Health Statistics



* Preliminary data.

Postneonatal Mortality Rates, by Race of Mother: 2001* Source (II.4): National Center for Health Statistics



* Preliminary data.

Maternal Mortality

During the past several decades, there has been a dramatic decrease in maternal mortality in the United States. Since 1980, however, the rate of decline has slowed.

In 2000, there were 396 maternal deaths which resulted from complications during pregnancy, childbirth, or the postpartum period up to 42 days. The maternal mortality rate of 9.8 per 100,000 live births was not significantly different from prior years and has remained fairly stable since 1982.

The maternal mortality rate for Black women (22.0 per 100,000 live births) is almost three times the rate for White women (7.5 per 100,000 live births).

According to the National Center for Health Statistics, regardless of race, the risk of maternal death increases for women over age 30. Women ages 35-39 have approximately twice the risk of maternal death than women ages 20-24 years.

Maternal Mortality Rates, by Race of Mother: 2000

Source (II.5): National Center for Health Statistics



* Includes the ethnic classification of Hispanic. ** Includes all non-White.s.

Vaccine-Preventable Diseases

The number of reported cases of vaccinepreventable diseases has decreased steadily since the introduction of the Childhood Immunization Initiative. While the number of cases of H. Influenzae increased between 2000 to 2001, cases of rubella, measles, Hepatitis B, mumps, Hepatitis A, and pertussis 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. Over 20 percent of pertussis cases occurred in infants younger than 6 months who were too young to have received all three doses of a pertussis-containing 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 vaccine-preventable diseases, several of these diseases are still common. The number of cases of pertussis, Hepatitis A and *H. Influenzae* remains substantial and indicates a continuing need to promote immunization efforts. In fact, rates of Hepatitis A have had the greatest decline among children in the states where routine childhood vaccination is recommended.

Vaccine-Preventable Diseases Among Children Under 5: 2001

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



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Child Abuse and Neglect

State child protective services received reports alleging the maltreatment of approximately 3 million children in 2001. Over half of these reports were received from community professionals, while the remainder were received from family, friends, relatives, or neighbors of these children.

In 2001, investigations by state child protective services agencies determined that an estimated 903,000 children were victims of abuse or neglect, equivalent to a rate of 12.4 per 1,000 children under 18 years of age. Approximately 59 percent of all victims suffered neglect, 18.6 percent physical abuse, 9.6 percent sexual abuse, 6.8 percent psychological maltreatment, and 19.5 percent other forms of maltreatment. Some children suffered multiple types of maltreatment.

Victimization was highest among the youngest children. In 2001, 27.7 percent of victims were ages birth to 3, while 5.4 percent were ages 16-17. Among the estimated 1,300 children who died of abuse and neglect, chil-

dren younger than one year accounted for 40.9 percent of fatalities and children younger than 6 years accounted for 84.5 percent. Of the child fatalities that occurred in 2001, 82.8 percent involved a parent.

The data were obtained from the National Child Abuse and Neglect Data System, the primary source of national information on abused and neglected children known to state child protective services agencies.

Child Abuse and Neglect Among Children Under 18, by Type of Maltreatment: 2001*

Source (II.7): U.S. Department of Health and Human Services







* Percentage totals more than 100 percent because children may have been the victims of more than one * 1,742,545 reports from 48 states. type of maltreatment.

Pediatric AIDS

As of December 31, 2001, 9,074 cases of AIDS in children younger than 13 had been reported in the United States. Pediatric AIDS cases represented less than 1.2 percent of all cases reported through 2001.

In 2001, 175 new AIDS cases in children were reported, with 86 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 zidovudine (ZDV) treatment during 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 more than three times that of White, non-Hispanic children and 2.6 times that of Hispanic children.





^{*} Graph does not include 13 children of unknown 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.

Hospitalization

In 2000, there were 3.4 million hospital discharges of children ages 1 to 21, or 4.0 discharges per 100 children.

Diseases of the respiratory system were the major causes of hospitalization for children ages 1-9 and accounted for 33 percent of their discharges. Hospital discharge rates generally decrease until age 10 and then increase during later adolescence.

While injuries are the leading cause of death for children older than 1 year, this category accounted for only 9 percent of the hospital discharges of children ages 1-14 in 2000. Pregnancy and childbirth accounted for 68 percent of discharges among young women ages 15-21. Mental disorders were the second leading cause of hospitalization for adolescents.





Number of Hospital Discharges (In Thousands)

Hospital Discharge Trends

Since 1985, there has been a 38 percent decrease in overall hospital discharge rates for children ages 1-14 years.

Between 1985 and 2000, there was a 44 percent decline in the hospital discharge rate for diseases of the respiratory system in children in this age group.

Three diagnostic categories (respiratory diseases, injury, and digestive diseases) accounted for 45 percent of the discharges of children ages 1-14 years in 2000.

Discharge Rates Among Children Ages 1-14, by Selected Diagnoses: 1985-2000

Source (II.9): National Center for Health Statistics



Child Mortality

Childhood death rates have generally declined over the past several decades. Based on preliminary data, there were 12,249 deaths of children ages 1-14 in 2001. Unintentional injury continues to be the primary cause of death for this age group. Among children ages 1 to 4, injuries accounted for 33.2 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 39.4 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 I-14: 2001* Source (II.4): National Center for Health Statistics



* Preliminary data

Childhood Deaths Due to Injury

In 2001, injuries caused the deaths of 1,701 children ages 1-4 and 2,802 children ages 5-14. Among children ages 1-4, motor vehicle crashes, drowning, and fire were the most common causes of injury death. Motor vehicle crashes were the most common cause of injury death among children ages 5-14, followed by deaths due to drowning and fire.

In addition, 394 children ages 1-4 were the victims of homicide and 590 children ages 5-14 were the victims of homicide or suicide.

Deaths Due to External Cause Among Children Ages 1-14: 2001

Source (II.10): National Center for Health Statistics



Death Rate per 100,000 Population in Specified Age Group



Adolescents

In 2001, individuals ages 13-19 accounted for roughly 10 percent of the U.S. population. 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 explored 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 unprotected 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

In 2001, birth rates among adolescents ages 15-19 dropped to 45.8 per 1,000 teenagers. This represents a historic low and a decrease of 26 percent since 1991. In 2001, there was also a decline in the birth rates among adolescents ages 10-14, which fell to 0.8 per 1,000 teenagers. Birth rates were highest among the oldest adolescents, those ages 18-19, at 75.5

births per 1,000 teenagers.

