

At-Risk Children



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Youth Risk Behavior Surveillance — United States, 1995

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Reports Published in *CDC Surveillance Summaries* Since January 1, 1985

Subject	Responsible CIO/Agency*	Most Recent Report
Abortion	NCCDPHP	1996; Vol. 45, No. SS-1
AIDS/HIV		
Distribution by Racial/Ethnic Group	NCID	1988; Vol. 37, No. SS-3
Among Black & Hispanic Children & Women of Childbearing Age	NCEHIC	1990; Vol. 39, No. SS-3
Behavioral Risk Factors	NCCDPHP	1991; Vol. 40, No. SS-4
Birth Defects		
B.D. Monitoring Program (see also Malformations)	NCEH	1993; Vol. 42, No. SS-1
Contribution of B.D. to Infant Mortality		
Among Minority Groups	NCEHIC	1990; Vol. 39, No. SS-3
Breast & Cervical Cancer	NCCDPHP	1992; Vol. 41, No. SS-2
<i>Campylobacter</i>	NCID	1988; Vol. 37, No. SS-2
Chancroid	NCPS	1992; Vol. 41, No. SS-3
Chlamydia	NCPS	1993; Vol. 42, No. SS-3
Cholera	NCID	1992; Vol. 41, No. SS-1
Congenital Malformations, Minority Groups	NCEHIC	1988; Vol. 37, No. SS-3
Contraception Practices	NCCDPHP	1992; Vol. 41, No. SS-4
Cytomegalovirus Disease, Congenital	NCID	1992; Vol. 41, No. SS-2
Dengue	NCID	1994; Vol. 43, No. SS-2
Dental Caries & Periodontal Disease Among Mexican-American Children	NCPS	1988; Vol. 37, No. SS-3
Diabetes Mellitus	NCCDPHP	1993; Vol. 42, No. SS-2
Dracunculiasis	NCID	1992; Vol. 41, No. SS-1
Ectopic Pregnancy	NCCDPHP	1993; Vol. 42, No. SS-6
Elderly, Hospitalizations Among	NCCDPHP	1991; Vol. 40, No. SS-1
Endometrial & Ovarian Cancers	EPO, NCCDPHP	1986; Vol. 35, No. 2SS
<i>Escherichia coli</i> O157	NCID	1991; Vol. 40, No. SS-1
Evacuation Camps	EPO	1992; Vol. 41, No. SS-4
Family Planning Services at Title X Clinics	NCCDPHP	1995; Vol. 44, No. SS-2
Foodborne Disease	NCID	1990; Vol. 39, No. SS-1
Gonorrhea & Syphilis, Teenagers	NCPS	1993; Vol. 42, No. SS-3
Hazardous Substances Emergency Events	ATSDR	1994; Vol. 43, No. SS-2
Health Surveillance Systems	IHPO	1992; Vol. 41, No. SS-4
Hepatitis	NCID	1985; Vol. 34, No. 1SS
Homicide	NCEHIC	1992; Vol. 41, No. SS-3
Homicides, Black Males	NCEHIC	1988; Vol. 37, No. SS-1
Hysterectomy	NCCDPHP	1986; Vol. 35, No. 1SS
Infant Mortality (see also National Infant Mortality; Birth Defects; Postneonatal Mortality)	NCEHIC	1990; Vol. 39, No. SS-3
Influenza	NCID	1993; Vol. 42, No. SS-1
Injury		
Death Rates, Blacks & Whites	NCEHIC	1988; Vol. 37, No. SS-3
Drownings	NCEHIC	1988; Vol. 37, No. SS-1
Falls, Deaths	NCEHIC	1988; Vol. 37, No. SS-1
Firearm-Related Deaths, Unintentional	NCEHIC	1988; Vol. 37, No. SS-1

*Abbreviations

ATSDR	Agency for Toxic Substances and Disease Registry
CIO	Centers/Institute/Offices
EPO	Epidemiology Program Office
IHPO	International Health Program Office
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion
NCEH	National Center for Environmental Health
NCEHIC	National Center for Environmental Health and Injury Control
NCHSTD	National Center for HIV, STD, and TB Prevention
NCID	National Center for Infectious Diseases
NCIPC	National Center for Injury Prevention and Control
NCPS	National Center for Prevention Services
NIOSH	National Institute for Occupational Safety and Health
NIP	National Immunization Program

Reports Published in *CDC Surveillance Summaries* Since January 1, 1985 — Continued

Subject	Responsible CIO/Agency*	Most Recent Report
Head & Neck	NCIPC	1993; Vol. 42, No. SS-5
In Developing Countries	NCEHIC	1992; Vol. 41, No. SS-1
In the Home, Persons <15 Years of Age	NCEHIC	1988; Vol. 37, No. SS-1
Motor Vehicle-Related Deaths	NCEHIC	1988; Vol. 37, No. SS-1
Objectives of Injury Control, State & Local	NCEHIC	1988; Vol. 37, No. SS-1
Objectives of Injury Control, National	NCEHIC	1988; Vol. 37, No. SS-1
Residential Fires, Deaths	NCEHIC	1988; Vol. 37, No. SS-1
Tap Water Scalds	NCEHIC	1988; Vol. 37, No. SS-1
Lead Poisoning, Childhood	NCEHIC	1990; Vol. 39, No. SS-4
Low Birth Weight	NCCDPHP	1990; Vol. 39, No. SS-3
Malaria	NCID	1995; Vol. 44, No. SS-5
Maternal Mortality	NCCDPHP	1991; Vol. 40, No. SS-2
Measles	NCPS	1992; Vol. 41, No. SS-6
Meningococcal Disease	NCID	1993; Vol. 42, No. SS-2
Mining	NIOSH	1986; Vol. 35, No. 2SS
Mumps	NIP	1995; Vol. 44, No. SS-3
National Infant Mortality (see also Infant Mortality; Birth Defects)	NCCDPHP	1989; Vol. 38, No. SS-3
<i>Neisseria gonorrhoeae</i> , Antimicrobial Resistance in	NCPS	1993; Vol. 42, No. SS-3
Neural Tube Defects	NCEH	1995; Vol. 44, No. SS-4
Nosocomial Infection	NCID	1986; Vol. 35, No. 1SS
Occupational Injuries/Disease		
Asthma	NIOSH	1994; Vol. 43, No. SS-1
Hazards, Occupational	NIOSH	1985; Vol. 34, No. 2SS
In Meatpacking Industry	NIOSH	1985; Vol. 34, No. 1SS
Silicosis	NIOSH	1993; Vol. 42, No. SS-5
State Activities	NIOSH	1987; Vol. 36, No. SS-2
Parasites, Intestinal	NCID	1991; Vol. 40, No. SS-4
Pediatric Nutrition	NCCDPHP	1992; Vol. 41, No. SS-7
Pertussis	NCPS	1992; Vol. 41, No. SS-8
Plague	NCID	1985; Vol. 34, No. 2SS
Plague, American Indians	NCID	1988; Vol. 37, No. SS-3
Poliomyelitis	NCPS	1992; Vol. 41, No. SS-1
Postneonatal Mortality	NCCDPHP	1991; Vol. 40, No. SS-2
Pregnancy Nutrition	NCCDPHP	1992; Vol. 41, No. SS-7
Pregnancy, Teenage	NCCDPHP	1993; Vol. 42, No. SS-6
Rabies	NCID	1989; Vol. 38, No. SS-1
Racial/Ethnic Minority Groups	Various	1990; Vol. 39, No. SS-3
Respiratory Disease	NCEHIC	1992; Vol. 41, No. SS-4
Rotavirus	NCID	1992; Vol. 41, No. SS-3
<i>Salmonella</i>	NCID	1988; Vol. 37, No. SS-2
Sexually Transmitted Diseases in Italy	NCPS	1992; Vol. 41, No. SS-1
Smoking	NCCDPHP	1990; Vol. 39, No. SS-3
Smoking-Attributable Mortality	NCCDPHP	1994; Vol. 43, No. SS-1
Tobacco Control Laws, State	NCCDPHP	1995; Vol. 44, No. SS-6
Tobacco-Use Behaviors	NCCDPHP	1994; Vol. 43, No. SS-3
Streptococcal Disease (Group B)	NCID	1992; Vol. 41, No. SS-6
Sudden Unexplained Death Syndrome Among Southeast Asian Refugees	NCEHIC, NCPS	1987; Vol. 36, No. 1SS
Suicides, Persons 15-24 Years of Age	NCEHIC	1988; Vol. 37, No. SS-1
Syphilis, Congenital	NCPS	1993; Vol. 42, No. SS-6
Syphilis, Primary & Secondary	NCPS	1993; Vol. 42, No. SS-3
Tetanus	NCPS	1992; Vol. 41, No. SS-8
Trichinosis	NCID	1991; Vol. 40, No. SS-3
Tuberculosis	NCPS	1991; Vol. 40, No. SS-3
Waterborne Disease Outbreaks	NCID	1993; Vol. 42, No. SS-5
Years of Potential Life Lost	EPO	1992; Vol. 41, No. SS-6
Youth Risk Behaviors	NCCDPHP	1996; Vol. 45, No. SS-4

Youth Risk Behavior Surveillance— United States, 1995

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Abstract

Problem/Condition: Priority health-risk behaviors that contribute to the leading causes of mortality, morbidity, and social problems among youth and adults often are established during youth, extend into adulthood, and are interrelated.

Reporting Period: February through May 1995.

Description of the System: The Youth Risk Behavior Surveillance System (YRBSS) monitors six categories of priority health-risk behaviors among youth and young adults: behaviors that contribute to unintentional and intentional injuries, tobacco use, alcohol and other drug use, sexual behaviors, unhealthy dietary behaviors, and physical inactivity. The YRBSS includes both a national school-based survey conducted by CDC and state and local school-based surveys conducted by state and local education agencies. This report summarizes results from the national survey, 35 state surveys, and 16 local surveys conducted among high school students from February through May 1995.

Results and Interpretation: In the United States, 72% of all deaths among school-age youth and young adults result from four causes: motor vehicle crashes, other unintentional injuries, homicide, and suicide. Results from the 1995 YRBSS suggest that many high school students practice behaviors that may increase their likelihood of death from these four causes: 21.7% had rarely or never used a safety belt, 38.8% had ridden with a driver who had been drinking alcohol during the 30 days preceding the survey, 20.0% had carried a weapon during the 30 days preceding the survey, 51.6% had drunk alcohol during the 30 days preceding the survey, 25.3% had used marijuana during the 30 days preceding the survey, and 8.7% had attempted suicide during the 12 months preceding the survey. Substantial morbidity and social problems among school-age youth and young adults also result from unintended pregnancies and sexually transmitted diseases, including human immunodeficiency virus infection.

YRBSS results indicate that in 1995, 53.1% of high school students had had sexual intercourse, 45.6% of sexually active students had not used a condom at last sexual intercourse, and 2.0% had ever injected an illegal drug. Among adults, 65% of all deaths result from three causes: heart disease, cancer, and stroke. Most of the risk behaviors associated with these causes of death are initiated during adolescence. In 1995, 34.8% of high school students had smoked cigarettes during the 30 days preceding the survey, 39.5% had eaten more than two servings of foods typically high in fat content during the day preceding the survey, and only 25.4% had attended physical education class daily.

Actions Taken: YRBSS data are being used nationwide by health and education officials to improve national, state, and local policies and programs designed to reduce risks associated with the leading causes of mortality and morbidity. YRBSS data also are being used to measure progress toward achieving 21 national health objectives and one of eight National Education Goals.

INTRODUCTION

In the United States, 72% of all deaths among youth and young adults 5–24 years of age result from only four causes: motor vehicle crashes (28% of all deaths in this age group), other unintentional injuries (11%), homicide (21%), and suicide (12%) (1). Substantial morbidity and social problems also result from the approximately 1 million pregnancies that occur each year among adolescents (2) and the more than 10 million cases of sexually transmitted diseases (STDs) that occur each year among persons 15–29 years of age (3). In the United States, 65% of all deaths and substantial morbidity among adults ≥25 years of age result from three causes: heart disease (34% of all deaths in this age group), cancer (24%), and stroke (7%) (1). Therefore, six categories of behaviors contribute to the leading causes of morbidity and mortality in the United States: behaviors that contribute to unintentional and intentional injuries; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and STDs (including human immunodeficiency virus [HIV] infection); unhealthy dietary behaviors; and physical inactivity. These behaviors, which frequently are interrelated, often are established during youth and extend into adulthood.

To monitor the priority health-risk behaviors in each of these categories among youth and young adults, CDC developed the Youth Risk Behavior Surveillance System (YRBSS) (4). The YRBSS includes national, state,* and local school-based surveys of high school students. National surveys were conducted in 1990, 1991, 1993, and 1995.† Comparable state and local surveys were first conducted in 1990, when 24 states and eight large cities participated. In 1991, 29 states and 10 cities conducted surveys; in 1993, 43 states and 13 cities; and in 1995, 45 states and 16 cities. This report summarizes the results from the 1995 national school-based survey and from the 35 selected state and 16 local school-based surveys. Data from nine state surveys conducted during 1995 were not included in this report because of their low overall response rate. Data from one state survey were not included upon request of the state education agency.

*U.S. territories are included as states.

†The school-based components of the YRBSS were implemented in 1990 and 1991 and then biennially during odd-numbered years thereafter.

METHODS

Sampling

The 1995 national school-based survey employed a three-stage cluster sample design to produce a nationally representative sample of students in grades 9–12. The first-stage sampling frame contained 1,955 primary sampling units (PSUs), consisting of large counties or groups of smaller, adjacent counties. From the 1,955 PSUs, 52 were selected from 16 strata formed on the basis of the degree of urbanization and the relative percentage of black* and Hispanic students in the PSU. The PSUs were selected with probability proportional to school enrollment size. At the second sampling stage, 157 schools were selected with probability proportional to school enrollment size. To enable separate analysis of black and Hispanic students, schools with substantial numbers of black and Hispanic students were sampled at higher rates than all other schools. The third stage of sampling consisted of randomly selecting one or two intact classes of a required subject (e.g., English or social studies) from grades 9–12 at each chosen school. All students in the selected classes were eligible to participate in the survey.

A weighting factor was applied to each student record to adjust for nonresponse and for the varying probabilities of selection, including those resulting from the oversampling of black and Hispanic students. Numbers of students in other racial/ethnic groups were too low for meaningful analysis in this report. The weights were scaled so that a) the weighted count of students was equal to the total sample size and b) the weighted proportions of students in each grade matched national population proportions. SUDAAN was used to compute 95% confidence intervals that were used to determine differences among subgroups at the $p < 0.05$ level (5). The national data are representative of students in grades 9–12 in public and private schools in the 50 states and the District of Columbia.

The 1995 state and local school-based surveys employed a two-stage cluster sample design to produce representative samples of students in grades 9–12 in their jurisdictions. In most states and cities, the first-stage sampling frame consisted of all public schools containing any of grades 9–12. Schools were selected with probability proportional to school enrollment size. At the second sampling stage, intact classes of a required subject or a required period (e.g., second period) were randomly selected. All students in the selected classes were eligible to participate in the survey. Some states and cities modified these procedures to meet their individual needs. For example, in some states and cities, either classes were selected as the first stage of sampling or all schools, rather than a sample of schools, were selected to participate.

The surveys from the 25 states and 12 cities, each with an overall response rate of at least 60% and appropriate documentation, were weighted (Table 1). Weighted data from most of these states and cities can be generalized to all public-school students in grades 9–12 in the jurisdiction. Surveys that did not have both an overall response rate of at least 60% and appropriate documentation were not weighted. The unweighted data from 10 state and four local surveys apply only to the students participating in the survey. Surveys from California, Colorado, Michigan, and New Jersey excluded students from Los Angeles, Denver, Detroit, and Newark, respectively.

*In this report, black refers to black, non-Hispanic students.

For the national survey, 10,904 questionnaires were completed in 110 schools. The school response rate was 70%, and the student response rate was 86%, resulting in an overall response rate of 60% (Table 1). For the state and local surveys, sample sizes ranged from 309 to 5,987. School response rates ranged from 48% to 100%, student response rates ranged from 44% to 99%, and overall response rates ranged from 41% to 85%. In the national, state, and local surveys, students were evenly distributed across grades and between sexes (Table 1).

Incidence rates for two variables were calculated to provide data for monitoring relevant year 2000 national health objectives (6). For weapon-carrying, students who replied that they had carried a weapon 2–3 days during the 30 days preceding the survey were assigned a weapon-carrying frequency of 2.5; 4–5 days, 4.5; and ≥ 6 days, 6.0. For physical fighting, students who reported having fought two or three times during the 12 months preceding the survey were assigned a fighting frequency of 2.5; four or five times, 4.5; six or seven times, 6.5; eight or nine times, 8.5; 10–11 times, 10.5; and ≥ 12 times, 12.0.

Data Collection

Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary participation. The self-administered questionnaire was administered in the classroom during a regular class period. Students recorded their responses directly on a booklet or answer sheet that could be scanned by a computer. The core questionnaire contained 84 multiple-choice questions. State and local education agencies added or deleted items to meet individual needs. Local parental consent procedures were followed before survey administration.

RESULTS

Behaviors that Contribute to Unintentional Injuries

Safety-Belt Use

Nationwide, 21.7% of students rarely or never used safety belts when riding in a car or truck driven by someone else (Table 2). Overall, male students (26.0%) were significantly more likely than female students (16.9%) to rarely or never use safety belts. White* male students (25.1%) were significantly more likely than white female students (15.2%) to rarely or never use safety belts, and male students in grades 10–12 (23.9%, 24.2%, and 29.0%, respectively) were significantly more likely than female students in the same grades (15.3%, 13.5%, and 18.8%, respectively) to rarely or never use safety belts. Overall, black students (31.5%) were significantly more likely than white and Hispanic students (20.5% and 18.4%, respectively) to rarely or never use safety belts. Black female students (25.7%) were significantly more likely than white and Hispanic female students (15.2% and 14.2%, respectively) to rarely or never use safety belts, and black male students (37.8%) were significantly more likely than Hispanic male students (22.6%) to rarely or never use safety belts. The prevalence rates across the state surveys varied sixfold from 5.9% to 37.2% (median: 23.5%)

*In this report, white refers to white, non-Hispanic students.

(Table 3). Across the local surveys, the prevalence rates varied nearly sixfold from 7.8% to 46.1% (median: 26.1%).

Motorcycle-Helmet Use

Nationwide, 25.1% of students had ridden a motorcycle during the 12 months preceding the survey. Of these students, 43.8% rarely or never wore a motorcycle helmet (Table 2). Prevalence rates of rarely or never using a motorcycle helmet varied among the state surveys nearly threefold from 26.5% to 73.1% (median: 44.2%) (Table 3). Across the local surveys, prevalence rates ranged from 33.9% to 72.6% (median: 47.0%).

Bicycle-Helmet Use

Nationwide, 76.2% of students had ridden a bicycle during the 12 months preceding the survey. Of these students, 92.8% rarely or never wore a bicycle helmet (Table 2). Overall, black and Hispanic students (97.3% and 96.4%, respectively) were significantly more likely than white students (91.8%) to rarely or never wear a bicycle helmet. Hispanic female students (96.7%) were significantly more likely than white female students (91.3%) to rarely or never wear a bicycle helmet, and black male students (98.3%) were significantly more likely than white male students (92.1%) to rarely or never wear a bicycle helmet. The prevalence rates of rarely or never wearing a bicycle helmet ranged from 75.0% to 98.2% (median: 93.8%) across the state surveys and from 83.8% to 97.4% (median: 94.0%) across the local surveys (Table 3).

Riding with a Driver Who Had Been Drinking Alcohol

During the 30 days preceding the survey, more than one third (38.8%) of students nationwide had ridden with a driver who had been drinking alcohol (Table 2). Black male students (41.6%) were significantly more likely than black female students (33.0%) to have ridden with a driver who had been drinking alcohol. Overall, Hispanic students (49.4%) were significantly more likely than black students (37.1%) to have ridden with a driver who had been drinking alcohol. Hispanic female students (49.7%) were significantly more likely than black female students (33.0%) to report this behavior. Riding with a drinking driver was significantly more likely among 12th-grade male students (44.8%) than among 10th-grade male students (35.1%). Prevalence rates across the state surveys ranged from 21.4% to 49.5% (median: 36.8%) and across the local surveys from 20.6% to 46.3% (median: 32.7%) (Table 3).

