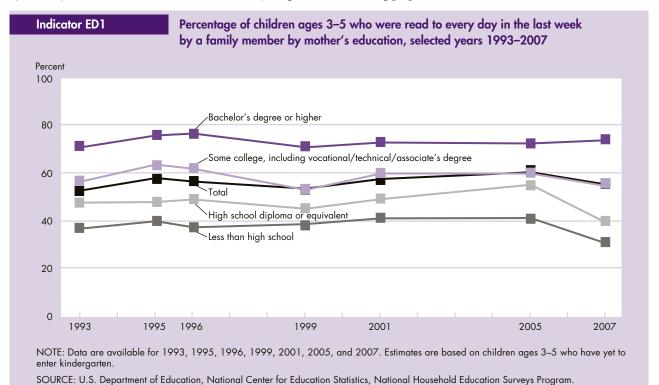


## Family Reading to Young Children

R eading to young children promotes language acquisition and is linked with literacy development and, later on, with achievement in reading comprehension and overall success in school. The percentage of young children read to daily by a family member is one indicator of how well young children are being prepared for school.



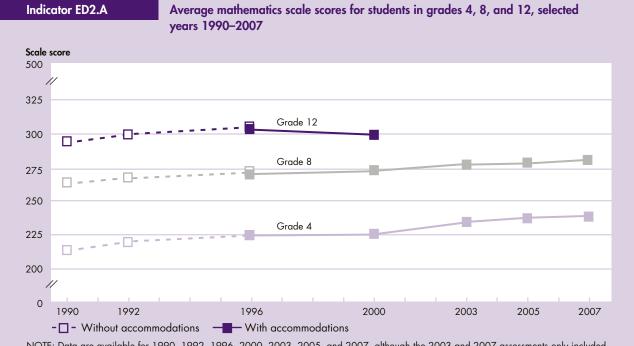
- In 2007, 55 percent of children ages 3–5 who were not yet in kindergarten were read to daily by a family member. This rate is slightly higher than the rate in 1993 (53 percent), but the rate fluctuated in intervening years.
- In 2007, 74 percent of children whose mothers had at least a bachelor's degree were read to every day. In comparison, daily reading occurred for 55 percent of children whose mothers had some college education, 39 percent of children whose mothers had a high school diploma or equivalent but no further education, and 31 percent of children whose mothers had less than a high school diploma.
- Higher percentages of White, non-Hispanic and Asian, non-Hispanic children than either Black, non-Hispanic or Hispanic children were read to every day in 2007. Sixty-seven percent of White, non-Hispanic children, 60 percent of Asian, non-Hispanic children, 35 percent of Black, non-Hispanic children, and 37 percent of Hispanic children were read to every day by a family member.

- The percentage of children in families with incomes 200 percent or more of the poverty level read to daily by a family member (64 percent) was higher than the percentages of children in families with incomes below the poverty level (40 percent) or those in families with incomes 100–199 percent of the poverty level (50 percent) in 2007.
- The percentage of children living with two parents who were read to every day was higher than the percentage of children living with one parent who were read to every day. Fifty-nine percent of children in two-parent households and 43 percent of children living with one parent were read to every day in 2007.
- The percentages of children in the Northeast (59 percent) and Midwest (59 percent) were not statistically different than the percentages of children in the West (54 percent) and South (52 percent) who were read to daily by a family member in 2007.

Bullets contain references to data that can be found in Table ED1 on page 151. Endnotes begin on page 73.

### **Mathematics and Reading Achievement**

he extent and content of students' knowledge, as well as their ability to think, learn, and communicate, affect their likelihood of becoming productive adults and active citizens. Mathematics and reading achievement test scores are important measures of students' skills in these subject areas, as well as good indicators of overall achievement in school. To assess progress in mathematics and reading, the National Assessment of Educational Progress (NAEP) measures national trends in the academic performance of students in grades 4, 8, and 12.

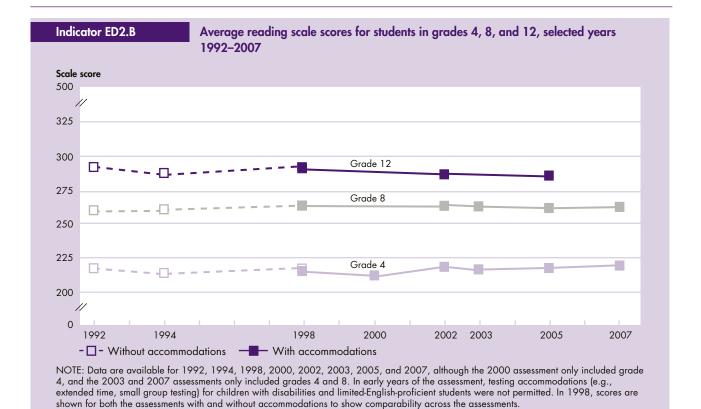


NOTE: Data are available for 1990, 1992, 1996, 2000, 2003, 2005, and 2007, although the 2003 and 2007 assessments only included grades 4 and 8. The 2005 assessment included a 12th-grade component, but the National Assessment Governing Board introduced changes in the 2005 NAEP mathematics framework for grade 12 in both the assessment content and administration procedures. As a result, the 12th-grade assessment results cannot be compared with those of previous assessments. In early years of the assessment, testing accommodations (e.g., extended time, small group testing) for children with disabilities and limited-English-proficient students were not permitted. In 1996, scores are shown for both the assessments with and without accommodations to show comparability across the assessments.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress.

- At grades 4 and 8, average mathematics scores were higher in 2007 than in all previous assessments.
- There was no 12th-grade NAEP mathematics assessment in 2007. Moreover, the 12th-grade NAEP mathematics assessment in 2005 was based on a mathematics framework that was revised to reflect changes in high school mathematics standards and coursework. As a result, the 2005 results cannot be compared with those from previous years. <sup>104</sup>
- In 2007, 39 percent of 4th-graders and 32 percent of 8th-graders were at or above the *Proficient* level in mathematics, indicating solid academic achievement. The percentages of 4th- and 8th-graders at or above *Basic* (indicating partial mastery of prerequisite

- knowledge and skills), at or above *Proficient*, and at *Advanced* (indicating superior performance) in mathematics in 2007 were higher than in all previous assessments. <sup>105</sup>
- At grades 4 and 8 in 2007, Asian or Pacific Islander and White, non-Hispanic students scored higher on average in mathematics than their Black, non-Hispanic, American Indian or Alaska Native, and Hispanic peers; also, Hispanic and American Indian or Alaska Native students had higher average scores than Black, non-Hispanic students.
- In mathematics, males outperformed females at grades 4 and 8 in 2007 and at grade 12 in 2005.



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress.

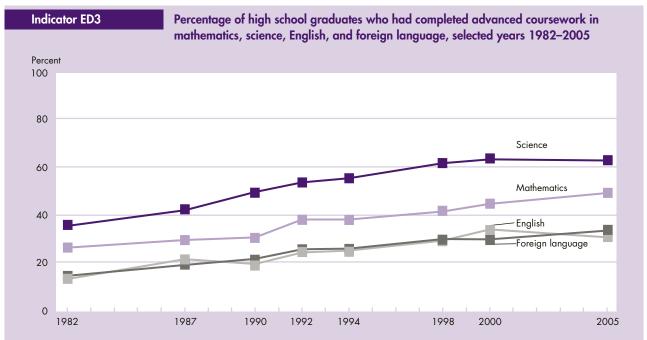
- At grade 4, there was a 4-point increase in the average reading score between 1992 and 2007. At grade 8, reading scores in 2007 had increased 1 point from 2005 and 3 points from 1992.
- There was no 12th-grade NAEP reading assessment in 2007. However, in 2005 the average score at grade 12 was 6 points lower than in 1992.
- In 2007, 33 percent of 4th-graders were at or above the *Proficient* achievement level in reading, indicating solid academic achievement, a higher percentage than in all previous assessments. Thirty-one percent of students in grade 8 were at or above *Proficient*, a percentage not statistically different from the percentage in 1992. Thirty-five percent of students in grade 12 were at or above *Proficient* in 2005, a lower percentage than the percentage in 1992 and 1998 but not statistically different than the percentage in 2002.<sup>105</sup>
- In reading, Asian or Pacific Islander and White, non-Hispanic students scored higher on average in 2007

- than their Black, non-Hispanic, American Indian or Alaska Native, and Hispanic peers at grades 4 and 8. The gap between White, non-Hispanic students and their Black, non-Hispanic peers decreased 5 points between 1992 and 2007 at grade 4; however, there was no change in the gap between White, non-Hispanic students and their Hispanic peers between 1992 and 2007 at grade 4. There were no changes in the gaps between White, non-Hispanic students and their Black, non-Hispanic or Hispanic peers from 1992 to 2007 at grade 8 or between 1992 and 2005 at grade 12.
- Females had higher reading scores than males at grades 4 and 8 in 2007 and at grade 12 in 2005.
- In both mathematics and reading, higher parental education levels were associated with higher achievement scores.<sup>106</sup>

Bullets contain references to data that can be found in Tables ED2.A and ED2.B on pages 152–155. Endnotes begin on page 73.