Birth rates among adolescents varied considerably by race and ethnicity. In 2001, birth rates for adolescents 15-19 were 20.4 for Asian/Pacific Islanders, 41.4 for Whites, 66.0 for American Indians, 73.2 for Blacks, and highest at 92.5 for Hispanics. Although all racial and ethnic groups saw a decline in adolescent births in the past decade, the steepest declines have occurred among Black adolescents. Between 1991 and 2001, the birth rate among Black adolescents ages 15-19 decreased by 36 percent. In the same time period, the birth rate among Hispanic adolescents fell the least, by just 13 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: 2001 Source (II.2): National Center for Health Statistics



* Hispanics can be of any race and those in any racial group may also be Hispanic





Sexual Intercourse

In 2001, 45.6 percent of students had ever had sexual intercourse, representing a nearly 9 percent decrease since 1999. Though Black students (60.8 percent) had a higher prevalence of ever having had sexual intercourse than Hispanic (48.4 percent) and White students (43.2 percent), the percentage of Black students ever having had sexual intercourse dropped by 14 percent from 1999, with smaller declines seen for Hispanic and White students. Approximately 48 percent of 12th grade students reported having sexual intercourse during the three months preceding the survey. The prevalence rate of current sexual activity increased significantly from grades 9 through 12 among both females (19.9 percent to 51.0 percent) and males (25.9 percent to 44.6 percent). Overall, male students were more likely than female students (17.2 percent versus 11.4 percent) to have had four or more sex partners during their lifetime.

Grade: 2001

Condom Use

In 2001, more than half (57.9 percent) of sexually active students reported condom use during their last sexual intercourse. Males were significantly more likely than females to have reported that a condom was used. Black students were significantly more likely than White and Hispanic students to report using a condom during last sexual intercourse.

Sexual activity increased by grade for all students; however, condom use decreased by grade, with 12th-graders being the least likely to use condoms.

High School Students Who Have Ever Had Sexual Intercourse, by Gender and Grade: 2001

Source (II.11): Centers for Disease Control and Prevention



Source (II.11): Centers for Disease Control and Prevention



Sexual Activity and Condom Use Among High School Students, by

* Sexual intercourse during the three months prior to the survey. ** Among sexually active students at last sexual 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 Black non-Hispanic youth than White non-Hispanics.

Chlamydia continues to be the most common STD in adolescents and young adults with a rate of 1,436 cases per 100,000 adolescents and 1,524 per 100,000 young adults. Gonorrhea followed in prevalence with an overall rate of approximately 500 cases per 100,000 adolescents and 613 cases per 100,000 young adults. Across both age groups, gonorrhea decreased slightly among Blacks but increased slightly among Whites. Syphilis is less common among young people, with only 1.9 cases per 100,000 adolescents and 4.4 cases per 100,000 young adults in 2001, a slight decline in both age groups from 2000.

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.

Sexually Transmitted Diseases Among Adolescents and Young Adults, by Age and Race: 2001 Source (II.12): Centers for Disease Control and Prevention





Adolescent HIV Infection

Of the 6,587 cases of HIV infection ever reported among adolescents (ages 13-19), males made up close to 43 percent and represented the same proportion of the new HIV infection cases reported in 2001 among adolescents. Almost half of these new cases were transmitted by men having sex with men. In 44 percent of new adolescent male cases, the risk category was not reported. From 1981 through 2001, Black males were more likely to report HIV infection and comprised almost 60 percent of the infected male adolescent population.

Fifty-seven percent of adolescent HIV infection cases ever reported were among females. The percentage of new HIV infection cases in adolescent females has been increasing in recent years. Of the new cases in 2001, about 37 percent acquired HIV infection through heterosexual contact and 5.5 percent were injecting drug users. The risk category was not reported for 57.4 percent of new adolescent female cases in 2001. Similar to the trend among adolescent males, Black females are significantly more likely to contract HIV and comprised 72.2 percent of female adolescents living with HIV infection.

HIV Infection Among Adolescents Ages 13-19, by Gender and Race/Ethnicity: 1981-2001* Source (II.8): Centers for Disease Control and Prevention



* Includes persons reported with HIV infection who have not developed AIDS in the 39 areas with confidential HIV infection reporting. ** Total includes 41 persons of unknown race/ethnicity.

Adolescent AIDS

Males comprised about 58 percent of the 4,428 AIDS cases ever reported among adolescents ages 13-19 years old, and represented 52.4 percent of the new AIDS cases reported among adolescents in 2001. Of the 195 new cases reported in 2001 among adolescent males, the largest exposure category (42.6 percent) was identified as men who have sex with men. In 44.1 percent of new cases, a risk category was not reported or identified.

Over 42 percent of adolescent AIDS cases ever reported were among females. Females comprised nearly 48 percent of new AIDS cases reported in 2001 among adolescents, which is an 11 percent decrease from 54 percent in 2000. Among adolescent females, 177 new AIDS cases were reported in 2001. In 32.2 percent of these new cases, heterosexual contact was reported as the risk category, but in most cases (62.1 percent), a risk category was not reported or identified. AIDS Cases Among Adolescents Ages 13-19, by Gender and Exposure Category: 1981-2001* Source (II.8): Centers for Disease Control and Prevention



^{*} On January 1, 1993, the AIDS case definition for adults and adolescents aged 13 years and older was expanded to include HIV- infected persons with CD4 counts of less than or equal to 200 cells/uL or a CD4 percentage of less than or equal to 14, and persons diagnosed with pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer.

** 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 who have sex with men" also includes men who have sex with men and inject drugs.

Young Adult AIDS

As of December 31, 2001, 28,665 cases of AIDS had been reported in young adults ages 20-24 years. This total includes 1,461 newly reported cases in 2001, which is an increase of 8.5 percent from the number reported in 2000. Between 2000 and 2001, a higher per-

centage increase was seen among females (9.4 percent) than among males (8.0 percent) in this age group.

Males represented 59.2 percent of the AIDS cases reported in 2001 among adults 20-24 years old. In over half of these new cases, the exposure category was identified as men hav-

ing sex with men. Among new female cases reported in 2001, heterosexual sex (48.5 percent) was reported as the primary exposure category. In about one third of new cases (32.5 percent) for all young adults 20-24, the exposure category was not identified or reported.

AIDS Cases Among Adults Ages 20-24, by Gender and Exposure Category: 1981-2001* Source: Centers for Disease Control and Prevention



* On January 1, 1993, the AIDS case definition for adults and adolescents aged 13 years and older was expanded to include HIV- infected persons with CD4 counts of less than or equal to 200 cells/uL or a CD4 percentage of less than or equal to 14, and persons diagnosed with pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer.

** 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 who have sex with men" also includes men who have sex with men and inject drugs.

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 2000.

Results from the 2001 Youth Risk Behavior Survey reveal that 17.4 percent of students had carried a weapon, such as gun, knife, or club, on one or more days in the last 30 days; nearly 6 percent had carried a gun. Boys (29.3

percent) were significantly more likely to carry a weapon than girls (6.2 percent). The percent of high school students who carry weapons had decreased significantly since 1991 but has remained level since 1997.

Some high school students also reported taking weapons to school. In 2001, 6.4 percent of students had carried a weapon on school property in the last thirty days- a 46 percent decrease since 1993. However, despite this

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decline, nearly 9 percent of students reported being threatened or injured with a weapon on school property in 2001. In addition, 6.6 percent of students had missed one or more days of school because they felt unsafe at school or on their way to school. Younger students and Black and Hispanic students expressed the most concern for their safety.

