America's Children: Key National Indicators of Well-Being 2000

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Federal Interagency Forum on Child and Family Statistics

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he Federal Interagency Forum on Child and Family Statistics was founded in 1994. Executive Order No. 13045 formally established it in April 1997, to foster coordination and collaboration in the collection and reporting of Federal data on children and families. Members of the Forum as of Spring 2000 are listed below.

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Foreword

merica's Children: Key National Indicators of Well-Being, 2000 is the fourth report in an annual series prepared by the Interagency Forum on Child and Family Statistics. A collaborative effort by 20 Federal agencies, including two—the Environmental Protection Agency and the National Highway Traffic Safety Administration—that joined the Forum this year, the report is required by President Clinton's Executive Order No. 13045. As in past years, readers will find here an accessible compendium of indicators—drawn from the most recent, most reliable official statistics—illustrative of both the promises and the difficulties confronting our Nation's young people.

This report updates the information presented last year, maintaining comparability with previous volumes while incorporating several improvements. For example, two data gaps that were identified in earlier reports have been addressed by establishing a background indicator to measure child care utilization and providing further details on children's living arrangements. In addition, this year's report includes a new background measure on exposure to air pollution as well as more detailed information on the causes of children's deaths. Special feature indicators this year include measures of children's knowledge and skills at kindergarten entry and youth involvement in volunteer activities.

By recognizing the gaps in our information, *America's Children* challenges Federal statistical agencies to do better. Forum agencies are meeting that challenge. They are undertaking efforts to provide more comprehensive and consistent information on the condition and progress of the Nation's children. Forum agencies will continue working to close critical data gaps, particularly in areas such as disability, the role of fathers in children's lives, and the measurement of positive behaviors associated with improved child development.

In November 1999, the value of the *America's Children* reports and the extraordinary cooperation they represent were lauded by Vice President Gore's National Partnership for Reinventing Government. The efforts of the Forum were recognized for their contributions to the development of Federal, State, and local policies and programs to improve the lives of children and youth. The "Hammer Award," presented to teams of Federal employees and their partners who have made significant contributions that support reinventing government principles, captures the essence of the Forum's innovative, determined spirit to advance our understanding of where our children are today and what may be needed to bring them a better tomorrow.

The Forum agencies should be congratulated once again this year for joining together to address their common goals: developing a truly comprehensive set of indicators on the well-being of America's children and ensuring that this information is readily accessible in both content and format. Their accomplishments reflect the dedication of the Forum agency staff members who coordinate the assessment of data needs, evaluate strategies to make data presentations more consistent, and work together to produce important publications and provide these products on the Forum's website: http://childstats.gov. And none of this work would be possible without the continued cooperation of thousands of American citizens who willingly provide the data that are summarized and analyzed by staff in the Federal agencies.

We invite you to suggest other ways to enhance this annual portrait of the Nation's most valuable resource: its children. I applaud the Forum's collaborative efforts in producing this fourth annual report and hope that our compendium will continue to be useful in your work.

Katherine K. Wallman

Chief Statistician Office of Management and Budget

Acknowledgments

his report reflects the commitment and involvement of the members of the Federal Interagency Forum on Child and Family Statistics. It was prepared by the Writing Subcommittee of the Reporting Committee of the Forum. This year, the committee was chaired by Katherine Heck, National Center for Health Statistics. Other committee members included Dawn Aldridge, Food and Nutrition Service; Art Hughes, National Institute on Drug Abuse; Alisa Jenny, National Center for Health Statistics; David Johnson, Bureau of Labor Statistics; Laura Lippman, National Center for Education Statistics; and Kristin Smith, Census Bureau.

The Reporting Committee of the Forum, chaired by Katherine Heck, guided the development of the new indicators. Members of the Reporting Committee not represented on the Writing Subcommittee included Linda Gordon, Immigration and Naturalization Service; Laura Montgomery, Ken Schoendorf, Gloria Simpson, and Barbara Foley Wilson, National Center for Health Statistics; Jeff Evans, National Institute of Child Health and Human Development; Matt Stagner, Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services; Woodie Kessel, Office of Disease Prevention and Health Promotion; Cathy Gotschall, National Highway Traffic Safety Administration; Russ Scarato and Stella Yu. Maternal and Child Health Bureau: Susan Schechter, Office of Management and Budget; Tracey Woodruff, Environmental Protection Agency; and Kathy Nelson, Department of Housing and Urban Development.

Other staff members of the Forum agencies provided data, developed indicators, or wrote parts of the report. They include Lynne Casper, Joseph Dalaker, Debbie Dove, Jason Fields, Mary Jane Slagle, Greg Spencer, Census Bureau; Michael Rand, Bureau of Justice Statistics; Robert McIntire and Howard Hayghe, Bureau of Labor Statistics: Monina Klevens and Victor Coronado, Centers for Disease Control and Prevention; Mark Lino and Peter Basiotis, Center for Nutrition Policy and Promotion: Gary Bickel, Food and Nutrition Service; Kathryn Chandler, Chris Chapman, and Jerry West, National Center for Education Statistics; Robin Cohen, Cathy Duran, Lois Fingerhut, Donna Hoyert, and Stephanie Ventura, National Center for Health Statistics; and Barbara Allen-Hagen, Office of Juvenile Justice and **Delinquency Prevention.**

Other individuals who assisted with the report included Steve Agbayani and Yupin Bae, Pinkerton Computer Consultants, Inc., and DeeAnn Brimhall, Kristin Denton, and Linda Shafer, Education Statistics Services Institute.

Westat, in support of the National Center for Health Statistics, assisted the committee in producing the report. Janice Kociol coordinated and managed the production of the report and was the initial copy editor. She also assisted the committee. Christine Winquist Nord provided substantive and technical guidance. Other Westat staff members who assisted in preparing the report included Andrea Forsythe, Peggy Hunker, Nancy Vaden-Kiernan, and Amy Van Driessche.

The following additional staff members made valuable contributions in their reviews of the report: Denise Dougherty, Agency for Healthcare Research and Quality; Larry Beasley and Martin O'Connell, Census Bureau; Deborah Klein, Bureau of Labor Statistics; Steven Carlson, Food and Nutrition Service; Michael Kogan, Maternal and Child Health Bureau; Val Plisko, Ellen Bradburn, and Tom Snyder, National Center for Education Statistics; Bill Huleatt, Office of Family Policy, Department of Defense; and Richard Bavier, Office of Management and Budget.

Carole Benson of Westat edited the final version of the report. Design contributions came from Westat Graphics Arts Dept., who designed the cover, produced and updated the report's tables and figures, and updated and laid out the text. The logo was developed by John Jeter of the National Center for Health Statistics. Patty Wilson, National Center for Health Statistics, coordinated the printing of the report. Finally, the National Maternal and Child Health Clearinghouse distributed the report for the Forum.

Highlights

merica's Children: Key National Indicators of Well-Being, 2000 is the fourth annual report to the Nation on the condition of our most precious resource, our children. Included are eight contextual measures that describe the changing population, family characteristics, and context in which children are living and 23 indicators of well-being in the areas of economic security, health, behavior and social environment, and education. This year, two special features are presented, on kindergartners' knowledge and skills and youth participation in volunteer activities.

Part I: Population and Family Characteristics

- In 1999, there were 70.2 million children under age 18 in the United States, or 26 percent of the population, down from a peak of 36 percent at the end of the baby boom (1964). Children are expected to remain a stable percentage of the total population as they are projected to comprise 24 percent of the population in 2020.
- The racial and ethnic diversity of America's children continues to increase. In 1999, 65 percent of U.S. children were white, non-Hispanic; 15 percent were black, non-Hispanic; 4 percent were Asian or Pacific Islander; and 1 percent were American Indian or Alaska Native. The number of Hispanic children has increased faster than that of any other racial or ethnic group, growing from 9 percent of the child population in 1980 to 16 percent in 1999.
- The family structures of children have become more varied. The percentage of children living with one parent increased from 20 percent in 1980 to 27 percent in 1999. Most children living with single parents live with a single mother. However, the proportion of children living with single fathers doubled over this time period, from 2 percent in 1980 to 4 percent in 1999. Some children live with a single parent who has a cohabiting partner: 16 percent of children living with single fathers and 9 percent of children living with single mothers also lived with their parents' partners.
- In 1999, 54 percent of children from birth through third grade received some form of child care on a regular basis from persons other than their parents, up from 51 percent in 1995.

Part II: Indicators of Children's Well-Being

Economic Security Indicators

- The poverty rate for related children dropped from 19 percent in 1997 to 18 percent in 1998. The poverty rate for children has fluctuated since the early 1980s: it reached a high of 22 percent in 1993 and has since decreased to 18 percent, a rate comparable to that seen in 1980.
- The percentage of children living with their parents where at least one parent was working full time all year increased slightly in 1998 to 77 percent, from 76 percent in 1997.
- Many children live in households that have housing problems, such as physically inadequate housing, crowded housing, or a high cost burden. The percentage of households with children that have these problems has been increasing since 1978; 36 percent had one or more housing problems in 1997, up from 30 percent in 1978.
- The percentage of children experiencing food insecurity decreased in 1999. However, nearly onethird of children in poverty experienced food insecurity.
- While the percentage of children without health insurance remained steady at 15 percent, the percentage with private insurance increased to 68 percent in 1998.

Health Indicators

- The percentage of children born with low birthweight (less than about 5.5 pounds) or very low birthweight (less than about 3.3 pounds) has steadily increased since 1984. About 7.6 percent of infants were low birthweight, and 1.4 percent were very low birthweight, in 1998. The increase in the proportion of low-birthweight infants is partly due to the rising number of twins and other multiple births.
- Death rates for children continued to drop in 1998. For children ages 1 to 4 and 5 to 14, the death rates were 34 and 20 per 100,000 children in each age group, respectively. The leading cause of death in these age groups was unintentional injuries, with most of these fatal injuries resulting from car crashes. Birth defects, cancer, and homicide were also leading causes of death for children ages 1 to 14.

- Deaths among adolescents ages 15 to 19 also continued to decline. In 1997, the adolescent mortality rate was 75 per 100,000 youth ages 15 to 19. Declines in deaths from firearm injuries between 1994 and 1997 contributed to the overall drop in mortality for adolescents.
- The birth rate for adolescents dropped by more than one-fifth between 1991 and 1998. In 1998, the birth rate for 15- to 17-year-olds was 30 per 1,000 females ages 15 to 17, the lowest it has been in at least 40 years.

Behavior and Social Environment Indicators

- The prevalence of heavy drinking among adolescents has been stable over the past few years. In 1999, 31 percent of 12th-graders, 26 percent of 10th-graders, and 15 percent of 8th-graders reported having five or more drinks in a row at least once during the past 2 weeks.
- Violent crimes committed by young people have dropped sharply. In 1998, the serious violent crime offending rate for youth was 27 crimes per 1,000 adolescents ages 12 to 17, totaling 616,000 such crimes involving juveniles—a drop by more than half from the 1993 high, and the lowest level since data were first collected in 1973.

Education Indicators

- In 1999, 53 percent of children ages 3 to 5 were read to daily by a family member, the same as in 1993 after increasing to 57 percent in 1996.
- Between 1996 and 1999, the percentage of children ages 3 to 5 not yet in kindergarten who were enrolled in early childhood centers rose from 55 to 59 percent. The largest increases were among children living in poverty, children with mothers who were not in the labor force, and black, non-Hispanic children.
- The overall high school completion rate for young adults ages 18 to 24 declined from 86 percent in 1997 to 85 percent in 1998. This decline was most pronounced among Hispanics.

Special Features

- Upon entering kindergarten in 1998, 66 percent of children were able to recognize letters and 29 percent knew the sounds made by letters that begin words—important skills in developing the ability to read.
- Fifty-five percent of high school students participated in volunteer activities in 1999, up from 50 percent in 1996. In 1999, 16 percent of these teens performed 35 or more hours of service throughout the school year.