## **High School Academic Coursetaking**

since A Nation at Risk was published in 1983, school reforms have emphasized increasing the number of academic courses students take in high school. More recent reforms have emphasized increasing the rigor, as well as the amount, of coursetaking. Research suggests a relationship between the level of difficulty of courses students take and their performance on assessments. 107, 108



NOTE: Data for 1982 and 1992 are from a series of longitudinal studies, whereas data for 1987, 1990, 1994, 1998, 2000, and 2005 are from the National Assessment of Educational Progress High School Transcript Studies. Due to differences in survey methodology among the data collections, users should use caution when comparing data across the years. Advanced coursework includes the following: mathematics: courses above Algebra II; science: chemistry, physics, or advanced biology; English: some courses at the honors level; and foreign language: a year 3, year 4, or advanced placement course.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Studies: High School and Beyond Study, National Education Longitudinal Study of 1988, and National Assessment of Educational Progress Transcript Study.

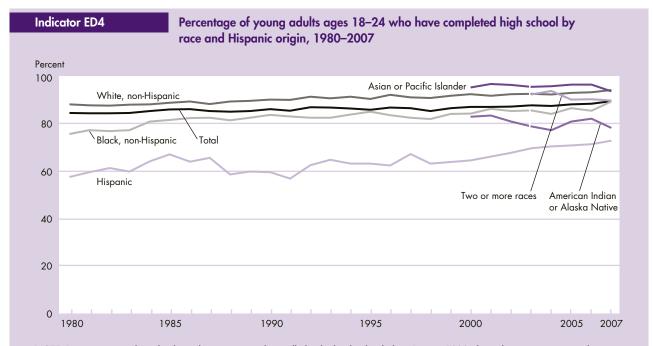
- Forty-nine percent of students who graduated from high school in 2005 had taken at least one advanced mathematics course (defined as a course above Algebra II), which was higher than the percentage in 1982 (26 percent). The percentage of graduates in 2005 who had taken a nonacademic or low-level academic course as their most advanced mathematics course was 4 percent, compared with 24 percent of graduates in 1982.
- In science, 63 percent of all high school graduates in 2005 had taken a chemistry, physics, or advanced biology course, compared to 35 percent of the graduates in 1982 who had taken this level of science course. The percentage of graduates whose most advanced science course was classified as a low-level academic course dropped from 27 percent in 1982 to 7 percent in 2005.
- In English, 31 percent of all high school graduates in 2005 had taken honors-level courses, an increase from 13 percent of graduates in 1982. There was no

- measurable difference between the percentages of graduates in 1982 and 2005 who had taken low-level academic courses in English (10 and 12 percent, respectively).
- In foreign languages, 33 percent of high school graduates had taken a year 3, year 4, or advanced placement course in 2005; this was double the percentage in 1982 (15 percent). Sixteen percent of high school graduates in 2005 had not taken any foreign language course, compared with 46 percent of graduates in 1982.
- While the level of high school academic coursetaking rose between 1982 and 2005, the reading, mathematics, or science scores of 12th-graders did not improve on the National Assessment of Educational Progress.<sup>109</sup>

Bullets contain references to data that can be found in Tables ED3.A–ED3.D on pages 156–159. Endnotes begin on page 73.

### **High School Completion**

high school diploma or its equivalent is an indicator that a person has acquired the basic reading, writing, and mathematics skills a person needs to function in modern society. The percentage of young adults ages 18–24 with a high school diploma or an equivalent credential is a measure of the extent to which young adults have completed a basic prerequisite for many entry-level jobs and for higher education.



NOTE: Percentages are based only on those not currently enrolled in high school or below. Prior to 1992, this indicator was measured as completing 4 or more years of high school rather than the actual attainment of a high school diploma or equivalent. For data before 2003, the 1977 OMB Standards for Data on Race and Ethnicity were used to classify persons into one of the following four racial groups: White, Black, American Indian or Alaskan Native, or Asian or Pacific Islander. The revised 1997 OMB standards were used for data for 2003 and later years. Persons could select one or more of five racial groups: White, Black or African American Indian or Alaska Native, Asian, or Native Hawaiian or Other Pacific Islander. Those reporting more than one race were classified as "Two or more races." For continuity purposes, respondents who reported being Asian or Native Hawaiian or Other Pacific Islander were combined. Beginning in 2003, those in each racial category represent those reporting only one race. Data from 2003 onward are not directly comparable with data from earlier years. Data on race and Hispanic origin are collected separately. Persons of Hispanic origin may be of any race.

SOURCE: U.S. Census Bureau, Current Population Survey, School Enrollment Supplement.

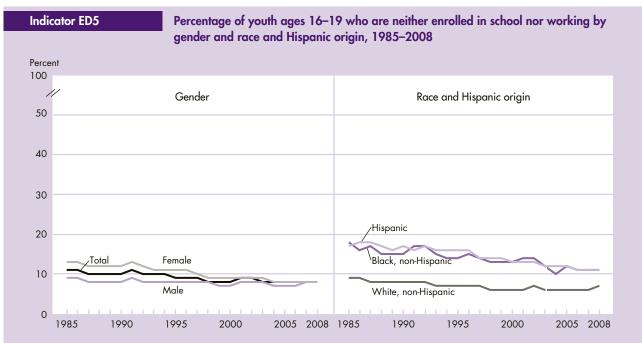
- In 2007, 89 percent of young adults ages 18–24 had completed high school with a diploma or an alternative credential such as a General Education Development (GED) certificate. The high school completion rate has increased slightly since 1980, when it was 84 percent.
- The rate at which Black, non-Hispanic young adults completed high school increased from 75 percent to 89 percent between 1980 and 2007. Among White, non-Hispanics, the high school completion rate increased from 88 percent in 1980 to 93 percent in 2007.
- Hispanic young adults have had a consistently lower high school completion rate than White, non-Hispanic

- and Black, non-Hispanic young adults. Nonetheless, the high school completion rate for Hispanic young adults has increased from 57 percent in 1980 to 72 percent in 2007.
- In 2007, higher percentages of White, non-Hispanic and Asian or Pacific Islander young adults (93 percent each) had completed high school, compared with Black, non-Hispanic young adults and young adults of two or more races (89 percent each), American Indian or Alaska Native young adults (78 percent), and Hispanic young adults (72 percent).

Bullets contain references to data that can be found in Table ED4 on page 160.

### Youth Neither Enrolled in School nor Working

outh ages 16–19 who are neither in school nor working are detached from both of these core activities that usually occupy teenagers during their transition from adolescence to adulthood. Such detachment, particularly if it lasts for several years, puts youth at increased risk of having lower earnings and a less stable employment history than their peers who stayed in school, secured jobs, or both. The percentage of youth who are not enrolled in school and not working is one measure of the proportion of young people who are at risk of limiting their future prospects.



NOTE: The information relates to the labor force and enrollment status of persons 16–19 years old in the civilian noninstitutionalized population during an "average" week of the school year. School refers to both high school and college. For data before 2003, the 1977 OMB Standards for Data on Race and Ethnicity were used to classify persons into one of the following four racial groups: White, Black, American Indian or Alaskan Native, or Asian or Pacific Islander. The revised 1997 OMB standards were used for data for 2003 and later years. Persons could select one or more of five racial groups: White, Black or African American, American Indian or Alaska Native, Asian, or Native Hawaiian or Other Pacific Islander. Included in the total but not shown separately are American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and "Two or more races." Beginning in 2003, those in each racial category represent those reporting only one race. Data from 2003 onward are not directly comparable with data from earlier years. Data on race and Hispanic origin are collected separately. Persons of Hispanic origin may be of any race.

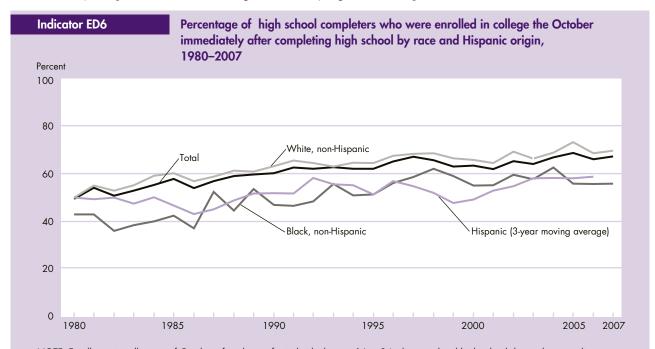
SOURCE: U.S. Bureau of Labor Statistics, Current Population Survey.