High School Students Who Carried A Gun in the Past 30 Days, By Gender and Race: 1993-2001





High School Students Who Were Threatened or Injured With a Weapon on School Property, by Race: 1993-2001





Physical Activity and Overweight

Results from the 2001 National Youth Risk Behavior Survey show that over two-thirds of high school students regularly participated in vigorous physical activity and one quarter participated in moderate physical activity. Furthermore, 53 percent participated in regular strengthening exercises, while 55 percent played on one or more sports teams. Nationwide, 52 percent of high school students were enrolled in a physical education class, though students in the 9th grade were significantly more likely to be enrolled than students in higher grades. The percentage of students enrolled in daily physical education has declined over the past decade, from 42 percent in 1991 to 32 percent in 2001.

While 29 percent of high school students thought they were overweight, 46 percent were trying to lose weight. Female students were more than twice as likely as male students to be attempting weight loss (62 percent versus 29 percent). Although males were more likely to be overweight, female students were significantly more likely than male students to perceive themselves as overweight. In an effort to lose weight or keep from gaining weight, nearly 60 percent had exercised and 44 percent of students had consumed fewer calories, eaten less, or eaten foods low in fat. However, a substantial minority had also attempted weight control in potentially unhealthy ways—14 percent had fasted for 24 hours or more, 9 percent had taken diet aids without a doctor's advice, and 5 percent had vomited or taken laxatives.





* Activities that caused sweating and hard breathing for at least 20 minutes on 3 of the 7 days preceding the survey.

** Activities that did not cause sweating or hard breathing for at least 30 minutes on 5 of the 7 days preceding the survey.

*** Activities such as push-ups, sit-ups, or weight lifting on 3 of the 7 days preceding the survey.

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Cigarette Smoking

Cigarette smoking declined significantly among 8th, 10th, and 12th graders in 2002 from the previous year, as reported by the University of Michigan's Monitoring the Future Study. In the 30 days preceding the survey, 10.7 percent, 17.7 percent, and 26.7 percent of 8th, 10th, and 12th graders, respectively, reported smoking. These figures represent a 49 percent, 42 percent, and 27 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, increases in cigarette price, and declining accessibility to cigarettes.

The prevalence of smoking among teens increased substantially between 1991 and 1996. These increases occurred in virtually every socio-demographic group; among both sexes, among those college-bound or not, among the four regions of the country, among those living in rural or urban areas, and among Whites, Blacks, and Hispanics. The recent decline since 1996 has also occurred 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 considerably more likely to smoke than are college-bound high school students. The use of cigarettes among Black adolescents is dramatically lower than for White adolescents. These improvements are likely to have significant long-term health consequences for this generation of adolescents.





Substance Abuse

Prevalence and Incidence

Results of the Substance Abuse and Mental Health Services Administration's 2001 National Household Survey on Drug Abuse (NHSDA) show that the percentage of adolescents ages 12-17 who reported using alcohol in the month prior to the survey increased to 17.3 percent. In this age group, boys and girls reported similar rates of alcohol use in 2001, although rates of binge drinking and heavy alcohol use were higher among boys.

In 2001, among youths ages 12-17, illicit drug use increased slightly to 10.8 percent from 9.7 percent in 2000. Usage patterns within this group varied considerably based on age. In the month prior to the survey, illicit drug use was lowest among adolescents ages 12-13 at 3.8 percent and highest among adolescents ages 16-17 at 17.8 percent. Although there was no significant difference among girls, there was a significant increase in illicit drug use among boys from rates reported in 2000. The NHSDA survey also found correlations between illicit drug use and smoking among adolescents. In 2001, the rate of current illicit drug use was approximately 9 times higher among youths who smoked cigarettes (48.0

percent) than it was among those who did not smoke (5.3 percent).

Between 2000 and 2001, the use of marijuana, the most commonly used illicit drug, increased. Among youths ages 12-17, 8.9 percent of boys and 7.1 percent of girls reported using marijuana in the month prior to the survey. Rates of substance use initiation, or incidence, are another indication of usage patterns. The number of yearly marijuana initiates among youth 12-17 years of age steadily increased from 0.8 million in 1990 to 1.6 million in 1996, and has remained stable since then.

Perception of Risk and Access to Drugs

The perceived risks of using marijuana or cocaine decreased slightly from 2000. In 2001, 35.7 percent of adolescents perceived smoking marijuana once a month as risky. The percentage of adolescents who perceived monthly cocaine use to be risky decreased from 55.4 percent in 2000 to 54.1 percent in 2001.

Marijuana was perceived as the illicit drug easiest to acquire, with 55.4 percent of adolescents reporting that it would be easy to obtain. The perceived availability of drugs among youths ages 12-17 was lowest for heroin; only 16.7 percent indicated heroin would be easy to obtain.

Drug Use Among Adolescents Ages 12-17 in the Past 30 Days: 1990-2001 Source (II.14): Substance Abuse and Mental Health Services Administration



^{*} Revised estimates

Adolescent Mortality

In 2001, there were 13,435 deaths of adolescents ages 15-19 years. After a moderate increase in mortality rates for this age group in the early 1980's, there has been a gradual decrease since that time. Unintentional injury has remained the leading cause of death and accounted for approximately 48 percent of all deaths among adolescents ages 15-19 years in 2001. Homicide and suicide were the next leading causes of death, accounting for 14 and 12 percent, respectively, of all deaths among 15-19-year-olds.

Deaths Due to Injury

Within the classification of deaths due to injury or external causes, motor vehicle crashes were the leading cause of injury mortality among 15-to-19-year-olds in 2001, and accounted for 77 percent of injuries among adolescents. Firearms were the next leading cause of injury death, and represented 38 percent of injury deaths in this age group. Adolescent death rates due to motor vehicle injuries and firearms were similar in the 1990's until 1994, after which they began to diverge. Adolescent firearm deaths decreased at a much faster rate and were recorded at a rate of 12.1 per 100,000 population in 2001 compared to the rate of motor vehicle injury deaths of 24.4 per 100,000.

Leading Causes of Death Among Adolescents Ages 15-19: 2001 Source (II.10): National Center for Health Statistics









Death Rate per 100,000 Population in Specified Age Group

Adolescent Deaths Due to Injury

The National Center for Health Statistics reports that the two leading causes of deaths due to external causes among adolescents are motor vehicle crashes and firearms. In 2001, motor vehicle crashes caused the deaths of 4,938 adolescents 15-19 year olds. 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 2001 Youth Risk Behavior Survey revealed that 14.1 percent of students had rarely or never worn seat belts when riding in a car driven by someone else. Additionally, 30.7 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 2001, 2,458 adolescents ages 15 to 19 were killed by firearms. Of these, homicide accounted for 60 percent of firearm deaths, suicide accounted for 34 percent, and 4 percent were considered to be unintentional.