Driving After Drinking Alcohol

During the 30 days preceding the survey, 15.4% of students nationwide had driven a vehicle after drinking alcohol (Table 2). Black male students (16.1%) were significantly more likely than black female students (5.3%) to drive after drinking alcohol. White and Hispanic female students (13.6% each) were significantly more likely than black female students (5.3%) to report this behavior. Female students in grade 12 (15.8%) were significantly more likely than 9th-grade female students (7.0%) to report this behavior. Male students in grade 12 (32.0%) were significantly more likely than male students in grades 9–11 (11.4%, 10.9%, and 18.9%, respectively) to drive after drinking alcohol. Prevalence rates across the state surveys varied nearly sixfold

from 5.6% to 32.5% (median: 14.3%). Prevalence rates across the local surveys varied fourfold from 3.4% to 14.0% (median: 9.1%) (Table 3).

Behaviors that Contribute to Intentional Injuries

Carrying a Weapon

One fifth (20.0%) of students nationwide had carried a weapon (e.g., a gun, knife, or club) during the 30 days preceding the survey (Table 4). Overall, male students (31.1%) were significantly more likely than female students (8.3%) to have carried a weapon. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, Hispanic students (24.7%) were significantly more likely than white students (18.9%) to have carried a weapon. Weapon-carrying was significantly more likely among black and Hispanic female students (15.7% and 13.2%, respectively) than among white female students (5.5%). Male students in grade 9 (33.8%) were significantly more likely than male students in grade 12 (26.0%) to have carried a weapon. State prevalence rates ranged from 11.3% to 27.4% (median: 20.6%), and local prevalence rates ranged from 16.6% to 29.2% (median: 20.5%) (Table 5).

Nationwide, 7.6% of students had carried a gun during the 30 days preceding the survey (Table 4). Overall, male students (12.3%) were significantly more likely than female students (2.5%) to have carried a gun. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, black and Hispanic students (10.6% and 10.5%, respectively) were significantly more likely to have carried a gun than white students (6.2%). Black male students (18.7%) were significantly more likely than white male students (10.2%) to have done so. State prevalence rates varied fourfold from 3.1% to 13.2% (median: 7.7%), and local prevalence rates varied threefold from 3.7% to 12.7% (median: 7.9%) (Table 5).

An estimated 81.3 separate incidents of weapon carrying occurred per 100 students during the 30 days preceding the survey (Table 4). Overall, the weapon-carrying incidence rate for male students (128.1 per 100 students) was significantly higher than for female students (31.3 per 100 students). This significant difference was identified for white and Hispanic students and all the grade subgroups. The weapon-carrying incidence rate for black female students (57.6 per 100 students) was significantly higher than for white female students (20.2 per 100 students). State rates ranged from 37.9 to 121.7 per 100 students (median: 84.8), and local rates ranged from 57.6 to 121.1 per 100 students (median: 79.7) (Table 5).

Engaging in a Physical Fight

Among students nationwide, 38.7% had been in a physical fight during the 12 months preceding the survey (Table 6). Overall, male students (46.1%) were significantly more likely than female students (30.6%) to have been in a physical fight. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, Hispanic students (47.9%) were significantly more likely than white students (36.0%) to have been in a physical fight. Both Hispanic male and female students (55.9% and 40.4%, respectively) were significantly more likely than white male and female students (44.0% and 26.8%, respectively) to report this behavior. Female students in grade 9 (37.4%) were significantly more likely than female students in grades

11 and 12 (27.5% and 24.1%, respectively) to report this behavior, and female students in grade 10 (34.4%) were significantly more likely than female students in grade 12 (24.1%) to have done so. Male students in grade 9 (55.0%) were significantly more likely than male students in grade 12 (38.0%) to have been in a physical fight. Among the state surveys, the prevalence rates of physical fighting ranged from 28.4% to 40.8% (median: 34.9%). Among the local surveys, the prevalence rates of physical fighting ranged from 27.7% to 48.0% (median: 40.0%).

Nationwide, 4.2% of students had been treated by a doctor or nurse for injuries sustained in a physical fight during the 12 months preceding the survey (Table 6). Overall, male students (5.7%) were significantly more likely than female students (2.5%) to report having been injured in a physical fight. This significant difference was identified for white students and students in grades 11 and 12. Overall, Hispanic students (6.4%) were significantly more likely than white students (3.4%) to have been injured in a physical fight. Among the state surveys, the prevalence rates of injurious physical fighting ranged from 2.5% to 6.0% (median: 4.0%) (Table 7). Among the local surveys, the prevalence rates of injurious physical fighting ranged from 3.5% to 8.4% (median: 5.5%).

Nationwide, an estimated 127.7 incidents of physical fighting occurred per 100 students during the 12 months preceding the survey (Table 6). Overall, male students (161.1 per 100 students) were significantly more likely than female students (91.9 per 100 students) to have been involved in a physical fight. Incidence rates were significantly higher among black male students (180.5 per 100 students) than among black female students (83.3 per 100 students). Across the state surveys, the incidence rates ranged from 92.6 per 100 students to 137.6 per 100 students (median: 115.2) (Table 7). Across the local surveys, the incidence rates ranged from 73.4 per 100 students to 154.7 per 100 students (median: 125.2).

School-Related Violence

Nationwide, 4.5% of students had missed at least 1 day of school during the 30 days preceding the survey because they had felt unsafe at school or when traveling to or from school (Table 8). Overall, black and Hispanic students (7.7% and 8.4%, respectively) were significantly more likely than white students (2.8%) to have felt unsafe. Hispanic and black female students (8.3% and 8.2%, respectively) were significantly more likely than white female students (2.2%) to miss school because they had felt unsafe, and black male students (7.1%) were significantly more likely than white male students (3.4%) to miss school for this reason. A sixfold difference was observed in prevalence rates across the state surveys, which ranged from 2.6% to 15.6% (median: 4.8%) (Table 9). The prevalence rates across the local surveys ranged from 6.9% to 17.0% (median: 10.2%).

The prevalence of weapon-carrying on school property during the 30 days preceding the survey was 9.8% nationwide (Table 8). Overall, male students (14.3%) were significantly more likely than female students (4.9%) to have carried a weapon on school property. This significant difference was identified for white and Hispanic students and all the grade subgroups. Overall, Hispanic students (14.1%) were significantly more likely than white students (9.0%) to have carried a weapon on school property. Hispanic and black female students (8.9% and 8.8%, respectively) were significantly more likely than white female students (3.1%) to have done so. State

prevalence rates varied nearly threefold from 5.4% to 14.6% (median: 9.6%), and local prevalence rates varied threefold from 5.2% to 15.3% (median: 9.7%).

Nationwide, the prevalence of students who had been threatened or injured with a weapon on school property during the 12 months preceding the survey was 8.4% (Table 8). Overall, male students (10.9%) were significantly more likely than female students (5.8%) to have been threatened or injured with a weapon on school property. This significant difference was identified for white students and students in grades 9, 11, and 12. Overall, Hispanic students (12.4%) were significantly more likely than white students (7.0%) to have been threatened or injured with a weapon on school property. Hispanic and black male students (15.2% each) were significantly more likely than white male students (9.2%) to report such behavior. State prevalence rates varied threefold from 3.6% to 11.4% (median: 7.9%). Local prevalence rates ranged from 8.1% to 13.3% (median: 10.4%) (Table 9).

Nationwide, 15.5% of students had been in a physical fight on school property during the 12 months preceding the survey (Table 8). Overall, male students (21.0%) were significantly more likely than female students (9.6%) to have been in a physical fight on school property. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, black and Hispanic students (20.3% and 21.1%, respectively) were significantly more likely than white students (12.9%) to have been in a physical fight on school property. Black male and female students (27.9% and 14.3%, respectively) and Hispanic male and female students (25.7% and 16.6%, respectively) were significantly more likely than white male and female students (18.4% and 6.5%, respectively) to report this behavior. Female students in grade 9 (12.1%) were significantly more likely to have been in a physical fight on school property than female students in grade 12 (5.6%). Male students in grade 9 (29.4%) were significantly more likely to have been in a physical fight on school property than male students in grades 10–12 (20.8%, 18.6%, and 15.5%, respectively). Across the state surveys, prevalence rates ranged from 11.6% to 23.2% (median: 15.0%). Across the local surveys, prevalence rates ranged from 12.5% to 22.2% (median: 17.9%) (Table 9).

Nationwide, approximately one third of students (34.9%) had had property (e.g., a car, clothing, or books) stolen or deliberately damaged on school property during the 12 months preceding the survey (Table 8). Overall, male students (41.4%) were significantly more likely than female students (28.0%) to have had property stolen or damaged on school property. This significant difference was identified for white students and all the grade subgroups. Female students in grades 10 and 11 (31.6% and 28.6%, respectively) were significantly more likely than female students in grade 12 (21.5%) to have experienced this. State prevalence rates ranged from 24.8% to 46.1% (median: 33.4%), and local prevalence rates ranged from 25.6% to 39.8% (median: 32.6%) (Table 9).

Suicide Ideation and Attempts

Nearly one fourth (24.1%) of students nationwide had seriously considered attempting suicide during the 12 months preceding the survey (Table 10). Overall, female students (30.4%) were significantly more likely than male students (18.3%) to have considered attempting suicide. This significant difference was identified for white and Hispanic students and all the grade subgroups. Overall, white students (24.9%) were significantly more likely than black students (20.0%) to have considered

attempting suicide. Hispanic and white female students (34.1% and 31.6%, respectively) were significantly more likely than black female students (22.2%) to have considered attempting suicide. Female students in grades 9 and 10 (34.4% and 32.8%, respectively) were significantly more likely than female students in grade 12 (23.9%) to have done so. Prevalence rates ranged from 17.7% to 31.5% (median: 23.9%) across the state surveys and from 17.3% to 26.7% (median: 20.3%) across the local surveys (Table 11).

More serious suicide ideation was observed among the 17.7% of students nationwide who, during the 12 months preceding the survey, had made a specific plan to attempt suicide (Table 10). Overall, female students (21.3%) were significantly more likely than male students (14.4%) to have made a suicide plan. This significant difference was identified for white and Hispanic students and students in grades 9 and 10. White and Hispanic female students (21.9% and 25.5%, respectively) were significantly more likely than black female students (15.5%) to have done so. Female students in grades 9 and 10 (23.3% and 23.8%, respectively) were significantly more likely than female students in grade 12 (16.6%) to have made a suicide plan. Prevalence rates across the state surveys ranged from 13.6% to 26.4% (median: 17.9%) (Table 11). Prevalence rates across the local surveys ranged from 13.5% to 21.1% (median: 15.2%).

Nationwide, 8.7% of students had actually attempted suicide during the 12 months preceding the survey (Table 10). Overall, female students (11.9%) were significantly more likely than male students (5.6%) to have attempted suicide. This significant difference was identified for white and Hispanic students and students in grades 9–11. Overall, Hispanic students (13.4%) were significantly more likely than white students (7.6%) to have attempted suicide. Suicide attempts were significantly more likely among Hispanic female students (21.0%) than among white female students (10.4%) and black female students (10.8%). Female students in grades 9 and 10 (14.9% and 15.1%, respectively) were significantly more likely than female students in grade 12 (6.6%) to have attempted suicide. The percentage of students attempting suicide varied nearly threefold from 7.5% to 20.5% (median: 9.3%) across the state surveys and varied nearly threefold from 5.8% to 15.8% (median: 10.3%) across the local surveys (Table 11).

Nationwide, during the 12 months preceding the survey, 2.8% of students reported having made a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (Table 10). Female students in grade 9 (6.3%) were significantly more likely than female students in grade 12 (1.3%) to have made a suicide attempt that required subsequent medical attention. The prevalence of injurious suicide attempts varied fourfold from 1.6% to 7.3% (median: 2.9%) across the state surveys and varied fourfold from 1.1% to 5.0% (median: 3.5%) across the local surveys (Table 11).

Tobacco Use

Cigarette Use

Nationwide, 71.3% of students had ever tried cigarette smoking (Table 12). Overall, Hispanic students (76.3%) were significantly more likely than black students (66.0%)

to have ever tried cigarette smoking. Hispanic female students (74.8%) were significantly more likely than black female students (62.8%) to have ever tried cigarette smoking. Female students in grades 11 and 12 (75.1% and 73.6%, respectively) were significantly more likely than female students in grade 9 (60.4%) to have ever tried cigarette smoking, and male students in grade 11 (76.5%) were significantly more likely than male students in grade 9 (66.1%) to have done so. State prevalence rates ranged from 45.2% to 84.9% (median: 71.0%), and local prevalence rates ranged from 59.4% to 75.2% (median: 66.0%) (Table 13).

More than one third of students (34.8%) nationwide had smoked cigarettes on ≥ 1 of the 30 days preceding the survey (i.e., current cigarette use) (Table 12). Black male students (27.8%) were significantly more likely than black female students (12.2%) to report current cigarette use. Overall, white and Hispanic students (38.3% and 34.0%, respectively) were significantly more likely to report current cigarette use than black students (19.2%). White and Hispanic male and female students were significantly more likely than black male and female students to do so. Male students in grade 12 (42.0%) were significantly more likely than male students in grade 9 (32.3%) to currently smoke cigarettes. Across the state surveys, prevalence rates varied nearly fivefold from 8.8% to 43.0% (median: 35.7%); across the local surveys, prevalence rates ranged from 17.8% to 30.3% (median: 23.3%) (Table 13).

Nationwide, 16.1% of students had smoked cigarettes on ≥ 20 of the 30 days preceding the survey (i.e., frequent cigarette use) (Table 12). Black male students (8.5%) were significantly more likely than black female students (1.3%) to report frequent cigarette use. Overall, white students (19.5%) were significantly more likely than black and Hispanic students (4.5% and 10.0%, respectively) to report frequent cigarette use. White female students (20.8%) were significantly more likely than black and Hispanic female students (1.3% and 9.3%, respectively) to report frequent cigarette use, and Hispanic female students (9.3%) were significantly more likely than black female students (1.3%) to do so. White male students (18.4%) were significantly more likely than black male students (8.5%) to report frequent cigarette use. Female and male students in grades 11 and 12 were significantly more likely to report frequent cigarette use than female and male students in grade 9. State prevalence rates varied forty-onefold from 0.6% to 24.6% (median: 17.5%), and local prevalence rates varied threefold from 3.8% to 13.2% (median: 7.3%) (Table 13).

Smokeless-Tobacco Use

Nationwide, more than one in 10 students (11.4%) had used smokeless tobacco during the 30 days preceding the survey (Table 12). Overall, male students (19.7%) were significantly more likely than female students (2.4%) to use smokeless tobacco. This significant difference was identified for white students and all the grade subgroups. Overall, white students (14.5%) were significantly more likely than black and Hispanic students (2.2% and 4.4%, respectively) to use smokeless tobacco. White male students (25.1%) were significantly more likely than Hispanic and black male students (5.8% and 3.5%, respectively) to do so. An eightfold variation in prevalence rates was observed across the state surveys, which ranged from 3.0% to 25.1% (median: 11.6%) (Table 13). Across the local surveys, a fivefold variation was observed, which ranged from 1.3% to 6.7% (median: 3.1%).

Access to Cigarettes

Among students reporting current cigarette use, nationwide 38.7% of those <18 years of age had purchased their cigarettes in a store or gas station during the 30 days preceding the survey (Table 14). White students (41.3%) in this subgroup were significantly more likely than black students (27.2%) to have purchased cigarettes in a store or gas station. For both male and female students in this subgroup, the percentage of students who had purchased cigarettes in a store or gas station significantly increased as grade increased; by grade 11, approximately half of students purchased their cigarettes at a store. State prevalence rates varied nearly threefold from 17.5% to 51.0% (median: 36.2%), and local prevalence rates ranged from 29.7% to 63.4% (median: 36.3%) (Table 15).

Nationwide, among students reporting current cigarette use, more than three fourths (77.5%) of students <18 years of age who had purchased their cigarettes in a store were not asked to show proof of age (Table 14). State prevalence rates ranged from 55.3% to 82.9% (median: 73.4%), and local prevalence rates ranged from 59.8% to 92.6% (median: 75.7%) (Table 15).

Alcohol and Other Drug Use

Alcohol Use

Nationwide, 80.4% of students had had at least one drink of alcohol during their lifetime (Table 16). Overall, white and Hispanic students (81.7% and 82.9%, respectively) were significantly more likely than black students (73.7%) to have had at least one drink of alcohol during their lifetime. White female students (81.6%) were significantly more likely than black female students (71.7%) to have had at least one drink of alcohol. Female students in grades 10–12 were significantly more likely than female students in grade 9 to have had at least one drink of alcohol, and male students in grades 11 and 12 (84.0% and 86.0%, respectively) were significantly more likely than male students in grade 9 (74.2%) to have done so. The prevalence of lifetime alcohol use across the state surveys ranged from 43.6% to 84.0% (median: 78.2%) (Table 17). The prevalence across the local surveys ranged from 58.0% to 83.9% (median: 71.3%).

Nationwide, more than half (51.6%) of all students had had at least one drink of alcohol during the 30 days preceding the survey (i.e., current alcohol use) (Table 16). Overall, white and Hispanic students (54.1% and 54.7%, respectively) were significantly more likely than black students (42.0%) to report current alcohol use. White and Hispanic female students (53.3% and 52.3%, respectively) were significantly more likely than black female students (38.5%) to report current alcohol use. Male students in grade 12 (59.5%) were significantly more likely than male students in grade 9 (46.9%) to do so. State prevalence rates varied nearly threefold from 22.4% to 60.7% (median: 50.5%), and local prevalence rates ranged from 26.4% to 57.0% (median: 41.0%) (Table 17).

Nationwide, 32.6% of students had had five or more drinks of alcohol on at least one occasion during the 30 days preceding the survey (i.e., episodic heavy drinking) (Table 16). Overall, male students (36.2%) were significantly more likely than female students (28.6%) to report episodic heavy drinking. This significant difference was identified for black students and students in grade 12. Overall, white and Hispanic

students (35.6% and 37.7%, respectively) were significantly more likely than black students (18.8%) to report episodic heavy drinking. White and Hispanic male and female students were significantly more likely to report episodic heavy drinking than black male and female students. Male and female students in grades 11 and 12 were significantly more likely than male and female students in grade 9 to report this behavior, and male students in grade 12 (46.5%) were significantly more likely than male students in grades 10 and 11 (32.1% and 37.8%, respectively) to do so. Prevalence rates across the state surveys varied threefold from 12.6% to 43.1% (median: 30.3%) and across the local surveys from 12.6% to 35.5% (median: 18.4%) (Table 17).

Marijuana Use

Nationwide, 42.4% of students had used marijuana during their lifetime (Table 16). Male students in grade 9 (38.9%) were significantly more likely than female students in grade 9 (27.9%) to have used marijuana during their lifetime. Black male students (54.2%) were significantly more likely than white male students (42.7%) to report having used marijuana in their lifetime. Lifetime use was significantly more likely among female students in grades 10, 11, and 12 (39.5%, 43.6%, and 43.8%, respectively) than among female students in grade 9 (27.9%). Lifetime marijuana use varied fourfold from 10.3% to 48.4% (median: 38.9%) across the state surveys and ranged from 27.7% to 61.8% (median: 37.6%) across the local surveys (Table 17).

Nationwide, 25.3% of students had used marijuana at least once during the 30 days preceding the survey (i.e., current marijuana use) (Table 16). Overall, male students (28.4%) were significantly more likely than female students (22.0%) to currently use marijuana. Black male students (36.8%) were significantly more likely than black female students (22.1%) to report this behavior. Black male students (36.8%) also were significantly more likely than white male students (26.8%) to currently use marijuana. Current marijuana use varied sixfold from 5.3% to 31.9% (median: 22.9%) across the state surveys and ranged from 15.6% to 38.7% (median: 21.4%) across the local surveys (Table 17).

