Indicators of Children's Well-Being

Behavior and Social Environment Indicators

The indicators in this section present data on selected measures of young people's personal behavior and aspects of their social environment that may affect them. The indicators focus on illegal or high-risk behaviors, including smoking cigarettes, drinking alcohol, using illicit drugs, and involvement in serious violent crimes, either as offender or victim. In addition to these indicators, readers should consider positive behaviors of children, aspects of neighborhood environment, and other aspects of risk and problem behaviors in evaluating this dimension. Sources for some of these indicators are being sought.

Regular Cigarette Smoking

S moking has serious long-term consequences, including the risk of smoking-related diseases and the risk of premature death, as well as causing increased health care costs associated with treating the illnesses.⁵² Many adults who are addicted to tobacco today began smoking as adolescents, and it is estimated that more than 5 million of today's underage smokers will die of tobacco-related illnesses.⁵³ These consequences underscore the importance of studying patterns of smoking among adolescents.



SOURCE: National Institutes of Health, National Institute on Drug Abuse, Monitoring the Future Survey.

- Between 1999 and 2000, the rate of daily smoking in the past 30 days decreased from 23 percent to 21 percent among 12th-graders and from 16 percent to 14 percent among 10th-graders. Recent peak levels in daily smoking occurred in 1997 for 12thgraders and 1996 for 10th- and 8th-graders. Since those years, rates have declined in all three grades. The 2000 rate of daily smoking is the lowest since 1992 for 8th- and 10th-graders and since 1994 for 12th-graders.
- Long-term trends for seniors show that daily smoking declined from 21 percent in 1980 to 17 percent in 1992 then increased to 25 percent in 1997 and declined to 21 percent in 2000.
- Males and females report similar rates of daily smoking. Among males, 7 percent of 8th-graders, 14 percent of 10th-graders, and 21 percent of 12thgraders reported daily smoking in the past 30 days in 2000; among females, the corresponding rates were 8 percent for 8th-graders, 14 percent for 10thgraders, and 20 percent for 12th-graders.
- Rates of smoking differ substantially between racial and ethnic groups. White students have the highest rate of smoking, followed by Hispanics and then blacks. In 2000, 26 percent of white 12th-graders reported daily smoking, compared to 16 percent of Hispanics and 8 percent of blacks.

Bullets contain references to data that can be found in Table BEH1 on page 97. Endnotes begin on page 58.

Alcohol Use

A loohol is the most commonly used psychoactive substance during adolescence. Its use is associated with motor vehicle accidents, injuries, and deaths; with problems in school and in the workplace; and with fighting, crime, and other serious consequences.⁵⁴ Heavy drinking in adolescence may be especially problematic, potentially increasing the likelihood of negative outcomes.



SOURCE: National Institutes of Health, National Institute on Drug Abuse, Monitoring the Future Survey.

- In 2000, rates of heavy drinking remained largely unchanged from 1999, with 30 percent of 12thgraders, 26 percent of 10th-graders, and 14 percent of 8th-graders reporting heavy drinking, i.e., having at least five drinks in a row at least once in the previous 2 weeks.
- Long-term trends for seniors indicate a peak in 1981, when 41 percent reported heavy drinking. Subsequently, the percentage of high school seniors reporting heavy drinking declined significantly to a low of 28 percent in 1993. Since that time, the prevalence of heavy drinking has held fairly steady, ranging from 30 to 32 percent. The rate in 2000 was 30 percent.
- Among 10th- and 12th-graders, males are more likely to drink heavily than are females. In 2000, 37 percent of 12th-grade males reported heavy drinking, compared with 24 percent of 12th-grade females. Among 10th-graders, 30 percent of males reported heavy drinking, compared with 23 percent of females. As adolescents get older, the differences between males and females in this

drinking behavior appear to become more pronounced.

- For the 8th-graders surveyed, the rate of heavy drinking among males declined from 16 percent in 1999 to 14 percent in 2000; the rate was also 14 percent for females in that grade in 2000.
- Heavy drinking is much more likely among Hispanic and white secondary school students than among their black counterparts. For example, among 12th-graders, 12 percent of blacks reported heavy drinking compared with 35 percent of whites and 31 percent of Hispanics. Similarly, among 10th-graders, 13 percent of blacks reported heavy drinking, compared with 28 percent of both whites and Hispanics.

Bullets contain references to data that can be found in Table BEH2 on page 98. Endnotes begin on page 58.

Illicit Drug Use

rug use by adolescents can have immediate as well as long-term health and social consequences. Cocaine use is linked with health problems that range from eating disorders to disability to death from heart attacks and strokes.⁵⁵ Marijuana use poses both health and cognitive risks, particularly for damage to pulmonary functions as a result of chronic use.^{56,57} Hallucinogens can affect brain chemistry and result in problems with learning new information and memory.⁵⁸ As is the case with alcohol use and smoking, drug use is a risk-taking behavior that has serious negative consequences.



NOTE: Illicit drugs include marijuana, cocaine (including crack), heroin, hallucinogens (including LSD, PCP, and ecstasy (MDMA)), amphetamines (including methamphetamine), and non-medical use of psychotherapeutics. SOURCE: National Institutes of Health, National Institute on Drug Abuse, Monitoring the Future Survey.

- The percentage of 8th-, 10th-, and 12th-graders reporting illicit drug use in the past 30 days remained stable from 1999 to 2000. In 2000, 25 percent of 12th-graders reported using illicit drugs in the previous 30 days, as did 23 percent of 10thgraders and 12 percent of 8th-graders.
- The percentage of students reporting illicit drug use in the past 30 days increased substantially from 1992 to 1996 or 1997. For 12th-graders, it increased from 14 percent in 1992 to 26 percent in 1997. Between 1992 and 1996, rates of use increased from 11 to 23 percent among 10th-graders and from 7 to 15 percent among 8th-graders. Since these recent peaks, illicit drug use has remained stable or decreased.
- Long-term trends for 12th-graders indicate that illicit drug use declined from 37 percent in 1980 to 14 percent in 1992. After 1992, rates began to rise sharply, reaching 26 percent in 1997; since then, illicit drug use by 12th-graders has remained stable.