- In an average week during the 2008 school year, 8 percent of youth ages 16–19 were neither enrolled in school nor working. The proportion of youth neither enrolled in school nor working has been on a downward trend, and most of the decline has occurred among females. In 1991, 13 percent of young females were neither in school nor working; by 2008, this proportion was 8 percent.
- Black, non-Hispanic youth and Hispanic youth are more likely to be neither enrolled nor working than White, non-Hispanic youth. In 2008, 11 percent of Hispanic youth and 11 percent of Black, non-Hispanic youth were neither in school nor working, compared with 7 percent of White, non-Hispanic youth.
- Older youth, ages 18–19, are more than three times as likely to be detached from school and work activities as youth ages 16–17. In 2008, 14 percent of youth ages 18–19 were neither enrolled in school nor working, compared with 4 percent of youth ages 16–17.
- The percentage of youth who were enrolled in school and not employed was 61 percent in 2008. This proportion has been trending up since 2000, when it was 48 percent.<sup>111</sup>
- The percentage of youth who were both enrolled in school and employed was 22 percent in 2008, down from 31 percent in 1998.

Bullets contain references to data that can be found in Tables ED5.A and ED5.B on pages 161–162. Endnotes begin on page 73.

### **College Enrollment**

college education generally enhances a person's employment prospects and increases his or her earning potential. The percentage of high school completers who enroll in college in the fall immediately after high school is one measure of the accessibility and perceived value of a college education by high school completers.



NOTE: Enrollment in college as of October of each year for individuals ages 16 to 24 who completed high school during the preceding 12 months. High school completion includes GED recipients. A 3-year moving average is the average of the estimates for the year prior to the reported year, the reported year, and the following year. Thus a moving average cannot be calculated for the most recent year. For data before 2003, the 1977 OMB Standards for Data on Race and Ethnicity were used to classify persons into one of the following four racial groups: White, Black, American Indian or Alaskan Native, or Asian or Pacific Islander. The revised 1997 OMB standards were used for data for 2003 and later years. Persons could select one or more of five racial groups: White, Black or African American, American Indian or Alaska Native, Asian, or Native Hawaiian or Other Pacific Islander. Included in the total but not shown separately are American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and "Two or more races." Beginning in 2003, those in each racial category represent those reporting only one race. Data from 2003 onward are not directly comparable with data from earlier years. Data on race and Hispanic origin are collected separately. Persons of Hispanic origin may be of any race.

SOURCE: U.S. Census Bureau, Current Population Survey, School Enrollment Supplement.

- In 2007, 67 percent of high school completers enrolled immediately in a 2-year or 4-year college.
- Between 1980 and 2007, the rate of immediate college enrollment has trended upward from 49 percent to 67 percent; however, the rate has fluctuated from year to year.
- In 1980, 50 percent of White, non-Hispanic high school completers immediately enrolled in college; this rate increased to 69 percent by 1998 and decreased to 64 percent by 2001. Although this rate fluctuated between 2001 and 2007, the immediate college enrollment rate was higher in 2007 (70 percent) than in 2001
- In 1980, the immediate enrollment rate for Black, non-Hispanics was 43 percent; this rate increased to 56 percent in 2007.
- For Hispanics, the immediate college enrollment rate has fluctuated greatly since 1980, very likely due to

- small sample sizes. For this reason, a 3-year moving average is used to measure the trend. Even so, due to large standard errors, there is no measurable difference between the moving average in 1980 (50 percent) and 2006 (59 percent).
- From 1980 to 2007, the immediate enrollment rate for male high school completers increased from 47 percent to 66 percent, while for female high school completers it increased from 52 percent to 68 percent.
- Between 1980 and 1995, there were no statistically significant differences between the immediate enrollment rates for males and females. Between 1996 and 2004, however, the female rate was significantly greater than the male rate every year except 1999 and 2001. Since 2005, there again were no statistically significant differences between the rates for males and females.

Bullets contain references to data that can be found in Table ED6 on page 163. Endnotes begin on page 73.

# **Indicator Needed**

#### **Education**

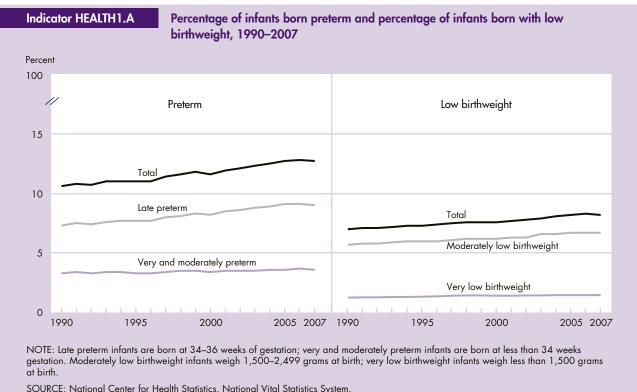
Regular, periodic data collections are needed to provide information on young children's cognitive, social, and emotional development.

■ Early childhood development. Although this report offers indicators of young children's exposure to reading and early childhood education, a regular source of data is needed to measure specific cognitive, emotional, and social skills of preschoolers over time. One assessment of kindergartners' skills and knowledge was presented as a special feature in America's Children, 2000. The Forum's Research and Innovation committee is working to strengthen our understanding of how to best conceptualize, define, and measure aspects of early childhood socio-emotional development.

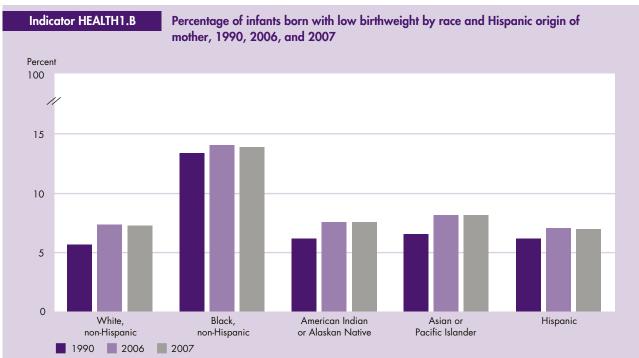


### Preterm Birth and Low Birthweight

Infants born preterm (less than 37 completed weeks of gestation) or with low birthweight (less than 2,500 grams or 5 lbs. 8 oz.) are at higher risk of early death and long-term health and developmental issues than infants born later in pregnancy or at higher birthweights. 9,114-115 Many, but not all, preterm infants are also low birthweight, and vice versa. In 2006, infants born preterm accounted for two-thirds of all low birthweight infants, and over 40 percent of preterm births were low birthweight.<sup>6</sup> Preterm infants born at less than 34 weeks (very and moderately preterm) are at high risk for poor outcomes, including chronic health conditions, long-term disability, and death. The majority of preterm births are infants born at 34–36 weeks (late preterm). Late preterm infants are at lower risk of poor outcomes than infants born earlier but are at higher risk than infants delivered at term or later.9 Disorders related to preterm birth and low birthweight are the second leading cause of infant death in the United States.9



- SOURCE: National Center for Health Statistics, National Vital Statistics System.
- After several decades of steady increases, the percentage of infants born preterm and the percentage born with low birthweight declined slightly in 2007. The percentage of infants born preterm was 12.7 percent in 2007, down from 12.8 percent in 2006; most of the decline was among late preterm infants (from 9.1 percent in 2006 to 9.0 percent in 2007). The percentage of infants born with low birthweight declined to 8.2 percent in 2007 from 8.3 percent in 2006; all of the decline was among moderately low birthweight infants.
- From 1990 to 2006, the percentage of preterm births rose from 10.6 percent to 12.8 percent. The increase in late preterm births (from 7.3 to 9.1 percent) accounted for most of this increase. The percentage of births that were very and moderately preterm changed little in recent years (3.6 percent in 2007).
- The percentage of low birthweight infants rose from 7.0 percent of all births in 1990 to 8.3 percent in 2006. In 2006 and 2007, 1.5 percent of infants were very low birthweight, up from 1.3 percent in 1990. The percentage of moderately low birthweight infants rose from 5.7 percent in 1990 to 6.8 percent in 2006, but declined slightly to 6.7 percent in 2007.
- The increasing multiple birth rate was a contributing factor to the rise in preterm birth and low birthweight between 1990 and 2006. However, both the percentage of preterm births and low birthweight infants rose substantially among singleton births as well.6



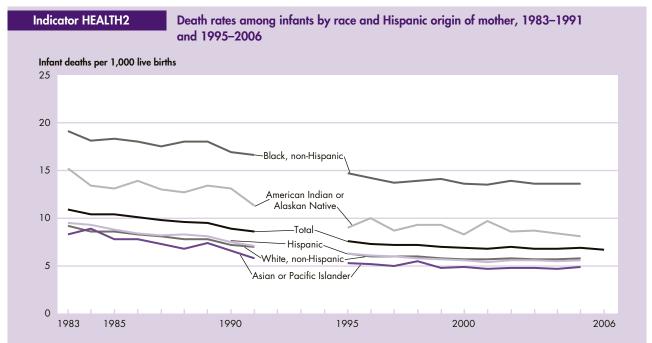
NOTE: Data for 2007 are preliminary. Race refers to mother's race. The 1977 OMB Standards for Data on Race and Ethnicity were used to classify persons into one of the following four racial groups: White, Black, American Indian or Alaskan Native, or Asian or Pacific Islander. Although state reporting of birth certificate data is transitioning to comply with the 1997 OMB standard for race and ethnic statistics, 2006 and 2007 data from states reporting multiple races were bridged to the single-race categories of the 1977 OMB standards for comparability with other states. Data on race and Hispanic origin are collected and reported separately. Persons of Hispanic origin may be of any race. SOURCE: National Center for Health Statistics, National Vital Statistics System.