Summary List of Indicators

		Previous Year of Data	New Data	Change Between
Indicator Name	Description of Indicator	Value (Year)	Value (Year)	Years
Economic Security				
Child poverty and family income	Percentage of related children under age 18 in poverty	19 (1997)	18 (1998)	▼
Secure parental employment	Percentage of children under age 18 living with parents with at least one parent employed full time all year	76 (1997)	77 (1998)	
Housing problems	Percentage of households with children under age 18 that report any of three housing problems	36 (1995)	36 (1997)	NS
Food security	Percentage of children under age 18 in households experiencing food insecurity with moderate or severe hunger	4.7 (1998)	3.8 (1999)	▼
	Percentage of children ages 2 to 5 with a good diet	24 (1996)	—	
Access to health care	Percentage of children under age 18 covered by health insurance	85 (1997)	85 (1998)	NS
	Percentage of children under age 18 with no usual source of health care	6 (1996)	7 (1997)	NS
Health				
General health status	Percentage of children under age 18 in very good or excellent health	80 (1996)	81 (1997)	NS
Activity limitation	Percentage of children ages 5 to 17 with any limitation in activity resulting from chronic conditions	8 (1996)	8 (1997)	NS
Childhood immunization	Percentage of children ages 19 to 35 months who received combined series immunization coverage	76 (1997)	79 (1998)	
Low birthweight	Percentage of infants weighing less than 5.5 pounds at birth	7.5 (1997)	7.6 (1998)	
Infant mortality	Deaths before the first birthday per 1,000 live births	7.2 (1997)	7.2 (1998)	NS
Child mortality	Deaths per 100,000 children ages 1 to 4	36 (1997)	34 (1998)	▼
·	Deaths per 100,000 children ages 5 to 14	21 (1997)	20 (1998)	▼
Adolescent mortality	Deaths per 100,000 adolescents ages 15 to 19	79 (1996)	75 (1997)	▼
Adolescent births	Births per 1,000 females ages 15 to 17	32 (1997)	30 (1998)	▼
Behavior and Social Environr	nent			
Regular cigarette smoking	Percentage of 8th-grade students who reported smoking daily in the previous 30 days	9 (1998)	8 (1999)	NS
	Percentage of 10th-grade students who reported smoking daily in the previous 30 days	16 (1998)	16 (1999)	NS
	Percentage of 12th-grade students who reported smoking daily in the previous 30 days	22 (1998)	23 (1999)	NS
Alcohol use	Percentage of 8th-grade students who reported having five or more alcoholic beverages in a row in the last 2 weeks	14 (1998)	15 (1999)	

Indicator Name	Description of Indicator	Previous Year of Data <i>Value (Year)</i>	New Data Value (Year)	Change Between Years
Alcohol use (cont.)	Percentage of 10th-grade students who reported having five or more alcoholic beverages in a row in the last 2 weeks	24 (1998)	26 (1999)	NS
	Percentage of 12th-grade students who reported having five or more alcoholic beverages in a row in the last 2 weeks	32 (1998)	31 (1999)	NS
Illicit drug use	Percentage of 8th-grade students who have used illicit drugs in the previous 30 days	12 (1998)	12 (1999)	NS
	Percentage of 10th-grade students who have used illicit drugs in the previous 30 days	22 (1998)	22 (1999)	NS
	Percentage of 12th-grade students who have used illicit drugs in the previous 30 days	26 (1998)	26 (1999)	NS
Youth victims and perpetrators of serious violent crimes	Rate of serious violent crime victimizations per 1,000 youth ages 12 to 17	27 (1997)	25 (1998)	NS
	Serious violent crime offending rate per 1,000 youth ages 12 to 17	31 (1997)	27 (1998)	NS
Education				
Family reading to young children	Percentage of children ages 3 to 5 who are read to every day by a family member	57 (1996)	53 (1999)	▼
Early childhood care and education	Percentage of children ages 3 to 5 who are enrolled in early childhood centers	55 (1996)	59 (1999)	
Mathematics and reading achievement	Average mathematics scale score of 9-year-olds	231 (1996)	—	
(0-500 scale)	Average mathematics scale score of 13-year-olds	274 (1996)	—	
	Average mathematics scale score of 17-year-olds	307 (1996)	—	
	Average reading scale score of 9-year-olds	212 (1996)	_	
	Average reading scale score of 13-year-olds	259 (1996)	_	
	Average reading scale score of 17-year-olds	287 (1996)	_	
High school completion	Percentage of young adults ages 18 to 24 who have completed high school	86 (1997)	85 (1998)	▼
Youth neither enrolled in school nor working	Percentage of youth ages 16 to 19 who are neither in school nor working	8 (1998)	8 (1999)	NS
Higher education	Percentage of high school graduates ages 25 to 29 who have completed a bachelor's degree or higher	31 (1998)	32 (1999)	NS
Special Features				
Beginning kindergartners' knowledge and skills	Percentage of beginning kindergartners who are proficient in recognizing letters	_	66 (1998)	
	Percentage of beginning kindergartners who often or very often form friendships	_	77(1998)	
	Percentage of beginning kindergartners who often or very often persist at a task	_	71(1998)	
Youth participation in volunteer activities	Percentage of high school students who participated in volunteer activities during the current school year	50 (1996)	55 (1999)	

Legend: NS = No significant change \blacktriangle = Significant increase \blacktriangledown = Significant decrease — = not applicable

About This Report

merica's Children: Key National Indicators of Well-Being, 2000, developed by the Federal Interagency Forum on Child and Family Statistics, represents the fourth annual synthesis of information on the status of the Nation's most valuable resource, our children. This report presents 23 key indicators of the well-being of children. These indicators are monitored through official Federal statistics covering children's economic security, health, behavior and social environment, and education. The report also presents data on eight key demographic measures and includes two indicators as special features: children's knowledge and skills at kindergarten entry and youth participation in volunteer activities. The 20 agencies of the Forum have also introduced improvements in the measurement of several of the indicators presented last year.

What is the purpose of this report?

This report provides the Nation with a broad annual summary of national indicators of child well-being and monitors changes in these indicators over time. The Forum hopes that this report also will stimulate discussions by policy-makers and the public, exchanges between the data and policy communities, and improvements in Federal data on children and families.

What is the Federal Interagency Forum on Child and Family Statistics?

The Forum is a formal structure for collaboration among 20 Federal agencies that produce or use statistical data on children and families. The members of the Forum are listed on the back of the cover page. Building on earlier cooperative activities, the Forum was founded in 1994. It was formally established by Executive Order No. 13045 in 1997 to foster the coordination and integration of the collection and reporting of data on children and families. The two major publications produced by the Forum are America's Children: Key National Indicators of Well-Being (produced annually since 1997) and Nurturing Fatherhood: Improving Data and Research on Male Fertility, Family Formation and Fatherhood (June 1998). In addition, the Forum undertakes the following activities:

- Developing priorities for improving consistency and enhancing the collection of data on children, youth, and families;
- Improving the reporting and dissemination of information on the status of children and families to the policy community and the general public; and

Encouraging the production and dissemination of better data on children and families at the State and local levels.

How is the report structured?

America's Children: Key National Indicators of Well-Being, 2000 is intended to present information and data on the well-being of children in a non-technical, userfriendly format. It is designed to complement other more technical or comprehensive reports produced by the Forum agencies. The report is divided into two parts.

The first part of the report, Population and Family Characteristics, presents data that illustrate the changes that have taken place during the past few decades in eight key demographic measures. These background measures provide an important context for understanding the key indicators and the child population. They also provide basic information about children in the United States, as well as the sociodemographic changes that are occurring in the child population. These data series answer questions such as: How many children are there in the United States? What proportion of the population are children? How racially and ethnically diverse are our children? How many have difficulty speaking English? What types of families do they live in? What is the quality of the environment they live in?

The second part, *Indicators of Children's Well-Being*, contains data on key indicators, or measures, of how well we are doing in providing economic security, educational opportunity, and a healthy and safe environment in which children can play, learn, and grow. Unlike the data presented in Part I of the report, which simply describe the changing context in which children live, the data in Part II offer insight into how well children are faring by providing information in four key areas of child well-being: economic security, health, behavior and social environment, and education.

The economic security indicators document poverty and income among children and the accessibility of basic necessities such as food, housing, and health care. The health indicators document the physical health and well-being of children by presenting information on their general health status, immunization coverage, and their likelihood, at various ages, to die. The behavioral and social environment indicators present information about young people's participation in illegal, dangerous, or high-risk behaviors, such as smoking, drinking alcohol, using illicit drugs, or engaging in serious violent crimes. Finally, the education indicators examine how well we are succeeding in educating our children. They include measures that capture preschoolers' exposure to reading and early education, measures of student achievement, and indicators of how many young adults complete high school and college.

For each background measure in *Part I: Population and Family Characteristics*, and each indicator in *Part II: Indicators of Children's Well-Being*, three types of information are presented:

- A short statement about why the measure or indicator is important to the understanding of the condition of children;
- Figures showing important facts about trends or population groups; and
- Highlights with information on the current status, recent trends, and important differences by population groups noted.

In addition, *Appendix A: Detailed Tables* contains tabulated data for each measure and additional detail not discussed in the main body of the report. *Appendix B: Data Source Descriptions* contains descriptions of the sources and surveys used to generate the indicators.

Why are two indicators called special features?

At the end of Part II, *America's Children: Key National Indicators of Well-Being, 2000* presents data on two "special features." The special features are a regular component of *America's Children*, presenting data that are not available with sufficient frequency to be considered as a regular key indicator, but nevertheless provide important information on child well-being. This year's special features focus on beginning kindergartners' knowledge and skills, and youth participation in volunteer activities.

How has the report changed since last year?

America's Children: Key National Indicators of Well-Being, 2000 is similar to last year's report in both format and content. While most of the indicators presented last year are included and updated, the Forum has worked to improve the report in a number of important ways. Some changes reflect improvements in the availability of data for certain key indicators. Some changes clarify the concept being measured or expand the indicator substantively. There are two new background measures (Child Care and Children's Environments) and two new special features in the report (Beginning Kindergartners' Knowledge and Skills, and Youth Participation in Volunteer Activities). Adequate trend information for early childhood education has allowed for the consolidation of two measures on this topic. All the changes reflect the many helpful comments and suggestions for improvements that were received from readers and users of the previous reports.

How were the key indicators selected?

America's Children: Key National Indicators of Well-Being, 2000 presents a selected set of key indicators that measure critical aspects of children's lives and are collected rigorously and regularly by Federal agencies. The Forum chose these indicators through careful examination of available data. In determining this list of key indicators, the Forum sought input from the Federal policy-making community, foundations, academic researchers, and State and local children's service providers. These indicators were chosen because they are:

- *Easy to understand* by broad audiences;
- Objectively based on substantial research connecting them to child well-being and based on reliable data;
- Balanced so that no single area of children's lives dominates the report;
- Measured regularly so that they can be updated and show trends over time; and
- *Representative* of large segments of the population, rather than one particular group.

What groups of children are included in this report?

In order to convey a comprehensive understanding of child well-being, the report looks at the status of all children under age 18 living in the United States. A few indicators provide data on older youth and young adults (persons ages 18 to 24 years). In most cases throughout the report, the word "children" refers to any person under age 18 living in a civilian or noninstitutionalized setting in the United States. When data are being presented only for specific age groups, this is indicated in the text (e.g., children ages 1 to 4). As is also noted in the text, some indicators examine only particular groups of children (e.g., children living in family settings, children living with parents, children in certain age groups or grade levels). For most of the indicators, the relevant information has been reported by an adult in the household or family and not directly by the children.

In many cases, we have also presented the data on children by race and Hispanic origin. In most cases, Hispanics have been separated from the white and black categories and "non-Hispanic" will follow the race designation, as in "white, non-Hispanic." In some cases, data for Hispanics were not available. In these cases, data for race groups (white, black, American Indian/Alaska Native, Asian/Pacific Islander) include Hispanics.

What are the sources for the data in this report?

Data for the key indicators are drawn primarily from national surveys and from vital records. Federal agencies regularly survey the population on many issues. Some national surveys use interviewers to gather information on children through a variety of methods, including speaking directly, by telephone or in person, with families selected through rigorous sampling methods. Other national surveys are questionnaires distributed directly to youth to measure certain practices and behaviors. In addition, some national data collection efforts directly assess students by giving them tests or by asking them to perform certain tasks, such as identifying sounds and letters. Federal agencies also collect information on births and deaths from State health departments. These nationally representative surveys, along with data collected through vital statistics, provide the best available measures of the condition of U.S. children. Although there are important areas of children's lives where administrative data from local social service agencies often are available, such measures were not included in this report. The availability and quality of such data can be affected by policy differences among agencies in various local areas and by resource constraints. Further information on data sources for this report is provided in Appendix B: Data Source Descriptions.

In the textual presentation of data for this report, percentages and rates were, as a rule, rounded to the nearest whole number (unless the data are from vital statistics or rounding would mask significant differences). The text discusses changes over time or between-group differences only when the differences are statistically significant.

What other data are needed?