Cocaine Use

Nationwide, 7.0% of students had used some form of cocaine during their lifetime (Table 18). Overall, male students (8.8%) were significantly more likely than female students (5.0%) to have ever used cocaine. This significant difference was identified for white and black students. Overall, white and Hispanic students (6.5% and 16.0%, respectively) were significantly more likely than black students (2.0%) to report lifetime cocaine use, and Hispanic students (16.0%) were significantly more likely than white students (6.5%) to do the same. These significant differences by race/ethnicity were identified for both male and female students. A fourfold variation in lifetime and nearly eightfold variation in current cocaine use were observed across the state and local surveys (Table 19). Lifetime cocaine use varied nearly fourfold from 2.9% to 11.5% (median: 5.9%) across the state surveys and nearly threefold from 1.4% to 10.6% (median: 5.3%) across the local surveys.

Nationwide, 3.1% of students had used some form of cocaine at least once during the 30 days preceding the survey (i.e., current cocaine use) (Table 18). Overall, male students (4.3%) were significantly more likely than female students (1.8%) to currently use cocaine. This significant difference was identified for white and black students and

students in grade 12. Overall, Hispanic students (7.5%) were significantly more likely than white and black students (2.6% and 1.3%, respectively) to report current cocaine use. This significant difference was identified for both male and female students. Current cocaine use varied nearly fourfold from 1.4% to 4.9% (median: 3.0%) across the state surveys and varied fivefold from 0.9% to 4.6% (median: 2.1%) across the local surveys.

Nationwide, 4.5% of students had used crack or freebase forms of cocaine during their lifetime (Table 18). Black male students (3.2%) were significantly more likely than black female students (0.3%) to have ever used crack cocaine. Overall, white and Hispanic students (4.2% and 10.5%, respectively) were significantly more likely than black students (1.6%) to have ever used crack cocaine, and Hispanic students (10.5%) were significantly more likely than white students (4.2%) to have done so. Hispanic and white female students (11.6% and 2.9%, respectively) were significantly more likely than black female students (0.3%) to have ever used crack cocaine. Hispanic female students (11.6%) also were significantly more likely than white female students (2.9%) to have done so. Hispanic male students (9.4%) were significantly more likely than black male students (3.2%) to have used crack cocaine. A nearly fourfold variation in crack or freebase use was observed across the state surveys, which ranged from 1.8% to 6.9% (median: 4.0%); a greater than tenfold variation was observed across the local surveys, which ranged from 0.7% to 7.4% (median: 2.9%) (Table 19).

Steroid Use

Nationwide, 3.7% of students had used steroids without a physician's prescription during their lifetime (Table 20). Overall, male students (4.9%) were significantly more likely than female students (2.4%) to have used steroids. This significant difference was identified for white students and students in grade 12. Overall, white and Hispanic students (3.8% and 4.7%, respectively) were significantly more likely than black students (1.6%) to have used steroids. Hispanic female students (5.3%) were significantly more likely than black female students (0.9%) to report lifetime steroid use, and white male students (5.3%) were significantly more likely than black male students (2.4%) to do so. Female students in grades 9 and 10 (3.4% and 3.1%, respectively) were significantly more likely to have used steroids than female students in grade 12 (1.0%). Lifetime steroid use varied threefold from 2.0% to 6.5% (median: 3.7%) across the state surveys and varied threefold from 1.7% to 5.1% (median: 3.2%) across the local surveys (Table 21).

Injecting-Drug Use

Nationwide, 2.0% of students had injected illegal drugs during their lifetime* (Table 20). Overall, male students (3.0%) were significantly more likely than female students (1.0%) to report injecting-drug use. This significant difference was identified for white and black students and students in grades 11 and 12. State prevalence rates varied threefold from 1.2% to 3.7% (median: 2.2%), and local prevalence rates varied nearly ninefold from 0.4% to 3.5% (median: 1.7%) (Table 21).

*Students were classified as injecting-drug users only if they a) reported injecting-drug use not prescribed by a physician and b) answered "one or more" to any of these questions: "During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?"; "During your life, how many times have you used any other type of illegal drug, such as LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin?"; or "During your life, how many times have you taken steroid pills or shots without a doctor's prescription?"

Other Illegal-Drug Use

Nationwide, 16.0% of students reported use of other illegal drugs during their lifetime (e.g., LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin) (Table 20). Overall, white and Hispanic students (18.4% and 18.1%, respectively) were significantly more likely than black students (3.9%) to report use of other illegal drugs. This significant difference was identified for both male and female students. State prevalence rates varied ninefold from 2.4% to 22.3% (median: 15.7%), and local prevalence rates varied ninefold from 2.3% to 20.1% (median: 7.9%) (Table 21).

Inhalant Use

Nationwide, one fifth (20.3%) of students reported they had ever sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paint sprays to get high (Table 20). Overall, white and Hispanic students (22.7% and 22.8%, respectively) were significantly more likely than black students (9.5%) to report inhalant use. This significant difference was identified for both male and female students. Female students in grades 9 and 10 (25.0% and 21.3%, respectively) were significantly more likely than female students in grade 12 (12.6%) to report ever having used inhalants. State prevalence rates varied more than threefold from 7.9% to 28.3% (median: 19.8%), and local prevalence rates ranged from 7.7% to 19.7% (median: 13.1%) (Table 21).

Initiation of Risk Behaviors

Cigarette Smoking

Nationwide, one fourth (24.9%) of students had ever smoked a whole cigarette before 13 years of age (Table 22). Hispanic male students (33.0%) were significantly more likely than Hispanic female students (20.2%) to have smoked a whole cigarette before 13 years of age. Overall, white and Hispanic students (25.9% and 26.6%, respectively) were significantly more likely than black students (17.2%) to have smoked a whole cigarette before 13 years of age. White female students (23.6%) were significantly more likely than black female students (14.8%) to have smoked a whole cigarette before 13 years of age, and white and Hispanic male students (27.9% and 33.0%, respectively) were significantly more likely than black male students (20.1%) to have done so. State prevalence rates varied threefold from 10.6% to 33.2% (median: 26.0%), and local prevalence rates ranged from 15.7% to 26.1% (median: 19.3%) (Table 23).

Alcohol Use

Nationwide, nearly one third (32.4%) of students first drank alcohol (other than a few sips) before 13 years of age (Table 22). Overall, male students (38.6%) were significantly more likely than female students (25.5%) to have tried alcohol before 13 years of age. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, Hispanic students (39.5%) were significantly more likely than white students (30.3%) to have tried alcohol before 13 years of age. Hispanic male students (46.7%) were significantly more likely than white male students (36.1%) to have initiated alcohol use before 13 years of age. Female and male students in grade 9 were significantly more likely to report alcohol use before 13 years of age than

female and male students in grades 11 and 12. State prevalence rates varied nearly fourfold from 10.8% to 42.0% (median: 34.2%). Local prevalence rates ranged from 25.8% to 39.0% (median: 33.1%) (Table 23).

Marijuana Use

Nationwide, 7.6% of students had tried marijuana before 13 years of age (Table 22). Overall, male students (10.2%) were significantly more likely than female students (4.8%) to have tried marijuana before 13 years of age. This significant difference was identified for white and black students and students in grades 9 and 10. Overall, black and Hispanic students (11.1% and 12.6%, respectively) were significantly more likely than white students (5.6%) to have tried marijuana before 13 years of age. Hispanic male and female students (16.5% and 8.8%, respectively) were significantly more likely than white male and female students (7.8% and 3.2%, respectively) to have tried marijuana before 13 years of age, and black male students (16.5%) were significantly more likely than white male students (7.8%) to have done so. State prevalence rates varied more than threefold from 4.1% to 14.1% (median: 7.4%). Local prevalence rates varied threefold from 5.6% to 18.4% (median: 9.2%) (Table 23).

Cocaine Use

Nationwide, 1.2% of students had tried cocaine (including powder, crack, or free-base forms of cocaine) before 13 years of age (Table 22). Overall, male students (1.8%) were significantly more likely than female students (0.5%) to have tried cocaine before 13 years of age. This significant difference was identified for white and black students and students in grade 11. State prevalence rates varied more than elevenfold from 0.3% to 3.5% (median: 1.5%), and local prevalence rates varied fivefold from 0.5% to 2.6% (median: 1.3%) (Table 23).

Tobacco, Alcohol, and Other Drug Use on School Property

Nationwide, 16.0% of students had smoked cigarettes on school property during the 30 days preceding the survey (Table 24). Black male students (11.6%) were significantly more likely than black female students (4.5%) to have smoked cigarettes on school property. Overall, white and Hispanic students (17.6% and 14.9%, respectively) were significantly more likely than black students (7.6%) to have smoked cigarettes on school property. White and Hispanic female students (17.7% and 13.6%, respectively) were significantly more likely than black female students (4.5%) to have engaged in this behavior, and white male students (17.5%) were significantly more likely than black male students (11.6%) to have done so. Across the state surveys, prevalence rates varied fourfold from 5.8% to 22.9% (median: 15.9%) (Table 25). Across the local surveys, the prevalence rates varied threefold from 6.4% to 18.8% (median: 10.3%).

Smokeless-tobacco use on school property during the 30 days preceding the survey was reported by 6.3% of students nationwide (Table 24). Overall, male students (11.2%) were significantly more likely than female students (0.9%) to have used smokeless tobacco on school property. This significant difference was identified for white and black students and all the grade subgroups. Overall, white students (8.0%) were significantly more likely than black and Hispanic students (1.3% and 3.0%, respectively) to have used smokeless tobacco on school property. White male

students (14.2%) were significantly more likely to have engaged in this behavior than black and Hispanic male students (2.7% and 3.9%, respectively). A thirteenfold variation was observed across the state surveys, which ranged from 1.4% to 18.3% (median: 6.9%) (Table 25). A sixfold variation was observed across the local surveys, which ranged from 0.5% to 3.3% (median: 1.6%).

Nationwide, 6.3% of students had had at least one drink of alcohol on school property during the 30 days preceding the survey (Table 24). Male students in grade 12 (8.4%) were significantly more likely than female students in the same grade (4.0%) to have engaged in this behavior. Prevalence rates across the state surveys ranged from 3.9% to 9.8% (median: 5.9%) and across the local surveys from 4.4% to 11.5% (median: 6.1%) (Table 25).

Nationwide, 8.8% of students had used marijuana on school property during the 30 days preceding the survey (Table 24). Overall, male students (11.9%) were significantly more likely than female students (5.5%) to have used marijuana on school property. This significant difference was identified for white students and students in grades 10, 11, and 12. Overall, black and Hispanic students (12.3% and 12.9%, respectively) were significantly more likely than white students (7.0%) to have used marijuana on school property. Prevalence rates varied nearly fourfold from 3.0% to 11.3% (median: 6.7%) across the state surveys and ranged from 6.9% to 17.2% (median: 8.7%) across the local surveys (Table 25).

Nearly one third (32.1%) of students had been offered, sold, or given an illegal drug on school property during the 12 months preceding the survey (Table 24). Overall, male students (38.8%) were significantly more likely than female students (24.8%) to have been offered, sold, or given an illegal drug on school property. This significant difference was identified for white and black students and all the grade subgroups. Overall, Hispanic students (40.7%) were significantly more likely than black students (28.5%) to have been offered, sold, or given an illegal drug on school property. Hispanic female students (34.9%) were significantly more likely than white and black female students (23.5% and 22.5%, respectively) to have been offered, sold, or given an illegal drug. Prevalence rates across the state surveys varied nearly threefold from 16.3% to 46.4% (median: 29.6%) and ranged across the local surveys from 21.0% to 46.2% (median: 29.9%) (Table 25).

Sexual Behaviors that Contribute to Unintended Pregnancy and STDs, Including HIV Infection

Sexual Intercourse

Nationwide, more than half (53.1%) of all high school students had had sexual intercourse during their lifetime (i.e., sexual experience) (Table 26). Black male students (81.0%) were significantly more likely than black female students (67.0%) to have had sexual intercourse. Overall, black students (73.4%) were significantly more likely than white and Hispanic students (48.9% and 57.6%, respectively) to have ever had sexual intercourse. Black female students (67.0%) were significantly more likely than white female students (49.0%) to have had sexual intercourse, and black male students (81.0%) were significantly more likely than white and Hispanic male students (48.9% and 62.0%, respectively) to have done so. Among female students, the prevalence

rates increased significantly from grade 9 (32.1%) to grades 10, 11, and 12 (46.0%, 60.2%, and 66.0%, respectively); among male students, the prevalence rates increased significantly from grade 9 (40.6%) to grades 11 and 12 (57.1% and 67.1%, respectively). Prevalence rates ranged from 36.3% to 67.6% (median: 48.7%) across the state surveys and from 43.8% to 72.2% (median: 55.8%) across the local surveys (Table 27).

The percentage of students nationwide who had initiated sexual intercourse before 13 years of age was 9.0% (Table 26). Overall, male students (12.7%) were significantly more likely than female students (4.9%) to have initiated sexual intercourse before 13 years of age. This significant difference was identified for all the racial/ethnic subgroups and students in grades 10–12. Overall, black students (24.2%) were significantly more likely than white and Hispanic students (5.7% and 8.8%, respectively) to have initiated sexual intercourse before 13 years of age. Black female students (10.4%) were significantly more likely than white female students (3.6%) to have done so, and black male students (41.4%) were significantly more likely than white and Hispanic male students (7.6% and 12.9%, respectively) to have done so. Female students in grade 9 (7.7%) were significantly more likely than female students in grade 12 (3.2%) to have initiated sexual intercourse before 13 years of age. Across the state surveys, prevalence rates varied fivefold from 4.3% to 22.1% (median: 8.7%) (Table 27). Across the local surveys, the prevalence rates varied more than threefold from 6.4% to 22.9% (median: 16.3%).

The percentage of students nationwide who had had sexual intercourse during their lifetime with four or more sex partners was 17.8% (Table 26). Overall, male students (20.9%) were significantly more likely than female students (14.4%) to have had four or more sex partners during their lifetime. This significant difference was identified for black and Hispanic students and students in grades 9 and 10. Overall, black students (35.6%) were significantly more likely than white and Hispanic students (14.2% and 17.6%, respectively) to have had four or more sex partners. Black male and female students (52.2% and 21.7%, respectively) were significantly more likely than white male and female students (15.2% and 13.1%, respectively) and Hispanic male and female students (23.6% and 11.9%, respectively) to report this behavior. Hispanic male students (23.6%) also were significantly more likely than white male students (15.2%) to have had four or more sex partners. Among female students, those in grade 11 (17.2%) were significantly more likely than those in grade 9 (6.8%) to have had four or more sex partners, and those in grade 12 (20.8%) were significantly more likely than those in grades 9 and 10 (6.8% and 11.3%, respectively) to have done so. Among male students, those in grade 12 (25.2%) were significantly more likely than those in grade 9 (17.5%) to have had four or more sex partners. Prevalence rates across the state surveys varied more than threefold from 8.4% to 29.9% (median: 16.4%) (Table 27). Prevalence rates across the local surveys varied nearly fourfold from 10.6% to 39.3% (median: 21.7%).

More than one third (37.9%) of students nationwide had had sexual intercourse during the 3 months preceding the survey (i.e., current sexual activity) (Table 26). Female students in grade 11 (48.1%) were significantly more likely than male students in the same grade (36.8%) to have had current sexual activity. Overall, black students (54.2%) were significantly more likely than white and Hispanic students (34.8% and 39.3%, respectively) to have had current sexual activity. Black female students (50.6%) were significantly more likely than white female students (38.5%) to have done so, and

black male students (58.3%) were significantly more likely than white or Hispanic male students (31.6% and 39.2%, respectively) to have done so. Among female students, current sexual activity was significantly more likely among those in grades 11 and 12 (48.1% and 51.9%, respectively) than among those in grades 9 and 10 (22.3% and 35.4%, respectively); current sexual activity was more likely among those in grade 10 (35.4%) than among those in grade 9 (22.3%). Among male students, current sexual activity was significantly more likely among those in grade 12 (47.9%) than among those in grades 9–11 (24.2%, 32.1%, and 36.8%, respectively); such activity was significantly more likely among those in grade 11 (36.8%) than among those in grade 9 (24.2%). Prevalence rates across the state surveys ranged from 21.7% to 50.2% (median: 33.3%) (Table 27). Prevalence rates across the local surveys ranged from 23.1% to 53.6% (median: 39.1%).

Among students who had had sexual intercourse during their lifetime, more than one fourth nationwide (28.5%) had been abstinent during the 3 months preceding the survey. Overall, male students (34.0%) were significantly more likely than female students (22.5%) to have been abstinent. This significant difference was identified for white students and students in grades 10 and 11. Male students in grade 9 (40.2%) were significantly more likely than male students in grade 12 (28.3%) to have been abstinent. Prevalence rates across the state surveys ranged from 25.4% to 40.7% (median: 28.8%) and across the local surveys from 25.7% to 36.9% (median: 29.6%) (Table 27).

Condom Use

Among currently sexually active students nationwide, 54.4% reported that either they or their partner had used a condom during last sexual intercourse (Table 28). Overall, male students (60.5%) were significantly more likely than female students (48.6%) to report that a condom was used. This significant difference was identified for Hispanic students and students in grades 10 and 12. Overall, black students (66.1%) were significantly more likely than white and Hispanic students (52.5% and 44.4%, respectively) to report that a condom was used. Black female students (60.5%) were significantly more likely than white (48.0%) and Hispanic (33.4%) female students to report that a condom was used during last sexual intercourse. Black male students (71.6%) were significantly more likely than white male students (57.5%) to report this behavior. Female students in grade 9 (58.5%) were significantly more likely than female students in grade 12 (43.1%) to report that a condom was used. Prevalence rates across the state surveys ranged from 29.7% to 64.6% (median: 53.7%) and across the local surveys from 45.5% to 69.1% (median: 62.4%) (Table 29).

Birth Control Pill Use

Nationwide, among students who are currently sexually active, 17.4% reported that either they or their partner had been using birth control pills prior to last sexual intercourse (Table 28). White female students (25.4%) were significantly more likely than white male students (17.0%) to report that birth control pills were used. Overall, white students (21.4%) were significantly more likely than black and Hispanic students (10.2% and 11.4%, respectively) to have used birth control pills. White female students (25.4%) were significantly more likely than black (12.2%) or Hispanic (9.4%) female students to report this behavior. White male students (17.0%) were significantly more

likely than black male students (8.3%) to do so. Among female students, those in grade 12 (28.6%) were significantly more likely than those in grades 9–11 (12.6%, 15.7%, and 17.2%, respectively) to report use of birth control pills. Prevalence rates varied nearly thirteenfold from 2.9% to 36.9% (median: 17.2%) across the state surveys and nearly threefold from 5.6% to 15.8% (median: 9.7%) across the local surveys (Table 29).

Alcohol and Drug Use at Last Sexual Intercourse

Nationwide, among students who are currently sexually active, one fourth (24.8%) reported that they had used alcohol or drugs at last sexual intercourse (Table 28). Overall, male students (32.8%) were significantly more likely than female students (16.8%) to report this behavior. This significant difference was identified for white and black students and students in grades 9, 10, and 12. Prevalence rates varied nearly fivefold from 8.7% to 35.4% (median: 24.1%) across the state surveys and ranged from 12.2% to 27.5% (median: 20.1%) across the local surveys (Table 29).

Pregnancy

Nationwide, 6.9% of students reported that they had been pregnant or gotten someone pregnant. Overall, black and Hispanic students (14.8% and 12.5%, respectively) were significantly more likely than white students (4.0%) to have been pregnant or gotten someone pregnant. This significant difference was identified for both male and female students. Male students in grade 12 (9.3%) also were significantly more likely than male students in grade 9 (3.6%) to have done so. Prevalence rates varied threefold from 3.6% to 11.5% (median: 6.1%) across the state surveys and varied threefold from 5.8% to 18.9% (median: 10.2%) across the local surveys (Table 29).

HIV Education

Nationwide, 86.3% of all students had been taught about acquired immunodeficiency syndrome (AIDS) or HIV infection in school (Table 30). Prevalence rates ranged from 79.0% to 96.3% (median: 89.8%) across the state surveys and from 79.7% to 93.8% (median: 88.8%) across the local surveys (Table 31).