- The percentage of Black, non-Hispanic infants born with low birthweight was higher than that of other racial or ethnic groups. The Black, non-Hispanic percentage declined to a low of 13.1 percent in 1996 and 1997, rose to 14.0 percent in 2006, and declined to 13.8 percent in 2007. The percentage of low birthweight infants rose among White, non-Hispanic infants, from 5.6 percent in 1990 to 7.3 percent in 2006, but declined slightly to 7.2 percent in 2007. Between 1990 and 2006, low birthweight percentages increased for American Indian or Alaskan Native infants (6.1 to 7.5 percent) and Asian or Pacific Islander infants (6.5 to 8.1 percent); the percentages for both groups, however, were unchanged between 2006 and 2007. Among Hispanic infants, the percentage of low birthweight infants rose between 1990 and 2006 (6.1 to 7.0 percent) and declined slightly for 2007 (6.9 percent).
- In 2007, Black, non-Hispanic infants were also more likely to be born preterm (18 percent) than White, non-Hispanic (11 percent) and Hispanic (12 percent) infants.
- The percentage of Black, non-Hispanic infants born preterm declined from 19.0 percent in 1991 to 17.4 percent in 2000, rose to 18.5 percent in 2006, and declined slightly in 2007 (18.3 percent). From 1990 to 2006, the percentage of preterm births increased steadily for White, non-Hispanic infants (8.5 to 11.7 percent), then declined slightly in 2007 (11.5 percent). The percentage of preterm Hispanic infants increased from 11.0 to 12.3 percent between 1990 and 2007.

Bullets contain references to data that can be found in Tables HEALTH1.A and HEALTH1.B on pages 164–165. Endnotes begin on page 73.

### **Infant Mortality**

nfant mortality is defined as the death of an infant before his or her first birthday. Infant mortality is related to the underlying health of the mother, public health practices, socioeconomic conditions, and availability and use of appropriate health care for infants and pregnant women.<sup>10</sup> In the United States, about two-thirds of infant deaths occur in the first month after birth and are due mostly to health problems of the infant, such as birth defects, or problems related to the pregnancy, such as preterm delivery.



NOTE: Infant deaths are deaths before an infant's first birthday. Data from the file linking live births to infant deaths are available for 1983–1991 and 1995–2005 only. The infant mortality rate for 2006 was obtained from unlinked death records from the National Vital Statistics System because data for 2006 are not currently available from the National Linked Files of Live Births and Infant Deaths. 2006 data for specific race and ethnicity groups in this figure are not available. Race refers to mother's race. The 1977 OMB Standards for Data on Race and Ethnicity were used to classify persons into one of the following four racial groups: White, Black, American Indian or Alaskan Native, or Asian or Pacific Islander. Although state reporting of birth certificate data is transitioning to comply with the 1997 OMB standard for race and ethnic statistics, data from states reporting multiple races were bridged to the single-race categories of the 1977 OMB standards for comparability with other states. Data on race and Hispanic origin are collected and reported separately. Persons of Hispanic origin may be of any race. Trends for the Hispanic population are affected by an expansion in the number of registration areas that included an item on Hispanic origin on the birth certificate.

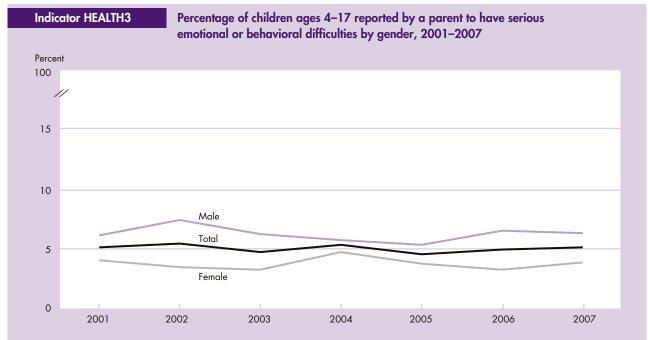
SOURCE: National Center for Health Statistics, National Vital Statistics System.

- The infant mortality rate was 6.7 deaths per 1,000 live births in 2006, a decline from 6.9 in 2005.
- Substantial racial and ethnic disparities in infant mortality continue. Black, non-Hispanic and American Indian or Alaskan Native infants have consistently had higher infant mortality rates than those of other racial or ethnic groups. For example, in 2005, the Black, non-Hispanic infant mortality rate was 13.6 infant deaths per 1,000 live births and the American Indian or Alaskan Native rate was 8.1; both rates were higher than the rates among White, non-Hispanic (5.8), Hispanic (5.6), and Asian or Pacific Islander (4.9) infants in 2005.
- Infant mortality rates also vary within racial and ethnic populations. For example, among Hispanics in the United States, the infant mortality rate for 2005 ranged from 4.4 deaths per 1,000 live births for infants of Cuban origin to a high of 8.3 for Puerto Rican infants.

Bullets contain references to data that can be found in Table HEALTH2 on page 166. Endnotes begin on page 73.

#### **Emotional and Behavioral Difficulties**

ood emotional and behavioral health enhances a child's sense of well-being, supports satisfying social relationships at home and with peers, and leads to achievement of full academic potential. 116 Children with emotional or behavioral difficulties may have problems managing their emotions, focusing on tasks, and/or controlling their behavior. These difficulties, which may persist throughout a child's development and can lead to lifelong problems, are usually noticed first by parents. 117 Parents play a crucial role in informing health professionals about a child's emotional and behavioral difficulties and obtaining mental health services. 118



NOTE: Children with serious emotional or behavioral difficulties are defined as those whose parent responded "yes, definite" or "yes, severe" to the following question on the Strengths and Difficulties Questionnaire (SDQ):<sup>119</sup> "Overall, do you think that (child) has difficulties in any of the following areas: emotions, concentration, behavior, or being able to get along with other people?" Response choices were: (1) no; (2) yes, minor difficulties; (3) yes, definite difficulties; (4) yes, severe difficulties. These difficulties may be similar to but do not equate with the Federal definition of serious emotional disturbances (SED), used by the Federal government for planning purposes.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

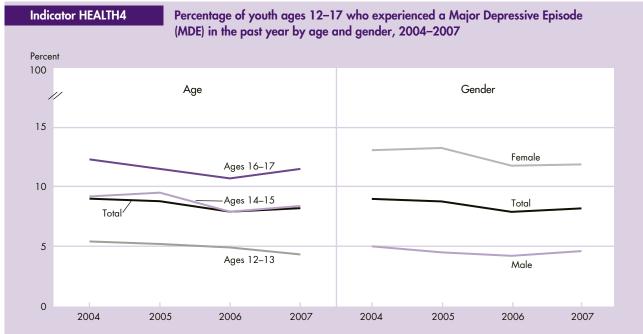
- In 2007, slightly more than 5 percent of children ages 4–17 were reported by a parent to have serious difficulties with emotions, concentration, behavior, or being able to get along with other people.
- Between 2001 and 2007, the percentage of children with serious emotional or behavioral difficulties remained stable at about 5 percent.
- In 2007, the percentage of children with serious emotional or behavioral difficulties differed by gender. More males than females ages 4–17 years were reported by a parent to have such difficulties.
- In 2007, 7 percent of children living below the poverty level or in families with incomes 100–199 percent of the poverty level had serious emotional or behavioral difficulties, compared with 4 percent of children with family incomes 200 percent or more of the poverty level.

Among the parents of children with serious difficulties, 86 percent reported contacting a health care provider or school staff about their child's difficulties, 46 percent reported their child was prescribed medication for their emotional or behavioral difficulties, and 51 percent reported their child had received treatment or help other than medication.<sup>120</sup>

Bullets contain references to data that can be found in Tables HEALTH3.A and HEALTH3.B on pages 167–168. Endnotes begin on page 73.

### **Adolescent Depression**

epression has a significant impact on adolescent development and well being. Adolescent depression can adversely affect school and work performance, impair peer and family relationships, and exacerbate the severity of other health conditions such as asthma and obesity. Depressive episodes often persist, recur, or continue into adulthood. Youth who have had a Major Depressive Episode (MDE) in the past year are at greater risk for suicide and are more likely than other youth to initiate alcohol and other drug use, experience concurrent substance use disorders, and smoke daily. 127–129



NOTE: Major Depressive Episode (MDE) is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities plus at least 4 additional symptoms of depression (such as problems with sleep, eating, energy, concentration and feelings of self-worth) as described in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* 

SOURCE: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health.