America's Children: Key National Indicators of Well-Being, 2000 points to critical gaps in the coverage and timeliness of the Nation's information on children and youth. It challenges the Nation as a whole—and the Federal statistical agencies in particular—to improve the monitoring of important areas of children's lives. It also challenges Federal agencies to improve the timeliness with which information on children is made available to policy-makers and the public.

At the end of *Part I: Population and Family Characteristics* and at the end of each section in *Part II: Indicators of*

Children's Well-Being, the report presents a description of data and measures of child well-being in need of development. These lists include many important aspects of children's lives for which regular indicators are lacking or are in development, such as homelessness, long-term poverty, mental health, disability, neighborhood environment, and early childhood development. In some of these areas, the Forum is exploring ways to collect new measures and improve existing ones. In others, Forum agencies have successfully fielded surveys incorporating some new measures but they are not yet available on a regular basis for monitoring purposes.

Where can I get more information about the indicators?

There are several good places to obtain additional information on each of the indicators found in this report. First, for many of the indicators, *Appendix A:* Detailed Tables contains additional detail not discussed in the main body of the report. For example, some tables show additional breakouts by gender, race, and Hispanic origin or another category. Second, Appendix B: Data Source Descriptions contains information and descriptions of the sources and surveys used to generate the indicators as well as information on how to contact the agency responsible for collecting the data or administering the relevant survey. Third, numerous publications of the Federal statistical agencies provide additional detail on each of the key indicators included in this report, as well as on scores of other indicators. These reports include Trends in the Well-Being of America's Children and Youth, published annually by the Office of the Assistant Secretary for Planning and Evaluation in the U.S. Department of Health and Human Services; Youth Indicators, published biennially by the National Center for Education Statistics; and Health, United States, published annually by the National Center for Health Statistics, Centers for Disease Control and Prevention. Often these compendia contain additional details not reported in America's Children. Appendix B: Data Source Descriptions also contains a list of agency contacts who can provide further information on the relevant surveys and indicators.

Can I find this report on the Internet?

The report can be found on the World Wide Web at http://childstats.gov. The website version of the report contains data for earlier years that are presented in the figures but not in the tables in this report. The Forum's website also contains information on the overall structure and organization of the Forum, as well as other reports, and news on current activities. Also found on the website are links to related reports

of Forum agencies and other organizations providing more detailed data. The website addresses of the Forum agencies are as follows:

Agency Websites

Department of Agriculture Food and Nutrition Service: http://www.fns.usda.gov **Department of Commerce Census Bureau:** http://www.census.gov **Department of Defense** Office of the Deputy Assistant Secretary of Defense (Personnel Support, Families and Education): http://mfrc.calib.com **Department of Education** National Center for Education Statistics: http://www.nces.ed.gov **Department of Health and Human Services** Administration for Children and Families: http://www.acf.dhhs.gov Agency for Healthcare Research and Quality: http://www.ahrq.gov Maternal and Child Health Bureau: http://www.mchb.hrsa.gov National Center for Health Statistics: http://www.cdc.gov/nchs National Institute of Child Health and Human **Development:** http://www.nichd.nih.gov Office of the Assistant Secretary for Planning and **Evaluation:** http://aspe.os.dhhs.gov

Department of Housing and Urban Development Office of Policy Development and Research: http://www.huduser.org **Department of Justice Bureau of Justice Statistics:** http://www.ojp.usdoj.gov/bjs National Institute of Justice: http://www.ojp.usdoj.gov/nij Office of Juvenile Justice and Delinquency **Prevention:** http://www.ojjdp.ncjrs.org **Department of Labor Bureau of Labor Statistics:** http://www.bls.gov Women's Bureau: http://www.dol.gov/dol/wb **Department of Transportation** National Highway Traffic **Safety Administration:** http://www.nhtsa.dot.gov **Environmental Protection Agency** Office of Children's **Health Protection:** http://www.epa.gov/children National Science Foundation **Division of Science Resources Studies:** http://www.nsf.gov/sbe/srs Office of Management and Budget **Statistical Policy Office:** http://www.whitehouse.gov/omb

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Population and Family Characteristics

P art I: Population and Family Characteristics presents data that illustrate the changes in the population and family context in which America's children are being raised. Eight key measures present data on trends in the size and composition of the child population, the composition of their families, and the environment in which they live. The background measures provide an important context for understanding the key indicators of well-being presented in Part II.

Number of Children in the United States

The number of children determines the demand for schools, health care, and other services and facilities that serve children and their families.



- In 1999, there were 70.2 million children in the United States, 0.3 million more than in 1998. This number is projected to increase to 77.2 million in 2020.
- The number of children under 18 has grown during the last half-century, increasing about half again in size since 1950.
- During the "baby boom" (1946 to 1964), the number of children grew rapidly.
- During the 1970s and 1980s, the number of children declined and then grew slowly.

- Beginning in 1990, the rate of growth in the number of children increased, although not as rapidly as during the baby boom.
- In 1999, there were approximately equal numbers of children—between 23 and 24 million—in each age group 0 to 5, 6 to 11, and 12 to 17 years of age.

Bullets contain references to data that can be found in Table POP1 on page 66.

Children as a Proportion of the Population

hough children represent a smaller percentage of the population today than in 1960, they are nevertheless a stable and substantial portion of the population.



- In 1999, children made up 26 percent of the population, down from a peak of 36 percent at the end of the "baby boom."
- Since the mid-1960s, children have been decreasing as a proportion of the total U.S. population.
- Children are projected to remain a fairly stable percentage of the total population. They are projected to comprise 24 percent of the population in 2020.
- In contrast, senior citizens (adults ages 65 and older) have increased as a percentage of the total population since 1950, from 8 to 13 percent. By

2020, they are projected to make up 17 percent of the population.

Together, children and senior citizens make up the "dependent population": those persons who, because of their age, are less likely to be employed than others. In 1950, children made up 79 percent of the dependent population; by 1999, they made up 67 percent. This percentage is expected to continue to decrease, to 59 percent in 2020.

Bullets contain references to data that can be found in Table POP2 on page 66.

Racial and Ethnic Composition

R acial and ethnic diversity has grown dramatically in the United States in the last three decades. This increased diversity first manifests itself among children, and later in the older population. This diversity is projected to increase even more in the decades to come.



- In 1999, 65 percent of U.S. children were white, non-Hispanic; 15 percent were black, non-Hispanic; 16 percent were Hispanic; 4 percent were Asian/Pacific Islander; and 1 percent were American Indian/Alaska Native.
- The percentage of children who are white, non-Hispanic has decreased from 74 percent in 1980 to 65 percent in 1999.
- The percentages of black, non-Hispanic and American Indian/Alaska Native children have been fairly stable during the period from 1980 to 1999.
- The number of Hispanic children has increased faster than that of any other racial and ethnic group, growing from 9 percent of the child population in 1980 to 16 percent in 1999. By 2020, it is projected that more than 1 in 5 children in the United States will be of Hispanic origin.
- The percentage of Asian/Pacific Islander children doubled from 2 to 4 percent of all U.S. children between 1980 and 1999. Their percentage is projected to continue to increase to 6 percent in 2020.
- Increases in the percentages of Hispanic and Asian/Pacific Islander children are due to both fertility and immigration. Much of the growth in the percentage of Hispanic children is due to the relatively high fertility of Hispanic women.

Bullets contain references to data that can be found in Table POP3 on page 67.

Difficulty Speaking English

C hildren who speak languages other than English at home and who also have difficulty speaking English¹ may face greater challenges progressing in school and, once they become adults, in the labor market. Once it is determined that a student speaks another language, school officials must, by law, evaluate the child's English ability to determine whether the student needs services such as special instructions to improve his or her English and provide these services if needed.



SOURCE: U.S. Bureau of the Census, October 1995 Current Population Survey. Tabulated by the U.S. Department of Education, National Center for Education Statistics.

- The number of school-age children (ages 5 to 17) who spoke a language other than English at home and who had difficulty speaking English was 2.4 million in 1995, up from 1.3 million in 1979. This represented 5 percent of all school-age children in the United States.
- The percentage of children who speak English with difficulty varies by region of the country, from 2 percent of children in the Midwest to 11 percent of children in the West.
- Likewise, the percentage of children who speak another language at home (with or without difficulty speaking English) varies by region of the country, from 6 percent of children in the Midwest

to 26 percent of children in the West. This difference is due largely to differing concentrations of immigrants and their descendents in the regions.

Children of Hispanic or other (mostly Asian) origin are more likely than white, non-Hispanic and black, non-Hispanic children to have difficulty speaking English. Thirty-one percent of children of Hispanic origin and 14 percent of children of Asian or other origin had difficulty speaking English in 1995, compared with 1 percent of white, non-Hispanic or black, non-Hispanic children.

Bullets contain references to data that can be found in Table POP4 on page 68. Endnotes begin on page 58.

Family Structure and Children's Living Arrangements

The number of parents living with a child is generally linked to the amount and quality of human and economic resources available to that child. Children who live in a household with one parent are substantially more likely to have family incomes below the poverty line than are children who live in a household with two parents.



Percentage of children under age 18 by presence of parents in household, 1980-99



- In 1999, 68 percent of American children lived with two parents, down from 77 percent in 1980.
- In 1999, almost a quarter (23 percent) of children lived with only their mothers, 4 percent lived with only their fathers, and 4 percent lived with neither of their parents.²
- Since 1996, the percentage of children living with only one parent has not changed significantly.
- Among the factors associated with change in the percentage of children living with just one parent is the percentage of births that were to unmarried mothers.³
- White, non-Hispanic children are much more likely than black children and somewhat more likely than Hispanic children to live with two parents. In 1999, 77 percent of white, non-Hispanic children lived with two parents, compared with 35 percent of black children and 63 percent of children of Hispanic origin.

Most children spend the majority of their childhood living with two parents; however, significant proportions of children have more diverse living arrangements. Information about the presence of parents and other adults in the family, such as the parent's unmarried partner, grandparents, and other relatives, is important for understanding children's social, economic, and developmental well-being.



- A more detailed picture of children's living arrangements can be provided by a different data source than that used in POP5.A. The most recent data on various living arrangements is from 1996, 3 years earlier than the data presented in POP5.A, page 6. Therefore, the percentages shown in POP5.A are different from those in POP5.B. In 1996, there were 71.5 million children under age 18. Seventy-one percent of them lived with two parents, 25 percent lived with one parent, and about 4 percent lived in households without parents.
- Among children living with two parents, 91 percent lived with both biological or adoptive parents and 9 percent lived with a biological or adoptive parent and a stepparent. About four-fifths of children living with a stepparent lived with their mother and a stepfather.
- About 3 percent of children who lived with both biological or adoptive parents had parents who were not married.
- The majority of children living with one parent lived with their single mother. Some of these single parents had cohabiting partners. Sixteen percent of

children living with single fathers and 9 percent of children living with single mothers also lived with their parents' partners. Overall, 3.3 million children (5 percent) lived with a parent or parents who were cohabiting.

- Among the 2.6 million children (4 percent) not living with either parent in 1996, half (1.3 million) lived with grandparents, while about 21 percent lived with other relatives, and another 22 percent lived with nonrelatives. Of children in nonrelatives' homes, about half (313,000) lived with foster parents.
- Older children were less likely to live with two parents—66 percent of children ages 15 to 17, compared with 74 percent of children under age 5 and 71 percent of those ages 5 to 14. Among children living with two parents, older children were more likely than younger children to live with a stepparent and less likely to live with cohabiting parents.

Bullets contain references to data that can be found in Tables POP 5.A and POP5.B on pages 69 to 71. Endnotes begin on page 58.