Motor Vehicle Crashes and Firearms Mortality Among Adolescents Ages 15-19: 2000 and 2001 Source (II.10): National Center for Health Statistics



Death Rate per 100,000 Population in Specified Age Group

* Detailed 2001 data were not available for traffic mortality. ** Includes the driver.



Health Services 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 socio-economic status.

In 1998, every state implemented a State Children's Health Insurance Program (SCHIP), 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, race/ethnicity, and income.

Health Care Financing

A report from the Employee Benefit Research Institute (EBRI) indicated that nearly 12 percent (8.5 million) of children younger than 18 years of age had no insurance coverage in 2001, an increase from the previous year. Although the late 1990's saw a reduction in the percentage of uninsured children, current economic conditions, coupled with the rising cost of health benefits, have contributed to the recent increase in the population of uninsured children.

In 2001, just over one quarter of all children (25.9 percent) were publicly insured, primarily

through Medicaid, and 68.3 percent 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 (62.1 percent) or be uninsured (22 percent). Only 22 percent of low-income children had private coverage.

In 2001, most uninsured children (65.6 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 (60.8 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 5.3 million children through the end of Federal Fiscal Year 2002. As of 2002, children with family incomes up to 200 percent of the Federal poverty level were eligible for coverage through SCHIP in twenty states. Only nine states implemented eligibility levels exceeding 235 percent of the Federal poverty level.



Health Care Financing: Children with Special Health Care Needs

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

The type of coverage varied across income groups. Among families in poverty, more than two-thirds of CSHCN were covered through public programs such as Medicaid and SCHIP. In contrast, for CSHCN in families with incomes above 200 percent of the poverty level, more than 80 percent had private coverage.



5.2%

Health Insurance Coverage for Children with Special Health Care Needs: 2001 Source (III.2): U.S. Department of Health and Human Services



Vaccination Coverage Levels

The Year 2010 objective for the complete series of routinely recommended childhood vaccinations is immunization of at least 80 percent of 19- to 35-month-olds with the full series of vaccines. Data released from CDC's 2002 National Immunization Survey revealed that 74.8 percent of children ages 19-35 months received the recommended vaccines (4 DTaP, 3 polio, 1 MCV, 3 Hib, 3 hepatitis B) in 2002. 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 6.5 percent to 89.1 percent in 2002. The varicella vaccination rate rose to 79.2 percent, which represents a 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 Black children are particularly vulnerable. With the exception of the varicella vaccine, Black children aged 19-35 months have the lowest immunization rates and are consistently below the national average.

In January 2003, the CDC published an updated immunization schedule (see facing page). No major changes have been made since publication of the schedule in 2002. The 2003 schedule continues to encourage the routine use of hepatitis B vaccine for all infants before hospital discharge and also begins to focus on the expansion of routine influenza immunization to include all children between 6-and 24-months of age.

¹ American Academy of Pediatrics. (2003). Vaccination Fact Sheets from the Childhood Immunization Support Program (CISP). Elk Grove Village, Illinois: AAP.



Estimated Vaccination Coverage Among Children Ages 19-35 Months, by Race/Ethnicity: 2002 Source (III.3): Centers for Disease Control and Prevention

Reccommended Childhood Immunization Schedule United States

Source (III.3): Centers for Disease Control and Prevention

VACCINE		Range of reco	mmended age	6.		Catch	up vaccination	n	Preadolescent assessment					
- AGE⊧	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'	only if moth	only if mother HBsAg(-)							No.					
			Hop B #2			Hop	B #3			нер в	6011916			
Diphtheria, Tetanus, Pertussis:			DTaP	DTaP	DTaP		DT	аP		DTaP	Td			
H. Influenzae type b:			Hib	Hib	Hib	н	ib							
Inactivated Polio*			IPV	IPV		15	v			IPV				
Mozsies, Illumps, Rubella ²						NN	R#1			MNR#2	NNF	1 #2		
Varicella ⁴							Varicella			Vari	cella			
Pneumococcal			PCV	PCV	PCV	P	cv		PCV	F	×Pγ			
Hepatitis A ¹		Vacsines beio	w this line are for	selected popula	Gans					He	patitis A series			
Influenza [,]								Influenza	a (yearly)					

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2002, 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. 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.

1 Hepatitis B Vaccine (HepB). All infants should receive the first dose of hepatitis B vaccine soon 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 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 are 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after 4 Measles, mumps, and rubella vaccine (MMR). The second dose of MMR is the second 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 toxoids and acellular pertussis vaccine (DTaP). The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15-18 months. 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 immunization in infants at ages 2, 4 or 6 months, but can be used as hoosters following any Hib vaccine

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 11-12 year old visit.

Varicella vaccine. Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children, i.e. those who lack a reliable history of chickenpox. Susceptible persons aged >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. It is also recommended for certain children age 24-59 months. Pneumococcal polysaccharide vaccine (PPV) is recommended in addition to PCV for certain high-risk groups. See MMWR, 2000;49(RR-9);1-38.

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. 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. See MMWR. 1999;48(RR-12):1-37.

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, and household members of persons in groups at high risk; see MMWR 2002;51(RR-3):1-31), and can be administered to all others wishing to obtain immunity. In addition, healthy children age 6-23 months are encouraged to receive influenza vaccine if feasible because children in this age group are at substantially increased risk for influenza-related hospitalizations. Children aged <12 years should receive vaccine in a dosage appropriate for their age (0.25 mL if age 6-35 months or 0.5 mL if aged >3 years). Children aged <8 years who are receiving influenza vaccine for the first time should receive two doses separated by at least 4 weeks.

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)

Dental Care

According to the Centers for Disease Control and Prevention (CDC), dental decay is the second most common chronic disease among U.S. children. This is a preventable health problem which can significantly affect children's health, ability to concentrate in school, and quality of life. With half of children already 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.

Problems related to oral health are more common among particular populations, including Black and Hispanic children, as well as low-income children. Analysis of the 2001 National Health Interview Survey found that 79.3 percent of children living at or above 200 percent of the Federal poverty level had seen a dentist in the past year, compared to only 62 percent of low-income children (below 200 percent of the Federal poverty level). Among low-income children, 38.1 percent had not received dental care in the last year, compared to 20.7 percent of higherincome children.

Preventive services such as regular dental health screenings may not always be available to those children who need them most. In Federal Fiscal Year 2000, only 20 percent of children eligible for dental services under the Medicaid Early and Preventive Screening, Diagnosis, and Treatment (EPSDT) program received preventive dental services.

Children Receiving an EPSDT Preventive Dental Service: 1990-2000 Source (III.5): U.S. Department of Health and Human Services







* Federal poverty level.



Physician Visits

Based on data from the 2001 National Health Interview Survey, approximately 10.5 percent of children under age 18 had not seen a physician in the past year. Older children were more likely than younger children to go without a physician visit. Nearly 16 percent of children ages 15-17 years had not had a physician visit in the past year, compared to only 3.8 percent of children under age 5.