Nearly two thirds (63.2%) of students nationwide had talked about AIDS or HIV infection with a parent or other adult family member (Table 30). Overall, female students (69.9%) were significantly more likely than male students (57.1%) to report having done so. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, black students (73.4%) were significantly more likely than white and Hispanic students (62.1% and 61.5%, respectively) to have talked with an adult or other family member about AIDS or HIV infection. Black female students (77.4%) were significantly more likely than white female students (68.5%) to have talked with a parent or other adult family member about AIDS or HIV infection, and black male students (68.4%) were significantly more likely than white (56.4%) or Hispanic male (53.9%) students to have done so. Across the state surveys, prevalence rates ranged from 51.8% to 78.3% (median: 64.1%) (Table 31). Across the local surveys, prevalence rates ranged from 55.4% to 77.0% (median: 68.2%).

Dietary Behaviors

Consumption of Fruits and Vegetables

More than one fourth (27.7%) of students nationwide had eaten five or more servings of fruits and vegetables* during the day preceding the survey (Table 32). Overall, male students (32.6%) were significantly more likely than female students (22.7%) to report this behavior. This significant difference was identified for white students and students in grades 9 and 12. Female students in grade 10 (26.6%) were significantly more likely than female students in grade 12 (16.8%) to have done so. Across the state surveys, prevalence rates varied nearly threefold from 16.4% to 45.0% (median: 27.2%) (Table 33). Across the local surveys, prevalence rates ranged from 19.7% to 31.0% (median: 27.1%).

Consumption of Foods Typically High in Fat Content

Nationwide, 60.5% of students had eaten two or fewer servings of foods typically high in fat content† during the day preceding the survey (Table 32). Overall, female students (71.6%) were significantly more likely than male students (50.3%) to have eaten two or fewer servings of such foods. This significant difference was identified across all the racial/ethnic and grade subgroups. Overall, white and Hispanic students (62.4% and 61.9%, respectively) were significantly more likely than black students (50.0%) to have eaten two or fewer servings of foods typically high in fat content. White and Hispanic female students (75.9% and 68.8%, respectively) were significantly more likely to have done so than black female students (56.3%), and Hispanic male students (54.7%) were significantly more likely than black male students (42.6%) to have done so. Across the state surveys, prevalence rates ranged from 41.9% to 76.5% (median: 60.7%) (Table 33). Across the local surveys, prevalence rates ranged from 50.7% to 73.3% (median: 61.1%).

Perceived Overweight

More than one fourth (27.6%) of all students nationwide thought they were overweight (Table 32). Overall, female students (33.6%) were significantly more likely to identify themselves as being overweight than male students (22.1%). This significant difference was observed for all the racial/ethnic subgroups and students in grades 9, 11, and 12. Overall, white and Hispanic students (28.9% and 31.6%, respectively) were significantly more likely than black students (21.2%) to identify themselves as being overweight. This significant difference was identified for both male and female students. Female students in grades 9 and 12 (36.3% and 37.1%, respectively) were significantly more likely than female students in grade 10 (29.1%) to identify themselves as being overweight. Across the state surveys, prevalence rates ranged from 19.9% to 36.0% (median: 28.9%) (Table 33). Across the local surveys, prevalence rates ranged from 21.3% to 29.8% (median: 25.1%).

*Fruit, fruit juice, green salad, and cooked vegetables.

†Hamburgers, hot dogs, or sausage; french fries or potato chips; and cookies, doughnuts, pie, or cake.

Attempted Weight Loss

Nationwide, 41.4% of all students were attempting weight loss at the time of the survey (Table 34). Overall, female students (59.8%) were significantly more likely than male students (24.3%) to be attempting weight loss. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, white and Hispanic students (43.1% and 45.4%, respectively) were significantly more likely than black students (33.2%) to be attempting weight loss. This significant difference was identified for both male and female students. Prevalence rates ranged from 31.6% to 46.8% (median: 42.3%) across the state surveys and from 30.6% to 42.8% across the local surveys (median: 37.9%) (Table 35).

The percentage of students nationwide who had taken laxatives or vomited either to lose weight or to keep from gaining weight during the 30 days preceding the survey was 4.8% (Table 34). Overall, female students (7.6%) were significantly more likely than male students (2.2%) to have taken laxatives or vomited to lose weight. This significant difference was identified for white and Hispanic students and students in grades 9, 10, and 11. White and Hispanic female students (8.2% and 10.9%, respectively) were significantly more likely than black female students (4.1%) to have taken laxatives or vomited to lose weight, and black male students (4.3%) were significantly more likely than white male students (1.2%) to have done so. Female students in grades 9 and 10 (9.3% and 9.4%, respectively) were significantly more likely to have taken laxatives or vomited to lose weight than female students in grade 12 (3.9%). Prevalence rates ranged from 3.8% to 9.0% (median: 5.3%) across the state surveys and from 3.7% to 6.5% across the local surveys (median: 4.5%) (Table 35).

Nationwide, 5.2% of all students had taken diet pills either to lose weight or to keep from gaining weight during the 30 days preceding the survey (Table 34). Overall, female students (8.7%) were significantly more likely than male students (1.9%) to have taken diet pills to lose weight. This significant difference was identified for white and Hispanic students and all of the grade subgroups. Among female students, white students (10.2%) were significantly more likely than black students (4.0%) to have taken diet pills; among male students, black students (3.6%) were significantly more likely than white students (1.1%) to have done so. Prevalence rates ranged from 4.1% to 9.3% (median: 5.8%) across the state surveys and varied threefold from 2.3% to 7.5% across the local surveys (median: 4.8%) (Table 35).

Nearly one third (31.2%) of all students had dieted either to lose weight or to keep from gaining weight during the 30 days preceding the survey (Table 34). Overall, female students (47.8%) were significantly more likely than male students (16.0%) to have dieted to lose weight. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, white and Hispanic students (32.8% and 36.0%, respectively) were significantly more likely than black students (22.7%) to have dieted to lose weight. Among female students, white and Hispanic students (52.5% and 48.2%, respectively) were significantly more likely to have dieted than black students (31.8%); among male students, Hispanic students (23.4%) were significantly more likely than white or black students (15.6% and 11.7%, respectively) to have done so. Across the state surveys, prevalence rates ranged from 24.2% to 35.2% (median: 30.3%) (Table 35). Across the local surveys, prevalence rates ranged from 21.5% to 33.5% (median: 27.3%).

Approximately half (51.0%) of all students had exercised either to lose weight or to keep from gaining weight during the 30 days preceding the survey (Table 34). Overall, female students (63.8%) were significantly more likely than male students (39.3%) to have exercised to lose weight. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, white and Hispanic students (53.7% and 52.0%, respectively) were significantly more likely than black students (42.4%) to have exercised to lose weight. Among female students, white and Hispanic students (69.6% and 61.3%, respectively) were significantly more likely to have exercised than black students (49.1%). Female students in grade 9 (72.2%) were significantly more likely than female students in grades 11 and 12 (59.1% and 59.8%, respectively) to have done so. Across the state surveys, prevalence rates ranged from 37.9% to 56.7% (median: 52.7%) (Table 35). Across the local surveys, prevalence rates ranged from 38.3% to 54.7% (median: 46.2%).

Physical Activity

Vigorous and Moderate Physical Activity

Nearly two thirds (63.7%) of all students nationwide had participated in activities that made them sweat and breathe hard for at least 20 minutes on ≥ 3 of the 7 days preceding the survey (i.e., vigorous physical activity) (Table 36). Overall, male students (74.4%) were significantly more likely than female students (52.1%) to report vigorous physical activity. This significant difference was identified for all the racial/ethnic and grade subgroups. Overall, white students (67.0%) were significantly more likely than black students (53.2%) to report having participated in vigorous physical activity. White female students (56.7%) were significantly more likely than black female students (41.3%) to report vigorous physical activity. Prevalence rates among female students in grades 9 and 10 (61.6% and 59.3%, respectively) were significantly higher than among female students in grades 11 and 12 (47.2% and 42.4%, respectively). Prevalence rates among male students in grades 9 and 10 (79.9% and 78.6%, respectively) were significantly higher than among male students in grade 12 (67.2%). Across the state surveys, prevalence rates ranged from 32.5% to 71.9% (median: 63.1%) (Table 37). Across the local surveys, prevalence rates ranged from 44.9% to 63.2% (median: 51.6%).

More than one fifth (21.1%) of all students nationwide had walked or bicycled for at least 30 minutes on ≥ 5 of the 7 days preceding the survey (i.e., moderate physical activity) (Table 36). Overall, black and Hispanic students (27.0% and 26.8%, respectively) were significantly more likely to report this behavior than white students (18.3%). Black and Hispanic female students (26.4% and 27.6%, respectively) were significantly more likely than white female students (16.8%) to report moderate physical activity. Prevalence rates among female students in grades 9 and 10 (27.0% and 22.9%, respectively) were significantly higher than among female students in grade 12 (13.7%). Across the state surveys, prevalence rates ranged from 15.0% to 30.3% (median: 21.4%) (Table 37). Across the local surveys, prevalence rates ranged from 37.4% to 58.9% (median: 29.0%).

Stretching Exercises

Nationwide, 53.0% of all students had done stretching exercises (e.g., toe touching, knee bending, and leg stretching) on ≥ 3 of the 7 days preceding the survey (Table 36). Hispanic male students (54.8%) were significantly more likely than Hispanic female students (43.5%) to report this behavior, and male students in grade 12 (50.7%) were significantly more likely than female students in grade 12 (38.9%) to do so. White female students (53.9%) were significantly more likely than black female students (41.5%) to report moderate physical activity. Among female students, the prevalence rate was significantly higher among students in grade 9 (62.1%) than among students in grades 11 and 12 (45.5% and 38.9%, respectively); the prevalence rate was significantly higher among students in grade 10 (57.8%) than among students in grade 12 (38.9%). Among male students, the prevalence rate was significantly higher among students in grade 9 (62.2%) than among students in grade 11 (50.9%). Across the state surveys, prevalence rates ranged from 24.2% to 58.7% (median: 49.7%) (Table 37). Across the local surveys, prevalence rates ranged from 33.3% to 56.1% (median: 42.8%).

Strengthening Exercises

Half (50.3%) of students nationwide had done strengthening exercises (e.g., push-ups, sit-ups, and weight lifting) on ≥ 3 of the 7 days preceding the survey (Table 36). Overall, male students (59.1%) were significantly more likely than female students (41.0%) to have done strengthening exercises. This significant difference was identified for all the racial/ethnic subgroups and students in grades 9, 11, and 12. Overall, white students (52.8%) were significantly more likely than black students (41.4%) to have done strengthening exercises. White female students (44.4%) were significantly more likely than black female students (31.3%) to report this behavior. Female students in grade 9 (49.6%) were significantly more likely than female students in grades 11 and 12 (37.1% and 29.4%, respectively) to have done strengthening exercises, and female students in grade 10 (49.8%) were significantly more likely than female students in grade 12 (29.4%) to have done so. Male students in grade 9 (64.0%) were significantly more likely than those in grade 12 (53.7%) to have done strengthening exercises. Prevalence rates ranged from 25.8% to 57.4% (median: 46.4%) across the state surveys and from 32.1% to 51.6% (median: 42.3%) across the local surveys (Table 37).

Participation in Physical Education (PE) Class

Nationwide, 59.6% of students were enrolled in a PE class (Table 38). Among both male and female students, students in grade 9 were significantly more likely to be enrolled in a PE class than students in grades 11 and 12; students in grade 10 were significantly more likely to be enrolled than students in grade 12. The percentage of students enrolled in PE varied threefold from 26.6% to 93.4% (median: 48.2%) across the state surveys and ranged from 33.6% to 89.8% (median: 55.9%) across the local surveys (Table 39).

One fourth (25.4%) of students had attended PE class daily (Table 38). Among female students, those in grades 9 and 10 (39.7% and 33.8%, respectively) were significantly more likely than students in grades 11 and 12 (12.3% and 11.1%,

respectively) to have attended PE class daily. Among male students, students in grade 9 (42.1%) were significantly more likely than students in grade 12 (14.8%) to have done so. The percentage of students who attended PE class daily varied sevenfold from 9.2 to 64.4% (median: 33.1%) across the state surveys and varied nearly ninefold from 9.0% to 78.2% (median: 33.9%) across the local surveys (Table 39).

Nationwide, 69.7% of students enrolled in PE class reported exercising ≥ 20 minutes during an average PE class. Overall, male students enrolled in PE class (74.8%) were significantly more likely than female students enrolled in PE class (63.7%) to report exercising ≥ 20 minutes during an average PE class. This significant difference was identified for black and Hispanic students and students in grade 11. Overall, white students enrolled in PE class (71.3%) were significantly more likely than black students enrolled in PE class (59.0%) to report exercising ≥ 20 minutes during an average PE class. White female students (67.1%) were significantly more likely than black female students (46.6%) to have done so. The percentage of students enrolled in PE class who reported exercising ≥ 20 minutes during an average PE class varied from 41.8% to 85.1% (median: 75.7%) across the state surveys and from 46.5% to 80.7% (median: 62.0%) across the local surveys (Table 39).

Participation on Sports Teams

Half (50.3%) of all students nationwide had played on a sports team run by their school during the 12 months preceding the survey (Table 38). Overall, male students (57.8%) were significantly more likely than female students (42.4%) to have played on a sports team run by their school. This significant difference was identified for all the racial/ethnic subgroups and students in grades 9, 11, and 12. Overall, white students (53.9%) were significantly more likely than Hispanic students (37.8%) to have played on a sports team run by their school. White female students (47.1%) were significantly more likely than black and Hispanic female students (34.9% and 27.3%, respectively) to have played on a sports team run by their school, and white male students (59.9%) were significantly more likely than Hispanic male students (48.6%) to have done so. Across the state surveys, the percentage of students who played on a sports team run by their school ranged from 25.3% to 59.2% (median: 47.5%) (Table 39). Across the local surveys, the percentage ranged from 29.0% to 47.4% (median: 36.4%).

Nationwide, 36.9% of all students had played on a sports team run by an organization other than their school during the 12 months preceding the survey (Table 38). Overall, male students (46.4%) were significantly more likely than female students (26.8%) to have played on a sports team run by an organization other than their school. Among female students, white students (29.9%) were significantly more likely than black and Hispanic students (21.1% and 21.2%, respectively) to have played on a sports team run by an organization other than their school, students in grade 9 (32.0%) were significantly more likely to have done so than students in grades 11 and 12 (23.8% and 19.8%, respectively), and students in grade 10 (32.4%) were significantly more likely than students in grade 12 (19.8%) to have done so. Among male students, those in grade 9 (52.8%) were significantly more likely to report this behavior than students in grades 11 and 12 (43.1% and 42.8%, respectively). The percentage of students who played on a sports team run by an organization other than their school ranged from 28.5% to 58.1% (median: 39.0%) across the state surveys and from 27.5% to 37.5% (median: 33.2%) across the local surveys (Table 39).

DISCUSSION

These results indicate that many high school students throughout the United States practice behaviors that place them at risk for serious health problems. Some risk behaviors are more likely to be found among particular subgroups of students. For example, male students were more likely than female students to report rarely or never wearing safety belts, weapon carrying, physical fighting, smokeless-tobacco use, episodic heavy drinking, current marijuana use, lifetime and current cocaine use, injecting-drug use, four or more lifetime sex partners, and using alcohol and drugs at last sexual intercourse. In contrast, female students were more likely than male students to report suicide-related behaviors, perceiving themselves as overweight, and using each type of weight-loss method. White students were more likely than black or Hispanic students to report seriously considering attempting suicide, frequent cigarette use, and smokeless-tobacco use. Black students were more likely than white or Hispanic students to report rarely or never wearing safety belts, sexual experience, sexual activity, and having had four or more lifetime sex partners. Hispanic students were more likely than white or black students to report riding with a driver who had been drinking alcohol, carrying a weapon, physical fighting, attempting suicide, lifetime cigarette use, lifetime and current cocaine use, and lifetime crack use. Students in grades 9 and 10 were more likely than students in grades 11 and 12 to report carrying a weapon, physical fighting, attempting suicide, lifetime use of inhalants, and use of laxatives or vomiting to lose weight. In contrast, students in grades 11 and 12 were more likely than students in grades 9 and 10 to report driving after drinking alcohol; lifetime, current, and frequent cigarette use; lifetime and current alcohol use; episodic heavy drinking; lifetime and current marijuana use; sexual experience; sexual activity; four or more lifetime sex partners; and ever having been pregnant or getting someone pregnant. These subgroup findings can assist in identifying the need for education and services based on higher prevalences of risk behaviors. However, the underlying causes (e.g., education levels, economic factors, or cultural influences) for subgroup differences (7) could not be addressed in this analysis.

Considerable variation occurs from state to state and from city to city for some priority health-risk behaviors. For example, among the state surveys, a fivefold variation or greater was identified for not using safety belts, drinking and driving, not attending school because of concerns about safety, frequent cigarette use, smokeless-tobacco use (including smokeless-tobacco use on school property), marijuana use, use of other illegal drugs, and initiation of sexual activity and cocaine use before 13 years of age. Among the local surveys, a similar level of variation was found for not using safety belts, smokeless-tobacco use (including smokeless-tobacco use on school property), cocaine use (including cocaine use on school property and crack cocaine use), injecting-drug use, use of other illegal drugs, and initiation of cocaine use before 13 years of age. Though not addressed in this analysis, these state and local survey variations may be attributable to differences in state and local laws and policies, enforcement practices, access to illegal drugs, available intervention programs, and prevailing norms and adult practices. Further exploration of the variations may indicate important intervention needs.

The median prevalence rates for the state and local surveys were similar for all behaviors except for the following behaviors where the state median was higher:

drinking and driving, current cigarette use, frequent cigarette use, smokeless-tobacco use, cigarette and smokeless-tobacco use on school property, episodic heavy drinking, use of other illegal drugs, and use of birth control pills. The median for the local surveys was higher for the following behaviors: being injured in a physical fight, feeling unsafe going to school, initiating sexual intercourse before 13 years of age, and ever having been pregnant.

YRBSS is the only school-based surveillance system to monitor priority health-risk behaviors among representative samples of students at the national, state, and local levels. Since the system was implemented in 1990, the number of participating states and cities has almost doubled—from 34 to 61. Consequently, the system is an increasingly useful tool for monitoring 21 national health objectives (6) and National Education Goal 7, which focuses on safe, disciplined, and drug-free schools (8). At the state and local levels, the surveillance system continues to be used to improve health-related policies and programs for youth. For example, in Alabama, YRBS data were used to help establish a state-wide Task Force on Violence. In West Virginia, YRBS data were used to increase support for comprehensive school health programs. West Virginia schools are now required by law to develop a local School Improvement Council that must include business and community representatives. In Maine, YRBS data encouraged the adoption of skill-based health education curricula in grade 8. In Dallas, YRBS data were used to help establish six community health clinics. In Boston, YRBS data are being used to support a proposed state mandate requiring comprehensive school health education in grades kindergarten through 12. Continued support for the YRBSS will enhance its ability to provide useful data for state and local health and education officials to use in improving policies and programs for youth.

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CENSUS BRIEF

U.S. Department of Commerce
Economics and Statistics Administration
BUREAU OF THE CENSUS



America's Children at Risk

MOST ADOLESCENTS NAVIGATE the perilous course from childhood to adulthood without serious mishap. But some stumble. The more obstacles they have had to overcome as children, the more likely they are to stumble as adolescents.

Although risk factors may lead to an unfavorable outcome, many people who grow up in poverty nonetheless achieve success later in life.

MANY CHILDREN MUST OVERCOME OBSTACLES—RISK FACTORS

Social research has identified many indicators that put children at risk of problems ranging from hyperactivity to dropping out of school to becoming involved in crime. This *Brief* reports findings from the March 1996 Current Population Survey on how American children are doing in relation to six of these risk factors: poverty, welfare dependence, absent parents, one-parent families, unwed mothers and parents who did not graduate from high school.

CHANGES FROM 1970 TO 1996

Risk Factor 1: Poverty. During 1995, 21 percent of American children under age 18 lived in families with incomes below the poverty level. This is significantly more than in 1970 when only 15 percent were in poor families.