(Data for 8th- and 10th-graders are not available before 1991.)

- Among 12th-graders, males are more likely to use illicit drugs than are females (28 percent versus 22 percent, respectively, in 2000). For 8th-graders, however, males and females are equally likely to report the use of illicit drugs, with 12 percent of males and 11 percent of females reporting use in the last 30 days.
- In 2000, 26 percent of white 12th-graders reported illicit drug use, as did 20 percent of black and 27 percent of Hispanic 12th-graders. Among 10th-graders, 23 percent of whites, 17 percent of blacks, and 24 percent of Hispanics reported illicit drug use in the past 30 days, while for 8th-graders, the rates were 11 percent for both whites and blacks and 15 percent for Hispanics.

Bullets contain references to data that can be found in Table BEH3 on page 99. Endnotes begin on page 58.

Youth Victims and Perpetrators of Serious Violent Crimes

iolence affects the quality of life of young people who experience, witness, or feel threatened by it. In addition to the direct physical harm suffered by young victims of serious violence, such violence can adversely affect victims' mental health and development and increase the likelihood that they themselves will commit acts of serious violence.^{59,60} Youth ages 12 to 17 are twice as likely as adults to be victims of serious violence), and homicide.



NOTE: Serious violent crimes include aggravated assault, rape, robbery (stealing by force or threat of violence), and homicide. Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology.

SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey. Federal Bureau of Investigation, Uniform Crime Reporting Program, Supplementary Homicide Reports.

- In 1999, the rate at which youth were victims of serious violent crimes was 20 crimes per 1,000 juveniles ages 12 to 17, totaling about 480,000 such crimes.
- The serious violent crime victimization rate fluctuated between 34 and 43 per 1,000 from 1980 to 1990, and peaked at 44 per 1,000 in 1993. Since 1993, the rate of serious violent crime against youth has decreased by 53 percent, down to 20 per 1,000 in 1999.
- Males are nearly twice as likely as females to be victims of serious violent crimes. In 1999, the serious violent crime victimization rate was 27 per 1,000 male youth, compared with 14 per 1,000 female youth.
- Younger teens (ages 12 to 14) are as likely as older teens (ages 15 to 17) to be victims of serious violent crimes. In 1999, the serious violent crime victimization rate for older teens dropped to 20 per 1,000 from 29 per 1,000 in 1998.

The level of youth violence in society can be viewed as an indicator of youths' ability to control their behavior, as well as the adequacy of socializing agents such as families, peers, schools, and religious institutions to supervise or channel youth behavior to acceptable norms. One measure of the serious violent crime committed by juveniles is the incidence rate of serious violent juvenile crime.

NOTE: This rate is the ratio of the number of crimes (aggravated assault, rape, and robbery; i.e., stealing by force or threat of violence) reported to the National Crime Victimization Survey for which the age of the offenders was known, plus the number of homicides reported to police that involved at least one juvenile offender perceived by the victim (or by law enforcement in the case of homicide) to be 12 through 17 years of age, to the number of juveniles in the population. Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology.

SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey. Federal Bureau of Investigation, Uniform Crime Reporting Program, Supplementary Homicide Reports.

- According to reports by victims, in 1999, the serious violent juvenile crime offending rate was 26 crimes per 1,000 juveniles ages 12 to 17 years old, totaling 610,000 such crimes involving juveniles—a 50 percent drop from the 1993 high and the lowest level recorded since the national victimization survey began in 1973.
- Reports by victims indicate that between 1980 and 1989, the serious violent juvenile crime offending rate fluctuated between 29 and 40 per 1,000, and then began to increase from 34 per 1,000 in 1989 to a high of 52 per 1,000 in 1993. Since then, the rate has steadily dropped to 26 per 1,000 in 1999.
- Based on victims' reports, since 1980, the percentage of all serious violent crime involving juveniles has ranged from 19 percent in 1982 to 26 percent in 1993, the peak year for youth violence. In 1999, 24 percent of all such victimizations reportedly involved a juvenile offender.
- In nearly half (47 percent) of all serious violent juvenile crimes reported by victims in 1999, more than one offender was involved in the incident. Because insufficient detail exists to determine the age of each individual offender when a crime is committed by more than one offender, the number of additional juvenile offenders cannot be determined. Therefore, this rate of serious violent crime offending does not represent the number of juvenile offenders in the population, but rather the number of crimes committed involving juveniles 12 to 17 years old in relation to the juvenile population.

Bullets contain references to data that can be found in Tables BEH4.A and BEH4.B on pages 100-101. Endnotes begin on page 58.

Behavior and Social Environment

A broader set of indicators than those presented in this section is needed to adequately monitor the social environment and behaviors of youth. This year's report includes a special feature on youth employment. Other behavior and social environment measures are needed on:

■ *Indicators of positive behaviors.* The participation of youth in positive activities and the formation of close attachments to family, school, and community have been linked to positive outcomes in research studies. Additional research needs to be conducted to strengthen our understanding of positive activities and the aspects of those activities that protect youth from risk. Then, regular sources of data that can be used to monitor trends in these important areas over time need to be developed. Examples of positive activities might include participation in extracurricular activities such as school clubs and team sports, scouting, or involvement with religious organizations. One measure, youth participation in volunteer activities, was presented as a special feature in America's Children, 2000. Forum agencies are also examining the measurement and influence of young people's feelings of closeness with their parents.