Across all age groups, Hispanic children were the least likely to have seen a physician in the past year, compared to White and Black children. Hispanic children were up to three times more likely than 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 throughout adolescence. Children Reporting No Physician Visits in the Past 12 Months, by Age and Race/Ethnicity: 2001 Source (III.6) National Center for Health Statistics





Place of Physician Contact

Most children with a usual source of care, regardless of age or racial and ethnic group, received their health care at either a physician's office or an HMO in 2001. However, a greater percentage of low-income children received

Usual Source of Acute Care: 2001*

Source (III.6): National Center for Health Statistics

their care at a clinic or health center than higher-income children. On average, 36.4 percent of low-income children used a clinic or health center as their usual source of acute care, compared to only 16.8 percent of higherincome children. Children with family incomes above poverty were approximately five times more likely to seek care through a physician's office or HMO rather than a clinic or health center. Very few families reported that the hospital emergency department was the usual source of their children's care.



* Excludes <1 percent of those who indicated other source of acute care.

Place of Physician Contact for Children with Special Health Care Needs

Access to health care is particularly important for children with special health care needs (CSHCN). One measure of access, and an important element of primary care, is whether children have an identified place to go when they are sick. Analysis of the 2001 National Survey of Children with Special Health Care Needs found that 92 percent of CSHCN had a usual source of acute care. For the majority of these children (73 percent), this was a physician's office, although this varied based on income. Over 80 percent (82.5 percent) of CSHCN with family incomes above poverty identified a physician's office as their usual source of acute care, compared to 62.0 percent of CSHCN with family incomes at or below the poverty level. Overall, health centers and hospitals were most commonly cited as a primary source of acute care by CSHCN with family incomes at or below the poverty level.

Usual Source of Acute Care for Children with Special Health Care Needs: 2001* Source (III.7): National Center for Health Statistics



* Excludes <1 percent of those who indicated other source of acute care.

Hospital Utilization

In 2001, Black and Hispanic children in lowincome families (those with an annual income of less than \$20,000) averaged more nights in the hospital (including deliveries) than children in higher-income families. Low-income Black and Hispanic children averaged 6.1 days and 4.1 days respectively, compared to 5.8 days and 2.9 days among higher-income Black and Hispanic children. This difference was not observed for White children, as both income groups averaged 4.5 days of hospitalization a year. Across both income groups, Hispanic children averaged the least days of hospitalization and Black children averaged the most. Hospital Utilization, by Income and Race/Ethnicity: 2001 Source (III.6): National Center for Health Statistics





Prenatal Care

Early 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 was 83.4 percent in 2001, a slight increase from 2000.

In the last decade, there have been substantial increases in the percentage of women receiving early prenatal care, especially among racial and ethnic minorities. The proportion of Black, Hispanic, and American Indian women receiving early prenatal care increased by 20 percent or more between 1990 and 2000. Although gains have occurred across all racial groups, racial disparities persist. On average, 85.2 percent of White women, compared to 74.5 percent of Black women and 75.7 percent of Hispanic women, began prenatal care in the first trimester in 2001.

The age of the mother was 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.

Late or No Prenatal Care

The percentage of pregnant women beginning prenatal care in the third trimester or going without prenatal care decreased slightly from 3.9 percent in 2000 to 3.7 percent in 2001. Regardless of age, Black and Hispanic women were about twice as likely as White women to receive late or no prenatal care.

Risk factors for not using prenatal care included being younger than 20 years old, being unmarried, having low educational attainment, and being a member of a racial or ethnic minority group.

Mothers Beginning Prenatal Care in the First Trimester, by Age and Race: 2001



Mothers Receiving Late or No Prenatal Care, by Age and Race: 2001 Source (III.6): National Center for Health Statistics







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 status 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 disparities in the health status of children living in different states. Women living in the District of Columbia 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, also had the highest rates of births to women under 18 years of age. Poverty in the U.S. continued to rise steadily during the last three decades. 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, Mississippi, New Mexico and the District of Columbia had the greatest proportion of children with Medicaid/SCHIP coverage (over 40 percent), while Colorado had the smallest proportion (10.6 percent). Vermont had the lowest proportion of uninsured children (3.5 percent) while Texas led the nation with the highest proportion of uninsured children at 21.5 percent.

The challenge to health care providers and policy-makers continues to be eliminating the disparities among states while improving the health status of children throughout the entire nation.