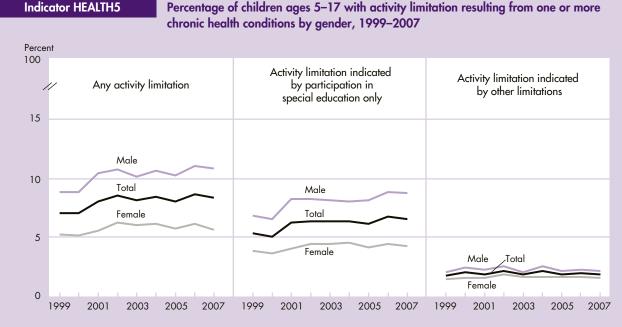
- In 2007, 8 percent of the population ages 12–17 had a Major Depressive Episode (MDE) during the past year, a lower rate than that reported in 2004 (9 percent).
- From 2004 to 2007, the prevalence of MDE among youth was more than twice as high among females (12 percent to 13 percent) as among males (4 percent to 5 percent).
- The past-year prevalence of MDE in 2007 was lowest in youth ages 12–13 (4 percent), compared to youth ages 14–15 (8 percent) and youth ages 16–17 (12 percent).
- In 2007, 67 percent of youth with MDE (5.5 percent of the population ages 12–17) reported that the MDE caused severe problems in at least one major role domain (home, school/work, family relationships, social life).

■ The percentage of youth with MDE receiving treatment for depression, defined as seeing or talking to a medical doctor or other professional about the depressive episode and/or using prescription medication for depression in the past year, remained stable from 2004 to 2007 (40 percent in 2004 and 39 percent in 2007).

Bullets contain references to data that can be found in Tables HEALTH4.A—HEALTH4.C on pages 169–171. Endnotes begin on page 73.

### **Activity Limitation**

ctivity limitation refers to a person's inability, due to a chronic physical, mental, emotional, or behavioral condition, to participate fully in age-appropriate activities. Age-appropriate activities for children ages 5–17 consist of a child's ability to complete regular school work and perform other activities, including self-care and walking. Activity limitation is a broad measure of health and functioning affected by a variety of chronic health conditions. The causes of activity limitation most often reported by parents of children ages 5–17 include learning disabilities, speech problems, and other mental, emotional, and behavioral problems.<sup>131</sup>



NOTE: Children are identified as having activity limitation by asking parents (1) whether children receive special education services and (2) whether they are limited in their ability to walk, care for themselves, or participate in other activities. "Activity limitation indicated by participation in special education" only includes children identified solely by their use of special education services. "Activity limitation indicated by all other limitations" includes limitations in self-care, walking, or other activities; children in this category may also receive special education services. Chronic health conditions are conditions that once acquired are not cured or have a duration of 3 months or more.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

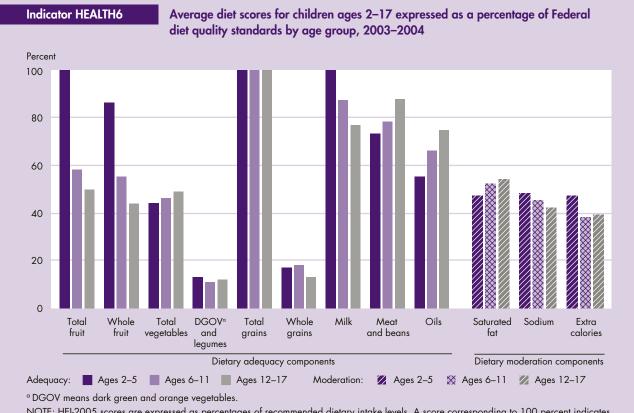
- In 2007, approximately 8 percent of children ages 5–17 were reported by parents to have activity limitation due to chronic conditions. Seven percent of children ages 5–17 were identified as having activity limitation solely by their participation in special education, and 2 percent had limitations in their ability to walk, care for themselves, or participate in other activities.
- Activity limitation, particularly when identified only by participation in special education, was reported more often for male children than for female children.
- In 2007, approximately 12 percent of children living below the poverty level and 10 percent of children living in families with incomes 100–199 percent of the poverty level had activity limitation, compared with 7 percent of children with family incomes 200 percent or more of the poverty level.

Among children of different racial and ethnic origins, Hispanic children were less likely than White, non-Hispanic and Black, non-Hispanic children to have a parental report of activity limitation.<sup>2</sup>

Bullets contain references to data that can be found in Table HEALTH5 on page 172. Endnotes begin on page 73.

### **Diet Quality**

he diet quality of children and adolescents is of concern. Poor eating patterns established in childhood may transfer to adulthood; such patterns are major factors in the increasing rate of childhood obesity over the past decades and are contributing factors to related health outcomes (see HEALTH7). The Healthy Eating Index-2005 (HEI-2005) is a dietary assessment tool comprising the 12 components shown below. HEI measures quality in terms of how well diets meet the recommendations of the 2005 Dietary Guidelines for Americans and MyPyramid, USDA's food guidance system (www.MyPyramid.gov). 132-134 The HEI-2005 component scores are averages across all children which reflect usual dietary intakes. 135 Nine components of the HEI-2005 address nutrient adequacy. The remaining three components assess saturated fat, sodium, and extra calories, all of which should be consumed in moderation.



NOTE: HEI-2005 scores are expressed as percentages of recommended dietary intake levels. A score corresponding to 100 percent indicates that the recommendation was met or exceeded on average. A score below 100 percent indicates that average intake does not meet the recommendations for that component. For the adequacy components, higher scores reflect higher intakes. For the moderation components, higher scores reflect lower intakes because lower intakes are more desirable. For all components, a higher percentage indicates a higher quality diet. "Extra calories" refers to calories from other sources, such as solid fats and added sugars.

SOURCE: National Center for Health Statistics, National Health and Nutrition Examination Survey, 2003–2004 and U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, Healthy Eating Index-2005.

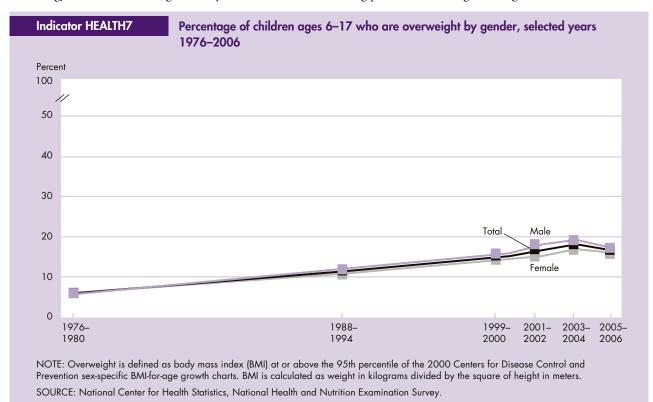
- In 2003–2004, on average, the quality of the diets of younger children was better when compared with that of older children with regard to fruit, milk, and extra calories. The quality of the diets of older children was better with regard to meat, oils, and saturated fat.
- The average diet score for all age groups (2–5, 6–11, and 12–17) met the quality standards for total grains, but only children ages 2–5 met the standards for total fruit and milk.
- The average diet score across all age groups, especially those of children ages 6–11 and 12–17, did not meet quality standards for a number of food groups, indicating a need to increase intakes of all types of fruit

- and vegetables, but especially dark green and orange vegetables (DGOV) and cooked dry beans and peas (legumes); whole grains; and oils.<sup>136</sup>
- Average intakes of sodium, saturated fat, and calories from solid fats and added sugars in foods and beverages did not meet the quality standards in any age group. This indicates a need to limit intake of foods high in salt, added sugar (i.e., not naturally occurring), and solid fat. For example, non-fat or low-fat milk and lean meat products should replace foods that have a higher fat content.<sup>132</sup>

Bullets contain references to data that can be found in Table HEALTH6 on page 173. Endnotes begin on page 73.

### **Overweight**

verweight adolescents often become overweight adults, with increased risks for a wide variety of poor health outcomes, including diabetes, stroke, heart disease, arthritis, and certain cancers. <sup>137,138</sup> The immediate consequences of overweight in childhood are often psychosocial, but also include cardiovascular risk factors such as high blood pressure, high cholesterol, and the precursors to diabetes. <sup>139</sup> The prevalence of overweight among U.S. children changed relatively little from the early 1960s through 1980; however, after 1980 it increased sharply. <sup>140</sup> Between 1999 and 2006, the prevalence of overweight was stable in both boys and girls. <sup>141</sup> Recent national estimates indicate that only 35 percent of adolescents meet current physical activity recommendations and only about 21 percent eat the recommended five or more servings of fruits and vegetables per day. <sup>142</sup> In addition to individual factors such as these, social, economic, and environmental forces (e.g., advances in technology and trends in eating out) may contribute to the increasing prevalence of being overweight.