- Neighborhood environment. Research shows that growing up in distressed neighborhoods has an effect over and above that of individual or family background characteristics on child well-being. A survey is being implemented that would, for the first time, enable the monitoring of America's communities and neighborhoods over time and identify distressed neighborhoods in which children are living.
- *Youth violence.* It is difficult to track youth participation in violent crime because crime data are reported by victims, not perpetrators. Therefore, the indicator on serious violent crime offending by youth in this report does not provide critical information on the number and characteristics of youthful offenders involved in serious crime. Additional work is needed to produce a more comprehensive and useful measure of the prevalence of violence among young people.

Indicators of Children's Well-Being

Education Indicators

The education of children shapes their own personal development and life chances, as well as the economic and social progress of our nation. This section presents key indicators of how well children are learning and progressing from early childhood through postsecondary school. Two indicators related to early childhood development are presented: family reading to young children and participation in early childhood care and education. Both measures are placeholders for a direct recurring assessment of what preschoolers know and can do, which is not yet available. Scores on national assessments of mathematics and reading for elementary, middle, and high school students are presented, followed by an indicator on advanced coursetaking. Completion rates for high school and college indicate the extent to which students have attained a basic education and are prepared for higher levels of education or the workforce. By contrast, the indicator on youth neither enrolled in school nor working tracks the extent to which youth are at risk of limiting their future prospects at a critical stage of their lives.

Family Reading to Young Children

R eading to young children promotes language acquisition and correlates with literacy development and, later on, with achievement in reading comprehension and overall success in school.⁶² The percentage of young children read aloud to daily by a family member is one indicator of how well young children are being prepared for school. Mother's education is consistently related to whether children are read to by a family member.



NOTE: Data are available for 1993, 1995, 1996, and 1999. Estimates are based on children ages 3 to 5 who have yet to enter kindergarten.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey.

- In 1999, 54 percent of children ages 3 to 5 were read to daily by a family member. The percentage has fluctuated between 53 and 58 since 1993.
- As a mother's education increases, so does the likelihood that her child is read to every day. In 1999, 71 percent of children whose mothers were college graduates were read aloud to every day. In comparison, daily reading aloud occurred for 53 percent of children whose mothers had some postsecondary education, 45 percent whose mothers had completed high school but had no education beyond that, and 39 percent whose mothers had not completed high school.
- White, non-Hispanic children are more likely to be read aloud to every day than either black, non-Hispanic or Hispanic children. Sixty-one percent of white, non-Hispanic children, 41 percent of black, non-Hispanic children, and 33 percent of Hispanic children were read to every day.
- Children in families with incomes below the poverty line are less likely to be read aloud to every day than are children in families with incomes at or above the poverty line. Thirty-eight percent of children in families in poverty were read to every day in 1999, down from 46 percent in 1996, compared with 58 percent of children in families at or above the poverty line, down from 61 percent in 1996.
- Children living with two parents are more likely to be read aloud to every day than are children who live with one or no parent. Fifty-eight percent of children in two-parent households were read to every day in 1999, compared with 43 percent of children living with one or no parent.

Bullets contain references to data that can be found in Table ED1 on page 102. Endnotes begin on page 58.

Early Childhood Care and Education

ike family reading, participation in an early childhood education program can provide preschoolers with skills and enrichment that can increase their chances of success in school. Studies have demonstrated that participation in high-quality early childhood education programs has short-term positive effects on IQ and achievement and long-term positive effects on low-income minority children's school completion.⁶³ Until an ongoing direct measure of preschoolers' cognitive, behavioral, and social skills is available for this monitoring report, this indirect indicator monitors the percentage of children who are exposed to a variety of early childhood education programs.



NOTE: Data are available for 1991, 1993, 1995, 1996, and 1999. Estimates are based on children who have yet to enter kindergarten. Poverty estimates for 1991 and 1993 are not comparable to later years.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey.

- Sixty percent of children ages 3 to 5 who had not yet entered kindergarten attended center-based early childhood care and education programs in 1999. These programs include day care centers, nursery schools, preschool programs, Head Start programs, and prekindergarten programs.
- Between 1996 and 1999, the percentage of children of this age attending early childhood programs increased from 55 to 60 percent. Most groups of children had higher participation rates in 1999 than in 1996, but especially noteworthy were increases among children living in poverty, among children with mothers who were not in the labor force, and among black, non-Hispanic and other minority children.
- Children living in poverty were still less likely to attend these programs than those living in families at or above poverty in 1999 (52 percent compared with 62 percent).

- Children with more highly educated mothers were more likely to attend an early childhood program than others. Seventy-four percent of children whose mothers had completed college attended such programs in 1999, compared with 40 percent whose mothers had less than a high school education.
- Black, non-Hispanic children were more likely than white, non-Hispanic children or Hispanic children to attend an early childhood program. In 1999, 73 percent of black, non-Hispanic children ages 3 to 5 attended such programs, compared with 60 percent of white, non-Hispanic children and 44 percent of Hispanic children.

Bullets contain references to data that can be found in Table ED2 on page 103. Endnotes begin on page 58.

Mathematics and Reading Achievement

The extent and content of students' knowledge, as well as their ability to think, learn, and communicate, affect their ability to succeed in the labor market as adults. On average, students with higher test scores will earn more and will be unemployed less often than students with lower test scores.⁶⁴ Mathematics and reading achievement test scores are important measures of students' skills in these subject areas, as well as good indicators of achievement overall in school. To assess progress in mathematics and reading, the National Assessment of Educational Progress measures national trends in the academic performance of students at ages 9, 13, and 17.