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: 2001

Source (IV.1, IV.2): National Center for Health Statistics

	Low	Birthw	eight	Early	Prenata	al Care		Births	Under	18		Low	/ Birthw	eight	Early	Prenata	I Care		Births	Under	18
States	All**	White	Black	All**	White	Black	All**	White	Black	Hispanic	States	All**	White	Black	All**	White	Black	All**	White	Black	Hispanic
United States*	7.7	6.7	13.0	83.4	85.2	74.5	3.8	3.3	7.3	5.8	Nevada	7.6	7.0	13.0	75.7	76.3	67.6	4.1	3.9	8.0	5.6
Alabama	9.6	7.6	14.0	82.4	87.4	71.7	5.2	3.8	8.3	5.6	N. Hampshire	6.5	6.4	13.9	90.6	91.0	79.5	1.8	1.9	3.4	5.1
Alaska	5.7	5.2	10.9	80.5	84.2	82.3	3.2	1.8	3.9	4.3	New Jersey	7.9	6.8	12.6	79.8	83.3	63.4	2.3	1.7	5.7	4.8
Arizona	7.0	6.7	13.7	76.7	77.4	75.8	5.0	4.9	7.5	7.6	New Mexico	7.9	7.9	13.1	69.0	70.3	65.8	6.4	6.5	7.8	8.6
Arkansas	8.8	7.5	14.1	79.8	82.4	69.9	5.2	4.1	9.5	6.2	New York	7.7	6.7	11.3	80.5	83.9	70.3	2.7	2.3	5.0	4.7
California	6.3	5.8	11.6	85.4	85.4	82.5	3.4	3.6	5.1	5.0	North Carolina	8.9	7.3	13.8	84.4	87.3	75.9	4.2	3.2	7.3	5.8
Colorado	8.5	8.2	14.0	79.8	80.2	72.7	3.7	3.6	5.8	7.4	North Dakota	6.2	6.1	*	85.8	88.4	78.4	2.3	1.8		5.7
Connecticut	7.4	6.7	12.1	88.7	89.7	81.9	2.5	2.2	5.5	7.2	Ohio	8.0	7.0	13.4	87.3	89.1	77.2	3.6	2.8	8.4	6.5
Delaware	9.3	7.7	13.7	87.2	88.9	81.5	4.3	3.2	8.1	7.0	Oklahoma	7.8	7.3	13.6	77.4	79.5	69.2	4.8	4.1	8.5	7.5
DC	12.1	6.3	15.3	74.4	84.2	68.7	5.0	1.7	7.0	3.9	Oregon	5.5	5.4	10.1	81.5	81.8	76.6	3.4	3.4	5.8	6.4
Florida	8.2	6.8	12.5	84.1	87.0	75.1	4.1	3.2	7.5	4.4	Pennsylvania	7.9	6.9	13.7	85.2	87.4	72.9	3.2	2.4	8.7	8.0
Georgia	8.8	6.7	12.9	86.2	88.9	80.6	4.6	3.6	7.0	5.0	Rhode Island	7.3	6.7	11.8	91.4	92.4	84.5	3.5	3.1	6.2	7.4
Hawaii	8.1	6.5	11.4	84.2	88.5	92.0	3.0	0.9	0.9	4.9	South Carolina	9.6	7.3	14.0	79.2	84.3	69.5	5.0	3.5	8.2	5.9
Idaho	6.4	6.4	*	81.8	82.0	81.0	3.0	3.0	3.5	8.1	South Dakota	6.4	6.3	*	78.3	82.2	59.0	3.4	2.1	5.9	3.9
Illinois	8.0	6.6	13.7	84.0	86.5	72.9	3.8	2.7	9.1	5.2	Tennessee	9.2	8.0	13.6	82.8	85.7	72.2	4.6	3.8	8.0	6.0
Indiana	7.6	7.0	12.9	80.6	82.1	68.9	3.7	3.1	8.0	4.9	Texas	7.6	6.9	12.9	80.3	80.5	77.0	5.4	5.3	7.6	7.2
lowa	6.4	6.1	13.7	88.4	88.9	79.0	2.9	2.6	9.3	7.3	Utah	6.4	6.4	10.8	79.3	80.3	61.7	2.3	2.3	4.7	5.7
Kansas	7.0	6.5	12.4	86.9	87.6	79.5	3.6	3.4	7.6	6.8	Vermont	5.9	5.9	*	89.3	89.3	77.4	2.2	2.2	6.5	5.7
Kentucky	8.3	7.8	13.4	86.7	87.5	79.3	4.0	3.7	7.5	4.5	Virginia	7.9	6.5	12.5	85.1	87.8	76.5	3.1	2.2	6.7	3.6
Louisiana	10.4	7.7	14.4	83.2	90.4	73.4	5.6	3.2	9.0	3.0	Washington	5.8	5.5	9.8	83.2	83.8	77.0	3.0	2.9	4.3	6.3
Maine	6.0	6.0	*	88.2	88.3	79.7	2.4	2.3	2.6	2.3	West Virginia	8.5	8.4	11.5	86.3	86.8	76.2	4.0	3.9	8.1	1.2
Maryland	9.0	7.0	12.9	83.7	87.7	76.5	3.4	2.1	6.1	4.4	Wisconsin	6.6	5.9	13.1	83.8	86.2	69.6	3.3	2.2	11.1	6.5
Massachusetts	7.2	6.8	10.2	89.7	91.3	79.5	2.1	1.8	4.4	7.2	Wyoming	8.3	8.0	*	82.9	83.4	83.1	3.7	3.6	4.6	7.9
Michigan	8.0	6.6	14.1	84.5	87.8	69.3	3.4	2.5	7.5	5.7	, ,										
Minnesota	6.3	5.9	9.8	84.5	87.1	66.5	2.4	1.9	6.0	5.3											
Mississippi	10.7	7.8	14.3	82.7	89.3	74.9	6.5	4.0	9.5	6.3											
Missouri	7.6	6.7	12.6	87.7	89.2	78.7	3.9	3.2	8.3	6.0											
Montana	6.9	6.9	*	82.6	85.3	82.9	3.6	2.8	4.8	5.0											
Nebraska	6.6	6.3	12.4	83.2	84.5	68.0	3.2	2.7	9.8	6.0											

Montana

Nebraska

Medicaid Enrollees, Expenditures, and Reported EPSDT Utilization for Children Under Age 21: FY 2000

Source (IV.3, IV.4): Centers for Medicare and Medicaid Services

States	Medicaid Enrollees*	Per Enrollee Exspenditure**	Participant Ratio***	States	Medicaid Enrollees*	Per Enrollee Exspenditure**	Participant Ratio***
Alabama	387,482	931	0.43	Nevada	94,746	. 1.672	N/A
Alaska	72,558	2.665	0.51	New Hampshire	67.541	2.058	0.40
Arizona	436,164	1,882	N/A	New Jersev	491,360	1,936	0.32
Arkansas	289,370	1,755	0.25	New Mexico	270,588	1,670	0.47
California	3,849,152	1,143	N/A	New York	1,525,759	2,681	N/A
Colorado	221,109	2,101	N/A	North Carolina	688,402	1,692	0.68
Connecticut	230,067	1,657	0.57	North Dakota	33,364	1,750	N/A
Delaware	66,316	2,415	0.65	Ohio	822,277	1,570	N/A
DC	82,701	2,489	N/A	Oklahoma	384,761	1,169	0.31
Florida	1,245,949	1,449	0.45	Oregon	263,455	1,670	0.54
Georgia	780,145	1,301	0.43	Pennsylvania	861,341	1,874	0.58
Hawaii	N/A	N/A	0.67	Rhode Island	92,938	2,113	N/A
Idaho	103,015	1,641	N/A	South Carolina	453,295	1,452	0.34
Illinois	1,042,649	1,510	0.68	South Dakota	62,572	1,755	0.40
Indiana	478,900	1,444	0.50	Tennessee	709,954	1,543	0.30
Iowa	172,243	1,985	N/A	Texas	1,706,960	1,534	N/A
Kansas	162,695	1,555	N/A	Utah	131,408	1,808	N/A
Kentucky	401,986	2,056	N/A	Vermont	69,596	2,118	N/A
Louisiana	513,346	1,202	0.58	Virginia	398,334	1,424	N/A
Maine	103,265	3,641	N/A	Washington	568,245	1,235	N/A
Maryland	427,123	2,439	N/A	West Virginia	196,345	1,441	N/A
Massachusetts	499,912	1,825	0.70	Wisconsin	331,047	1,630	N/A
Michigan	809,240	1,050	N/A	Wyoming	32,193	1,594	0.39
Minnesota	330,045	2,224	0.50				
Mississippi	350,486	1,273	N/A	* Unduplicated number of	individuals under the ag	ge of 21 determined t	to be eligible for F
Missouri	572,899	1,354	0.52	(FY 2000 416 Report).			

N/A

0.64

2,234

1,611

53,451

151,568

** Represents total Medicaid vendor payments by age divided by Medicaid eligibles under 21 (FY 2000 MSIS Report).

*** This ratio indicates the extent to which Medicaid eligibles receive any initial and periodic screening services during the year (FY 2000 416 Report).