Births to Unmarried Women

Increases in births to unmarried women are among the many changes in American society that have affected family structure and the economic security of children.³ Children of unmarried mothers are at higher risk of having adverse birth outcomes, such as low birthweight and infant mortality, and are more likely to live in poverty than children of married mothers.⁴⁻⁶



Birth rates for unmarried women by age of mother, 1980-98



- There were 44 births for every 1,000 unmarried women ages 15 to 44 in 1998.
- Between 1980 and 1994, the birth rate for unmarried women ages 15 to 44 increased from 29 to 47 per 1,000. The rate has since stabilized and declined; between 1994 and 1997-98, the rate fell slightly to 44 per 1,000.
- During the 1980-94 period, birth rates increased sharply for unmarried women in all age groups. The birth rate for unmarried women ages 15 to 17 increased from 21 to 32 per 1,000, and the rate for unmarried women ages 18 to 19 rose from 39 to 70 per 1,000. The birth rate for unmarried women ages 20 to 24 increased from 41 to 72 per 1,000. Between 1994 and 1998, rates by age declined for all women under age 20 and stabilized for women 20 and older.
- The long-term rise between 1960 and 1994 in the nonmarital birth rate is linked to a number of factors. The proportion of women of childbearing

age who are unmarried increased (from 29 percent in 1960 to 46 percent in 1994), concurrent with an increase in nonmarital cohabitation. About 20 to 25 percent of unmarried women ages 25 to 44 were in cohabiting relationships in 1992 to 94.7 The likelihood that a single pregnant woman will marry before the child is born declined steeply from the early 1960s to the early 1980s and continued to fall, although more modestly, through the early 1990s.⁸ At the same time, childbearing within marriage declined: births to married women declined from 4 million in 1960 to 2.7 million in 1994, and the birth rate for married women fell from 157 per 1,000 in 1960 to 84 per 1,000 in 1994.^{5,6} All of these measures stabilized in the mid-1990s, as the nonmarital birth rate also steadied.

hildren are at greater risk for adverse consequences when born to a single mother because the social, emotional, and financial resources available to the family may be more limited.⁴ The proportion of births to unmarried women is useful for understanding the extent to which children born in a given year may be affected by any disadvantage—social, financial, or health—associated with being born outside of marriage. This measure is also useful in monitoring trends and variations in births to unmarried women at the State and local levels.⁹ The percentage of births to unmarried women is affected by several factors, including birth rates for married and unmarried women and the number of unmarried women. Significant changes occurred in all these measures between 1980 and 1998.^{5,6,10}



SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

- In 1998, 33 percent of all births were to unmarried women.
- The percentage of all births to unmarried women rose sharply from 18 percent in 1980 to 33 percent in 1994. From 1994 to 1997, the proportion was relatively stable at about 32 percent, and then increased slightly to 33 percent in 1998.^{5,6}
- During the 1980-98 period, the proportions of births to unmarried women rose sharply for women in all age groups. Among teenagers, the proportions were high throughout the period and continued to rise, from 62 to 87 percent for ages 15 to 17 and from 40 to 74 percent for ages 18 to 19. The proportions more than doubled for births to women in their twenties, rising from 19 to 48 percent for ages 20 to 24 and from 9 to 22 percent for ages 30 and older increased from 8 to 14 percent.^{5,6,11}
- While about one-third of all births were to unmarried women in 1998, 4 in 10 first births were nonmarital. Nearly two-thirds of women under age 25 having their first child were not married.
- The increases in the proportions of births to unmarried women, especially during the 1980s, are linked to sharp increases in the birth rates for unmarried women during this period, concurrent with declines in birth rates for married women. In addition, the number of unmarried women increased by about one-fourth.^{5,6,10}

Bullets contain references to data that can be found in Tables POP6.A and POP6.B on page 72. Endnotes begin on page 58.

Child Care

Increasing proportions of children are spending substantial amounts of time in the care of a child-care provider other than their parents. While researchers continue to assess the effects of child care on child development, it is important to monitor over time the way many children receive care. Children receive a variety of types of care, including care in home by a relative, care in home by a nonrelative, and center-based care or early education. This indicator presents the most recent data on the proportion of children receiving care on a regular basis from persons other than their parents, and the types of settings where that care is provided, by the age of the child.



NOTE: Some children participate in more than one type of arrangement, so the sum of all arrangement types exceeds the total percentage in nonparental care. Center-based programs include day care centers, prekindergartens, nursery schools, Head Start programs, and other early childhood education programs. Relative and nonrelative care can take place in either the child's own home or another home.

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

- In 1999, 54 percent of children from birth through 3rd grade received some form of child care on a regular basis from persons other than their parents. This translates to close to 20 million children and represents an increase over 1995, when 51 percent of children through 3rd grade received child care.
- The type of child care received is related to the age of the child. Children from birth through age 2 were more likely to be in home-based care, either with a relative or nonrelative, than to be in centerbased care. Forty-two percent were in home-based care (about 25 percent with a relative and 17 percent with a nonrelative), and about 16 percent were in center-based care in 1999.
- Children ages 3 to 6 who are not yet in kindergarten are more likely to be in a center-based child-care arrangement, which includes nursery schools and other early childhood education programs. Fiftynine percent of these children were in center-based

care, compared to 39 percent in home-based care (23 percent in relative care and 16 percent in nonrelative care) in 1999.

- Kindergartners were more likely to be in home-based care (32 percent) than in center-based care (22 percent).
- Among children attending 1st through 3rd grade, children were more likely to be in home-based care with a relative (21 percent) than in a center (18 percent) or in a home with a nonrelative (9 percent) in 1999.
- About 22 percent of 3- to 6-year-olds were in multiple types of arrangements, compared with 6 percent in the other age groups.

Bullets contain references to data that can be found in Table POP7 on page 73.

Children's Environments

The environment in which children live plays an important role in their health and development. Children need a clean, safe place in which they can grow and play. Children may be more vulnerable to environmental contaminants because of their increased potential for exposure to pollutants, since they eat, drink, and breathe more per body weight than adults. In addition, environmental contaminants in air, food, drinking water, and other sources are associated with a number of different ailments, and these contaminants may disproportionately affect children because they are still developing.¹²⁻¹⁶ One important measure of environmental quality is the percentage of children living in areas that do not meet the National Ambient Air Quality Standards. Polluted air is associated with increased asthma episodes and other respiratory illnesses. While air pollution is one important measure of children's environments, further research is needed to develop a more complete measure of overall environmental quality for children.



NOTE: Nitrogen dioxide and sulfur dioxide are not included in the graph because essentially all areas met the Primary National Ambient Air Quality Standards for these pollutants after 1991.

SOURCE: U.S. Environmental Protection Agency, Office of Air and Radiation, Aerometric Information Retrieval System.

- In 1998, 24 percent of children lived in areas that did not meet at least one of the Primary National Ambient Air Quality Standards, down from 31 percent in 1990. The Clean Air Act established Primary National Ambient Air Quality Standards which are designed to establish limits to protect public health, including the health of sensitive populations such as asthmatics and children. The U.S. Environmental Protection Agency has set national air quality standards for six principal pollutants (referred to as "criteria" pollutants): carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), and sulfur dioxide (SO₂).
- EPA is seeking to implement new national ambient air quality standards for particulate matter and ozone in order to better protect public health. The new

standards were set, in part, to protect children. Both particulate matter and ozone can cause respiratory problems and aggravate respiratory diseases, such as asthma, in children. These problems can lead to hospital and emergency room visits.

- Ozone accounts for most of the areas that do not meet the Primary National Ambient Air Quality Standards.
- In 1998, 2 percent of children, or approximately 1 million, lived in areas that did not meet the National Ambient Air Quality Standard for lead. High levels of lead are dangerous to children because they can lead to neurological and developmental effects.

Bullets contain references to data that can be found in Table POP8 on page 74. Endnotes begin on page 58.

Population and Family Characteristics

Current data collection systems at the national level do not provide extensive detailed information on children's lives, their families and their caregivers. Certain topical databases provide some of this information, but it needs to be collected across domains of child well-being and to be collected regularly enough to discern trends in where, how, and with whom children spend their time. This year's report expands upon last year's by augmenting the background measure on family structure, by adding information on children's living arrangements, as well as by adding new measures on child-care utilization and children's environments. More data are also needed on:

- Family interactions. Information is needed about children's interactions with non-resident parents, particularly fathers, and about the establishment of paternity.
- *Time use.* A regular source of data is needed to track how and where children spend their time and how these patterns change over time. For example, data on how much time children spend in school, in day care, in after-school activities, using a computer, and interacting with one or both parents and how much time youth spend at work would provide valuable insights. Currently, Federal surveys collect information on the amount of time children spend on certain activities, such as watching television, but no regular Federal data source examines time spent on the whole spectrum of children's activities. The inclusion in surveys of additional questions on time use by children and adults is currently being investigated by several member agencies of the Federal Interagency Forum on Child and Family Statistics. The Bureau of Labor Statistics has plans to conduct a continuous time use survey, beginning in 2003, that will cover time invested in the care of children as well as time spent in other market and non-market activities.
- Children's environments. Further data are needed to monitor the environments of children and their potential exposure to environmental contaminants. In particular, data are needed to describe children's potential exposure to contaminants in drinking water and food. Further work is needed to evaluate the available data sources to determine if they are appropriate for monitoring exposures to environmental contaminants in food and drinking water.

Indicators of Children's Well-Being

Economic Security Indicators

Part II: Indicators of Children's Well-Being contains data on key indicators that measure the health, security, and safety of the environment in which children play, learn, and grow. Unlike the data presented in Part I of the report, which simply describe the changing context in which children live, the data series in Part II offer insight into the condition of American children by providing information in four key areas of child well-being: economic security, health, behavior and social environment, and education.

Child Poverty and Family Income

hildhood poverty has both immediate and lasting negative effects. Children in low-income families fare less well than children in more affluent families for many of the indicators presented in this report, including indicators in the areas of economic security, health, and education. Compared with children living in families above the poverty line, children living below the poverty line are more likely to have difficulty in school,¹⁷ to become teen parents,¹⁸ and, as adults, to earn less and be unemployed more frequently.¹⁷ The child poverty rate provides important information about the percentage of U.S. children whose current circumstances make life difficult and jeopardize their future economic well-being.



NOTE: Estimates refer to children who are related to the householder and who are under age 18. In 1998, the average poverty threshold for a family of four was \$16,660 in annual income.

SOURCE: U.S. Census Bureau, March Current Population Survey.

- The poverty rate for related children dropped from 19 percent in 1997 to 18 percent in 1998. The poverty rate for children has fluctuated since the early 1980s: it reached a high of 22 percent in 1993 and has since decreased to 18 percent, a rate comparable to 1980.
- Children under age 6 are more likely to be living in families with incomes below the poverty line than children ages 6 to 17. In 1998, 21 percent of children under age 6 lived in poverty, compared with 17 percent of older children.
- Children in married-couple families are much less likely to be living in poverty than children living only with their mothers. In 1998, 9 percent of children in married-couple families were living in poverty, compared to 46 percent in female-householder families.
- This contrast by family structure is especially pronounced among certain racial and ethnic groups. For example, in 1998, 12 percent of black children in married-couple families lived in poverty, compared with 55 percent of black children in female-

householder families. Twenty-three percent of Hispanic children in married-couple families lived in poverty, compared with 60 percent in femalehouseholder families.

- Most children in poverty are white, non-Hispanic. However, the poverty rate of black or Hispanic children is much higher than the poverty rate of white, non-Hispanic children. In 1998, 10 percent of white, non-Hispanic children lived in poverty, compared with 36 percent of black children and 34 percent of Hispanic children.
- In 1998, 8 percent of all children lived in families with incomes less than half the poverty level, or \$8,330 a year on average for a family of four, while 29 percent of children lived in families with incomes less than 150 percent of the poverty level, or \$24,990 a year on average for a family of four.
- Children under 18 continue to represent a very large segment of the poor population (37 percent) even though they are only about 26 percent of the total population.

he full distribution of the income of children's families is important, not just the percentage in poverty. Knowing that more and more children live in affluent families tells us that a growing proportion of America's children enjoy economic well-being. The growing gap between rich and poor children suggests that poor children may experience more relative deprivation even if the percentage of poor children is holding steady.



NOTE: Estimates refer to children who are related to the householder and who are under age 18. The income classes are derived from the ratio of the family's income to the family's poverty threshold. Extreme poverty is less than 50 percent of the poverty threshold (i.e., \$8,330 for a family of four in 1998). Poverty is between 50 and 99 percent of the poverty threshold (i.e., between \$8,330 and \$16,659 for a family of four in 1998). Low income is between 100 and 199 percent of the poverty threshold (i.e., between \$16,660 and \$33,319 for a family of four in 1998). Medium income is between 200 and 399 percent of the poverty threshold (i.e., between \$33,320 and \$66,639 for a family of four in 1998). High income is 400 percent of the poverty threshold or more.¹⁹ SOURCE: U.S. Census Bureau, March Current Population Survey.

- In 1998, more children lived in families with medium income (34 percent) than in other income groups. Smaller percentages of children lived in families with low income and with high income, 21 and 27 percent, respectively.
- The percentage of children living in families with medium income has fallen from 41 percent in 1980 to 34 percent in 1998, while the percentage of children living in families with high income and the percentage of children in extreme poverty have

risen, from 17 to 27 percent and from 7 to 8 percent, respectively. The data indicate that income disparities have increased among families with children.