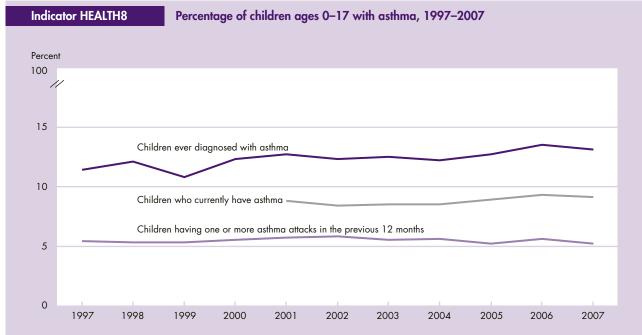
■ Since the 1980s, there has been an increase in the percentage of children who are overweight. During the period 1976–1980, only 6 percent of children ages 6–17 were overweight. By 1988–1994, this percentage had risen to 11 percent of children ages 6–17, and in 1999–2000 it was 15 percent. In 2005–2006, 17 percent of children were overweight. There was no significant change in the percentage of overweight children between 2003–2004 and 2005–2006.

- In 2005–2006, there was no difference between boys and girls in the percentage of children who were overweight.
- In 2005–2006, 15 percent of children ages 6–11 were overweight and 18 percent of adolescents ages 12–17 were overweight. There was no statistical difference between the percentages of the younger and older age groups.

Bullets contain references to data that can be found in Table HEALTH7 on page 174. Endnotes begin on page 73.

### **Asthma**

sthma is a disease of the lungs that can cause wheezing, difficulty in breathing, and chest pain. It is one of the most common chronic diseases among children and is costly in both health and monetary terms. Asthma varies greatly in severity. Some children who have been diagnosed with asthma may not experience any serious respiratory effects. Other children may have mild symptoms or may respond well to management of their asthma, typically through the use of medication. Some children with asthma may, however, suffer serious attacks that greatly limit their activities, result in visits to emergency rooms or hospitals, or, in rare cases, cause death. Environmental factors such as air pollution and secondhand tobacco smoke, along with infections, exercise, and allergens, can trigger asthma attacks in children who have the disease. 143-145



NOTE: Children are identified as ever diagnosed with asthma by asking parents, "Has a doctor or other health professional EVER told you that your child has asthma?" If the parent answers YES to this question, they are then asked (1) "Does your child still have asthma?" and (2) "During the past 12 months, has your child had an episode of asthma or an asthma attack?" The question "Does your child still have asthma?" was introduced in 2001 and identifies children who currently have asthma.

SOURCE: National Center for Health Statistics, National Health Interview Survey

- In 2007, about 13 percent of children had been diagnosed with asthma at some time in their lives.
- About 9 percent of children were reported to currently have asthma in 2007. These include children with active asthma symptoms and those whose asthma is well controlled.
- Approximately 5 percent of all children had one or more asthma attacks in the previous 12 months. These children have ongoing asthma symptoms that could put them at risk for poorer health outcomes, including hospitalizations and death. About 3 children out of 5 who currently have asthma have ongoing asthma symptoms.
- In 2007, about 15 percent of Black, non-Hispanic children were reported to currently have asthma, compared with 7 percent of White, non-Hispanic

- and 9 percent of Hispanic children. Disparities exist within the Hispanic population such that 15 percent of Puerto Rican children were reported to currently have asthma, compared with 9 percent of children of Mexican origin.
- From 1997 to 2007, the trends for these three asthma indicators remained fairly stable. Between 1980 and 1995, childhood asthma more than doubled (from about 4 percent in 1980 to approximately 8 percent in 1995). Methods for measurement of childhood asthma changed in 1997, so earlier data cannot be compared to data from 1997–2007.

Bullets contain references to data that can be found in Tables HEALTH8.A and HEALTH8.B on page 175. Endnotes begin on page 73.

### **Indicator Needed**

#### Health

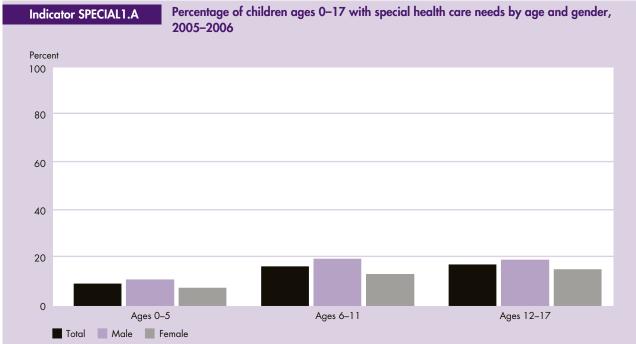
National indicators on several key dimensions of health are not yet available because of the difficulties in reaching consensus on relevant definitions and measurements. The following health-related area has been identified as a priority for indicator development:

Disability. The Forum has had a longstanding interest in developing an improved measure of child disability based on the functional difficulties experienced by children. The recently adopted International Classification of Functioning, Disability, and Health for Children and Youth (ICF-CY)146 provides a broad conceptual framework and terminology that may be a useful guide for the development of a new measure of child disability. Currently, there is little agreement about which domains of functioning should be included in a child disability measure and how functioning difficulties within these domains should be measured for children of different ages. However, recent progress in the development of an adult disability measure derived from regularly collected survey data is encouraging and underscores the need to devise a similar concise measure of child disability.



### Children with Special Health Care Needs

hildren with special health care needs (CSHCN) are defined as those children who have a chronic physical, developmental, behavioral, or emotional condition who also require health and related services of a type or amount beyond that required by children generally. <sup>147,148</sup> Based on this definition, CSHCN are identified by parents' reports that their child has a health problem expected to last at least 12 months and which requires prescription medication, more services than most children, special therapies, or which limits his or her ability to do things most children can do. The use of or need for specialized medical, educational, and social services associated with having a special health care need can have a significant impact on both families and service systems charged with meeting these needs. <sup>149</sup> Understanding the extent and nature of special health care needs among children is critical not only for providing services today, but for planning to meet future demands. <sup>150</sup>

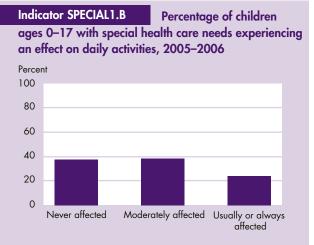


NOTE: Children are considered to have a special health care need if they have a parent-reported medical, behavioral, or other health condition that has lasted or is expected to last 12 months or longer and that has resulted in functional limitations and/or elevated use of or need for medical care, mental health or educational services, specialized therapy, or prescription medications beyond what is usual for other children of the same age.

SOURCE: Maternal and Child Health Bureau and National Center for Health Statistics, State and Local Area Integrated Telephone Survey, National Survey of Children with Special Health Care Needs, 2005–2006.

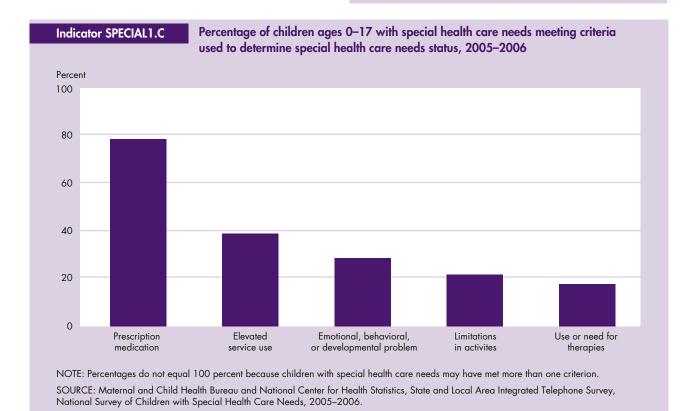
- In 2005–2006, an estimated 14 percent of children ages 0–17 had a special health care need. <sup>151,152</sup> Overall, 22 percent of all U.S. households with children had at least one child with special health care needs. <sup>153</sup> The proportion of children with special health care needs increased from 13 percent in 2001 to 14 percent in 2005–2006. <sup>154</sup>
- The prevalence of special health care needs was higher among older children. Approximately 17 percent of children ages 12–17 had special health care needs while, 16 percent of children ages 6–11 and about 9 percent of children ages 0–5 were identified as having special health care needs.
- The prevalence of special health care needs was greater among males than females in 2005–2006. About 16 percent of males had a special health care need, compared to 12 percent of females.
- In 2005–2006, the proportion of CSHCN varied by race and ethnicity. The prevalence of special health care needs was highest among children of two or more races (18 percent), followed by White, non-Hispanic (15 percent), Black, non-Hispanic (15 percent), American Indian or Alaska Native (15 percent), and Native Hawaiian or Other Pacific Islander (12 percent) children. The prevalence of special health care needs was lowest among Hispanic and Asian children (8 percent and 6 percent respectively).
- The majority of CSHCN were covered by private health insurance (59 percent), while 28 percent had public health insurance only and approximately 7 percent were covered by some combination of public and private health insurance. About 3 percent were uninsured at the time of the survey. Among CSHCN with health insurance, one-third of parents reported that the coverage was not adequate. <sup>153</sup>

- The most commonly reported health conditions among CSHCN include allergies (53 percent); asthma (39 percent); attention-deficit and attention-deficit/ hyperactivity disorder (30 percent); depression, anxiety, or other emotional problems (21 percent); and migraine or frequent headaches (15 percent). 153
- About one-quarter of CSHCN have health conditions that usually or always affect their daily activities, while 38 percent have health conditions that moderately or sometimes affect their daily activities and 38 percent have health conditions that never affect their daily activities.
- A child's special health care need status is determined by parents' reports about the effects of their child's health problems. About 78 percent of CSHCN used or needed prescription medications, while only 18 percent used or needed special therapies. CSHCN could have met more than one criterion.