State Children's Health Insurance Program (SCHIP) Aggregate Enrollment Statistics: 2002 Source (IV.5): Centers for Medicare and Medicaid Services

MEDICAID

Nebraska

05/01/98

185%

16,227

			Upper					Upper	
		Date	Eligibility	Total SCHIP			Date	Eligibility	Total SCHIP
States	Type of SCHIP*	Implemented	Level**	Enrollment	States	Type of SCHIP*	Implemented	Level**	Enrollment
Alabama	COMBO	02/01/98	200%	83,359	Nevada	SEPARATE	10/01/98	200%	37,878
Alaska	MEDICAID	03/01/99	200%	22,291	New Hampshire	COMBO	05/01/98	300%	8,138
Arizona	SEPARATE	11/01/98	200%	92,705	New Jersey	COMBO	03/01/98	350%	117,053
Arkansas	MEDICAID	10/01/98	100%	1,912	New Mexico	MEDICAID	03/31/99	235%	19,940
California	COMBO	03/01/98	200%	856,994	New York	COMBO	04/15/98	250%	807,145
Colorado	SEPARATE	04/22/98	185%	51,826	North Carolina	SEPARATE	10/01/98	200%	120,090
Connecticut	COMBO	07/01/98	300%	21,346	North Dakota	COMBO	10/01/98	140%	4,463
Delaware	SEPARATE	02/01/99	200%	9,691	Ohio	MEDICAID	01/01/98	200%	183,034
District of Columbia	MEDICAID	10/01/98	200%	5,060	Oklahoma	MEDICAID	12/01/97	185%	84,490
Florida	COMBO	04/01/98	200%	368,180	Oregon	SEPARATE	07/01/98	170%	42,976
Georgia	SEPARATE	11/01/98	235%	221,005	Pennsylvania	SEPARATE	05/28/98	200%	148,689
Hawaii	MEDICAID	07/01/00	200%	8,474	Rhode Island	MEDICAID	10/01/97	250%	19,515
Idaho	MEDICAID	10/01/97	150%	16,895	South Carolina	MEDICAID	10/01/97	150%	68,928
Illinois	COMBO	01/05/98	185%	68,032	South Dakota	COMBO	07/01/98	200%	11,183
Indiana	COMBO	10/01/97	200%	66,225	Tennessee	MEDICAID	10/01/97	100%	NR
lowa	COMBO	07/01/98	200%	34,506	Texas	COMBO	07/01/98	200%	727,452
Kansas	SEPARATE	01/01/99	200%	40,783	Utah	SEPARATE	08/03/98	200%	33,808
Kentucky	COMBO	07/01/98	200%	93,941	Vermont	SEPARATE	10/01/98	300%	6,162
Louisiana	MEDICAID	11/01/98	200%	87,675	Virginia	COMBO	10/22/98	200%	67,974
Maine	COMBO	07/01/98	200%	22,586	Washington	SEPARATE	02/01/00	250%	8,754
Maryland	COMBO	07/01/98	300%	125,180	West Virigina	SEPARATE	07/01/98	200%	35,949
Massachusetts	COMBO	10/01/97	200%	116,699	Wisconsin	MEDICAID	04/01/99	185%	62,391
Michigan	COMBO	05/01/98	200%	71,882	Wyoming	SEPARATE	12/01/99	133%	5,059
Minnesota	MEDICAID	10/01/98	280%	NR	, ,				
Mississippi	COMBO	07/01/98	200%	64,805	* Program type as of	January 30, 2003.			
Missouri	MEDICAID	09/01/98	300%	112,004	**Reflects upper eligib	oility level approved ar	nd in effect as of Jul	y 19, 2002.	
Montana	SEPARATE	01/01/99	150%	13,875	NR - State did not rep	port data			

Health Insurance Status of Children Through Age 18: 2001*

Source (IV.6): 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	64.7	26.1	9.1	Nebraska	71.5	21.2	7.3
Alaska	55.9	36.9	7.2	Nevada	71.9	13.1	15.1
Arizona	59.5	22.8	17.7	New Hampshire	77.7	14.9	7.4
Arkansas	53.4	34.2	12.4	New Jersey	74.3	14.2	11.5
California	58.6	26.0	15.3	New Mexico	43.0	41.7	15.3
Colorado	76.4	10.6	12.9	New York	60.8	29.6	9.6
Connecticut	77.9	14.1	7.9	North Carolina	62.9	25.6	11.5
Delaware	77.0	14.4	8.6	North Dakota	70.7	25.0	4.3
District of Columbia	48.5	42.5	9.0	Ohio	71.0	21.1	7.9
Florida	59.6	24.1	16.3	Oklahoma	56.8	29.8	13.5
Georgia	61.5	23.2	15.2	Oregon	66.0	23.2	10.9
Hawaii	68.0	22.4	9.6	Pennsylvania	72.6	19.5	8.0
Idaho	61.8	26.3	11.9	Rhode Island	70.7	24.7	4.7
Illinois	70.4	18.9	10.7	South Carolina	65.1	24.6	10.3
Indiana	74.0	15.0	11.0	South Dakota	76.2	18.2	5.6
Iowa	79.2	15.9	4.8	Tennessee	61.2	32.5	6.2
Kansas	73.1	19.6	7.4	Texas	56.4	22.1	21.5
Kentucky	64.4	25.5	10.1	United States	65.3	22.8	11.9
Louisiana	59.8	26.9	13.3	Utah	72.9	15.4	11.6
Maine	65.0	29.0	5.9	Vermont	62.6	33.9	3.5
Maryland	78.8	11.8	9.4	Virginia	79.6	12.2	8.2
Massachusetts	70.1	24.4	5.5	Washington	65.6	23.1	11.3
Michigan	71.7	20.1	8.1	West Virigina	56.2	35.2	8.7
Minnesota	79.5	14.9	5.6	Wisconsin	76.4	18.8	4.9
Mississippi	46.6	41.9	11.5	Wyoming	67.6	19.9	12.5
Missouri	71.0	23.7	5.3				
Montana	66.0	23.8	10.2	* Estimates for 2002 sho	uld not be compared directly	with estimates prior to 2	2000 due to changes

* Estimates for 2002 should not be compared directly with estimates prior to 2000 due to changes in survey design that decreased the uninsured estimate by about 8 percent. **See map on facing page.