Bullets contain references to data that can be found in Tables ECON1.A and ECON1.B on pages 75 and 76. Endnotes begin on page 58.

Secure Parental Employment

S ecure parental employment reduces the incidence of poverty and its attendant risks to children. Since most parents obtain health insurance for themselves and their children through their employers, a secure job can also be a key variable in determining whether children have access to health care. Secure parental employment may also enhance children's psychological well-being and improve family functioning by reducing stress and other negative effects that unemployment and underemployment can have on parents.²⁰ One measure of secure parental employment is the percentage of children whose resident parent or parents were employed full time during a given year.



- Since 1990, the trend in secure parental employment has paralleled the overall trend in unemployment. The percentage of children who had at least one parent working full time all year continued to increase in 1998 to 77 percent from 76 percent in 1997.
- A disproportionate share of the increase in the percentage of children living with at least one parent employed full time all year was due to the increase in the percentage of children living with single mothers who are employed, which increased from 33 percent in 1993 to 44 percent in 1998.
- In 1998, 89 percent of children living in two-parent families had at least one parent who was a full-time, year-round worker. In contrast, 70 percent of children living with a single father and 44 percent of children living with a single mother had a parent who worked full time all year.
- Black, non-Hispanic children and Hispanic children were less likely than white, non-Hispanic children to have a parent working full time all year. In 1998, 58 percent of black, non-Hispanic children and 68 percent of Hispanic children had a parent working

full time all year, compared with 84 percent of white, non-Hispanic children.

- Children living in poverty were much less likely to have a parent working full time all year than children living at or above the poverty line, 31 percent and 87 percent, respectively. For children living with both parents, 56 percent of poor children had at least one parent working full time all year compared with 92 percent of children living above poverty. For children living with single mothers, the differences are much larger. Seventeen percent of those below the poverty line and 66 percent of those above it had a parent working full time all year.
- Between 1980 and 1998, the percentage of children living in two-parent families in which both the mother and father worked full time all year increased from 17 to 31 percent.

Bullets contain references to data that can be found in Table ECON2 on page 77. Endnotes begin on page 58.

Housing Problems

Inadequate, crowded, or costly housing can pose serious problems to children's physical, psychological, or material well-being.²¹ The percentage of households with children that report that they are living in physically inadequate,²² crowded, and/or costly housing provides an estimate of the percentage of children whose well-being may be affected by their family's housing.



SOURCE: U.S. Census Bureau and the U.S. Department of Housing and Urban Development, Annual Housing Survey and American Housing Survey. Tabulated by the U.S. Department of Housing and Urban Development.

- In 1997, 36 percent of U.S. households with children, both owners and renters, had one or more of three housing problems: physically inadequate housing, crowded housing, or housing that cost more than 30 percent of household income.²³
- The share of U.S. households with children that have any housing problems rose between 1978 and 1995 and has since stabilized.
- Inadequate housing, defined as housing with severe or moderate physical problems, has become slightly less common. In 1997, 7 percent of households with children had inadequate housing, compared with 9 percent in 1978.
- Crowded housing, defined as housing in which there is more than one person per room, has also declined slightly among households with children, from 9 percent in 1978 to 7 percent in 1997.
- Improvements in housing conditions, however, have been accompanied by rising housing costs. Between 1978 and 1997, the percentage of households with children with a cost burden—that is, paying more than 30 percent of their income for housing—rose from 15 percent to 28 percent. The percentage with severe cost burdens, paying more than half of their income for housing, rose from 6 to 12 percent.

- Households that receive no rental assistance and have severe cost burdens or physical problems are defined as having severe housing problems.²⁴ In 1997, 11 percent of households with children had severe housing problems. Although the 1997 data are not directly comparable to estimates for earlier years, severe housing problems increased from 8 percent in 1978 to 12 percent in 1995 because of a rise in the percentage of families reporting severe cost burdens.
- Severe housing problems are especially prevalent among very-low-income renters.²⁵ In 1997, 28 percent of very-low-income renter households with children reported severe housing problems, with severe cost burden again the major problem. Although the percentage of these families having severe housing problems has fallen since 1978, the number with such problems grew from 1.4 million in 1978 to 1.7 million in 1997, again because the number of households with severe cost burdens rose.

Bullets contain references to data that can be found in Table ECON3 on page 79. Endnotes begin on page 58.

Food Security

hildren's good health and development depend on a diet sufficient in nutrients and calories. Food security has been defined as access at all times to enough nourishment for an active, healthy life. At a minimum, food security includes the ready availability of sufficient, nutritionally adequate, and safe food and the assurance that families can obtain adequate food without relying on emergency feeding programs or resorting to scavenging, stealing, or other desperate efforts to secure food.²⁶ A family's ability to provide for children's nutritional needs is linked to income or other resources and secure access to adequate, nutritious food. Members of food-insecure households are at risk of hunger. The following indicator measures food insecurity on a scale that indicates increasing levels of severity of food insecurity and, at the more severe levels, hunger. Food-insecure households without hunger report having difficulty obtaining enough food, reduced quality of diets, anxiety about their food supply, and increasingly resorting to emergency food sources and other coping behaviors, but do not report hunger to a significant degree. Food-insecure households with hunger report multiple indicators of hunger among adults and, at more severe levels, among children.



NOTE: See Table ECON4.A for details on the food security scale. Data for 1996 and 1997 are not shown because they are not strictly comparable with data for 1995, 1998, and 1999 due to methodology differences.

SOURCE: U.S. Census Bureau, Food Security Supplement to the Current Population Survey. U.S. Department of Agriculture, Economic Research Service and Food and Nutrition Service, Office of Analysis and Evaluation.

- In 1999, 3.8 percent of children lived in households experiencing food insecurity with hunger, primarily among adults (children's hunger becomes prevalent only at more severe levels of adult hunger).
- Children living in households below poverty are much more likely than other children to live in households experiencing food insecurity with hunger. In 1999, 11.8 percent of children in households with incomes below the Federal poverty level experienced food insecurity with hunger, compared with 1.9 percent of children in households with income above the poverty level.
- Most food-insecure households do not report actual hunger for household members. In 1999, 13.1 percent of all children and 32.2 percent of poor children lived in households experiencing food insecurity without hunger.
- The number of children who actually experience hunger themselves, even though they may live in a food-insecure household where one or more family members experience hunger, is believed to be significantly smaller than the total number of children living in such households. This is because in most such households the adults go without food, if necessary, so that the children will have food.²⁷

The diet quality of children and adolescents is of concern because poor eating patterns established in childhood usually transfer to adulthood. Such patterns are major factors in the increasing rate of child obesity over the past decades and are contributing factors to certain diseases. The Healthy Eating Index (HEI) is a summary measure of diet quality. The HEI consists of 10 components, each representing different aspects of a healthful diet. Components 1 to 5 measure the degree to which a person's diet conforms to the U.S. Department of Agriculture's Food Guide Pyramid serving recommendations for the five major food groups: grains, vegetables, fruits, milk, and meat/meat alternatives. Components 6 and 7 measure fat and saturated fat consumption. Components 8 and 9 measure cholesterol intake and sodium intake, and component 10 measures the degree of variety in a person's diet. Scores for each component are given equal weight and added to calculate an overall HEI score. This overall HEI score is then used to determine diet quality based on a scale established by nutrition experts.²⁸



NOTE: The maximum combined score for the 10 components is 100. An HEI score above 80 implies a good diet, an HEI score between 51 and 80 implies a diet that needs improvement, and an HEI score less than 51 implies a poor diet.

SOURCE: U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, Continuing Survey of Food Intakes by Individuals.

- In 1996, most children and adolescents had a diet that was poor or needed improvement, as indicated by their HEI score.
- As children get older, their diet quality declines. In 1996, among children ages 2 to 5, 24 percent had a good diet and 8 percent had a poor diet. For those ages 13 to 18, 6 percent had a good diet and 20 percent had a poor diet.
- The lower-quality diets of older children are linked to declines in their fruit and milk consumption.
- Children in families below poverty are less likely than higher-income children to have a diet rated as good. For children ages 2 to 5, 19 percent of those

in poverty had a good diet in 1994-96, compared with 28 percent of those living above the poverty line.

The diet quality of children and adolescents was similar in 1994, 1995, and 1996—most children in each of these years had a diet that was poor or needed improvement.

Bullets contain references to data that can be found in Tables ECON4.A, ECON4.B, ECON4.C, and ECON4.D on pages 80-82. Endnotes begin on page 58.

Access to Health Care

hildren with access to health care have reasonable assurance of obtaining the medical and dental attention needed to maintain their physical well-being. Access involves both the availability of a regular source of care and the ability of the child's family, or someone else, to pay for it. Children with health insurance (government or private) are much more likely than children without insurance to have a regular and accessible source of health care. The percentage of children who have health insurance coverage at least part of the year is one measure of the extent to which families can obtain preventive care or health care for a sick or injured child.



NOTE: Government health insurance for children consists primarily of Medicaid, but also includes Medicare, SCHIP (the State Children's Health Insurance Program), and CHAMPUS (Civilian Health and Medical Program of the Uniformed Services). CHAMPUS is a health benefit program for all members of the armed forces and their dependents. It is being replaced by Tricare.

SOURCE: U.S. Census Bureau, March Current Population Survey.

- In 1998, 85 percent of children had health insurance coverage. This rate has fluctuated around 86 percent since 1987.
- The number of children who had no health insurance at any time during 1998 was 11.1 million (15 percent of all children). Neither the number nor the percentage of uninsured children was significantly higher than the 1997 figures of 10.7 million and 15 percent.
- The proportion of children covered by private health insurance has decreased in recent years, from 74 percent in 1987 to 68 percent in 1998. During the same period, the proportion of children covered by government health insurance has grown from 19 percent to 23 percent.²⁹
- Hispanic children are less likely to have health insurance than either white, non-Hispanic or black children. In 1998, 70 percent of Hispanic children were covered by health insurance, compared with 89 percent of white, non-Hispanic children and 80 percent of black children.
- Overall rates of coverage vary by the age of child children ages 6 to 11 are more likely to be insured than those 0 to 5 or 12 to 17. Preschoolers (0 to 5) and teenagers (12 to 17) have similar insurance coverage rates. Type of insurance varies across all three age groups; government-provided insurance decreases, but private health insurance increases with age.

The health of children depends at least partially on their access to health services. Health care for children includes physical examinations, preventive care, health education, observations, screening, immunizations, and sick care.³⁰ Having a usual source of care—a particular person or place a child goes for sick and preventive care—facilitates the timely and appropriate use of pediatric services.^{31,32} Emergency rooms are excluded here as a usual source of care because their focus on emergency care generally excludes the other elements of health care.³³



NOTE: Emergency rooms are excluded as a usual source of care. In 1997, the National Health Interview Survey was redesigned. Data for 1997 are not strictly comparable with earlier data.

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

- In 1997, 7 percent of children had no usual source of health care, according to a parent or household adult.
- Between 1993 and 1997, the percentage of children with no usual source of health care declined from 8 percent to 7 percent.
- The overall declines mask large health insurancerelated disparities in the percentage of children having no usual source of care. In 1997, children with public insurance, such as Medicaid, were substantially more likely to have no usual source of care than were children with private insurance.
- Uninsured children are much more likely to have no usual source of care than are children who have health insurance. Children who were uninsured were over eight times as likely as those with private insurance to have no usual source of care in 1997.

- In addition, the percentage of uninsured children who had no usual source of care increased from 22 to 28 percent between 1994 and 1997.
- In 1997, 13 percent of children in families below the poverty line had no usual source of care, compared with 5 percent of children in higherincome families.
- Older children are slightly more likely than younger children to lack a usual source of health care. In 1997, 8 percent of children ages 5 to 17 had no usual source of care, compared with 4 percent of children ages 0 to 4.

Bullets contain references to data that can be found in Tables ECON5.A and ECON5.B on pages 83 and 84. Endnotes begin on page 58.

Part II: Indicators of Children's Well-Being 21
Economic Security

Economic security is multifaceted, and several measures are needed to adequately represent its various aspects. While this year's report provides some information on economic and food security, additional indicators are needed on:

- Economic security. Changes in children's economic well-being over time need to be anchored in an average standard of living context. Multiple measures of family income or consumption, some of which might incorporate estimates of various family assets, could produce more reliable estimates of changes in children's economic well-being over time.
- Long-term poverty for families with children. Although good Federal data are available on child poverty and alternative measures are being developed (see Indicator ECON1, Child Poverty and Family Income, and the discussion of alternative poverty rates on page 76), the surveys that collect these data

do not capture information on long-term poverty. Long-term poverty among children can be estimated from existing longitudinal surveys, but changes to current surveys would be needed to provide estimates on a regular basis. Since longterm poverty can have serious negative consequences for children's well-being, regularly collected and reported data are needed to provide the capacity to produce regular estimates.