NOTE: Data are available for 1982, 1986, 1990, 1992, 1994, 1996, and 1999. The mathematics proficiency scale ranges from 0 to 500, with the following skill levels associated with the corresponding scale score:

Level 150: Simple arithmetic facts

Level 200: Beginning skills and understandings

Level 250: Numerical operations and beginning problem solving

Level 300: Moderately complex procedures and reasoning

Level 350: Multi-step problem solving and algebra

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

- Average mathematics scores increased for all age groups between 1982 and 1999.
- Scores did not improve significantly over the last assessment in 1996 in reading or mathematics or in any of the three age groups tested—ages 9. 13, and 17.
- White, non-Hispanic students consistently have had higher reading and mathematics scores than either black, non-Hispanic or Hispanic students at ages 9, 13, and 17. However, the gaps between non-

Hispanic whites and blacks and between non-Hispanic whites and Hispanics decreased in each subject in some age groups during the 1980s and 1990s, but widened for others. Larger reductions in these gaps occurred during the 1970s because of gains in the scores of black, non-Hispanic and Hispanic students.



Average reading scale scores for students ages 9, 13, and 17, selected years 1980-99



0 to 500, with the following skill levels associated with the corresponding scale score:

Level 150: Simple, discrete reading tasks

Level 200: Partial skills and understanding

Level 250: Interrelates ideas and makes generalizations

Level 300: Understands complicated information

Level 350: Learns from specialized reading materials

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

- Average reading scores have not improved among students ages 9, 13, or 17 since 1980.
- On average, students at ages 13 and 17 whose parents have completed more years of school have higher reading and mathematics scores than do their peers whose parents have had fewer years of education.⁶⁵
- Girls had higher reading scores than boys at all three ages in 1999. In 1996, boys outperformed girls in mathematics at all three ages, but that gap was no longer significant in 1999. At ages 9 and 13,

the differences between boys and girls were not significant for most years between 1980 and 1996.

Bullets contain references to data that can be found in Tables ED3.A and ED3.B on pages 104-105. Endnotes begin on page 58.

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. The third goal of the National Education Goals calls for all students to leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter "to ensure all students learn to use their minds well so they may be prepared for responsible citizenship, further learning, and productive employment." Research has shown a strong relationship between the level of difficulty of courses students take and their performance on assessments.⁶⁶ For both college-bound and non-college-bound students, assessment scores increased more for students taking advanced courses than for students who did not take advanced courses.⁶⁶ Studies have also shown that students who take advanced coursework, such as calculus, in high school are more likely to enroll in college and succeed beyond college.⁶⁷



NOTE: Data are available for 1982, 1987, 1990, 1992, 1994, and 1998. High-level coursework includes: mathematics: courses above Algebra II; science: chemistry, physics or both; English: 50% or more of courses at the honors level; foreign language: 4thyear/advanced placement course. For a detailed listing of courses, see Tables ED4A-ED4D.

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

- Forty-one percent of 1998 high school graduates had taken at least one advanced mathematics course, defined as a course above algebra II. This was an increase from the 26 percent of 1982 high school graduates who had taken at least one advanced mathematics course. In addition, the percentage of 1998 high school graduates taking a non- or low academic course as their most advanced course was 9 percent, compared to 24 percent for 1982 graduates. In science, more than half (60 percent) of all 1998 high school graduates had taken either physics I or chemistry I or higher courses, nearly doubling the percentage of 1982 graduates who had taken one or both courses (31 percent). In addition, the percentage of students that had taken a physical science course below biology, chemistry, and physics as their most advanced course dropped from 27 percent of 1982 graduates to 9 percent of 1998 graduates.
- Twenty percent of all 1998 high school graduates took the majority of their English courses at the honors level, an increase from 7 percent of 1982 high school graduates. A total of 29 percent of 1998 graduates took a mix of middle and high-level English courses without taking any low-level courses, up from 13 percent in 1982.
- More high school students are taking foreign language courses. In foreign languages, 13 percent of 1998 high school graduates had taken a 4th-year or advanced placement course, compared to 6 percent of 1982 graduates. Nineteen percent of 1998 high school graduates did not take any foreign language course, compared to 46 percent of 1982 high school graduates who did not take any foreign language course.

Bullets contain references to data that can be found in Tables ED4.A-ED4.D on pages 106-107. Endnotes begin on page 58.

High School Completion

A high school diploma or its equivalent represents acquisition of the basic reading, writing, and mathematics skills a person needs to function in modern society. The percentage of young adults ages 18 to 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 as well as 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. SOURCE: U.S. Census Bureau, October Current Population Survey. Tabulated by the U.S. Department of Education, National Center for Education Statistics.

- In 1999, 86 percent of young adults ages 18 to 24 had completed high school, either with a diploma or an alternative credential such as a General Education Development (GED) test. The high school completion rate has increased slightly since 1980, when it was 84 percent.
- The rate at which black, non-Hispanic youth completed high school increased markedly between 1980 and 1990, from 75 percent to 83 percent. It has fluctuated since then, and was at 84 percent in 1999. Among white, non-Hispanics, high school completion rates increased slightly, from 88 percent in 1980 to 91 percent in 1999.
- Hispanic youth consistently have had a lower high school completion rate than black, non-Hispanic youth who, in turn, have had consistently lower high school completion rates than white, non-Hispanic youth. Since 1980, the high school

completion rate for Hispanic youth has been fluctuating between 57 and 67 percent, and was at 63 percent in 1999.

Most young adults complete high school by earning a regular high school diploma. Others complete high school by earning an alternative credential, such as a GED. Between 1990 and 1999, the diploma rate declined by 4 percentage points, falling from 81 percent to 77 percent. In comparison, the alternative credential rate increased by 5 percentage points, increasing from 4 to 9 percent.⁶⁸

Bullets contain references to data that can be found in Table ED5 on page 108. Endnotes begin on page 58.

Youth Neither Enrolled in School Nor Working

he transition from adolescence to adulthood is a critical period in each individual's life. Youth ages 16 to 19 who are neither in school nor working are detached from both of the core activities that usually occupy teenagers during this period. Detachment from school or the work force, particularly if this situation 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 and/or secured jobs.⁶⁹ 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.