Risk Factor 2: Welfare Dependence. During 1995, 15 percent of the nation's children were in households receiving cash assistance or food stamps. The percentage of children whose families participate in these programs has increased as the percentage of children in poverty has risen.

Risk Factor 3: Both Parents Absent. Children are slightly more likely to live in a home with neither parent. In March 1996, 4 percent of children lived with neither parent, up from 3 percent in 1970. Some lived with grandparents or other relatives; others lived with nonrelatives, for example, as foster children. The number of children living with grandparents, with neither parent present, jumped from less than 1 million in 1990 to more than 1.4 million in 1996.

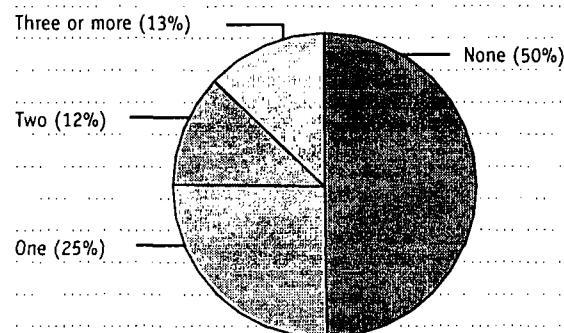
Risk Factor 4: One-Parent Families. In March 1996, 28 percent of children lived in one-parent families. This is significantly more than in 1970 when only 12 percent were in such families.

Risk Factor 5: Unwed Mothers. In March 1996, 9 percent of children lived with a never-married mother, compared with fewer than 1 percent in 1970.

Risk Factor 6: Parent Who Has Not Graduated From High School. In March 1996, 19 percent of children lived with a parent or guardian who had not

HALF OF 16- AND 17-YEAR-OLDS ARE AT RISK

(percent with number of risk factors)



U.S. Department of Commerce; BUREAU OF THE CENSUS

graduated from high school. Nonetheless, things have improved substantially from 1970 when 38 percent of children had a nongraduate parent or guardian.

SOME ADOLESCENTS STUMBLE— OUTCOMES ASSOCIATED WITH RISKS

The March 1996 Current Population Survey also identified two adverse outcomes that can occur for 16- and 17-year-old children: dropping out of high school and not working, and (for girls) giving birth to and living with a child. Since the risk factors and outcomes were measured at nearly the same point in time—during 1995 and in March 1996—it would be incorrect to infer that one caused the other. Causes precede effects. However, the findings do suggest that those exposed to risk factors are more likely to experience adverse outcomes.

Outcome 1: Not in School and Not Working. In March 1996, 5 percent of all adolescents age 16 and 17 were not enrolled in school and were not working. Hispanic children were more likely than others to experience this condition: 9 percent, compared with 6 percent of non-Hispanic Blacks and 4 percent of non-Hispanic Whites. (The percentages for non-Hispanic Blacks and Whites are not significantly different from each other.)

Outcome 2: Teenage Mothers. In March 1996, 3 percent of all 16- and 17-year-old girls had given birth to and were living with one or more children.¹ Nine percent of non-Hispanic Black, 6 percent of Hispanic, and

1 percent of non-Hispanic White girls had given birth to and were living with one or more children. (The percentages for non-Hispanic Blacks and Hispanics are not significantly different.)

The figure below shows that teenagers experiencing some of the six risk factors are more likely than those without them to experience these outcomes. And, those with more risk factors are more likely than those with fewer to have these adverse outcomes.

Some of the six risk factors are more associated with adverse outcomes than others. Living with a nongraduate parent or guardian is more strongly related to being out of school and not working than is living in a one-parent family. It also may be the case that particular combinations of risk factors are especially likely to produce these outcomes.

Public policy often seeks to improve the well-being of children by reducing the proportion of those who are at risk. For example, recently enacted welfare reform legislation seeks, among other things, to—

- End the dependence of needy parents on government benefits.
- Prevent out-of-wedlock pregnancies.
- Encourage the formation and maintenance of two-parent families.

The *Work Opportunity and Personal Responsibility Reconciliation Action of 1996* directs the Census Bureau to monitor the impacts of welfare reform on the well-being of children. We will be watching and reporting on the future course of these and other risk factors and outcomes.

CENSUS BRIEF

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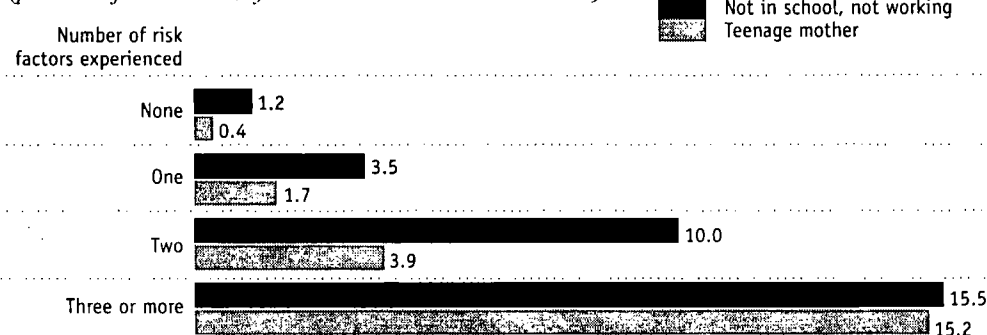
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This *Brief* is one of a series that presents information of current policy interest. All statistics are subject to sampling variability, as well as survey design flaws, respondent classification and reporting errors, and data processing mistakes. The Census Bureau has taken steps to minimize errors, and analytical statements have been tested and meet statistical standards. However, because of methodological differences, use caution when comparing these data with data from other sources.

¹ If a 16- or 17-year old mother maintains a mother-child family household—few of these young mothers do—she is considered to have had an adverse outcome and to be exposed to a risk factor: living in a one-parent family.

THE MORE RISK FACTORS. THE MORE LIKELY ADVERSE OUTCOMES

(percent of 16- and 17-year-olds with adverse outcomes)



CENSUS BRIEF

U.S. Department of Commerce
Economics and Statistics Administration
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Children with single parents— how they fare

CHILDREN LIVING AT HOME WITH BOTH PARENTS grow up with more financial and educational advantages than youngsters raised by one parent, as U.S. Census Bureau statistics have long shown. But even for those children living in single-parent homes, the marital status of the parent can affect the quality of life.

More than a quarter of America's children now live with one parent. This *Brief* provides a few glimpses of the living situations of such children.

Children living with a divorced parent typically have a big edge over those living with a parent who has never married—an even bigger edge if that parent is the father.

Never-married parents are significantly younger than divorced parents and on average tend to have fewer years of school completed and lower levels of income. Nonetheless, although age does have an effect, the differences remain.

DIVORCED PARENTS ARE MORE EDUCATED

About 85 percent of children living with either a divorced mother or father in 1995 were living with a parent who had finished high school. In contrast, among children living with a never-married parent, fewer than two-thirds had parents who had completed high school.

CHILDREN OF DIVORCED PARENTS ARE LESS LIKELY TO LIVE IN RENTAL HOMES...

Of the 19 million children of single parents, two-thirds lived in

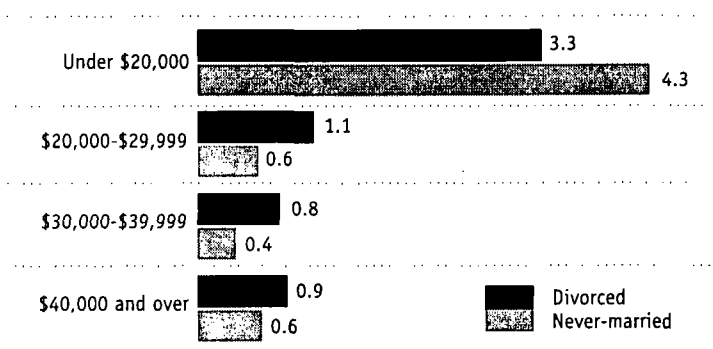
rented homes. In 1995, about 78 percent of children living with never-married parents and one-half (52 percent) of children living with divorced parents lived in rented homes.

... AND LESS LIKELY TO BE POOR

Nearly six of 10 children living with only their mother were near (or below) the poverty line. About 45 percent of children raised by divorced mothers and 69 percent of those raised by never-married mothers lived in or near poverty. Children living with their father (particularly if he was divorced) were more likely to be part of a family with a higher median income than those living with a single mom.

CHILDREN WITH DIVORCED AND NEVER-MARRIED MOTHERS, BY FAMILY INCOME (MARCH 1995)

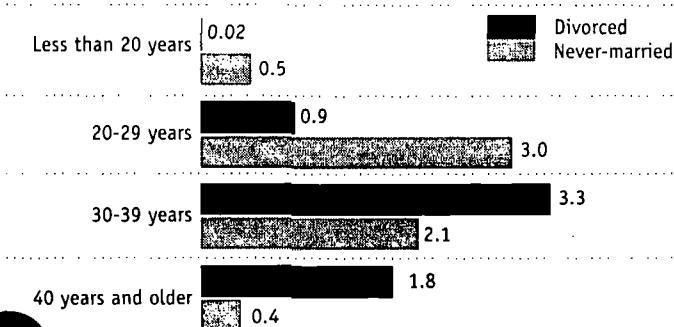
(In millions)



Employment was an important reason. While many single parents had jobs, there were 7.4 million children living with single moms who were unemployed or not in the labor force. Children of never-married mothers were twice as likely (59 percent) to have their moms unemployed or not in the labor force as children whose mothers were divorced (29 percent).

CHILDREN WITH DIVORCED AND NEVER-MARRIED MOTHERS, BY MOTHER'S AGE (MARCH 1995)

(In millions)



U.S. Department of Commerce; BUREAU OF THE CENSUS;

PROFILE OF CHILDREN'S LIVING ARRANGEMENTS (CHILDREN UNDER AGE 18)

- In 1995, 48.3 million of the 70.3 million children under age 18 lived with two parents (69 percent); 18.9 million lived with only one parent (27 percent); and 3.0 million lived with neither parent (4 percent).
- Of children living with one parent, 38 percent lived with a divorced parent, 35 percent with a never-married parent, 19 percent with a separated parent, 4 percent with a widowed parent, and 4 percent with a parent whose spouse lived elsewhere because of business or some other reason.
- Four million children lived in the homes of their grandparents—for 11 percent of them, both parents were also in the household; for 52 percent, one parent was there; and for 37 percent, neither parent was present.
- Most single-parent children live in metropolitan areas (14.5 million), and six in 10 of them (9.2 million) are in cities with populations of 1 million or more.

CENSUS BRIEF

MORE INFORMATION:

Marital Status and Living Arrangements: March 1995 (Update), Series P20-491.

Detailed statistics can be obtained in printed tables (PPL-52) for \$28.50 from the Population Division (301-457-2422) or via the Internet at—

<www.census.gov/prod/www/titles.html#popspec> and—
<www.census.gov/population/www/socdemo/ms-la.html>

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Boys With Absentee Dads Twice as Likely to Be Jailed

Stepfathers Don't Help, Study Finds

Reuters

SAN FRANCISCO, Aug. 20—Young men who grow up in homes without fathers are twice as likely to end up in jail as those who come from traditional two-parent families, according to a new study released today.

Cynthia Harper of the University of Pennsylvania and Sara S. McLanahan of Princeton University tracked a sample of 6,000 males aged 14 to 22 from 1979 to 1993. They found that boys whose fathers were absent from the household had double the odds of being incarcerated—even when other factors such as race, income, parents' education and urban residence were held constant.

Surprisingly, those boys who grow up with a stepfather in the home were at even higher risk for incarceration, roughly three times that of children who remain with both their natural parents, according to a study being presented at a meeting of the American Sociological Association Friday.

"Remarriage of parents doesn't help," Harper said. "A step-parent in the household doesn't erase the father-absent problem."

The sociologists launched their study in an effort to shed new light on the increase of youth violence between the late 1980s and early 1990s.

"It has become a lot less unusual for youth to become involved in violent crime," Harper said. "I wanted to see if there was any connection between youth vio-

lence and major family changes that have occurred over the last few decades."

Overall, the U.S. youth crime rate rose by 43 percent between 1989 and 1993. Since then, however, the youth violent crime rate dropped by about 25 percent, according to Justice Department figures.

Officials have credited the drop, which mirrored a wider drop in overall crime rates, in part to new community policing initiatives and tougher penalties for youth crime.

The study of 271 at-risk youths also found that the juveniles sent to jail were three times more likely to commit a violent crime than those sent to other programs.

Harper and McLanahan's study found that young men whose parents part ways during their adolescence were roughly 1½ times as likely to end up in jail as children from intact families—faring slightly better than boys who are born to single mothers.

It also found that, while whites have lower rates of father absenteeism than blacks, white youth whose families split are at a higher risk of incarceration than their black peers.

Child support payments did not appear to make a significant difference in the odds of incarceration, but the presence of live-in grandparents in households without fathers "appears to help improve youths' chances of avoiding incarceration," the study found.

The Washington Post
FRIDAY, AUGUST 21, 1998

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SECTION: Section A; Page 1; Column 1; National Desk

LENGTH: 2757 words

HEADLINE: PARENTS IN PRISON: A special report.;
As Inmate Population Grows, So Does a Focus on Children

BYLINE: By FOX BUTTERFIELD

DATELINE: OSSINING, N.Y.

BODY:

Baba Eng had been a prisoner at Sing Sing for 22 years, serving a life sentence for murder, when a new inmate walked into the shower room one day and stared at his face.

"Dad!" the stranger finally exclaimed.

The man was his son, whom Mr. Eng had not seen since his arrest, and who now was in prison himself for armed robbery. "It was the worst moment of my life," Mr. Eng recalled. "Here was my son; he had tried to imitate my life."

Mr. Eng's experience reflects a side of the nation's prison-building boom that is only now gaining attention: there are seven million children with a parent in jail or prison or recently released on probation or parole.

Those numbers alarm experts who say that having a parent behind bars is the factor that puts a child at greatest risk of becoming a juvenile delinquent and adult criminal.

Although most jails and prisons do not even ask new inmates whether they have children, a few are taking steps to counter the effect of parental incarceration as experts have begun to realize the seriousness of the problem. Some prisons have created special visiting areas for children; some offer parenting classes for inmates.

But the experts also warn that the emphasis on imprisonment to fight crime may be helping to create the next generation of criminals.

"There is no free lunch in this business," said Lawrence Sherman, dean of the University of Maryland's school of criminology and criminal justice. "If you increase the number of people arrested and sent to prison, you may actually be creating another problem. There is a multiplier effect."

There are 1.96 million children who have a parent or other close relative in jail or prison on any given day, according to the Bureau of Justice Statistics, a branch of the Justice Department, and 5 million more have parents who have been incarcerated and are on probation or parole.

The New York Times, April 7, 1999

The link between the generations is so strong that half of all juveniles in custody have a father, mother or other close relative who has been in jail or prison, said Allen J. Beck, chief of corrections statistics at the bureau. About 40 percent of the 1.8 million adults in jail and prison have a parent, brother or sister behind bars, Mr. Beck said.

There are several reasons children with a parent in prison are more likely to get in trouble, experts say. Most of these children grow up in families troubled by poverty, abuse, neglect and drug use. And separation from a parent -- for any reason -- is a well-documented problem for children.

But incarceration adds a special hazard. Children who see a parent arrested and handcuffed, and who are frisked by guards during a prison visit, become contemptuous toward law enforcement. More troublesome, many children with a father behind bars make a hero of him.

"When children are not in contact with their parents, it is a breeding ground for idealization, and when the parent is a big-time criminal, they can turn them into legends," said Jaime Inclan, a clinical psychologist who is director of the Roberto Clemente Center, a mental health center serving poor families on the Lower East Side of Manhattan.

Despite the dimensions of the problem, little attention is paid because the criminal-justice system is set up to deal with offenders, not their children.

In most cities, when the police make an arrest, when a judge passes sentence, or when an inmate enters jail and prison, no one asks whether the offender has children -- or, if they happen to ask, does anything with the information. And inmates are often evasive about their children, out of shame or fear of losing custody or government benefits.

There is so little research on the subject that there is no agreement even on the seemingly simple issue of whether it is good for children to visit their fathers or mothers behind bars.

Juliana Perez, a social worker who directs a parenting program in the county jail in San Antonio, says contact between incarcerated parents and their children is essential. In addition to helping the children, Ms. Perez said, "if the system doesn't allow bonding, we destroy whatever chance we have of changing the offenders' behavior."

But Judge Kathleen Richie of the Juvenile Court in Baton Rouge, La., disagrees. "The more these kids are exposed to prison by visiting, the more they get used to it, and prison loses its stigma," Judge Richie said.

She recently had a case in which a social worker was taking four children to prison to visit their mother, who had been convicted of selling crack cocaine and was awaiting trial on charges of neglecting the children. Judge Richie ordered that the visits take place in her chambers, with the mother in civilian clothes, so the children would not become accustomed to prison.

The mother was puzzled why prison visits were a problem. She had taken her children to visit her friends and relatives in prison for years before her own arrest. Three of the four children have since been arrested and sent to juvenile prisons.

The New York Times, April 7, 1999

"Sadly, these kids have fond memories, and their only memories, of their mom behind bars," Judge Richie said. "If you have parents in jail, then it is part of your life, and there is nothing offensive about it."

The Fathers Staying in Touch With Some Help

The Children's Center of the visiting room at Sing Sing is a small glass-enclosed space with shelves of children's books, boxes of building blocks and toy cars, a crib full of stuffed animals, and a computer.

It may not look much different than a day care center. But in one of the nation's oldest and most forbidding prisons, it is a revolution, an attempt to create a haven where convicts can meet quietly with their children in an effort to preserve, or rebuild, the family bonds that prison often breaks.

One day Hector Millan, a 38-year-old from East Harlem serving a 20-year to life sentence for murder, was seated at a low table with his young grandson, Hector 3d. His wife, Maritza, stood nearby. Mr. Millan has three sons and two daughters, and is one of the lucky inmates who is still married and visited by his family.

Nationwide, fewer than a quarter of male inmates are married, and fewer than a third are visited by their families. But two-thirds of them have children.

"Prison destroys families," Mr. Millan said matter of factly. "I can't tuck my children in bed at night. I can't be there to comfort them when they scrape their knees. I can't help them when they have problems at school. The damage done is irreparable."

Mr. Millan is enrolled in an unusual 16-week program at Sing Sing that tries to teach convicts how to overcome the obstacles to parenting behind bars. The program is part classroom reading -- with selections from the great child psychologists Jean Piaget, Erik Erikson and Bruno Bettelheim -- and part family therapy with counselors to help bridge the gaps during visits or in writing letters home.

The program, and the special section of the visiting room, are the brainchild of Elizabeth Gaynes, executive director of the Osborne Association, a group based in New York that sponsors programs to aid prisoners and their families.

"We tell them prison walls certainly make it harder, but you can still be a parent," Ms. Gaynes said. "We say prison can be an excuse for not taking your children to the library, but it is not an excuse for not teaching your children the value of reading."

Among the lessons the program tries to impart, she said, are that prisoners should stay in touch with their children, that they should not make false promises about when they will be released, and that they should acknowledge the pain they have caused their children, who are also victims of their crimes.

The good news for the inmates, Ms. Gaynes said, is that while society "will forever remember them for what they did on the worst day of their life, their children will not judge them for just this."

The New York Times, April 7, 1999

In the past few years, as the number of inmates has exploded, a handful of other programs have been started to help incarcerated parents, but most have been for mothers.

Ms. Gaynes acknowledges that the impact on a child may be greater when the mother is locked up, because the mother is often a single parent and the child may be sent to a grandmother or foster home. But in sheer numbers, fathers pose a more serious problem. Because most inmates are men, in 93 percent of the cases in which a parent is behind bars, that parent is the father, the Justice Department said.

"People forget most of these men are someday going to be released," said Creasie Finney Hairston, dean of the Jane Addams College of Social Work at the University of Illinois in Chicago. "There is a growing body of research that shows maintaining family ties while in prison leads to lower rates of re-arrest for the fathers and makes a difference in the lives of their kids."

Prisons, however, are in the business of punishment, and security is their primary concern. Helping inmates preserve family ties is at the bottom of the list.