Homelessness. At present, there are no regularly collected data on the number of homeless children in the United States, although there have been occasional studies that have sought to estimate this number.

Indicators of Children's Well-Being

Health Indicators

General Health Status

he health of children and youth is basic to their well-being and optimal development. Parental reports of their children's health provide one indication of the overall health status of the Nation's children. This indicator measures the percentage of children whose parents report them to be in very good or excellent health.



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

- In 1997, about 81 percent of children were reported by their parents to be in very good or excellent health.
- Child health varies by family income. Children living below the poverty line are less likely than children in higher-income families to be in very good or excellent health. In 1997, about 68 percent of children in families below the poverty line were in very good or excellent health, compared with 86 percent of children in families living at or above the poverty line.
- Children under age 5 are about as likely to be in very good or excellent health as children ages 5 to 17.
- The percentage of children in very good or excellent health remained stable between 1984 and 1997. The health gap between children below and those at or above the poverty line also did not change during the time period. Each year, children at or above the poverty line were about 20 percentage points more likely to be in very good or excellent health than children whose families were below poverty.

Bullets contain references to data that can be found in Table HEALTH1 on page 85. See indicator ECON1.A and ECON1.B on pages 14 and 15 for a description of child poverty.

Activity Limitation

hildren whose activities are limited by one or more chronic health conditions may need more specialized health care than children without such limitations. Their medical costs are generally higher; they are more likely to miss days from school; and they may require special education services.³⁴ Researchers use parental reports on limitations associated with chronic conditions to determine the prevalence of activity limitations. Chronic conditions (such as asthma, hearing impairment, or diabetes) included in this measure usually have a duration of more than 3 months. Activities include going to school, playing, and any other activities of children.



NOTE: In 1997, the National Health Interview Survey was redesigned. Data for 1997 are not strictly comparable with earlier data. SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

- In 1997, 8 percent of children ages 5 to 17 were limited in their activities because of one or more chronic health conditions, compared with 3 percent of children younger than 5. Children and youth ages 5 to 17 have much higher rates of activity limitation than younger children, possibly because some chronic conditions are not diagnosed until children enter school.
- Children and youth in families living below the poverty line have significantly higher rates of activity limitation than children in more affluent families. Among children and youth ages 5 to 17, 11 percent of children living below poverty had activity limitations due to chronic conditions, whereas 8 percent of children in families at or above poverty had a limitation in 1997.
- From 1984 to 1997, activity limitation increased from 9 to 11 percent among children ages 5 to 17 in families living below the poverty line. Among

children ages 5 to 17 in families at or above the poverty line, activity limitation increased from 6 to 8 percent.

- The difference in activity limitation by income is also present among preschool-age children. Children ages birth to 4 in families below poverty had a rate of activity limitation that was higher than for children in families at or above poverty.
- Males ages 5 to 17 were more likely than females in the same age group to have activity limitations for all years from 1984 to 1997.

Bullets contain references to data that can be found in Table HEALTH2 on page 86. Endnotes begin on page 58.

Childhood Immunization

A dequate immunization protects children against several diseases that killed or disabled many children in past decades. Rates of childhood immunization are one measure of the extent to which children are protected from serious vaccine-preventable illnesses. The combined immunization series (often referred to as the 4:3:1:3 combined series) rate measures the extent to which children have received four key vaccinations.



NOTE: Vaccinations included in the combined series are 4 doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP)/diphtheria and tetanus toxoids (DT) vaccine, 3 doses of polio vaccine, 1 dose of a measles-containing vaccine (MCV), and 3 doses of Haemophilus influenzae type b (Hib) vaccine.

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

- In 1998, 79 percent of children ages 19 to 35 months had received the combined series of vaccines (often referred to as the 4:3:1:3 combined series).
- Children with family incomes below the poverty level had lower rates of coverage with the combined series than children with family incomes at or above the poverty line—74 percent of children below poverty compared with 82 percent of higher-income children.
- Overall and for children living above and below the poverty level, coverage with the combined series increased 3 percentage points between 1997 and 1998. However, the gap in coverage between children in families living above and below the poverty level remained stable at 8 percentage points.
- Coverage with three or more doses of Hib vaccine among children ages 19 to 35 months remained relatively stable at 93 percent.
- In 1998, coverage with three or more doses of hepatitis B vaccine among children ages 19 to 35 months increased 3 percentage points, to 87 percent.

- Rates of coverage with the full series of vaccines were higher among white, non-Hispanic children than among black, non-Hispanic or Hispanic children. Eighty-two percent of white, non-Hispanic children ages 19 to 35 months received these immunizations compared with 73 percent of black, non-Hispanic children and 75 percent of Hispanic children.
- In 1998, coverage with varicella vaccine among children ages 19 to 35 months increased substantially, from 26 percent to 43 percent. Gains in coverage for varicella vaccine were seen among all children regardless of race or ethnicity and poverty level; however, children living at or above the poverty line had higher coverage levels.

Bullets contain references to data that can be found in Table HEALTH3 on page 87.

Low Birthweight

ow-birthweight infants (infants born weighing less than 2,500 grams, or about 5.5 pounds) are at higher risk of death or long-term illness and disability than are infants of normal birthweight.^{35,36} Low-birthweight infants are a diverse group: some are born prematurely, while others are small for their gestational age.



SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

- The percentage of infants born of low birthweight was 7.6 in 1998, up slightly from 7.5 percent in 1997. The low-birthweight rate has increased slowly but steadily since 1984. The 1998 rate is the highest since 1973.⁵
- The low-birthweight rate for black, non-Hispanic infants declined during the 1990s, to 13.1 percent in each year, 1996 and 1997, before rising slightly to 13.2 in 1998, but is still higher than levels reported for the early to mid-1980s. The low-birthweight rate has risen during the 1990s for white, non-Hispanic infants, from 5.6 percent in 1990 to 6.6 percent in 1998. The rate of low birthweight among Hispanic infants remained at 6.4 percent in 1998. The rate of low birthweight for American Indian/Alaska Native infants was 6.8 percent, and the overall rate for Asian/Pacific Islander infants was 7.4 percent in 1998.
- The percentage of low-birthweight births varies widely within Hispanic and Asian/Pacific Islander subgroups. Among Hispanics, women of Mexican origin had the lowest percentage of low-birthweight

infants (6.0 percent) and Puerto Ricans the highest (9.7 percent). Among Asian/Pacific Islander subgroups, low birthweight was lowest for births to women of Chinese origin (5.3 percent) and highest for women of Filipino origin (8.2 percent).

- About 1.4 percent of infants were born with very low birthweight (less than 1,500 grams) in each year between 1996 and 1998, up from 1.3 percent in each year between 1989 and 1995, and 1.2 percent in each year between 1981 and 1988.
- One reason for the increase in low birthweight over the past several years is that the number of twin, triplet, and higher-order multiple births has increased.^{5,37,38} Twins and other multiples are much more likely than singleton infants to be of low birthweight; 54 percent of twins and 94 percent of triplets, compared with 6 percent of singletons, were of low birthweight in 1998.⁵

Bullets contain references to data that can be found in Table HEALTH4 on page 88. Endnotes begin on page 58.

Infant Mortality

Infant mortality is defined as the death of an infant before his or her first birthday. The infant mortality rate is an important measure of the well-being of infants, children, and pregnant women because it is associated with a variety of factors, such as maternal health, quality of access to medical care, socioeconomic conditions, and public health practices.³⁹ 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 or the pregnancy, such as preterm delivery or birth defects. About one-third of infant deaths occur after the first month and may be influenced by social or environmental factors, such as exposure to cigarette smoke or access to health care.⁴⁰



NOTE: 1998 data are preliminary. Data are available for 1983-91 and 1995-98. SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Linked File of Live Births and Infant Deaths and National Vital Statistics System.

- The 1998 infant mortality rate for the United States, according to preliminary data, was 7.2 deaths per 1,000 births, substantially below the 1983 rate of 10.9.
- Infant mortality data are available by mother's race and ethnicity through 1997.⁴¹ Black, non-Hispanics have consistently had a higher infant mortality rate than white, non-Hispanics. In 1997, the black, non-Hispanic infant mortality rate was 13.7, compared with 6.0 for white, non-Hispanics.
- Infant mortality has dropped for all race and ethnic groups over time, but there are still substantial racial and ethnic disparities in infant mortality. In 1997, black, non-Hispanic and American Indian/Alaska Native infants had significantly higher infant mortality rates than white, non-

Hispanic, Hispanic, and Asian/Pacific Islander infants. In 1997, infant mortality rates varied from 5.0 among Asian/Pacific Islander infants and 6.0 among Hispanics to 8.7 among American Indians/Alaska Natives.

Infant mortality rates also vary within race and ethnic populations. For example, among Hispanics in the United States, the infant mortality rate ranged from 5.5 for infants of Central and South American and Cuban origin to a high of 7.9 for Puerto Ricans. Among Asians/Pacific Islanders, infant mortality rates ranged from 3.1 for infants of Chinese origin to 5.8 for Filipinos.

Bullets contain references to data that can be found in Table HEALTH5 on page 89. Endnotes begin on page 58.

Child Mortality

C hild mortality rates are the most severe measure of ill health in children. These rates have generally declined over the past two decades. In 1997, unintentional injuries, birth defects, and cancer were the leading causes of death among children ages 1 to 4, while at ages 5 to 14, unintentional injuries, cancer, and homicide were the leading causes of death.



Death rate among children ages 1 to 4 by race and Hispanic origin, 1980-98



NOTE: Total includes American Indians/Alaska Natives. Mortality rates for American Indians/Alaska Natives are not shown separately because the numbers of deaths were too small for the calculation of reliable rates. 1998 data are preliminary. SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.





Deaths per 100,000 children ages 1-4

- In 1998, the death rate for children ages 1 to 4 was 34 per 100,000 children, according to preliminary data.
- Among children ages 1 to 4, black children had the highest death rate in 1998, at 61 per 100,000 children (preliminary data). Asian/Pacific Islander children had the lowest death rate, at 19 per 100,000.
- Between 1980 and 1998, the death rate declined by almost half for children ages 1 to 4.
- Among children ages 1 to 4, unintentional injuries were the leading cause of death, followed by birth defects. The mortality rate from unintentional injuries in 1997 was about half of what it was in 1980, having declined from about 26 to 13 per 100,000. Mortality from birth defects also declined by about half, from 8 deaths per 100,000 in 1980 to 4 in 1997.
- Most unintentional injury deaths among children result from motor vehicle traffic crashes. Use of child restraint systems, including safety seats, booster seats, and seat belts, can greatly reduce the number and severity of injuries to child occupants of motor vehicles. In 1997, 66 percent of child occupants ages 1 to 4 who died in crashes were unrestrained.⁴²

Indicator HEALTH6.B

Death rate among children ages 5 to 14 by race and Hispanic origin, 1980-98



NOTE: Total includes American Indians/Alaska Natives. Death rates for American Indians/Alaska Natives are not shown separately because the numbers of deaths were too small for the calculation of reliable rates. 1998 data are preliminary.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.



- The death rate in 1998 for children ages 5 to 14 was 20 per 100,000 children, according to preliminary data.
- Among children ages 5 to 14, black children had the highest death rates in 1998 at 29 deaths per 100,000 (preliminary data), and Asians/Pacific Islanders had the lowest death rate at 14.
- Between 1980 and 1998, the death rate declined by almost one-third, from 31 to 20 deaths per 100,000 children ages 5 to 14.
- Among children ages 5 to 14, unintentional injuries were the leading cause of death, followed by cancer, homicide, and birth defects.
- The majority of unintentional injury deaths among children ages 5 to 14 result from motor vehicle traffic crashes. Over 75 percent of children ages 5 to 14 who died in traffic crashes in 1997 were not wearing a seatbelt or other restraint.⁴²

Bullets contain references to data that can be found in Tables HEALTH6.A and HEALTH6.B on pages 90 and 91. Endnotes begin on page 58.

Adolescent Mortality

C ompared with younger children, adolescents ages 15 to 19 have much higher mortality rates. Adolescents are much more likely to die from injuries sustained from motor vehicle traffic accidents or firearms.⁴³ This difference illustrates the importance of looking separately at mortality rates and causes of death among teenagers ages 15 to 19.