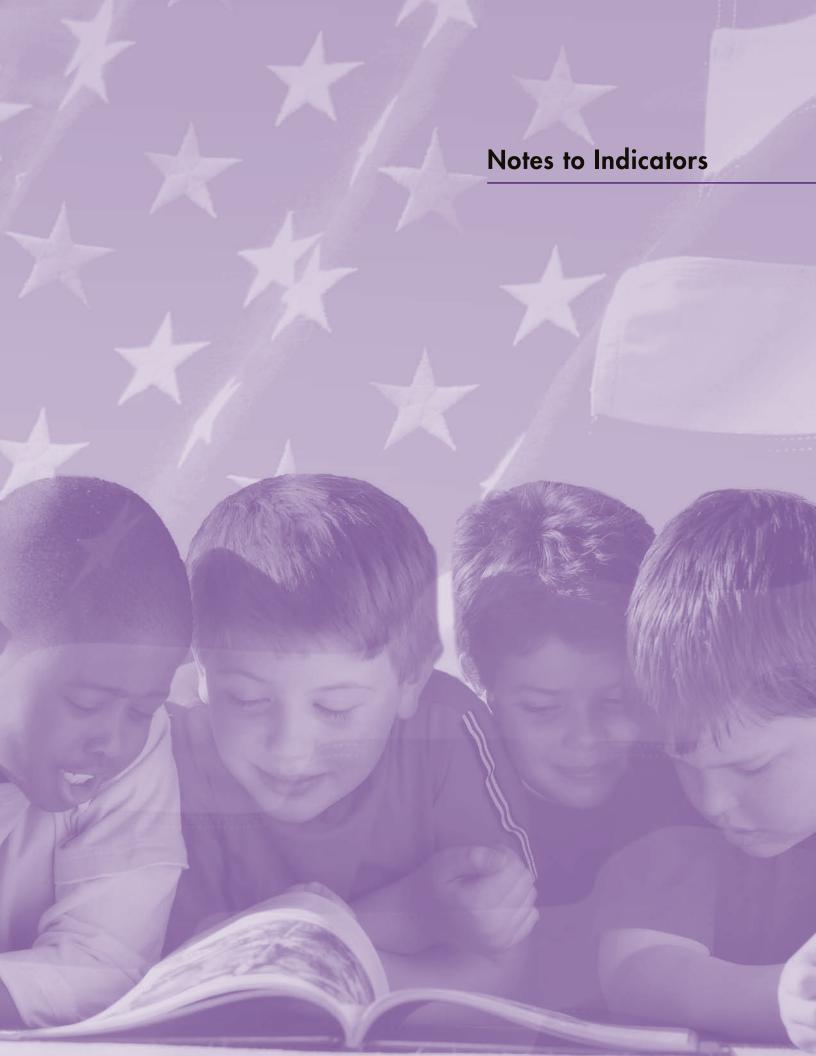


NOTE: Children whose conditions never affected their daily activities reflect either the effects of treatment used to manage the condition or the nature of the condition.

SOURCE: Maternal and Child Health Bureau and National Center for Health Statistics, State and Local Area Integrated Telephone Survey, National Survey of Children with Special Health Care Needs, 2005–2006.



Bullets contain references to data that can be found in Tables SPECIAL1.A and SPECIAL1.B on pages 176–177. Endnotes begin on page 73.



### Notes to Indicators

- <sup>1</sup> The majority of children who live with neither of their parents are living with grandparents or other relatives. Others who live with neither parent live with foster parents or other nonrelatives.
- <sup>2</sup> Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Black may be defined as those who reported Black and no other race (the race-alone or single-race concept) or as those who reported Black regardless of whether they also reported another race (the race-alone-or-in-combination concept). This indicator shows data using the first approach (race alone). Use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The U.S. Census Bureau uses a variety of approaches. Data on race and Hispanic origin are collected separately. Persons of Hispanic origin may be of any race.
- <sup>3</sup> For more information, refer to America's Families and Living Arrangements 2008 detailed tables, available at http://www.census.gov/population/www/socdemo/hh-fam/cps2008.html.
- <sup>4</sup> National Center for Health Statistics. (1995). Report to Congress on out-of-wedlock childbearing. Hyattsville, MD: Author.
- <sup>5</sup> McLanahan, S. (1995). The consequences of nonmarital childbearing for women, children, and society. In National Center for Health Statistics, *Report to Congress on out-of-wedlock childbearing*. Hyattsville, MD: National Center for Health Statistics.
- <sup>6</sup> Martin, J.A., Hamilton, B.E., Sutton, P.D., Ventura, S.J., Menacker, F.J. Kirmeyer, S., and Mathews, TJ. (2009). Births: Final data for 2006. *National Vital Statistics Reports* 57(7). Hyattsville, MD: National Center for Health Statistics.
- <sup>7</sup> Ventura, S.J. (1995). Births to unmarried mothers: United States, 1980–1992. *Vital and Health Statistics*, *53*(21). Hyattsville, MD: National Center for Health Statistics.
- <sup>8</sup> Ventura, S.J., and Bachrach, L.A. (2000). Nonmarital childbearing in the United States, 1940–1999. *National Vital Statistics Reports*, 48(16). Hyattsville, MD: National Center for Health Statistics.
- <sup>9</sup> Mathews, T.J., and MacDorman, M.F. (2008). Infant mortality statistics from the 2005 period linked birth/infant death data set. *National Vital Statistics Reports*, 57(2). Hyattsville, MD: National Center for Health Statistics.
- <sup>10</sup> Hamilton, B.E., Martin, J.A., and Ventura, S.J. (2009). Births: Preliminary data for 2007. *National Vital Statistics Reports*, *57*(12). Hyattsville, MD: National Center for Health Statistics.
- <sup>11</sup> Hamilton, B.E., Sutton, P.D., and Ventura, S.J. (2003). Revised birth and fertility rates for the 1990s: United States, and new rates for Hispanic populations, 2000 and 2001. *National Vital Statistics Reports*, *51*(12). Hyattsville, MD: National Center for Health Statistics.
- <sup>12</sup> Bumpass, L.L., and Lu, H.H. (2000). Trends in cohabitation and implications for children's family contexts in the United States. *Population Studies*, *54*, 29–41.
- <sup>13</sup> Bachu, A. (1999). Trends in premarital childbearing: 1930 to 1994. *Current Population Reports* (P23–197). Washington, DC: U.S. Census Bureau.
- <sup>14</sup> Chandra, A., Martinez, G.M., Mosher, W.D., Abma, J.C., and Jones, J. (2005). Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. *Vital and Health Statistics*, 23(25). Hyattsville, MD: National Center for Health Statistics.
- <sup>15</sup> The birth rate for unmarried women is the number of births per 1,000 unmarried women in a given age group, for example, 20–24 years. The percentage of all births that are to unmarried women is the number of births occurring to unmarried women divided by the total number of births. The percentage of all births that are to unmarried women is affected by the birth rate for married women, the birth rate for unmarried women (who account for about 40 percent of all births), and the proportion of women of childbearing age who are unmarried. The percentage of births to unmarried women increased in recent years, because there were rapid increases in the birth rate for unmarried women while births for married women changed little.
- <sup>16</sup> National Center for Health Statistics. National Vital Statistics System. (2009). Unpublished tabulations.
- <sup>17</sup> U.S. Census Bureau. (various years). Marital status and living arrangements (annual reports) and, beginning in 1999, America's families and living arrangements. *Current Population Reports*, Series P–20. Beginning in 1995, reports are available on the U.S. Census Bureau website at http://www.census.gov/population/www/socdemo/ms-la.html and, since 1999, at http://www.census.gov/population/www/socdemo/hh-fam.html.