Visits by wives and children are often viewed as a security threat by prison officials, or at least a nuisance, because they can be an opportunity to smuggle drugs or weapons and they consume guards' time.

For the families, visiting prisons, which often are in rural areas, can be time-consuming and costly, and when they finally arrive, they can be kept outside in the cold or rain for hours and then subjected to humiliating searches.

"A visit to a prison is a very emotionally difficult experience," Dean Hairston said. "There isn't time or space for normal family arguments, and the kids tend to act out afterward, and the wives or girlfriends can be resentful."

Juan Hernandez, an inmate at Sing Sing, says his 14-year-old son is angry at him for abandoning him, and his 16-year-old daughter is embarrassed and lies to her friends about where he is. Neither will write or visit.

"I don't know how to deal with it," said Mr. Hernandez, who had just begun the parenting class. "It's impossible to be a good father from prison."

One of the inmates' greatest fears, which they realize too late, is that their children may consciously or unconsciously imitate them. Gregory Frederick, a 52-year-old from Harlem who has been at Sing Sing for 10 years for murder, finds that his grandson "thinks I'm some sort of countercultural hero."

"When he comes to visit," Mr. Frederick said, "he sees these guys walking around with big muscles, and then when he goes back home, he tells his friends, 'My grandfather is in prison,' and he's proud of it. In some communities, prison just has no stigma any more. It's a very distorted rite of passage."

Children often imitate the behavior of those they are close to, said Angela Browne, a psychologist who is an expert on prisoners and their children. "Unfortunately," Dr. Browne said, "children imitate strong behavior, like anger and drug abuse, more than subtle behavior."

The New York Times, April 7, 1999

The Children Following Father, Right Into Prison

The impact on children can fall most heavily on blacks in poor city neighborhoods, where a disproportionate number of people go to prison, contributing to a concentration of fatherless families. But research has found that the parental prison influence on children affects all populations.

In the 1940's, two pioneering researchers at Harvard Law School, Sheldon and Eleanor Glueck, found that among boys sent to a reformatory from the Boston area, two-thirds had a father who had been incarcerated, and half had a grandfather who had been locked up.

Race was not an issue. All these boys were white.

Similar findings, that about half of incarcerated juveniles have a parent who has been locked up, have been reported wherever the issue has been studied: in London, Minneapolis or Sacramento, Calif.

The most recent research, conducted last year in California among 1,000 girls in detention in Los Angeles, San Diego, Alameda and Marin counties, revealed that 54 percent of their mothers and 46 percent of their fathers had been locked up.

Leslie Accoca, a senior researcher with the National Council on Crime and Delinquency, who directed the study, said the real number of fathers who had served time was undoubtedly higher, but the girls knew less about them.

"Incarceration today is a family matter," Ms. Accoca said. "There is an entire kinship system that is now moving through jail, prison, probation and parole."

Corrections officials are sometimes stunned to find whole families locked up. At the Laurel Highlands state prison in Pennsylvania, a father and son, convicted of separate arsons, share the same cell.

At the Allegheny County Jail in Pittsburgh, a father, mother and their four sons and two daughters were all incarcerated for different bank robberies. In California, a daughter, her mother and her grandmother were in one women's prison for separate crimes.

The Visit A Child's Treat, A Parent's Reward

Sareena Bain, all of 4 years old and dressed in a turquoise jumper, was waiting by the slam gate entrance to the Bexar County Detention Center, the San Antonio jail, for a new treat, a Saturday contact visit with her father, Bobby Bain, a convicted burglar.

A guard gently ordered Sareena to take off her shoes so they could be searched for drugs, then passed her through a metal detector. Nearby, civilian volunteers took off the diapers of a group of babies to check for contraband, replacing them with fresh, jail-issued diapers.

The New York Times, April 7, 1999

Inspection finished, the children were ushered into a special visitors room, the walls painted jungle green and emblazoned with a mural from "The Lion King." Sareena scanned the large, unfamiliar men in orange jump suits in the room and then let out a whoop. "Daddy," she said, and jumped into Mr. Bain's arms.

Mr. Bain and the other men had earned the right to a one-hour visit with their children by volunteering for an innovative program, Papas and their Children, in which 70 of the 3,200 inmates in the San Antonio jail live in the same pod and attend an hour of parenting classes five days a week.

Other inmates can talk to their visitors only by telephone through a glass wall.

The San Antonio program, and an equivalent one for mothers in the jail, are the best of their kind in the country, said Anna Laszlo, a criminologist in Washington who conducted a nationwide survey of programs for children of incarcerated parents for the Department of Health and Human Services.

In the visitors room, Derrick Hunt, a bear of a man convicted of drug possession, was bottle-feeding his month-old son, DiAnthony, in his arms. Unfortunately, the baby had picked this moment to take a nap. But Mr. Hunt was able to quiz his 5-year-old son, Derrick Jr., on his ABC's.

"I never really had a relationship with my children until I came to jail and took the classes," Mr. Hunt said. "But I've learned how to control my anger and how to put my kids in timeout rather than shout at them."

In the visitors room of the women's section of the jail, Mary Anne Garza was lying on the gray carpet with her three children tight around her: Edward, 7, Anna, 4, and Briana, 9 months. Tears rolled down her cheeks. Ms. Garza's brother is in prison for murder, her husband is in jail and she had now been convicted of auto theft.

Anna could not stop hugging her mother. "She wants to come to jail with me," Ms. Garza said. "She is so worried about what is happening to me, and she is scared of the police and the guards."

Not long before, there was an automobile accident near her mother's house, where the children are staying. When the police came, Anna said: "Don't go outside. The police will take you away and there won't be any more moms."

Ms. Perez, the social worker who created the San Antonio program for the sheriff's department said, "From a management point of view, it has been a success because it has been so popular it has changed jail culture."

The inmates who take part in it have never tried to smuggle in drugs, they openly express their emotions and there are no racial cliques or fights in the pods where they live.

"They are just parents, not brown, black or white," Ms. Perez said.

The inmates may actually be better parents in jail than before they were locked up, Ms. Perez said.

The New York Times, April 7, 1999

"Most of them are addicted," she said, "and when they are out there, the drug is the No. 1 thing to them. But once in here, they have to be clean, they are able to think clearly and they learn how important parents are to their children."

GRAPHIC: Photos: Derrick Hunt is among a small number of imprisoned fathers in programs that seek to counter the potential risks that incarceration poses for their children. Mr. Hunt, 23, has regular visits with his children, Derrick Jr., 5, and Deandre, 3, in San Antonio. By attending parenting classes at the San Antonio jail, Mary Anne Garza is allowed regular visits with her children, from left: Anna, 4, and Briana, 9 months, and Edward, 7. "She wants to come to jail with me," Ms. Garza said of Anna on a recent visit. (Photographs by Mathew Sturtevant for The New York Times); Baba Eng, serving life for murder in Sing Sing prison, in Ossining, N.Y., met with Elizabeth Gaynes, whose group sponsors programs for prisoners and their families. (Keith Meyers/The New York Times) (pg. A18)

LANGUAGE: ENGLISH

LOAD-DATE: April 7, 1999

FOCUS ON Your Family



Kids Who Don't Fit In

Researchers say that good social skills are critical to success and happiness. How can parents help children who are left out? BY PAT WINGERT

THE FIRST SIGN OF A PROBLEM WAS 3-year-old William's refusal to hold hands with other children. As he moved through preschool, he made friends but didn't keep them. By first grade, he was isolated and lonely. The other kids, his mother admits, "thought he was weird." William (not his real name) was painfully aware there was a problem. "He'd ask me, 'Why don't the kids like me?'" his mother recalls. Third grade was a crisis; William was falling apart. "His teacher pulled us in and said, 'He's always crying at school and walking around the periphery of the playground. You should have him tested.'"

You should have him tested. That advice is echoed in classrooms around the country as more and more teachers and parents understand the importance of developing good social skills. Researchers now know that success in life—personal happiness, too—depends to a great degree on an individual's "emotional intelligence," the ability to func-

tion well in a group and to form meaningful relationships. "Children who are generally disliked, who are aggressive and disruptive, who are unable to sustain close relationships with other children and who cannot establish a place for themselves in the peer culture are seriously at risk," says psychologist Willard Hartup of the University of Minnesota. That's why kids like William, who run into trouble early, are getting the help they need at an age when the right therapy can really make a difference.

Sometimes the problem is just awkwardness; in other cases, there can be real neurological deficits. In William's case, test results revealed that he was suffering from attention deficit disorder and an inability to read social cues. "He didn't know where his personal space ended and someone else's space began," his mother says. "He couldn't read facial expressions. Sometimes he was nonresponsive when people were talking directly to him. He talked at

people, and didn't laugh at the right time."

For three years William attended weekly group therapy, where he would play with other kids with similar problems while the therapist gently prompted and corrected his interactions. He also met with a psychologist for one-on-one help. Now in eighth grade, he continues with individual therapy. He's still "not Mr. Popularity," his mom says, but "he has friends."

Experts agree that the earlier the intervention, the more effective the therapy. But evaluating very young children can be tricky. Many psychologists believe children develop social competence at different rates—just as some children are slow to walk or talk. "On the one hand it's encouraging that more children are getting help early on," says Jan Wintrol, director of the Ivymount School in suburban Maryland, which diagnoses social, emotional and behavioral problems. "On the other hand, I get concerned about an overemphasis: we think

"we have to have therapy for everything."

So how does a parent know whether to worry about a kid who's always alone on the playground? The experts advise parents to watch, compare, consult with teachers and, in the end, trust their instincts.

The first hint of trouble often shows up when children are preverbal, between 12 and 24 months, says psychiatrist Stanley Greenspan, author of "The Growth of the

Mind." At this stage, children typically "learn to use gestures to get their needs met and express their emotions." Most toddlers learn this automatically. Kids who don't master this skill may also fail to develop in other ways. Parents might begin to notice that their child isn't interacting the way other children do or that playmates avoid their child. Marshall Duke and Steve Nowicki Jr., psychology professors at Emory University

and authors of "Helping the Child Who Doesn't Fit In," call this condition "dyssemia." The abilities to interpret and use nonverbal cues "are the building blocks of social skills," Nowicki says.

Tests can reveal that a child is unable to read facial expressions, body language or tone of voice. Other children can't get their bodies and faces to express the right emotions. And some children can do neither.

The Edge of Kindness

A veteran kindergarten teacher on what she's learned

VIVIAN PALEY NEVER misses the opportunity to tell the tale of Teddy. She was visiting a London preschool when some kids from a nearby school for the severely disabled came to visit. Teddy was pushed into the classroom in a wheelchair, his head protected by a padded helmet, his limbs twitching. Paley watched in wonder as the small children incorporated Teddy—who had trouble speaking more than a word at a time—into their play. To Paley, 70, a longtime Chicago kindergarten teacher and the winner of a MacArthur Fellowship for her writing about children, that moment inspired an insightful new book, "The Kindness of Children." In an interview with NewsWEEK's Pat Wingert, Paley talked about how adults can nurture empathy.

WINGERT: Do you think children are always ready to be kind?

PALEY: Yes, even when they're in a snit. You may have to wait a little and not push. But out of the side of their eye they may see someone, maybe even the child they were fighting with, with a trembling lip, and their eyes filling, and something says to them: "Stop. Do something nice now. This has gone too far." I believe children are always on the edge of committing an act of kindness, always ready to go in that direction.



Children are her inspiration: Paley at her school in Chicago

By sharing stories of kindness, can we inspire children?

When children hear a story about kindness, they are very moved. From our earliest school years, we know all we need to know about hurt feelings and how to help someone salvage hurt feelings.

When does the earliest kindness appear in children?

Even very young children are moved when they see a baby or a friend crying, and they'll go pull their teacher to help. No one has taught this. No one has said to these 18-month-olds, "If you see any human being struggling or suffering, call me right away."

Do you think young children are naturally more accepting than older children or adults?

Absolutely. I've never seen a young child be anything other than very interested in what other children look like, do, say, how they behave—they're fascinated. They have a tremendous, almost scientific interest in each other.

Is that why you've become such an advocate of diversity?

When children with problems come into a regular classroom, there are more opportunities for children and teachers to show kindness. Acting out kindness makes us realize what we're capable of. It feels

good to be in power, but it feels terrific to see yourself as the giver of kindness.

You say play helps children create a "new life for a wandering soul." What do you mean?

The lonely child only lacks a role to play because play is the language of children. Play is a story. We don't hear the story when kids are in the sandbox, but we could almost write the story from the noises we hear coming out of it. Play was a brilliant invention of whoever created mankind.

You say loneliness is the major struggle when children first enter school. Does that experience foster empathy?

Every child knows loneliness. But because I have been lonely, do I recognize the plight of others who are lonely? That's more subtle, and that's where the artistry comes in, where the modeling comes in. I can't imagine a greater source of satisfaction for a teacher.

How do you help children who don't know how to play?

If I saw a child running through the block like a whirlwind and knocking everything down, I would ask the child to sit with me and watch others who find it easy to play well with others. The class then becomes a kind of laboratory where you can point out what works.

How does the kindness of children inspire us as adults?

It gives me joy as a teacher to be a witness to these things. It gives me the strength to deal with that other side of life, when people are wounded and discouraged.

Some stand much too close to people, or touch inappropriately. They may talk very loud—or so softly they can't be heard. They may laugh or cry or get angry at the wrong times, or seem to be talking at people rather than conversing with them. These are the kind of rules that you only notice when they get broken," Duke says.

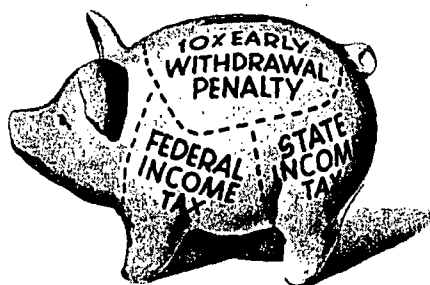
Some of these kids may have a brain processing problem that makes it difficult for them to sequence or put their thoughts into action. Others may have a speech disability or a form of autism or developmental problems. Some problems may be aggravated by learning disabilities or attention deficit disorder. Others simply haven't had enough experience interacting with people. Children with depressed, alcoholic or drug-using parents can exhibit the same problems, as can youngsters who are not getting enough one-on-one attention from busy parents or overworked child-care providers. Duke and Nowicki's studies indicate that about 10 percent of children have some form of dyssemia. If those estimates are right, that would be equal to double the number of children who have been diagnosed with attention deficit disorder.

TO FIND THE RIGHT KIND OF HELP, parents can start by asking teachers, the school psychologist or an educational counselor. Some kids join "social skill groups" like William's with other children and a trained therapist acting almost as a coach. Others seek help through family or one-on-one counseling. Some therapists act primarily as consultants, observing a kid's behavior at home and in school and then advising teachers and parents.

Children struggle with these problems at all ages. Maryland pediatrician Sharon Goldman says she has one new patient who's a senior in high school. "She's never gone on a date," Goldman says. "She's never hung out at the mall with friends. She's so exquisitely afraid of how others will view her that she has no friends. She needs to learn to do these things before she goes off to college by herself."

It's never too late to get that help; some therapists who specialize in social skills work only with adults, and others even consult with corporations that are having difficulties with employees. But children benefit the most. Intervention can help kids with mild to moderate social problems have a normal social life. Those with more severe problems may always be a little stiff or quirky in their social exchanges, but with help they have a much better chance of being able to relate to others. As William's says, "This stuff doesn't just disappear. But he's going up the ladder. He's going in the right direction." And his future looks a lot less lonely.

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Archives of
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Editor
Catherine D. DeAngelis, MD, MPH

Abstracts - March 1999

Preventing Adolescent Health-Risk Behaviors by Strengthening Protection During Childhood

J. David Hawkins, PhD; Richard F. Catalano, PhD; Rick Kosterman, PhD; Robert Abbott, PhD; Karl G. Hill, PhD

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years. The full intervention student group reported more commitment ($P=.03$) and attachment ($P=.006$) to school, better academic achievement ($P=.01$), and less school misbehavior ($P=.02$) than control students. Late intervention in grades 5 and 6 only did not significantly affect health-risk behaviors in adolescence.

Conclusions: A package of interventions with teachers, parents, and children provided throughout the elementary grades can have enduring effects in reducing violent behavior, heavy drinking, and sexual intercourse by age 18 years among multiethnic urban children. Results are consistent with the theoretical model guiding the intervention and support efforts to reduce health-risk behaviors through universal interventions in selected communities or schools serving high-crime neighborhoods.

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Emphasis Shifts to Keeping Siblings Together When Using Foster Homes

By PAM DELLUCK

CHICAGO, Aug. 25 — Childhood has not been kind to them; these four brothers and sisters.

Their overwhelmed parents smacked them to keep them in line, counselors say, and the three oldest, now ages 10, 9, and 5, were sexually molested by their mother's brothers. Now angry and insecure, the siblings hit one another, made disturbing sexual gestures, sometimes wet their beds and misbehaved in school.

When child welfare authorities decided to remove them from their parents' home and place them in foster care two years ago, they stood a good chance of being separated from one another. Child welfare agencies have historically focused on finding available foster parents, not on trying to keep sisters and brothers in the same home. And it is hard to find foster parents with room for four, let alone the willingness to take care of so many troubled children.

But this time, Veronica, Chantel, Jimmy and Jermaine, who is 3, were steered toward a new program that pays foster parents a premium — a salary thousands of dollars in addition to money they receive from the state — as well as benefits not offered by the state — health insurance, vacation time, pension and sick days — to persuade them to care for a group of brothers and sisters.

The Chicago program reflects a growing national movement in foster care. Fueled by lawsuits in New York, Chicago and elsewhere, and by a groundswell of lobbying by child welfare advocates, states have begun enacting laws and establishing programs to encourage foster parents to care for several siblings.

"You can't underestimate the trauma children go through when they're separated from their siblings," said Gordon Johnson, the president of the Jane Addams Hull House Association, a nonprofit agency that runs the sibling program.

"On top of the trauma of being separated from their parents, you put them in a strange environment where they're mixed with other kids," said Mr. Johnson, who is a former director of the Illinois Department of Children and Family Services.

Some child welfare officials point out the potential pitfalls of trying to routinely keep siblings together. Special programs like Chicago's are generally expensive and the laws and consent decrees involved are often difficult to enforce. It only because there may be more groups of siblings than families willing to take them.

In addition, some officials and ad-

vocates worry that it might compromise another increasingly popular goal — to place children with no chance of being reunited with their parents in adoptive families as soon as possible, removing them from the limbo of foster care. It is always easier to find a family to adopt just one child.

But increasingly, most foster care experts agree that trying to keep brothers and sisters together is at least a worthy goal because it could help maintain some thread of consistency for children whose small worlds are being otherwise ripped apart and whose history of abuse may have made them more dependent on each other.

Since the majority of children in foster care have siblings who are also in foster care, keeping them together is no small task. In some states, as much as 80 percent of foster children have siblings in the system and half or more are scattered among different foster homes. And many child welfare agencies report seeing more large sibling groups, possibly because social workers who find one abused child in a family are now more inclined to quickly move the other children.

Last year, California passed a law allowing foster homes to take more than six children, the maximum if the move kept brothers and sisters together. Ohio, Massachusetts and New York took up similar measures in 1996.

Minnesota and Alabama recently began requiring that siblings be placed together whenever possible, according to the Child Welfare League of America, a national advocacy group.

In New York City, a small program begun last fall gives foster parents who take in sibling groups a rent-free apartment in a building in Rego Park, Queens, pays them an extra stipend and provides benefits like laundry service and baby sitters.

California's Social Services Department is giving social workers special training in placing siblings together and has recommended that counties pay prospective foster families to wait until sibling groups are available. New Jersey has just begun heavily recruiting foster parents who will agree to take sibling groups.

Kentucky provides an extra stipend for foster families that care for siblings. Florida is setting up a pilot program along the lines of the Hull House program in Chicago. And Illinois has another program that gives foster families extra money for rent if they move to a larger house to take in more brothers and sisters.

"More and more people are tak-



Mary Hardwick, 58, an experienced foster mother, took in four siblings — Veronica, 10, Chantel, 9, Jimmy, 5, and Jermaine, 3 — as part of the Neighbor to Neighbor program in Chicago that keeps siblings together.

ing about it and trying to do better," said Kathy Barbell, director of foster care for the Child Welfare League.