Mortality rate among adolescents ages 15 to 19 by cause of death, 1980-97



SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

- In 1997, the death rate for adolescents ages 15 to 19 was 75 deaths per 100,000. After increasing to 89 per 100,000 in 1991, the rate declined again and continues to be substantially lower than the rate in 1980. Injury, which includes homicide, suicide, and unintentional injuries, continues to account for nearly 4 out of 5 deaths among adolescents.
- Injuries from motor vehicles and firearms are the primary causes of death among youth ages 15 to 19. Motor vehicle traffic-related injuries accounted for 36 percent of deaths in this age group during 1997, while injuries from firearms accounted for 25 percent.⁴⁴
- Motor vehicle injuries were the leading cause of death among adolescents for each year between 1980 and 1997, but the death rate declined by onethird during the time period. Little change, however, has occurred since 1992.
- In 1980, motor vehicle traffic-related deaths among adolescents ages 15 to 19 occurred almost three times as often as firearm injuries (intentional and unintentional).
- Motor vehicle traffic-related and firearm death rates have followed different trends since 1980. From 1980 to 1985, both rates declined; in the following years, however, the motor vehicle traffic death rate continued to decline modestly while the firearm death rate increased markedly. During the years 1992-94, the two rates differed only slightly. However, since 1994, the firearm death rate has decreased by one-third while the motor vehicle death rate has only decreased slightly, increasing the relative difference between the two causes again.
- Most of the increase in firearm injury deaths between 1985 and 1992 resulted from an increase in homicides. The firearm homicide rate among 15- to 19-year-olds more than tripled from 5 to 18 per 100,000 between 1983 and 1993. At the same time, the firearm suicide rate rose from 5 to 7 per 100,000. From 1994 to 1997, the firearm homicide rate declined by nearly one-third and the firearm suicide rate declined by about one-fourth.



Injury death rate among adolescents ages 15 to 19 by gender, race, Hispanic origin, and type of injury, 1997

Deaths per 100,000 adolescents ages 15-19



- Motor vehicle and firearm injury deaths were both more common among male than among female adolescents. In 1997, the motor vehicle traffic death rate for males was nearly twice the rate for females, and the firearm death rate among males was seven times that for females.
- Among adolescents in 1997, motor vehicle injuries were the most common cause of death among white, non-Hispanic males and females; black, non-Hispanic females; and Hispanic females. Firearm injuries were the most common cause of death among black, non-Hispanic and Hispanic males. Black, non-Hispanic males were three times as likely to die from a firearm injury as from a motor vehicle traffic injury.
- Deaths from firearm suicides were more common than deaths from firearm homicides among white, non-Hispanic adolescents. Deaths from firearm homicides were more common than deaths from firearm suicides among black, non-Hispanic and Hispanic adolescents.

- Motor vehicle and firearm mortality declined more for males than for females between 1994 and 1997.
- Deaths from firearm injuries among teenagers declined substantially between 1994 and 1997, particularly among black, non-Hispanic and Hispanic males. From 1994 to 1997, the firearm homicide rates for Hispanic and black, non-Hispanic adolescent males declined substantially to 33 and 81 per 100,000, respectively.

Bullets contain references to data that can be found in Table HEALTH7 on page 92. Endnotes begin on page 58.

Adolescent Births

B earing a child during adolescence is often associated with long-term difficulties for the mother, her child, and society. The birth rate of adolescents under age 18 is a measure of particular interest because the mothers are still of school age. Compared with babies born to older mothers, babies born to adolescent mothers, particularly young adolescent mothers, are at higher risk of low birthweight and infant mortality.^{5,36} They are more likely to grow up in homes that offer lower levels of emotional support and cognitive stimulation, and they are less likely to earn high school diplomas. For the mothers, giving birth during adolescence is associated with limited educational attainment, which in turn can reduce future employment prospects and earnings potential.⁴⁵ These consequences are often attributable to poverty and the other adverse socioeconomic circumstances that frequently accompany early childbearing.⁴⁶



NOTE: Rates for 1980-89 are calculated for all whites and all blacks. Rates for 1980-89 are not shown for Hispanics; white, non-Hispanics or black, non-Hispanics because estimates for these populations were not available.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

- In 1998, the adolescent birth rate was 30 per 1,000 young women ages 15 to 17. There were 173,231 births to these young women in 1998. The 1998 rate was a record low for the Nation.⁵
- The birth rate among teenagers ages 15 to 17 declined from 39 to 30 births per 1,000 between 1991 and 1998. This decline follows a period of substantial increase between 1986 and 1991. During the early 1980s, the rate declined slightly and reached a low in 1986.
- There are substantial racial and ethnic disparities in birth rates among adolescents ages 15 to 17. In 1998, the birth rate for this age group was 14 per 1,000 for Asians/Pacific Islanders, 18 for white, non-Hispanics, 44 for American Indians/Alaska Natives, 59 for black, non-Hispanics, and 62 for Hispanics.
- The birth rate for black, non-Hispanic females ages 15 to 17 dropped by nearly one-third between 1991 and 1998, essentially reversing the increase from 1986 to 1991. The birth rate for white, non-Hispanic teens declined by more than one-fifth during 1991-98. In contrast, the birth rate for Hispanics in this age group did not begin to decline until after 1994; the rate fell by one-sixth from 1994 to 1998.

- In 1998, 87 percent of births to young teenagers were births to unmarried mothers, compared with 62 percent in 1980.
- While nearly four-fifths of all adolescent births are first births, the steepest decline in birth rates for young teenagers in the 1990s has been for second births to adolescents who have already had one child.^{5,47}
- The pregnancy rate (the sum of births, abortions, and fetal losses per 1,000) declined by one-sixth for teenagers ages 15 to 17 during 1990-96, reaching a record low of 68 per 1,000 in 1996. Rates for births, abortions, and fetal losses declined for young teenagers in the 1990s.⁴⁸
- Declines in overall teenage birth rates are greater than the reductions observed for unmarried teenagers (POP6A). Birth rates for married teenagers have fallen sharply in the 1990s, but relatively few teenagers are married.⁴⁹

Bullets contain references to data that can be found in Table HEALTH8 on page 93. Endnotes begin on page 58.

Indicators Needed

Health

National indicators in several key dimensions of health are not yet available because of difficulty in definitions and measurement, particularly through survey research. The following health-related areas have been identified as priorities for indicator development by the Federal Interagency Forum on Child and Family Statistics:

- *Disability*. Research continues toward the development of improved measures of disability among children that can be derived from regularly available data. Disability in children may involve chronic health conditions or limitations in mobility and physical movement, sensory and communicative ability, activities of daily living, or cognitive and mental health functions. Many definitions of disability are currently in use by policy-makers and researchers, but there is little agreement regarding which components should be included, or how they are best measured. Parental or individual perceptions of limitations, the severity and impact of the limitation, and access to health care and services affect any estimate of disability among children.
- Mental health. Efforts are currently underway to evaluate data from a mental health indicator that could be used in national surveys to estimate the number of children with mental, emotional, and behavioral problems. The National Institute of Mental Health and the Center for Mental Health

Services in the Substance Abuse and Mental Health Services Administration are working with other Forum agencies and academic researchers to determine data needs on mental health for children as well as the best methods of obtaining the data.

Child abuse and neglect. Also needed are regular, reliable estimates of the incidence of child abuse and neglect that are based on sample surveys rather than administrative records. Since administrative data are based on cases reported to authorities, it is likely that these data underestimate the magnitude of the problem. Estimates based on sample survey data could potentially provide more accurate information; however, a number of issues still persist, including how to effectively elicit this sensitive information, how to identify the appropriate respondent for the questions, and whether there is a legal obligation to report abuse or neglect.

Indicators of Children's Well-Being

Behavior and Social Environment Indicators

Regular Cigarette Smoking

S moking has serious long-term consequences, including the risk of smoking-related diseases, increased health care costs associated with treating these illnesses, and the risk of premature death.⁵⁰ 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.⁵¹ These consequences underscore the importance of studying patterns of smoking among adolescents.



- In 1999, 8 percent of 8th-graders, 16 percent of 10th-graders, and 23 percent of 12th-graders reported smoking cigarettes daily in the previous 30 days. Rates of daily smoking peaked in 1996 for 8th- and 10th-graders (between 1991 and 1999) and in 1997 for 12th-graders (between 1980 and 1999). Among 8th- and 10th-graders, daily smoking declined steadily between 1996 and 1999. Among 12th-graders, daily smoking decreased between 1997 and 1998 and remained unchanged in 1999.
- Although the 1998 daily smoking rate among 12thgraders decreased from its high mark of 25 percent in 1997, the 1999 rate of 23 percent is the second highest since 1979. Long-term trends for high school seniors show that daily smoking declined from 21 percent in 1980 to 17 percent in 1992 and has been higher in subsequent years in spite of some fluctuations between 1996 and 1998.
- Females and males report similar rates of daily smoking. Seven percent of 8th-grade males smoke daily, while 16 percent of 10th- and 24 percent of 12th-grade males do so. For females, rates are 8, 16, and 22 percent for 8th-, 10th-, and 12th-graders, respectively.
- Rates of smoking differ substantially among racial and ethnic groups. White students have the highest rates of smoking, followed by Hispanics and then blacks. In 1999, 27 percent of white 12th-graders reported daily smoking, compared with 14 percent of Hispanics and 8 percent of blacks.

Bullets contain references to data that can be found in Table BEH1 on page 94. 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.⁵² 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 1999, heavy drinking remained unchanged from 1998, with 31 percent of 12th-graders, 26 percent of 10th-graders, and 15 percent of 8th-graders reporting heavy drinking (i.e., having at least five drinks in a row in the previous 2 weeks).
- Long-term trends for high school 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 1995, the prevalence of this behavior has held fairly steady, ranging from 30 percent in 1995 to 32 percent in 1998.
- Among 10th- and 12th-graders, males are more likely to drink heavily than are females. In 1999, 38 percent of 12th-grade males reported heavy drinking, compared to 24 percent of 12th-grade females. Among 10th-graders, 30 percent of males reported heavy drinking, compared to 22 percent of females. As adolescents get older, the differences between males and females in this drinking behavior become more pronounced.

- For the youngest students surveyed, males are still more likely to report heavy alcohol use than are females. However, the difference in rates is not as pronounced as in the older grades. Among 8th-graders in 1999, 16 percent of males and 14 percent of females reported heavy alcohol use.
- Heavy drinking is much more common 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 36 percent of whites and 29 percent of Hispanics. Similarly, among 10th-graders, 13 percent of blacks reported heavy drinking, compared with 27 percent of whites and 28 percent of Hispanics.

Bullets contain references to data that can be found in Table BEH2 on page 95. Endnotes begin on page 58.

Illicit Drug Use

D 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.⁵³ Marijuana use poses both health and cognitive risks, particularly for damage to pulmonary functions as a result of chronic use.⁵⁴ Hallucinogens can affect brain chemistry and result in problems with learning new information and memory.⁵⁵ Possession or use of drugs is illegal and can lead to a variety of penalties and a permanent criminal record. 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 and PCP), amphetamines, and nonmedical 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 unchanged between 1998 and 1999. In 1999, 26 percent of 12th-graders reported using illicit drugs in the previous 30 days, as did 22 percent of 10th-graders and 12 percent of 8thgraders.
- The percentage of students in each grade level reporting illicit drug use in the past 30 days increased substantially between 1992 and 1996 from 14 to 25 percent for 12th-graders, from 11 to 23 percent for 10th-graders, and from 7 to 15 percent for 8th-graders. Since 1996, rates have remained stable or have 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 and remaining stable in 1998 and 1999.
- Among 12th-graders, males are more likely to use illicit drugs than females. In 1999, 29 percent of male 12th-graders reported using illicit drugs, compared with 23 percent of females. For 8thgraders, however, males and females are equally likely to report the use of illicit drugs, with 13 percent of males and 12 percent of females reporting use in the last 30 days.
- Twenty-seven percent of white 12th-graders reported illicit drug use in 1999, compared with 20 percent of black and 24 percent of Hispanic 12thgraders. Among 10th-graders, 23 percent of whites, 16 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 17 percent for Hispanics.

Bullets contain references to data that can be found in Table BEH3 on page 96. 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, serious violence can adversely affect victims' mental health and development and increase the likelihood that they themselves will commit acts of serious violence.⁵⁶ Youth ages 12 to 17 are nearly three times more likely than adults to be victims of serious violent crimes,⁵⁷ which include aggravated assault, rape, robbery (stealing by force or threat of violence), and homicide.