- <sup>18</sup> To provide a comprehensive picture of the child care arrangements parents use to care for their preschoolers, this indicator draws on the strengths of two different Federal data sets—the National Household Education Surveys Program (NHES) and the Survey of Income and Program Participation (SIPP). Using NHES (FAM3.B) data, the percentage of children in each type of arrangement is shown, to provide total usage rates. Because some children are cared for by more than one type of provider, the numerator is the number of children in the particular arrangement and the denominator is all children. Using SIPP (FAM3.A) data, the historical trend of the primary child care provider is shown because there is an interest in the care arrangement that is used by employed mothers for the greatest number of hours each week. In this case, the numerator is the number of children of employed mothers who spend the greatest number of hours in the particular arrangement each week and the denominator is all children of employed mothers.
- <sup>19</sup> Center-based care includes day care centers, nursery schools, preschools and Head Start programs. Home-based care or other nonrelative care includes family day care providers, babysitters, nannies, friends, neighbors, and other nonrelatives providing care in either the child's or provider's home. Other relatives include siblings and other relatives. Mother care includes care by the mother while she worked. To see trends in individual child care arrangement types refer to Overturf Johnson, J. (2005). Who's minding the kids? Child care arrangements: Winter 2002. *Current Population Reports*, U.S. Census Bureau, Washington, DC, 70–101.
- <sup>20</sup> Schmidley, A.D. (2001). Profile of the foreign-born population in the United States: 2000. *Current Population Reports* (P23–206), U.S. Census Bureau. Washington, DC: U.S. Government Printing Office. Retrieved from http://www.census.gov/prod/2002pubs/p23-206.pdf.
- <sup>21</sup> Schmidley, A.D. (2003). The foreign-born population in the United States: March 2002, *Current Population Reports* (P20–539). Washington, DC: U.S. Census Bureau. Retrieved from http://www.census.gov/prod/2003pubs/p20-539.pdf.
- <sup>22</sup> Gibson, C.J., and Lennon, E. (1999). Historical Census Statistics on the Foreign-Born Population of the United States: 1850–1990, Population Division Working Paper No. 29. Washington, DC: U.S. Census Bureau. Retrieved from http://www.census.gov/population/www/documentation/twps0029/twps0029.html.
- <sup>23</sup> If the child lived with two parents, the education reflected is that of the most educated parent.
- <sup>24</sup> Adult respondents were asked if the children in the household spoke a language other than English at home and how well they could speak English. Categories used for reporting how well children could speak English were "Very well," "Well," "Not well," and "Not at all." All those who were reported to speak English less than "Very well" were considered to have difficulty speaking English based on an evaluation of the English-speaking ability of a sample of children in the 1980s.
- <sup>25</sup> The percentage of White, non-Hispanic children ages 5–17 who spoke English less than "very well" (1.2 percent) was not statistically different from the percentage of Black, non-Hispanic children (1.2 percent).
- <sup>26</sup> Klerman, L.V. (1993). Adolescent pregnancy and parenting: Controversies of the past and lessons for the future. *Journal of Adolescent Health*, 14, 553–561.
- <sup>27</sup> Kiely, J.L., Brett, K.M., Yu, S., and Rowley, D.L. (1994). Low birthweight and intrauterine growth retardation. In L.S. Wilcox, and J.S. Marks, (Eds.), *From data to action: CDC's public health surveillance for women, infants, and children* (pp. 185–202). Atlanta, GA: Centers for Disease Control and Prevention.
- <sup>28</sup> Maynard, R.A. (Ed.). (1997). *Kids having kids: Economic costs and social consequences of teen pregnancy.* Washington, DC: The Urban Institute Press.
- <sup>29</sup> Office on Child Abuse and Neglect, Department of Health and Human Services. (2003). *A Coordinated Response to Child Abuse and Neglect: The Foundation for Practice*. Retrieved August 28, 2006, from the Child Welfare Information Gateway, http://www.childwelfare.gov/pubs/usermanuals/foundation/foundationf.cfm.
- <sup>30</sup> Data from 2007 are not directly comparable with prior years as differences may be partially attributed to changes in one state's procedures for determination of maltreatment. Other reasons include the increase in children who received an "other" disposition, the decrease in the percentage of children who received a substantiated or indicated disposition, and the decrease in the number of children who received an investigation or assessment.
- <sup>31</sup> Estimates based on the official definition of poverty include estimates for children in two ways. First, estimates for all children include anyone in the poverty universe under age 18. Second, estimates for related children under 18 include children related to the householder (or reference person of an unrelated subfamily) who are not themselves a householder or spouse of the householder (or family reference person).

- <sup>32</sup> Duncan, G., and Brooks-Gunn, J. (Eds.). (1997). Consequences of growing up poor. New York, NY: Russell Sage Press.
- <sup>33</sup> An, C., Haveman, R., and Wolfe, B. (1993). Teen out-of-wedlock births and welfare receipt: The role of childhood events and economic circumstances. *Review of Economics and Statistics*, 75(2), 195–208.
- <sup>34</sup> The poverty calculations in this section use the official poverty measure based on the Office of Management and Budget Statistical Policy Directive 14. A child is living below poverty if the child lives in a family with before-tax cash income below a defined level of need, called a poverty threshold. The official poverty thresholds in use today were devised in the early 1960s based on the minimum cost of what was considered to be a nutritionally adequate diet. Since then, the poverty thresholds have been updated annually for inflation using the Consumer Price Index for all urban consumers. Poverty thresholds vary based on the size of the family and the number of children in the family.
- <sup>35</sup> The percent of Black children in female-householder families that lived in poverty was not statistically different from that of children in Hispanic female-householder families.
- <sup>36</sup> Mayer, S.E. (1997). Income, employment and the support of children. In R.M. Hauser, B.V. Brown, and W. Prosser. (Eds.), *Indicators of children's well-being*. New York, NY: Russell Sage Press.
- <sup>37</sup> Smith, J.R., Brooks-Gunn, J., and Jackson, A.P. (1997). Parental employment and children. In R.M. Hauser, B.V. Brown, and W. Prosser. (Eds.), *Indicators of children's well-being*. New York, NY: Russell Sage Press.
- <sup>38</sup> Anderson, S.A. (Ed.). (1990). Core indicators of nutritional state for difficult-to-sample populations. *Journal of Nutrition 120*(11S), 1557–1600.
- <sup>39</sup> Nord, M. (2002). *Food insecurity in households with children* (Food Assistance and Nutrition Research Report FANRR34–13). Washington, DC: U.S. Department of Agriculture, Economic Research Service. Retrieved from http://www.ers.usda.gov/publications/fanrr34-13.
- <sup>40</sup> In reports prior to 2006, households with "very low food security among children" were described as "food insecure with hunger among children." In 2006, USDA introduced new language to describe ranges of severity of food insecurity in response to recommendations by an expert panel convened by the Committee on National Statistics of the National Academies. The methods used to assess children's food security remained unchanged, so the statistics for 2005 and later years are directly comparable with those for 2004 and earlier years. For further information see the following reports:
  - National Research Council, (2006). *Food insecurity and hunger in the United States: An assessment of the measure.*Committee on National Statistics, Panel to Review the U.S. Department of Agriculture's Measurement of Food Insecurity and Hunger, G.S. Wunderlich and J.L. Norwood. (Eds.). Washington, DC: The National Academies Press.
  - Nord, M., Andrews, M., and Carlson, S. (2006). *Household food security in the United States 2005* (Economic Research Report 29). Washington, DC: U.S. Department of Agriculture, Economic Research Service. Retrieved from http://www.ers.usda.gov/publications/err29.
- <sup>41</sup> Green, M. (Ed.). (1994). *Bright futures: Guidelines for health supervision of infants, children, and adolescents.* Arlington, VA: National Center for Education in Maternal and Child Health.
- <sup>42</sup> Simpson, G., Bloom, B., Cohen, R.A., and Parsons, P.E. (1997). Access to health care. Part 1: Children. *Vital and Health Statistics*, *10*(Series 196). Hyattsville, MD: National Center for Health Statistics.
- <sup>43</sup> Bartman, B.A., Moy, E., and D'Angelo, L.J. (1997). Access to ambulatory care for adolescents: The role of a usual source of care. *Journal of Health Care for the Poor and Underserved, 8,* 214–226.
- <sup>44</sup> Folton, G.L. (1995). Critical issues in urban emergency medical services for children. *Pediatrics*, 96(2), 174–179.
- <sup>45</sup> For more information, refer to http://www.cdc.gov/vaccines/vac-gen/shortages/past/pneumo-2001.htm.
- <sup>46</sup> U.S. Department of Health and Human Services. (2000). *Oral health in America: A report of the Surgeon General.* Rockville, MD: Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research.
- <sup>47</sup> American Academy of Pediatric Dentistry. (1999). *Handbook of pediatric dentistry*. Chicago, IL: The Academy.
- <sup>48</sup> Institute of Medicine. (2001). Crossing the quality chasm. Washington, DC: National Academies Press.

- <sup>49</sup> This measure does not differentiate between counties in which the Primary National Ambient Air Quality Standards are exceeded frequently or by a large margin and counties in which the standards are exceeded only rarely or by a small margin. It must also be noted that this analysis differs from the analysis utilized by the U.S. Environmental Protection Agency for the designation of "nonattainment areas" for regulatory compliance purposes.
- <sup>50</sup> U.S. Environmental Protection Agency. (1994). Supplement to the second addendum (1986) to air quality criteria for particulate matter and sulfur oxides (1982): Assessment of new findings on sulfur dioxide acute exposure health effects in asthmatic individuals (EPA/600/FP-93/002). Research Triangle Park, NC: Author.
- <sup>51</sup> U.S. Environmental Protection Agency. (2008). *Integrated Science Assessment for Oxides of Nitrogen—Health Criteria* (EPA/600/R-08/071). Research Triangle Park, NC: Author.
- <sup>52</sup> U.S. Environmental Protection Agency. (2006). *Air quality criteria for ozone and related photochemical oxidants* (EPA/600/R-05/004aF). Research Triangle Park, NC: Author.
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