"It's like a light bulb went off," she said. "What is the longest relationship you have with any person? It's your siblings. And there are more former foster children searching for their siblings these days than for their biological parents."

In some ways, these sibling initiatives reflect a broader national movement to give foster children more stability. New York City and other systems are championing plans to keep foster children in their original neighborhoods, and many states, like Illinois, are trying to place more children with relatives, which can also lead to more sibling contact.

So far, the fledgling programs for siblings are making incremental differences, as states weigh priorities in foster care placement. What should social workers do, for example, if a family takes in one child but does not have room for a sibling taken from the parents later, or for a new child born to the parents?

In New York City, a class-action lawsuit filed by the Legal Aid Society against the city was settled in 1993 with an agreement requiring that siblings be placed together when it is

in their best interests. More sibling groups are being placed together now, 31 percent in 1996, up from 45 percent in 1990 when the suit was filed. Jennifer Folk, a spokeswoman for the Administration of Children's Services, says the main reason brothers and sisters are separated is that a social worker decides they need different types of medical or mental health care, or a relative offers to take only one or two of the children. Child welfare advocates believe more sibling groups should be kept together.

In Chicago, the Cook County Public Guardian won a similar consent decree with a suit against the state, including a provision that siblings, when separated, should visit each other twice a month. Still, two-thirds of Illinois's 37,762 siblings in foster care are separated from some of their siblings and only about half of those children visit each other twice a month, said Mary Sue Morsch, a deputy director of the Illinois Department of Children and Family Services, adding that her department was working to improve the number of siblings kept together and the number of visits between children separated from brothers and sisters.

Mr. Johnson said he wanted to

expand the Hull House program Neighbor to Neighbor beyond its 30 foster families. He said that placing siblings together makes it easier for social workers to assess whether children should be reunited with their parents, one goal of the program. Even if they are separated later by adoption, he said, they have at least been together for a while.

Very few studies have tried to measure the consequences of sibling group placements. One recent small study of preschool foster children living near Syracuse found that children living with their brothers and sisters were more emotionally stable than children separated from their siblings but did not do as well on cognitive tests, perhaps because older siblings, rather than parents, taught the younger children skills like increasing their vocabulary or naming colors, said the author, Maureen C. Smith, an assistant professor of psychology at Chicago State University. Professor Smith said she concluded that sibling placements should not be automatic, but should depend on each child's needs.

Aware that they are plowing new ground, some sibling programs try to move quickly when conflicts between siblings and other difficulties arise after placement. After prob-

lems cropped up between brothers and sisters in one of the New York program's foster families, two brothers were moved temporarily to another home in the program, trading places with two sisters from another family, said Sue Goldman, assistant director of foster home services for the Jewish Child Care Association, which runs the program.

In Chicago, Hull House gives its foster parents intensive training and monitors the families closely — at least once a week. In exchange for a \$16,000 annual salary (which supplements the regular state stipend of roughly \$415 per child per month), Hull House treats foster parents like full-time employees. They cannot hold another job and can be dismissed quickly, for cause.

That is what happened to the first Hull House foster mother who took in Veronica, Chantel, Jimmy and Jermaine. The woman, Bobbie Luckett, 56, tried hard to establish order and consistency for the children, who gorged themselves on food as if they never had enough and who were often very rough with one another. Once, Ms. Luckett said, Veronica brandished a kitchen knife at her. Chantel had trouble at school, calling a substitute teacher epithets and harassing other children.

Ms. Luckett often consulted the program's caseworkers and therapists for guidance and used methods like the Good Kid Chart, a checklist of goals like "I did not fight before school" and "I did not argue to-night." But in February, about a year after the children came to live with Ms. Luckett, the girls locked the boys in a closet and Ms. Luckett's adult daughter, who was baby-sitting, lost her temper and struck the girls with a belt, said Michael Heard, a Hull House therapist. Within 24 hours, the children were removed and placed with Mary Hardwick, a 58-year-old woman with years of experience as a foster mother.

Ms. Hardwick says the four children are the most troubled she has cared for. In addition to problems at home, the girls were once kicked out of a church program for fighting with each other. But Mr. Heard says that with Ms. Hardwick's steady approach, he is seeing gradual progress: Jermaine is becoming more verbal, all four are playing together in a friendly way in group therapy sessions. On balance, he believes, they are gaining stability.

"I guess they really love each other," Ms. Hardwick said. "They just don't know how to express it. But if they get together it's better. I would want to be split up from my sons and brothers."

WEDNESDAY, AUGUST 26, 1998
The New York Times

Earlier Work With Children Steers Them From Crime

By JANE E. BRODY

Programs that seek to reduce violence, drug abuse, pregnancy and other dangerous or unhealthy activities among adolescents are notorious for doing too little too late and at too great a cost.

But a new study has shown that by starting early — in grades one through six — to foster an interest in school and learning among children and to enhance their self-esteem, many of these risky behaviors can be averted and school performance and attendance can be improved through high school.

At the same time, an independent analysis of the study showed, communities can save money over and above the cost of such a preventive effort.

The findings of this 12-year study, published today in the journal *Archives of Pediatrics and Adolescent Medicine*, showed that coaching teachers and parents on how best to encourage young children's involvement and interest in school and teaching children how to interact socially can have a significant long-term effect on their behavior and academic achievement.

The study involved schools with students from Seattle's most crime-ridden neighborhoods. Some of the schools got the intervention program designed for the study and the other comparable schools did not.

Compared to students who did not receive the elementary school intervention program, by age 18, those who did were 19 percent less likely to have committed violent acts, 38 percent less likely to indulge in heavy drinking, 13 percent less likely to engage in sexual intercourse, 19 percent less likely to have had multiple sex partners and 35 percent less likely to have caused a pregnancy or to have become pregnant.

The effects on curbing sexual behavior and teen-age pregnancy were achieved "without ever using the 'S' word," said Dr. J. David Hawkins, the principal investigator and a professor of social work at the University of Washington. "It's amazing to see these outcomes," he said.

Students who attended the schools with intervention programs also were more likely to stay in school and to achieve higher grades, although there was no significant impact on their experimentation with drugs or cigarettes.

Jane Quinn, who studied youth programs at the Carnegie Council on Adolescent Development, praised the Seattle program as one of the very best she has reviewed. Ms. Quinn, who is now program director at the DeWitt Wallace-Reader's Digest Fund, said the study has three "remarkable features: One, the intervention is quite simple and straightforward, something that any community could adopt; two, it works with people who are already involved in the lives of children and recognizes young people as agents in their own development, and, three, it has powerful long-term results — a six-year follow-up is very unusual."

Dr. Roger Weissberg, professor of psychology at the University of Illinois at Chicago, called the Seattle work exemplary in its attention to social and emotional issues as well as academic performance.

The study involved three efforts: with teachers in each of the six grades, with parents and with the students. During five days of in-service training, teachers were taught how to foster cooperative learning among students so that each child is rewarded for having contributed to the achievements of the group.

Dr. Hawkins explained that the underlying goal was to help children "develop a commitment to school, to value education and to become emotionally attached to their school, teachers and peers."

"This in turn can give them the motivation to live in a positive, responsible way," Dr. Hawkins said.

Parenting programs were offered to the parents of every student in the experimental classrooms. Over all, 43 percent of these parents participated. Parents were encouraged to reinforce desirable behavior and to provide consistent discipline. They were also shown how to help their children succeed academically.

As for the children themselves, their guidance started in school in the first grade with learning how to solve interpersonal problems, take turns and talk positively to themselves. In sixth grade the students were offered four one-hour training sessions in refusal skills — how to say "No" and still keep their friends.

The full cost of the program over the six years of intervention was calculated at nearly \$3,000 a child. However, Dr. Hawkins noted that if such a program were adopted in a school system, the actual ongoing costs would be lower because teacher training would not be repeated annually.

But even at the full cost of the program, the Washington State Institute for Public Policy demonstrated that the intervention would be cost-effective if all that it achieved was a reduction in crime. The institute calculated a taxpayer savings of 21 percent just from the reduction in the number of felonies committed.

NYT 3/15/99

ARTICLE

Preventing Adolescent Health-Risk Behaviors by Strengthening Protection During Childhood

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Editor's Note: I think the message here is, "Start early, include everyone possible, and [I'd add] don't ever stop."

Catherine D. DeAngelis, MD

From the Social Development Research Group, University of Washington, Seattle.

AS THE COSTS of crime, teen pregnancies, an undereducated underclass in poverty, and substance abuse have increased, policymakers and researchers have looked more seriously at prevention as a potentially cost-effective approach to reduce the prevalence of these behaviors.¹ Efforts to

improve schools, reduce crime and violence, combat substance abuse, and prevent unwanted pregnancies have progressed on separate tracks.

Advances in prevention in public health² provide a model for prevention of adolescent health-risk behaviors by focusing on risk and protective factors predictive of these behaviors.^{3,4} Research on the predictors of school failure, delinquency, drug abuse, teen pregnancy, and violence indicates that many of the same factors predict these different outcomes.^{3,6} Recent research has shown that bonding to school and family protects against a broad range of health-risk behaviors in adoles-

PARTICIPANTS AND METHODS

SAMPLE AND DESIGN

This study of intervention effects is part of a larger ongoing longitudinal study of all consenting fifth-grade students in 18 public schools serving high-crime areas of Seattle, Wash. To assess the effects of full intervention and late intervention, a nonrandomized controlled trial with 3 conditions was created. The full intervention group received the intervention package from grade 1 through grade 6. The late intervention group received the intervention package in grades 5 and 6 only, and the control group received no special intervention. This design was created in 1985 by nesting an intervention initiated in 1981 at first-grade entry, within the longitudinal panel study. For the present study, schools were assigned nonrandomly to conditions in the fall of 1985, and from that point, all fifth-grade students in each school participated in the same interventions. New schools added for the panel study were matched to the intervention schools with respect to grades served and inclusion of students drawn from high-crime neighborhoods of Seattle. Schools added for the panel study were assigned to conditions to achieve balanced numbers across conditions. It should be noted that during this study the Seattle School District used mandatory busing to achieve racial equality in schools. As a result, all schools in this study served heterogeneous population of students drawn from at least 2 different neighborhoods of the city. This practice reduced the risk that outcomes observed in this study reflected contextual or neighborhood differences in the populations attending different schools.

In the present analyses, the full intervention group consists of all students who were randomly assigned to intervention classrooms in grades 1 through 4 in 8 elementary schools participating in the earlier experimental study, and who remained in schools assigned to the intervention condition in grades 5 or 6 in the present study. The late intervention group consists of students in intervention schools who were in intervention classrooms in grades 5 and 6 only, some of whom were controls in the earlier intervention study. The control condition consists of students in schools assigned to receive no intervention in grades 5 and 6 and who were not in intervention classrooms in grades 1 through 4.

When the longitudinal study was funded by the National Institute on Drug Abuse in 1985, school-based substance abuse prevention research trials had been limited to studies of social influence resistance curricula provided to students in grades 5 through 10.³ In this context, reviewers desired that the study include a condition assessing effects of only 2 years of intervention in the late elementary grades as well as effects of the full intervention, since they questioned whether intervention in the early elementary grades was necessary. In addition, reviewers concerned with the possibility of contamination of control students by experimental students in our earlier randomized within-building study design preferred a nonrandomized design in which whole schools, rather than classrooms, were assigned to intervention or nonintervention conditions. As a result some students who had served as controls in the earlier study became part of the late intervention group in the longitudinal study.

The present study included all fifth-grade children assigned to the 3 conditions in 1985 whose parents provided annual written consent to their involvement in the longitudinal follow-up study (N=643). Seventy-six percent of the total eligible fifth-grade population in these schools

consented. Children also provided consent annually. Participants were distributed across the 3 conditions as shown in **Table 1**. The sample included roughly equal proportions of boys and girls. More than 56% of the sample were from poor families as evidenced by their participation in the National School Lunch/School Breakfast Program. About 44% of the sample were white, 26% were African Americans, 22% were Asian Americans, 5% were Native Americans, and 3% were classified as other racial/ethnic groups.

In the spring of 1993 when the participants were aged 18 years, 598 participants (93.0% of the original consenting sample assigned to the 3 conditions) were successfully interviewed. All self-reported follow-up data came from these interviews. Standardized achievement test scores, grade point averages, and school disciplinary records were collected in the spring of 1992 when participants were 17 years old. Delinquency charges were collected in 1993 from juvenile court records, through age 17 years.

Because analyses reported below revealed significant differences between the full intervention and control groups at age 18 years, analyses were conducted to ascertain the equivalence of these 2 groups on factors that might influence outcomes. These are reported in **Table 2**. The groups did not differ on residential stability as measured by mean number of years living in Seattle by age 12 years and by the mean number of residences in which participants lived from age 5 to 14 years; socioeconomic status, as measured by years of parental education or proportion eligible for the school lunch program; proportion from single-parent families; proportion of boys; or proportion of whites or nonwhites. Table 2 also shows that roughly equivalent proportions of students in both the full intervention and control groups were living in disorganized neighborhoods at age 16 years as indicated by students' self-reports of rundown housing, crime, poor people, drug-selling, gangs, and disorderly and undesirable neighbors in their neighborhoods. To ascertain whether later school assignments might have affected observed outcomes differentially for the full intervention and control groups, contingency tables comparing high schools attended in grades 9, 10, and 11 were computed. No significant differences in high schools attended were found between the 2 groups, again suggesting that Seattle's mandatory busing program overcame the separation of students from different neighborhoods and elementary schools sometimes found in large urban school districts. This decreases the plausibility that observed outcomes reflected later differences in schools attended by students in the 2 conditions. These results suggest that a number of factors that might have affected outcomes were equivalent across intervention conditions, and do not pose major threats to the internal validity of the present study.

INTERVENTIONS

The intervention package included the following components, elaborated in **Table 3**.

Classroom Instruction and Management

Each year, as the panel moved through the elementary grades, teachers in intervention classrooms received 5 days of in-service training in a package of instructional methods³³ with 3 major components: proactive classroom management,³⁴ interactive teaching,³⁵ and cooperative learning.³⁶

Continued on next page

Teachers of control students did not receive training in instructional or classroom management skills from the project. However, both intervention and control teachers were observed by evaluators, uninformed as to intervention condition of the classrooms they observed. Observations lasted for 50 minutes on 2 different days in the fall and spring each year using the interactive teaching map to document the use of the targeted teaching strategies in all conditions.³⁷ Greater use of the experimental instructional and management methods was observed in intervention classrooms, as discussed elsewhere.³⁸ Teachers' use of the experimental instructional and management methods has been found to predict short-term variation across classrooms in students' levels of social development constructs related to school bonding.³⁸

Child Skill Development

First-grade teachers of the full intervention group also received instruction in the use of a cognitive and social skills training curriculum, Interpersonal cognitive problem solving,^{39,40} which teaches skills to children to think through and use alternative solutions to problems with peers. This curriculum developed children's skills for involvement in cooperative learning groups and other social activities without resorting to aggressive or other problem behaviors.

In addition, when students in both intervention conditions were in grade 6, they received 4 hours of training from project staff in skills to recognize and resist social influences to engage in problem behaviors, and to generate and suggest positive alternatives to stay out of trouble while keeping friends.⁴¹

Parent Intervention

Parent training classes appropriate to the developmental level of the children were offered on a voluntary basis to parents

or adult caregivers of children. Parents of children in the full intervention condition were offered training in child behavior management skills when their children were in the first and second grades through a 7-session curriculum called "Catch 'Em Being Good,"⁴² which is grounded in the work of Patterson.⁴³ In the spring of the second-grade school year and again in the third grade, parents of children receiving the full intervention also were offered a 4-session curriculum, called "How to Help Your Child Succeed in School,"⁴⁴ to strengthen their skills for supporting their children's academic development. When their children were in grades 5 and 6, parents of children in both the full and the late intervention conditions were offered a 5-session curriculum, "Preparing for the Drug (Free) Years,"⁴⁴ to strengthen their skills to reduce their children's risks for drug use. Professional multiethnic project staff provided parenting workshops in collaboration with participating schools and parent councils.

Parents of 43% of children in the full intervention condition attended parenting classes. Forty-six percent of parents who attended parenting classes were from low-income families.

MEASUREMENT

Data were collected from group-administered questionnaires completed by children in the fall of 1985 just after entering fifth grade, and from Seattle School District records. Outcome data were collected through individually administered interviews conducted in the spring of 1993. Self-reported outcomes were supplemented with data on delinquency charges in the King County Juvenile Court, and California Achievement Test results, grade point averages, and school disciplinary action reports through age 17 years from the Seattle School District. Measures used to assess constructs addressed by the intervention are listed in **Table 4**. (The scales, items, and reliabilities are available from one of us [J.D.H.])

cence.⁶ Yet, prevention studies typically have focused narrowly on a specific outcome, such as preventing substance abuse, and on attitudes and social influences that predict that outcome.^{7,8} Previous studies on prevention have not sought to address the shared risk and protective factors for diverse health-risk behaviors that are the main threats to adolescent health. This article reports results of a nonrandomized controlled trial 6 years following the provision of intervention during the elementary grades. The interventions were designed to increase bonding to school and academic success and to prevent a broad range of health-risk behaviors in a multiethnic urban sample.

The intervention sought to reduce specific empirically identified risk factors for adolescent health and behavior problems: persistent physically aggressive behavior in the early elementary school grades,^{9,11} academic failure,¹² and poor family management practices including unclear rules, poor monitoring of behavior, and inconsistent or harsh discipline.^{13,14} Because being raised in poverty increases risk for crime, school failure, and school dropout,¹⁵⁻¹⁷ effects of the intervention on children from low-income families were of particular interest.

Research has shown that teachers can improve children's attitudes toward school, behavior at school, and

academic achievement through the use of effective methods of instruction and management.^{18,21} Studies have also identified child-rearing methods that reduce conduct problems and improve school performance of elementary school-aged children.²²⁻²⁵

To affect the risk factors of concern, we thought that intervention with teachers, parents, and children themselves would be necessary, suggesting a multiple component strategy. To ensure that the components of the strategy would complement each other, the intervention was grounded in the social development model,^{26,27} an integrated theory of human behavior.

Consistent with recent research,⁶ the social development model hypothesizes that strong bonds to school serve as a protective factor against behaviors that violate socially accepted standards. Attachment (ie, a positive emotional link), and commitment (ie, a personal investment in the group) are the component elements of such social bonds. The theory hypothesizes that when social groups produce strong bonds of attachment and commitment in members, and promote clear standards for behavior, these groups increase behavior consistent with those standards and prevent behavior that violates them.

ANALYSIS

Attrition Analysis

Attrition analyses shown in Table 1 indicate that effects reported below are not likely to be an artifact of differential attrition from conditions. Forty-five participants from the original sample were not interviewed at age 18 years. As shown in Table 1, they did not differ significantly from those remaining in the study with respect to gender, ethnicity, or poverty. Also, as shown in Table 1, attrition was unrelated to intervention condition. The participants missing at follow-up (14 from the control, 24 from the late, and 7 from the full intervention groups) were randomly distributed among the 3 intervention conditions. Moreover, after accounting for the attrition of the 45 participants, the overall distribution of the sample with respect to gender, socioeconomic status, or race was unrelated to intervention condition. Separate χ^2 analysis for gender, socioeconomic status, and race indicated no significant relationship between attrition and intervention condition for these variables. In an additional test of attrition effects, the interaction of intervention condition with attrition was assessed with respect to each outcome variable reported in Table 3 by examining attrition-by-condition interaction effects on corresponding measures at fifth-grade entry. An interaction of attrition and condition would indicate possible bias introduced by differential attrition by condition. Effects on fifth-grade entry measures of school bonding, self-reported grades, California Achievement Test scores, school misbehavior, fighting, delinquency, arrests, and substance use were estimated. No significant interaction of intervention condition (control vs full) with the attrition variable was found for effects on related fifth-grade measures, reinforcing the internal validity of the study with respect to all comparisons of the full intervention and control groups. Observed outcomes are unlikely to have been an artifact of differential attrition

across conditions. It should be noted that regardless of condition, participants missing California Achievement Test scores at age 17 years had significantly lower California Achievement Test scores at age 9 years ($F_{1,339} = 6.66, P < .05$), participants missing school records of grade point average at age 17 had significantly lower self-reported grades in fifth grade ($F_{1,343} = 4.23, P < .05$), and those missing self-reports of school misbehavior at age 18 reported significantly more school misbehavior at fifth-grade entry than did their counterparts who were retained in the study ($F_{1,370} = 4.22, P < .05$), suggesting care in generalizing the observed results on these outcomes to all low-achieving or poorly behaved students.