- In 2000, about 8 percent of youth ages 16 to 19 were neither enrolled in school nor working.
- The proportion of youth neither enrolled nor working has been declining since 1991, when it was 11 percent. Most of the decline in the proportion of youth neither enrolled nor working occurred among young women. In 1991, 13 percent of young women were neither in school nor working. By 2000, this proportion had decreased to 9 percent. Nevertheless, young women continue to be more likely to be detached from these activities than young men.
- Black, non-Hispanic and Hispanic youth are considerably more likely to be detached from these activities than white, non-Hispanic youth. In 2000, 13 percent of Hispanic and black, non-Hispanic youth were neither in school nor working, compared with 6 percent of white, non-Hispanic youth.
- The proportion of black, non-Hispanic youth who are neither enrolled in school nor working has decreased from 19 percent in 1984 to 13 percent in

2000. The proportion of Hispanic youth who are neither enrolled in school nor working has also decreased, from 18 percent in 1984 to 13 percent in 2000.

- Older youth, ages 18 to 19, are three times as likely to be detached from these activities as youth ages 16 to 17. In 2000, 12 percent of youth ages 18 to 19 were neither enrolled in school nor working compared with 4 percent of youth ages 16 to 17.
- In contrast to the decrease in the percentage of youth who are neither enrolled in school nor working, the percentage of youth who are both enrolled and employed increased during this time period. Between 1984 and 2000 the percentage of youth ages 16 to 19 who are both enrolled and employed increased from 25 to 30 percent.

Bullets contain references to data that can be found in Tables ED6.A and ED6.B on pages 109-110. Endnotes begin on page 58.

Higher Education

igher education, especially completion of a bachelor's or more advanced degree, generally enhances a person's employment prospects and increases his or her earning potential.⁷⁰ The percentage of high school graduates who have completed a bachelor's degree is one measure of the percentage of young people who have successfully applied for and persisted through a program of higher education.



NOTE: Prior to 1992, this indicator was measured as completing 4 or more years of college rather than the actual attainment of a bachelor's degree.

SOURCE: U.S. Census Bureau, March Current Population Survey. Tabulated by the U.S. Department of Education, National Center for Education Statistics.

- In 2000, 33 percent of high school graduates ages 25 to 29 had earned a bachelor's or a higher degree.
- This percentage increased slightly between 1980 and 1995, from 26 to 28 percent, then increased 3 percentage points between 1995 and 1996 and increased to 33 percent in 2000.
- White, non-Hispanic high school graduates ages 25 to 29 are more likely than either black, non-Hispanic or Hispanic high school graduates in the same age group to have earned a bachelor's degree. Black, non-Hispanic high school graduates are more likely than their Hispanic counterparts to have earned a bachelor's degree. In 2000, 36 percent of white, non-Hispanic, 21 percent of black, non-Hispanic, and 15 percent of Hispanic high school graduates in this age group had earned a bachelor's degree or higher. In addition, the

percentage of black, non-Hispanic high school graduates who earned a bachelor's degree increased from 17 percent in 1999 to 21 percent in 2000.

- In 2000, 10 percent of high school graduates ages 25 to 29 had earned an associate's degree but had not subsequently earned a bachelor's degree.
- Racial and ethnic group differences in rates of enrollment in college are smaller than differences in rates of degree attainment. In 1997, 46 percent of white, non-Hispanic high school graduates ages 18 to 24 were enrolled in college, compared with 39 percent of black, non-Hispanic, and 36 percent of Hispanic high school graduates.⁷¹

Bullets contain references to data that can be found in Table ED7 on page 111. Endnotes begin on page 58.

Indicator Needed

Education

Regular, periodic data collections are needed of young children's cognitive and socioemotional 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 that can be used to monitor specific social, intellectual, and emotional skills of preschoolers over time is needed. One assessment of kindergartners' skills and knowledge was presented as a special feature in *America's Children, 2000.* Another assessment of kindergartners' skills may be available in 2008.

Indicators of Children's Well-Being

Special Features

ollowing are two additional measures of child well-being that are not reported annually in America's Children.

Asthma

A sthma is the most common chronic childhood illness in the United States³⁶ and is a leading cause of childhood disability.^{72,73} Asthma causes limitations in childhood activities, missed school days, missed workdays for caretakers, and in some cases, premature death. Children with asthma use a disproportionate amount of health care services, including over two times as many emergency room visits and three and a half times as many hospitalizations as children without asthma.⁷⁴ The causes of asthma are not fully understood, but it may result from biological components and/or poor environmental conditions. Asthma has been increasing for the past several years, but reasons for the increase are unclear. Some possible explanations include changes in the diagnosis of asthma, variation in the outdoor environment and pollutants, changes in indoor air quality such as parental smoking or airtight homes, changes in access to preventive health care, changes in breastfeeding rates, or changes in socioeconomic status.⁷⁵



NOTE: Data by Hispanic origin were not available in 1981; data for whites and blacks include Hispanics in 1981. For all 3 years, children were categorized as having asthma if the child ever had asthma (1981, 1988), or if they had ever been told by a health professional they had asthma (1998), and if the child had an asthma attack in the last year. Because of these slight differences, data for 1998 are not strictly comparable to previous years.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

- In 1998, about 5 percent of children ages 0 to 17 had asthma. This was up from 3 percent in 1981 and 4 percent in 1988.
- Black, non-Hispanic children had higher rates of asthma than other racial or ethnic groups in 1998, at 7 percent. About 5 percent of both white, non-Hispanic and Hispanic children had asthma.
 Asthma rates have increased for children in each of these groups over time
- As children age, their rates of asthma increase. About 5 percent of children under 5 had asthma, compared with 6 percent of children ages 11 to 17 in 1998.
- Children living below the poverty line are more likely to have asthma than higher-income children. About 7 percent of children below the poverty line had asthma in 1998, compared with 5 percent of children at or above poverty.

Bullets contain references to data that can be found in Table SPECIAL1 on page 112. Endnotes begin on page 58.