NOTE: Serious violent crimes include aggravated assault, rape, robbery, and homicide. Aggravated assault is an attack with a weapon, regardless of whether or not an injury occurred, or an attack without a weapon when serious injury resulted. Robbery is stealing by force or threat of force. 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 1998, the rate at which youth were victims of serious violent crimes was 25 crimes per 1,000 juveniles ages 12 to 17, totaling about 570,000 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 to 25 per 1,000 in 1998.
- Males are nearly twice as likely as females to be victims of serious violent crimes. In 1998, the

serious violent crime victimization rate was 32 per 1,000 male youth, compared with 17 per 1,000 female youth.

■ Younger teens (ages 12 to 14) are somewhat less likely than older teens (ages 15 to 17) to be victims of serious violent crimes. In 1998, the serious violent crime victimization rates were 20 per 1,000 for younger teens and 29 per 1,000 for older teens. The level of youth violence in society can be viewed as an indicator of the collective failure on the part of socializing agents such as families, peers, schools, and religious institutions to supervise or channel youth behavior to acceptable norms and of youth to control their behavior. One measure of the serious violent crime committed by juveniles is the incidence rate of serious violent juvenile crime.



NOTE: The numerator is the number of violent crimes (aggravated assault, rape, and robbery) 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. The denominator is the number of juveniles in the population. Aggravated assault is an attack with a weapon, regardless of whether or not an injury occurred, or an attack without a weapon when serious injury resulted. Robbery is stealing by force or threat of force. 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 1998, the serious violent juvenile crime offending rate was 27 crimes per 1,000 juveniles ages 12 to 17, totaling 616,000 such crimes involving juveniles. The rate dropped by over half from the 1993 high and was the lowest level recorded since the national victimization survey began in 1973.
- 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 27 per 1,000 in 1998.
- Between 1980 and 1998, the percentage of all serious violent crime involving juvenile offenders has ranged from 19 percent in 1982 to 26 percent in 1993, the peak year for youth violence. In 1998, 22 percent of all such victimizations involved a juvenile offender.
- In 1998, in about half (53 percent) of all serious violent juvenile crimes, victims reported that 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 ages 12 to 17 in relation to the juvenile population.

Bullets contain references to data that can be found in Tables BEH4.A and BEH4.B on pages 97 and 98. 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 participation in volunteer activities. 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. In addition to this year's special feature on youth participation in volunteer activities, examples of positive activities might include participation in extracurricular activities such as school clubs and team sports, scouting, or involvement with religious organizations. Forum agencies are also examining the positive aspects of family connectedness and the measurement, in various Federal surveys, of youths' 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 developed 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.* 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

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.⁵⁸ The percentage of young children read aloud to daily by a family member is one indicator of how well young children are 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, 53 percent of children ages 3 to 5 were read to daily by a family member, the same as in 1993 after increasing to 57 percent in 1996.
- As a mother's education increases, so does the likelihood that her child is read to every day. In 1999, 70 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, 44 percent whose mothers had completed high school but had no education beyond that, and 38 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-seven percent of children in two-parent households were read to every day in 1999, compared with 42 percent of children living with one or no parent.

Bullets contain references to data that can be found in Table ED1 on page 99. Endnotes begin on page 58.

Early Childhood Care and Education

L 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.⁵⁹ 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.

- Fifty-nine 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 59 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 center 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 center. In 1999, 73 percent of black, non-Hispanic children ages 3 to 5 attended such programs, compared with 59 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 100. Endnotes begin on page 58.

Mathematics and Reading Achievement

he 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.⁶⁰ 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, and 1996. 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 1996.

White students consistently have had higher reading and mathematics scores than either black or Hispanic students at ages 9, 13, and 17. However, the gaps between whites and blacks and between whites and Hispanics decreased in each subject in some age groups during the 1980s. Larger reductions in these gaps occurred during the 1970s because of gains in the scores of black and Hispanic students.



Average reading scale scores for students age 13 by race and Hispanic origin, selected years 1980-96



NOTE: Data are available for 1980, 1984, 1988, 1990, 1992, 1994, and 1996. The reading proficiency scale ranges from 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 13 and 17 since 1980 and have declined slightly among 9-year-olds.
- 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.⁶¹
- Girls have consistently higher reading scores than boys at all ages. Boys outperformed girls in mathematics at all ages in 1996. For most prior years between 1980 and 1994, the differences

between boys and girls in mathematics achievement at ages 9 and 13 were not significant, and boys slightly outperformed girls at age 17.

Bullets contain references to data that can be found in Tables ED3.A and ED3.B on pages 101 and 102. 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. SOURCE: U.S. Census Bureau, October Current Population Survey. Tabulated by the U.S. Department of Education, National Center for Education Statistics.

- In 1998, 85 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 fluctuated slightly since 1980, when it was 84 percent.
- The rate at which black, non-Hispanics completed high school increased markedly between 1980 and 1990, from 75 percent to 83 percent. It has fluctuated since then, and was at 81 percent in 1998. Among white, non-Hispanics, high school completion rates increased slightly, from 88 percent in 1980 to 90 percent in 1998.
- Hispanics consistently have had a lower high school completion rate than either black, non-Hispanics or white, non-Hispanics. Their rate increased from 57 percent in 1980 to 67 percent in 1985 and then declined to 57 percent in 1991. The rate has fluctuated above 60 percent since then and was at 63 percent in 1998.
- Most young adults complete high school by earning a regular high school diploma. Others complete high school by earning an alternative credential, such as the GED. The proportion of young adults ages 18 to 24 who had earned an alternative credential rose 5 percentage points in 3 years, from 5 percent in 1993 to 10 percent in 1996, while the proportion earning a regular diploma decreased about 5 percentage points over the same period and continued to decline to 75 percent in 1998.⁶² This decline was particularly apparent among Hispanics, who obtained regular diplomas at a rate of 52 percent in 1998.

Bullets contain references to data that can be found in Table ED4 on page 103. Endnotes begin on page 58.

Youth Neither Enrolled in School Nor Working

The 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.⁶³ 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 1999, about 8 percent of the Nation's 16- to 19year-olds 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 1999, 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 1999, 13 percent of black, non-Hispanic youth and 14 percent of 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 1999. The proportion of Hispanic youth who are neither enrolled in school nor working has also decreased, from 18 percent in 1984 to 14 percent in 1999.
- Older youth, ages 18 to 19, are three times as likely to be detached from these activities as youth ages 16 to 17. In 1999, 13 percent of youth ages 18 to 19 were neither enrolled in school nor working compared with 4 percent of youth ages 16 to 17.

Bullets contain references to data that can be found in Table ED5 on page 104. 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.⁶⁴ 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 1999, 32 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 has remained stable since then.
- 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. In 1999, 36 percent of white, non-Hispanic, 17 percent of black, non-Hispanic, and 14 percent of Hispanic high school graduates in this age group had earned a bachelor's degree or higher.
- In 1999, 10 percent of high school graduates ages 25 to 29 had earned an associate's degree but not 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 non-Hispanic blacks and 36 percent of Hispanics.⁶⁵

Bullets contain references to data that can be found in Table ED6 on page 105. Endnotes begin on page 58.

Indicators Needed

Education

Education indicators are needed in two areas that have been found to be critical to a child's development and later opportunities in life:

- 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. This year, a special feature is presented from the Early Childhood Longitudinal Study on beginning kindergartners' knowledge and skills (see page 56). A second assessment of kindergartners' skills may be available, but not until 2007.
- *Course-taking*. Taking higher-level courses in middle and high school is linked to higher achievement in those subjects and to greater opportunity in a student's future academic career. Yet data on student course-taking in middle school are not regularly available. A transcript study of middle school is needed, as is more research on which courses are most predictive of educational attainment.

Indicators of Children's Well-Being

Special Features

F or some important measures of children's well-being, data are not collected on a regular basis. This section presents two such indicators.

Beginning Kindergartners' Knowledge and Skills

A schildren enter kindergarten for the first time, they demonstrate a diverse range of cognitive knowledge, social skills, and approaches to learning. This indicator highlights their proficiency in several key skills needed to develop the ability to read. How well children read eventually affects how they learn and ultimately influences their chances for school success.⁶⁶ Social skills and positive approaches to learning are also related to success in school and are equally important at this age.⁶⁷⁻⁶⁹ The depth and breadth of children's knowledge and skills are related to both developmental and experiential factors. These include child characteristics such as age, gender, and cognitive and sensory limitations and characteristics of the child's home environment and preschool experience. Mother's education is the background variable that is consistently related to children's knowledge and skills.



SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99.

- Emergent literacy—a child's understanding that the print in books has meaning—was assessed among incoming kindergartners in 1998. One aspect of emergent literacy is the ability to recognize letters, which plays an essential role in learning to read. Upon entry to kindergarten, 66 percent of children were proficient in recognizing letters. This skill varied by the level of the mother's education, from 38 percent of children with mothers who had not completed high school to 86 percent of those whose mothers had a bachelor's degree or higher.
- Another skill in emergent literacy is knowing the sounds associated with the letters that begin and end words. Twenty-nine percent of first-time kindergartners were proficient with beginning sounds, and 17 percent were proficient with ending sounds.
- Social skills are an important part of children's development. The ability to make and keep friends forms the social foundation of school, and children's experiences with peers will likely influence their

attitudes toward school and learning.⁶⁷ According to their teachers, 74 percent of beginning kindergartners often accepted peer ideas for group activities, and 77 percent often formed and maintained friendships.

- The ways in which children approach learning frame how they think and act in learning situations. Behavioral inclinations or dispositions such as task persistence and eagerness to learn affect their ability to learn.^{68,69} According to their teachers, 71 percent of beginning kindergartners often persisted at tasks and 75 percent often seemed eager to learn.
- Proficiency in all of these areas upon entry to kindergarten varies widely and is strongly related to the mother's level of education.

Bullets contain references to data that can be found in Table SPECIAL1 on page 106. Endnotes begin on page 58.

Youth Participation in Volunteer Activities

outh as well as communities benefit when youth participate in volunteer activities. Specifically, studies show that regular participants in volunteer activities have higher levels of civic development and personal efficacy than those who did little or no service during the school year. For example, youth who volunteer regularly are more confident in their ability to make public statements, have more political knowledge, and pay more attention to politics.⁷⁰ Other studies demonstrate additional benefits: youth learn to respect and to help others, and they develop leadership skills and a better understanding of citizenship. In addition, teen volunteering creates a behavior pattern that carries into adulthood.⁷¹



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

- Fifty-five percent of high school (9th through 12th grade) students participated in volunteer activities in 1999, up from 50 percent in 1996.
- Twenty-four percent of youth participated one or two times in volunteer activities during the school year, and 15 percent participated regularly up to 35 hours.
- Regular participation in volunteer activities for 35 or more hours during the school year is associated with higher levels of political knowledge and interest, and confidence in public speaking. In 1999, 16 percent of high school students performed 35 or more hours of service.
- Girls are more likely than boys to participate in volunteer activities. Fifty-seven percent of 6ththrough 12th-grade girls participated in 1999, compared with 47 percent of boys.

- Students with more highly educated parents are more likely to participate than others. Sixty-five percent of 6th- through 12th-grade students with a parent who attended graduate school participated in 1999, compared with 37 percent of students whose parents had no high school diploma or equivalent.
- Students are much more likely to participate if their schools require and arrange the service. When their schools did so, 59 percent of 6th- through 12th-grade students participated, compared with 29 percent when schools did neither.

Bullets contain references to data that can be found in Table SPECIAL2 on page 107. 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 Bumpass, L.L. and Lu, H.H. (forthcoming). Trends in cohabitation and implications for children's family contexts in the U.S. *Population Studies*.

⁸ Bachu, A. (1999). Trends in premarital childbearing: 1930 to 1994. *Current Population Reports*, P-23-197. Washington, DC: U.S. Census Bureau.

⁹ 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. It is not affected by differences in the number of women between groups. The percentage of all births that are to unmarried women is affected by the birth rate for married women (who account for two-thirds of all births), the birth rate for unmarried women (who account for one-third of all births), and the proportion of women in the childbearing ages 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 has dropped and the proportion of women who are unmarried has increased.

¹⁰ 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.)

¹¹ Martin, J.A., Smith, B.L., Mathews, T.J., and Ventura, S.J. (1999). Births and deaths: Preliminary data for 1998. *National Vital Statistics Reports*, *47* (25). Hyattsville, MD: National Center for Health Statistics.

¹² 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.

¹³ 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.

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