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Percentage of Children Under the Age of 19 who are Uninsured: 2000 Source (IV.6): American Academy of Pediatrics



Infant and Neonatal Mortality Rates, by State and Race of Mother: 2000

Source (IV.7): National Center for Health Statistics

7.2

6.1

Missouri

Montana

5.9

5.5

14.7

*

4.7

4.0

3.9

3.4

9.9

*

States Infant Mortality ***				Neonata	al Mortalit	y ****	States	Infa	nt Mortali	ty ***	Neonatal Mortality ****			
	All**	White	Black	All**	White	Black		All**	White	Black	All**	White	Black	
Alabama	9.4	6.6	15.4	5.8	4.0	9.8	Nebraska	7.3	6.4	20.3	4.9	4.4	*	
Alaska	6.8	5.8	*	3.5	3.3	*	Nevada	6.5	6.0	12.7	4.1	4.0	*	
Arizona	6.7	6.2	17.6	4.3	4.0	9.7	New Hampshire	5.7	5.5	*	4.0	3.9	*	
Arkansas	8.4	7.0	13.7	4.8	3.7	9.2	New Jersey	6.3	5.0	13.6	4.3	3.5	8.9	
California	5.4	5.1	12.9	3.7	3.5	8.3	New Mexico	6.6	6.3	*	3.7	3.7	*	
Colorado	6.2	5.6	19.5	4.3	3.9	14.2	New York	6.4	5.4	10.9	4.6	3.8	7.8	
Connecticut	6.6	5.6	14.4	5.0	4.4	9.9	North Carolina	8.6	6.3	15.7	6.2	4.6	11.2	
Delaware	9.2	7.9	14.8	6.4	5.4	10.6	North Dakota	8.1	7.5	*	5.3	4.9	*	
District of Columbia	12.0	*	16.1	8.9	*	11.8	Ohio	7.6	6.3	15.4	5.3	4.4	10.7	
Florida	7.0	5.4	12.6	4.5	3.5	8.1	Oklahoma	8.5	7.9	16.9	5.2	5.0	9.6	
Georgia	8.5	5.9	13.9	5.7	3.9	9.4	Oregon	5.6	5.5	*	3.6	3.6	*	
Hawaii	8.1	6.5	*	6.1	5.5	*	Pennsylvania	7.1	5.8	15.7	5.0	4.2	10.3	
Idaho	7.5	7.5	*	5.4	5.3	*	Rhode Island	6.3	5.9	*	5.0	4.4	*	
Illinois	8.5	6.6	17.1	5.8	4.7	10.8	South Carolina	8.7	5.4	14.8	6.1	3.8	10.3	
Indiana	7.8	6.9	15.8	5.3	4.9	9.2	South Dakota	5.5	4.3	*	3.1	2.8	*	
Iowa	6.5	6.0	21.1	4.2	3.9	*	Tennessee	9.1	6.8	18.0	5.9	4.3	12.0	
Kansas	6.8	6.4	12.2	4.4	4.1	9.1	Texas	5.7	5.1	11.4	3.4	3.0	6.7	
Kentucky	7.2	6.7	12.7	4.6	4.2	9.0	Utah	5.2	5.1	*	3.5	3.3	*	
Louisiana	9.0	5.9	13.3	5.8	3.8	8.6	Vermont	6.0	6.1	*	3.8	3.9	*	
Maine	4.9	4.8	*	3.5	3.5	*	Virginia	6.9	5.4	12.4	4.8	3.8	8.4	
Maryland	7.6	4.8	13.2	5.6	3.6	9.8	Washington	5.2	4.9	9.4	3.0	2.9	*	
Massachusetts	4.6	4.0	9.9	3.5	3.1	7.7	West Virigina	7.6	7.4	*	4.9	4.8	*	
Michigan	8.2	6.0	18.2	5.7	4.2	12.9	Wisconsin	6.6	5.5	17.2	4.4	3.7	10.5	
Minnesota	5.6	4.8	14.6	3.7	3.2	9.9	Wyoming	6.7	6.5	*	4.6	4.6	*	
Mississippi	10.7	6.8	15.3	6.6	3.9	9.8	* E' 1	1 1	C 11 1 11.					

* Figure does not meet standards of reliability or precision.

** Includes races other than White or Black.

*** Rates are deaths under one year per 1,000 live births in specified group. **** Rates are deaths under 28 days per 1,000 live births in specified group.
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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 prenatal care for women and children 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 2001, the percentage of infants born at low birth weight was 9 percent higher for residents of U.S. cities compared to the national average (8.4 percent versus 7.7 percent). While the infant mortality rate has decreased in both cities and the nation, a disparity in rates remains. Higher rates of low birth weight contributed to the 2000 city infant mortality rate of 7.5 deaths per 1,000 live births; the national rate for 2000 was 6.9. The percentage of pregnant women receiving first trimester prenatal care is lower in cities (80.1 percent) as compared to 83.4 percent nationwide.

The challenge for health care providers and special initiatives is to eliminate these disparities by improving the health status of children in the nation's cities.



Birth Weight

Low Birth Weight

Disorders related to short gestation and low birth weight are the second leading cause of neonatal mortality.¹ In 2001, 103,091 babies (8.4 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 pounds, 8 ounces). The 2001 percentage of urban infants born at low birth weight was 9 percent higher than the national rate of 7.7 percent.

Very Low Birth Weight

Infants born at very low birth weight (less than 1,500 grams or 3 pounds, 4 ounces) are at highest risk for poor health outcomes. In 2001, 1.6 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 14 percent.

¹ Congenital anomalies are the leading cause of neonatal mortality.

Percentage of Infants Born at Low Birth Weight in U.S. Cities with Populations Over 100,000: 1989-2001

Source (V.1): National Center for Health Statistics



Percentage of Infants Born at Very Low Birth Weight in U.S. Cities with Populations Over 100,000: 1989-2001

Source (V.I): National Center for Health Statistics



Infant Mortality

In 2000, 9,340 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 7.5 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: 1988-2000 Source (V.I): National Center for Health Statistics



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 1993.

In 2001, 80.1 percent of pregnant women living in U.S. cities began prenatal care in the first trimester of pregnancy, compared to 83.4 percent nationwide. The percentage of women receiving prenatal care has increased steadily since 1989 at both the city and national levels. The Healthy People 2010 Objective is to have 90 percent of pregnant women begin prenatal care in the first trimester.

Late or No Prenatal Care

In 2001, 4.8 percent of pregnant women living in U.S. cities with a population of over 100,000 began prenatal care in the 3rd trimester or received no prenatal care. The percentage of women receiving late or no prenatal care is 30 percent higher among women living in cities than among the overall U.S. population.

Percentage of Pregnant Women Receiving First Trimester Prenatal Care in U.S. Cities with Populations Over 100,000: 1988-2001 Source (V.I): National Center for Health Statistics



Percentage of Pregnant Women Receiving Late or No Prenatal Care in U.S. Cities with Populations Over 100,000: 1988-2001

Source (V.I): National Center for Health Statistics



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This publication was prepared for the Health Resources and Service Administration's Maternal and Child Health Bureau and produced by its Maternal and Child Health Information Resource Center.

Federal and non-government contributors include: The National Center for Health Statistics, the U.S. Census Bureau, the Centers for Disease Control and Prevention, the U.S. Bureau of Labor Statistics, the U.S. Department of Education, the Centers for Medicare and Medicaid Services, the National Center on Child Abuse and Neglect, the University of Michigan Institute for Social Research, the Employee Benefit Research Institute, Abbott Laboratories, the Urban Institute, the Federal Interagency Forum on Child and Family Statistics, and the American Academy of Pediatrics.

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