Youth Employment While In School

hether young people should work during the school term has received considerable attention in recent years. Work experience can potentially provide positive benefits to young people. For example, it may enable them to learn about the world of work and about balancing different responsibilities. This knowledge can assist in their transition from school to work and into adulthood. A goal of the 1994 School-to-Work Opportunities Act is to strengthen the relationship between schooling and work. However, the employment of youth may, in fact, reduce their study time, increase school-absenteeism, and thus adversely affect their academic achievement.⁷⁶ As young people age, they are increasingly likely to work during the school year in an employee job, that is, a job in which they have an ongoing relationship with a particular employer, such as a restaurant or supermarket.



NOTE: Employee jobs are distinct from freelance jobs, which involve doing one or a few tasks without a specific "boss," like babysitting or mowing lawns, or working for oneself.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997.

- Working while in school is prevalent among older high school students. Nearly 60 percent of students who were 16 years old when the 1997-98 school year began worked for an employer at some point during the academic year.
- Working during the academic year is common even among younger students. Eighteen percent of those who were age 14 at the beginning of the 1997-98 school year worked in an employee job at some point during the school year. For those who were age 15 at the beginning of the school year, 39 percent worked at an employee job.
- Even at these relatively young ages, youth enrolled in school begin forming strong, year-round attachments to the formal labor market. Forty-five percent of working youth age 14 worked both during the school year and the following summer, as did 58 percent of working youth age 15, and 70 percent of working youth age 16.
- Among youth age 14, males were much more likely than females to work at an employee job at some point during the school year. By age 16, however,

this gender differential disappeared. In addition, working males and females at this age were equally likely to work over 90 percent of school weeks.

- Among students age 14, 22 percent of white, non-Hispanics worked while school was in session, compared with 9 percent of black, non-Hispanics, and 13 percent of Hispanics. Among students age 16, 65 percent of white, non-Hispanics worked during the academic year compared with 45 percent of black, non-Hispanics, and 43 percent of Hispanics.
- As students age from 15 to 16, they are both more likely to work during the school year and to work a higher percentage of school weeks.

Bullets contain references to data that can be found in Tables SPECIAL 2.A and SPECIAL 2.B on pages 113-114. Endnotes begin on page 58.

Notes to Indicators

¹ 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 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 sample children in the 1980s.

² The majority of children who live with neither of their parents are living with grandparents or other relatives. Some live with foster parents or other nonrelatives.

³ National Center for Health Statistics. (1995). *Report to Congress on out-of-wedlock childbearing*. Hyattsville, MD: National Center for Health Statistics.

⁴ 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.

⁵ Ventura, S.J., Martin, J.A., Curtin, S.C., Mathews, T.J., and Park, M.M. (2000). Births: Final data for 1998. *National Vital Statistics Reports*, *48* (3). Hyattsville, MD: National Center for Health Statistics.

⁶ Ventura, S.J. (1995). Births to unmarried mothers: United States, 1980-92. *Vital and Health Statistics*, *53* (Series 21). Hyattsville, MD: National Center for Health Statistics.

⁷ Ventura, S.J. and Bachrach, C.A. (2000). Nonmarital childbearing in the United States, 1940-99. *National Vital Statistics Reports*, *48* (16). Hyattsville, MD: National Center for Health Statistics.

⁸ 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.

⁹ Bachu, A. (1999). Trends in premarital childbearing: 1930 to 1994. *Current Population Reports*, P-23-197. Washington, DC: U.S. Census Bureau.

¹⁰ The *birth rate for unmarried women* is the number of births per 1,000 unmarried women in a given age group, for example, 20 to 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 one-third of all births), and the proportion of women of childbearing age who are unmarried. The percentage has increased in recent years, despite small declines in the birth rate for unmarried women, because the birth rate for married women who are unmarried as increased.

¹¹ U.S. Bureau of the Census.(various years). Marital status and living arrangements (annual reports). *Current Population Reports* (Series P-20). (Beginning in 1995, reports are available on the Census Bureau website: http://www.census.gov/population/www/socdemo/ms-la.html.)

¹² Ventura, S.J., Martin, J.A., Curtin, S.C., Menacker, F., and Hamilton, B.E. (2001). Births: Final data for 1999. *National Vital Statistics Reports*, *49* (1). Hyattsville, MD: National Center for Health Statistics.

¹³ 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: U.S. Environmental Protection Agency.

¹⁴ U.S. Environmental Protection Agency. (1995). *Review of the National Ambient Air Quality Standards for Nitrogen Oxides: Assessment of scientific and technical information* (EPA-452/R-95-005). Research Triangle Park, NC: U.S. Environmental Protection Agency.

¹⁵ U.S. Environmental Protection Agency. (1996). *Air quality criteria for ozone and related photochemical oxidants* (EPA/600/P-93/004aF). Research Triangle Park, NC: U.S. Environmental Protection Agency.

¹⁶ U.S. Environmental Protection Agency. (1996). *Air quality criteria for particulate matter* (EPA/600/P-95/001aF). Research Triangle Park, NC: U.S. Environmental Protection Agency.

¹⁷ U.S. Environmental Protection Agency. (1986). *Air quality criteria for lead: Volume III* (EPA-600/8-83/028cF). Research Triangle Park, NC: U.S. Environmental Protection Agency.

¹⁸ Duncan, G. and Brooks-Gunn, J. (Eds.). (1997). Consequences of growing up poor. New York, NY: Russell Sage Press.

¹⁹ 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.

²⁰ These income categories are similar to those used in the Economic report of the President (1998). A similar approach is found in Hernandez, D.J. (1993). *America's children: Resources from family, government, and the economy.* New York: Russell Sage Foundation for the National Committee for Research on the 190 Census, except that Hernandez uses the relationship to median income to define his categories. For either method, the medium and high income categories are at similar levels of median family income.

²¹ Mayer, S.E. (1997). Income, employment and the support of children. In: Hauser, R.M., Brown, B.V., and Prosser, W. (Eds), *Indicators of children's well-being*. New York, NY: Russell Sage Press.

²² Smith, J.R., Brooks-Gunn, J., and Jackson, A.P. (1997). Parental employment and children. In: Hauser, R.M., Brown, B.V., and Prosser, W. (Eds.), *Indicators of children's well-being*. New York, NY: Russell Sage Press.

²³ Kaufman, T. (1996). *Housing America's future: Children at risk*. Washington, DC: National Low Income Housing Coalition.

²⁴ The definition includes households lacking complete plumbing for exclusive use, having unvented room heaters as the primary heating equipment, and multiple upkeep problems such as water leakage, open cracks or holes, broken plaster, or signs of rats.

²⁵ Paying 30 percent or more of income for housing may leave insufficient resources for other basic needs. National Academy of Sciences. (1995). *Measuring poverty: A new approach*. Washington, DC: National Academy Press.

²⁶ Income-eligible families who report either severe housing cost burdens or severe physical problems with their housing and do not receive rental assistance are considered by the U.S. Department of Housing and Urban Development to have "priority" housing problems. Because of questionnaire changes, 1997 and 1999 data on assisted families, priority problems, and severe physical problems are not comparable to earlier data.

²⁷ "Very-low-income renters" are renter households with incomes at or below half the median family income, adjusted for household size, in their geographic area.

²⁸ Life Sciences Research Office and American Institute of Nutrition. (1990). *Core indicators of nutritional state for difficult to sample populations*. Bethesda, MD: Life Sciences Research Office and American Institute of Nutrition.

²⁹ Hamilton, W.L., Cook, J.C., Thompson, W.W., Buron, L.F., Frongillo, E.F., Jr., Olson, C.M., and Wehler, C.A. (1997). *Household food security in the United States in 1995: Summary report of the Food Security Measurement Project.* Report prepared for the U.S. Department of Agriculture, Food and Nutrition Service (formerly Food and Consumer Services), Alexandria, VA.

³⁰ For additional results and more details on the Healthy Eating Index and how it is computed, see Bowman, S.A., Lino, M., Gerrior, S.A., and Basiotis, P.P. (1998). *The Healthy Eating Index: 1994-96* (CNPP-5). U.S. Department of

Agriculture, Center for Nutrition Policy and Promotion. Available at http://www.usda.gov/cnpp.

³¹ The percentages of children covered by government and private insurance in 1999 do not add up to 86 percent (the percentage of all children covered by health insurance), because some children have both government and private insurance.

³² 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.

³³ 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.

³⁴ 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.

³⁵ Folton, G.L. (1995). Critical issues in urban emergency medical services for children. *Pediatrics*, 96 (2), 174-179.

³⁶ Newacheck, P.W. and Starfield, B. (1988). Morbidity and use of ambulatory care services among poor and nonpoor children. *American Journal of Public Health*, 78 (8), 927-933.

³⁷ Newacheck, P.W., Halfon, N., and Budetti, P.P. (1986). Prevalence of activity-limiting chronic conditions among children based on household interviews. *Journal of Chronic Diseases, 39* (2), 63-71.

³⁸ Kiely, J.L., Brett, K.M., Yu, S., and Rowley, D.L. (1994). Low birthweight and intrauterine growth retardation. In Wilcox, L.S. and Marks, J.S. (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.

³⁹ Mathews, T.J., Curtin, S.C., and MacDorman, M.F. (2000). Infant mortality statistics from the 1998 period linked birth/infant death data set. *National Vital Statistics Reports, 48* (12). Hyattsville, MD: National Center for Health Statistics.

⁴⁰ Martin, J.A. and Park, M.M. (1999). Trends in twin and triplet births: 1980-97. *National Vital Statistics Reports*, 47 (24). Hyattsville, MD: National Center for Health Statistics.

⁴¹ Martin, J.A. and Taffel, S.M. (1995). Current and future impact of rising multiple birth ratios on low birthweight. *Statistical Bulletin*, 76 (2). New York, NY: Metropolitan Life Insurance Company.

⁴² Kleinman, J.C. and Kiely, J.L. (1991). Infant mortality. *Healthy People 2000 Statistical Notes*, *1* (2). Hyattsville, MD: National Center for Health Statistics.

⁴³ Centers for Disease Control and Prevention. (1995). Poverty and infant mortality, United States, 1988. *Morbidity and Mortality Weekly Report, 44* (49), 922-927.

⁴⁴ Infant mortality rates for subgroups within an ethnic population are calculated from a separate data set, the National Linked Files of Live Births and Infant Deaths. No linked file was produced for data years 1992 through 1994, as a transition was made from cohort data to period data. For period linked files, the numerator consists of all infant deaths occurring in the period that have been linked to their corresponding birth certificates, whether the birth occurred in that year or the previous year. National Center for Health Statistics. (1997). Public use data file documentation: Linked birth/infant death data set-1995 period data. Hyattsville, MD: National Center for Health Statistics. Prager, K. (1994). Infant mortality by birthweight and other characteristics: United States, 1985 birth cohort. *Vital and Health Statistics, 20* (24). Hyattsville, MD: National Center for Health Statistics. MacDorman, M.F. and Atkinson, J.O. (1998). Infant mortality statistics from the linked birth/infant death data set-1995 period data. *Monthly Vital Statistics Report, 46* (6, Supplement 2). Hyattsville, MD: National Center for Health Statistics.

⁴⁵ Estimates from the Fatality Analysis Reporting System, National Highway Traffic Safety Administration.

⁴⁶ Fingerhut, L.A. and Warner, M. (1997). *Injury chartbook. Health, United States, 1996-97.* Hyattsville, MD: National Center for Health Statistics.

⁴⁷ Klerman, L.V. (1993). Adolescent pregnancy and parenting: Controversies of the past and lessons for the future. *Journal of Adolescent Health, 14*, 553-561.

⁴⁸ Maynard, R.A. (Ed.). (1996). *Kids having kids: A Robin Hood Foundation special report on the costs of adolescent childbearing*. New York, NY: The Robin Hood Foundation.

⁴⁹ Ventura, S.J., Mathews, T.J., and Curtin, S.C. (1998). Declines in teenage birth rates, 1991-97: National and State patterns. *National Vital Statistics Reports*, *47* (12). Hyattsville, MD: National Center for Health Statistics.

⁵⁰ Ventura, S.J., Mosher, W.D., Curtin, S.C., et al. (2001). Trends in pregnancy rates for the United States, 1976-97: An update. *National Vital Statistics Reports, 49* (in preparation). Hyattsville, MD: National Center for Health Statistics.

⁵¹ Lugaila, T.A. (1998). Marital status and living arrangements: March 1998. *Current Population Reports* (Series P20-514). Washington, DC: U.S. Census Bureau.

⁵² Kessler, D.A., Witt, A.M., Barnett, P.S., et al. (1996). The Food and Drug Administration's regulation of tobacco products. *New England Journal of Medicine*, *335* (13), 988-994.

⁵³ Centers for Disease Control and Prevention. (1996). Projected smoking-related deaths among youth–United States. *Morbidity and Mortality Weekly Report, 45* (44), 971-974.

⁵⁴ National Institute on Alcohol Abuse and Alcoholism. (1997). *Ninth special report to the U.S. Congress on alcohol and health, from the Secretary of Health and Human Services, June 1997* (NIH Publication No. 97-4017). Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.

⁵⁵ Blanken, A.J. (1993). Measuring use of alcohol and other drugs among adolescents. *Public Health Reports, 108* (Supplement 1).

⁵⁶ National Institute on Drug Abuse. (1995). *Marijuana: Facts parents need to know* (NCADI Publication No. PHD712). Washington, DC: U.S. Department of Health and Human Services.

⁵⁷ Pope, H.G., Jr. and Yurgelun-Todd, D. (1996). The residual cognitive effects of heavy marijuana use in college students. *Journal of the American Medical Association*, 275 (7).

⁵⁸ U.S. Public Health Service. (1993). Measuring the health behavior of adolescents: The Youth Risk Behavior Surveillance System and recent reports on high-risk adolescents. *Public Health Reports, 108* (Supplement 1).

⁵⁹ Finkelhor, D. and Dziuba-Leatherman, J. (1994). Victimization of children. American Psychologist, 49 (3), 173-183.

⁶⁰ Lauritsen, J.L., Laub, J.H., and Sampson, R. J. (1992). Conventional and delinquent activities: Implications for the prevention of violent victimization among adolescents. *Violence and Victims*, 7 (2), 91-108.

⁶¹ Snyder, H.N. and Sickmund, M. (1999). *Juvenile offenders and victims: 1999 national report* (Publication No. NCJ 178257, p. 26). Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

⁶² Wells, C.G. (1985). Preschool literacy-related activities and success in school. In Olson, D., Torrance, N., and Hildyard, A. (Eds.), *Literacy, language, and learning: The nature and consequences of literacy* (pp. 229-255). Cambridge, England: Cambridge University Press.

⁶³ Barnett, S.W. (1992). Benefits of compensatory preschool education. Journal of Human Resources, 27, 279-312.

⁶⁴ Decker, P.T., Rice, J.K., Moore, M.T., and Rollefson, M. (1997). *Education and the economy: An indicators report*. Washington, DC: National Center for Education Statistics.

⁶⁵ Data on parents' level of education are not reliable for 9-year-olds.

⁶⁶ Chen, X., Tuma, J., Daniel, B., and Scott, L. (2001). *Trends in high school academic coursetaking: Mathematics, science, English, and foreign language course completion.* Washington, DC: National Center for Education Statistics.

⁶⁷ Horn, L., Nunez, A.M., and Bobbitt, L. (2000). *Mapping the road to college: First-generation students' math track, planning strategies, and context for support.* Washington, DC: National Center for Education Statistics.

⁶⁸ Some of these changes may be related to changes in the survey and collection procedures in 1994.

⁶⁹ Brown, B. (1996). *Who are America's disconnected youth?* Report prepared for the American Enterprise Institute. Washington, DC: Child Trends, Inc.

⁷⁰ American Council on Education. (1994). *Higher education today: Facts in brief*. Washington, DC: American Council on Education, Division of Policy Analysis and Research.

⁷¹ National Center for Education Statistics. (1999). *The Condition of Education, 1999.* Washington, DC: National Center for Education Statistics.

⁷² Newacheck, P.W., Budetti, P.P., and Halfon, N. (1986). Trends in activity limiting chronic conditions among children. *American Journal of Public Health*, *76* (2), 178-84.

⁷³ Taylor, W.R. and Newacheck, P.W. (1992). Impact of childhood asthma on health. *Pediatrics*, 90 (5), 657-62.

⁷⁴ Lozano, P., Sullivan, S., Smith, D.H., and Weiss, K.B. (1999). The economic burden of asthma in U.S. children: Estimates from the National Medical Expenditure Survey. *Journal of Allergy and Clinical Immunology, 104* (5), 957-63.

⁷⁵ Weiss, K.B., Gergen, P.J., and Wagener, D.K. (1993) Breathing better or wheezing worse? The changing epidemiology of asthma morbidity and mortality. *Annual Review of Public Health*, *14*, 491-513.

⁷⁶ For a review of the literature on youth employment and its potential consequences see the following: National Research Council. (1998). *Protecting Youth at Work*. Washington, DC: National Academic Press; Ruhm, C. J. (1997). Is High School Employment Consumption or Investment? *Journal of Labor Economics*, 15 (4), 735-76; Schoenhals, M., Tienda, M., and Schneider, B. (1998). The Educational and Personal Consequences of Adolescent Employment. *Social Forces*, 77 (2), 723-62.