Intervention Analysis

Continuous measures were analyzed by comparing means across the 3 conditions using analysis of variance procedures.

Prevalence measures were compared using the χ^2 test with the continuity correction to contrast each intervention condition with the control condition. As shown later, significant effects on health-risk behaviors were found only for the full intervention group.

Because poverty predicts risk for school adjustment problems, low achievement, crime, and other problem behaviors, the effects of the full intervention on children from poor families were investigated using logistic and linear regression methods as appropriate, with terms for intervention and free lunch eligibility as main effects and an interaction term for intervention by participation in the free lunch program. Similar analyses were conducted to assess possible differential effects of the full intervention on boys and girls using an interaction term for treatment by gender.

Although this study makes specific directional hypotheses regarding intervention effects, a conservative approach is used, and 2-tailed *P* values are reported.

The social development model hypothesizes that the interplay of specific factors during development influences the degree to which children develop strong social bonds to school. The factors that affect children's bonding are the degree of opportunity for active involvement available in the family and classroom, the skills possessed and applied by children during participation in these social groups, and the reinforcements provided to children in response to their behavior in these groups.

We hypothesized that training teachers to teach and manage their classrooms in ways that promote bonding to school, training parents to manage their families in ways that promote bonding to family and to school, and providing children with training in skills for social interaction would positively affect children's attitudes toward school, their behavior at school, and their academic achievement. We thought that these changes would, in turn, set children on a different developmental trajectory observable in more positive academic outcomes and fewer health-risk behaviors later in adolescence.

We have found and reported short-term positive effects of this intervention package on behavior, school bonding, and achievement of children receiving the in-

tervention during grades 1 through 4.^{28,29} We have also found positive effects on children from low-income families at the end of grade 6.³⁰

Previous delinquency, substance abuse, and teen pregnancy prevention programs have been provided in the late elementary or middle school grades, just prior to the ages when delinquent behavior, substance use, and sexual activity increase in prevalence.^{6,7,31,32} Yet the social development model that guides the present intervention suggests that early and sustained intervention through the elementary grades should put children on a different developmental trajectory leading to positive outcomes over the long term. An important question is whether delivering the intervention package over the full course of elementary school ("full intervention") had greater effects than delivering the intervention just prior to adolescence ("late intervention"). This study examines this question by comparing outcomes for 3 separate groups: a "full intervention group," exposed to the interventions throughout the elementary grades; a "late intervention group," exposed to the interventions only in grades 5 and 6; and a control group, 6 years after the interventions ended, when children progressing normally were completing high school.

Table 1. Comparisons of Baseline and Analysis Samples With Tests of External and Internal Validity

Factor	Baseline Sample				Analysis Sample				External Validity Factor by Attrition*	Internal Validity Factor by Intervention†
	Intervention Group, %			Total No.	Intervention Group, %			Total No.		
	Control (n = 220)	Late (n = 207)	Full (n = 156)		Control (n = 206)	Late (n = 243)	Full (n = 149)			
Full sample	84.2	41.5	24.3	643	344	40.8	24.9	599	$\chi^2 = 3.271$ (P = .20)	$\chi^2 = 1.91$ (P = .38)
Sex (male)	53.9	48.7	50.8	227	227	47.7	48.3	299	$\chi^2 = 2.04$ (P = .16)	$\chi^2 = 0.47$ (P = .79)
White (vs. other)	44.6	42.7	48.8	288	145	42.8	45.6	266	$\chi^2 = 0.02$ (P = .89)	$\chi^2 = 0.47$ (P = .79)
Poverty (free lunch eligible)	65.8	64.8	65.8	260	260	67.2	66.4	338	$\chi^2 = 2.14$ (P = .14)	$\chi^2 = 0.08$ (P = .98)

*Factor-by-attrition χ^2 tests whether, overall, those lost to attrition differed from the analysis sample with respect to the indicated factor.

†Factor-by-intervention χ^2 tests whether, for those retained in the analysis sample, the distribution of participants into the intervention conditions differed among levels of the indicated factor.

‡This χ^2 value indicates that the overall distribution of participants into the intervention conditions did not significantly differ for those lost to attrition vs the analysis sample.

Table 2. Characteristics of Control and Full Intervention Groups

	No. of Subjects*	Intervention Group		Difference (95% Confidence Interval)	P
		Control	Full		
Years living in town (by age 12 y), mean	319	10.6	11.1	0.5 (-0.4 to 1.4)	.80
No. of residences lived in from age 6-14 y, mean	224	3.9	3.0	-0.9 (-2.3 to 0.4)	.18
Years of parents' education, mean	316	12.0	13.0	0.4 (-0.2 to 0.9)	.19
Eligible for school lunch program, %	355	65.8	66.4	0.6 (-0.5 to 1.0)	>.99
Single-parent families, %	351	39.4	40.8	1.1 (-9.8 to 10.9)	.92
Living in disorganized neighborhoods at age 16 y, %	354	27.6	26.3	-2.1 (-12.0 to 6.8)	.76
Male, %	355	53.9	48.3	-5.0 (-15.6 to 5.5)	.35
White, %	355	45.6	45.6	0 (-11.1 to 9.9)	>.99

*Numbers vary because of missing data.

RESULTS

SCHOOL BEHAVIOR, SCHOOL BONDING, AND ACHIEVEMENT

Table 4 compares the prevalences and scale means for school outcome measures between the intervention groups and the control group. Table 4 shows that students in the full intervention condition reported significantly stronger commitment ($P=.03$) and attachment ($P=.006$) to school at age 18 years, suggesting that the full intervention had lasting effect on school bonding, an important mediating social development construct and a protective factor identified in descriptive research.⁶ This effect was paralleled by significant improvement in self-reported achievement ($P=.01$), a near significant improvement in school-reported grade point average (2.18 for controls vs 2.42 for full intervention participants; $P=.09$), and proportion who had repeated a grade (22.8% of controls vs 14.1% of the full intervention participants; $P=.05$) and a nonsignificant reduction in the proportion who had dropped out of school (26.2% vs 18.9%; $P=.14$). No effect on California Achievement Test scores at age 17 years was observed.

Students receiving the full intervention also reported significantly less involvement in school misbehavior than did control students ($P=.02$). This was consistent with the trend for school district disciplinary action

reports. Fifty-eight percent of control participants compared with 45.8% of full intervention participants had reports of misbehavior in Seattle School District records ($P=.07$). Levels of suspension or expulsion did not differ significantly across the groups, although the pattern of results parallels other outcomes; ie, 48.3% of controls compared with 39.6% of full intervention students had been suspended or expelled in their lifetimes ($P=.13$).

Table 5 compares the lifetime prevalence of health-risk behavior outcomes for the full and late intervention groups with that of the control group. Significantly more participants in the control group than in the full intervention group had committed violent delinquent acts by age 18 years (59.7% vs 48.3%; $P=.04$). Patterns of prevalence for nonviolent delinquency, self-reported arrests, and official juvenile court delinquency records paralleled the results for violence, although the differences did not achieve statistical significance.

No significant effects were found for any of the lifetime measures of drug use, nor did measures of heavy cigarette and marijuana use differ significantly across the groups at age 18 years (data not shown in Table 5). However, significant differences were found between the control and full intervention groups for heavy alcohol use in the past year. Twenty-five percent of controls compared with 15.4% of full intervention participants reported having drunk alcohol 10 or more times in the past year ($P=.04$) (data not shown in Table 5). This was par-

alleled by a nonsignificant trend toward less drinking and driving in the full intervention group. More than 17% of controls compared with 10.9% of full intervention students reported drinking and driving in the past year ($P=.14$) (data not shown in Table 5).

Significantly more controls than students receiving full intervention had engaged in sexual intercourse (83.0% vs 72.1%; $P=.02$) and had multiple sex partners by age 18 years (61.5% vs 49.7%; $P=.04$). More control students had been pregnant or gotten someone pregnant (26.4% vs 17.1%; $P=.06$), although this finding only approached statistical significance. More control participants than full intervention participants had fathered or had had a baby (14.7% vs 9.5%; $P=.20$), although this difference was not statistically significant.

In sum, participation in the full intervention during the elementary grades was predictive of enduring significant positive effects through age 18 years on students' bonds to school, achievement, and school behavior. The full intervention group also experienced lower rates of lifetime violence, frequent drinking, and sexual behavior through age 18 years.

Note that "dose effects" are observable for many of the outcomes in Tables 4 and 5, with the full intervention group showing the most positive outcomes, followed by the late intervention group, followed by the control group.

Analyses of the interactions between poverty and intervention condition revealed that the full intervention was more effective for children from poor families with respect to several outcomes. As shown in the **Figure**, significant interaction effects were found for attachment to school ($P=.03$) and repeating a grade ($P=.04$). Post hoc tests confirmed that, by age 18 years, children from poor families who had participated in the full intervention were significantly more attached to school than their control counterparts from poor families ($P=.001$). Further, only 13% of the full intervention children from poor families had repeated a grade compared with 30% of their control counterparts ($P=.007$). Similarly, trends in interactions indicating stronger intervention effects among children from poor families were found for better school achievement ($P=.06$; post hoc comparison $P=.002$), less school misbehavior ($P=.05$; post hoc comparison $P=.003$), and less drinking and driving in the past year ($P=.06$; post hoc comparison $P=.03$) (data not shown in the **Figure**).

In contrast, significant poverty-by-intervention interactions for pregnancy ($P=.02$) and parenthood ($P=.005$) revealed that the intervention had significantly greater effects for working and middle class youths in reducing the lifetime prevalence of pregnancy ($P=.008$ for post hoc comparison) and of having or fathering a baby ($P=.02$ for post hoc comparison).

The preponderance of observed intervention effects did not differ for boys and girls. However, the full intervention had significantly greater effects in preventing boys from repeating a grade ($\chi^2 = 4.00, P = .05$), and engaging in sexual activity ($\chi^2 = 4.44, P = .04$) (results not shown in the Figure). We investigated the possibility of a gender-by-poverty interaction in predicting grade repetition, but found none ($\chi^2 = 0.01, P = .92$).

Table 2. Sample Basic Development Project Interventions

- 1. Establish high academic instruction and management standards for all classroom
- 2. Establish high academic classroom expectations and routines at the beginning of the year
- 3. Establish clear instructions for behavior
- 4. Monitor and reward desirable student behavior and enforce for undesirable behavior
- 5. Establish minor classroom management rules
- 6. Establish high academic knowledge goals for all students
- 7. Establish learning objectives
- 8. Establish clear learning standards
- 9. Monitor for student comprehension during instruction
- 10. Monitor student progress when necessary
- 11. Monitor student progress
- 12. Monitor student progress of different parts of lessons and monitor learning partners
- 13. Monitor student progress for academic improvement
- 14. Monitor student progress over time performance
- 15. Monitor student progress in social skill development
- 16. Monitor student progress in solving skills
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COMMENT

The results show that intervention through the elementary grades can have enduring positive effects on the academic development and health-risk behaviors of urban children. A package of interventions that trained parents and teachers to promote children's academic competencies and bonding to school, and that developed children's social competencies and skills to resist health-compromising influences produced greater commitment and attachment to school, less school misbehavior, and better academic achievement 6 years after intervention. It seemed particularly effective in improving attachment to school, achievement, and school behavior of children from poor fami-

Table 4. Comparisons of Control, Late, and Full Intervention Groups Across Targeted School Outcomes*

Outcome	No. of Subjects	Prevalence of Mean			Control vs Full		Control vs Late	
		Control Intervention	Late Intervention	Full Intervention	Difference (95% CI)	P	Difference (95% CI)	P
Bonding to school [†]								
School commitment (age 18 y)	530	2.50	2.89	2.65	-0.15 (-0.02 to 0.20)	.03	0.09 (-0.03 to 0.22)	.12
School attachment (age 18 y)	530	2.05	2.01	3.08	-0.20 (-0.06 to 0.34)	.006	0.03 (-0.10 to 0.17)	.60
School success [‡]								
School achievement (age 12 y)	696	3.21	3.24	3.39	-0.18 (-0.04 to 0.31)	.01	0.03 (-0.10 to 0.15)	.68
Official grade point average (age 17 y)	692	2.18	2.27	2.42	-0.24 (-0.04 to 0.51)	.08	0.09 (-0.18 to 0.35)	.52
Repeated a grade (lifetime prevalence)	696	22.80	25.00	14.10	-8.70 (-16.20 to -0.10)	.05	3.10 (-5.30 to 10.60)	.61
Dropped out of school (lifetime prevalence)	696	26.20	26.10	18.90	-7.30 (-15.40 to 2.0)	.14	1.90 (-6.80 to 9.70)	.73
Official California Achievement Test Score (age 17 y) [§]	277	768.79	770.85	770.79	-2.00 (-9.94 to 13.93)	.74	1.86 (-8.49 to 12.21)	.72
School misbehavior								
Cheated on tests, skipped school, classes, sent from class for misbehavior (past year frequency)	829	4.77	3.48	3.36	-1.41 (-2.63 to -0.28)	.02	-1.29 (-2.35 to -0.23)	.02
Official disciplinary action report (high school prevalence)	425	58.00	58.30	48.60	-12.20 (-23.70 to 0.90)	.07	0.30 (-11.20 to -10.60)	>.99
Suspended or expelled (lifetime prevalence)	597	48.30	47.70	39.60	-8.70 (-18.60 to 2.30)	.13	-0.60 (-9.40 to 9.20)	.98

*Data are given as means unless otherwise indicated. Means compared with Student's *t* test; prevalences compared with χ^2 statistic based on 2×2 tables with Yates correction for continuity. CI indicates confidence interval.

[†]Commitment to school was measured on a 4-point scale (with 1 and 2 indicating no and 3 and 4, yes) and is the mean of 4 items such as "When I have an assignment to do, I keep working on it until it is finished." Attachment to school was also measured on a 4-point scale and is the mean of 4 items such as "I like my teachers this year."

[‡]School achievement combined the self-report measures of grade point average and number of grades repeated by age 18 years.

[§]Combined standard scores on the reading, language, and mathematics subtest of the California Achievement Test that participants took in 1992 while in grade 11. For comparison, the mean (SD) of all 11th-grade Seattle Public School students in 1992 was 776.94 (43.9).

Table 5. Comparisons of Control, Late, and Full Intervention Groups Across Targeted Delinquency, Substance Use, and Sexual Behavior Outcomes

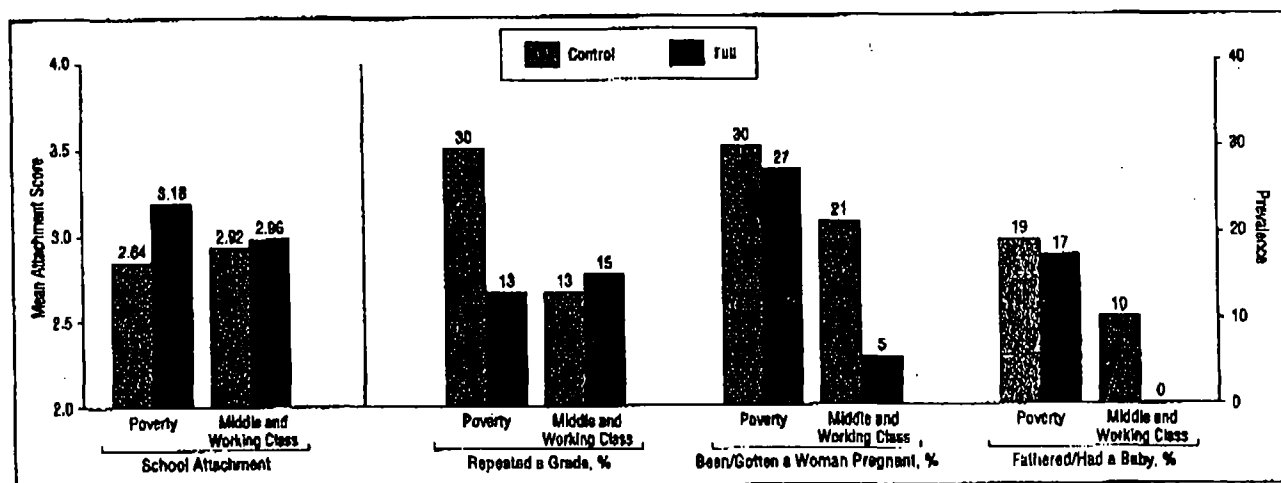
Outcome	No. of Subjects	Prevalence			Control vs Full		Control vs Late	
		Control Intervention	Late Intervention	Full Intervention	Difference (95% CI)	P	Difference (95% CI)	P
Crime								
Lifetime violence	696	50.7	55.4	48.3	-11.3 (-21.3 to -0.4)	.04	-3.3 (-12.0 to 5.3)	.54
Lifetime nonviolent crime	696	63.1	68.4	57.7	-5.4 (-15.3 to 6.5)	.36	-4.7 (-13.9 to 4.8)	.36
Lifetime arrested	696	24.8	24.7	18.8	-6.0 (-14.0 to 3.2)	.23	-0.1 (-7.6 to 8.4)	>.99
Lifetime court charges from county records	642	37.8	36.0	20.9	-7.9 (-17.5 to 3.1)	.18	-0.9 (-9.8 to 9.0)	.93
Substance use								
Lifetime cigarette use	696	54.4	52.7	53.7	-0.7 (-10.6 to 10.4)	.98	-1.7 (-10.5 to 8.0)	.79
Lifetime alcohol use	696	72.8	72.0	71.8	-1.0 (-9.8 to 9.0)	.93	-0.8 (-8.6 to 7.0)	.93
Lifetime marijuana use	696	44.7	45.7	42.3	-2.4 (-12.2 to 8.6)	.74	1.0 (-8.7 to 9.8)	.90
Lifetime other drug use	696	20.0	21.8	20.8	-0.1 (-8.1 to 8.1)	>.99	0.9 (-7.1 to 8.1)	.90
Sexual activity								
Lifetime sexually active	681	89.0	78.1	72.1	-10.9 (-19.2 to -1.4)	.02	-6.9 (-14.0 to 1.0)	.09
Lifetime multiple sex partners	689	61.5	69.1	49.7	-11.6 (-21.7 to -0.7)	.04	-2.4 (-11.1 to 7.2)	.58
Lifetime been pregnant or gotten a woman pregnant	681	26.4	27.4	17.1	-9.3 (-17.3 to 0.0)	.06	1.0 (-7.8 to 8.9)	.90
Lifetime had or impaired a baby	689	14.7	14.3	0.5	-15.2 (-11.4 to 2.2)	.20	-0.4 (-6.0 to 5.6)	>.99

*Prevalences compared with χ^2 statistic based on 2×2 tables with Yates correction for continuity. CI indicates confidence interval.

lies. Further, the full intervention reduced the lifetime prevalence of violent criminal behavior, heavy drinking, sexual intercourse, and pregnancy.

Threats to the internal validity of study conclusions seem minimal. The full intervention and control groups did not differ with respect to residential stabil-

ity, socioeconomic status, gender, proportion from single-parent families, proportion living in disorganized neighborhoods, or race. No evidence of differential attrition by condition was found. Students were not informed of their intervention condition in the study, and it is unlikely that respondents knew 6 years later whether they



Significant interactions of intervention effects with poverty.

received an intervention or control condition during the elementary grades, thus decreasing the likelihood that participants' self-reported outcomes reflected awareness of their condition assignment.

The pattern of results also suggests confidence in the findings. Respondents in the intervention condition did not consistently report less involvement in all forms of health-risk behaviors. Although hypothesized, no effects of intervention were observed for the lifetime prevalence of use of cigarettes, alcohol, marijuana, or other illicit drugs at age 18 years. "Halo effects" do not seem to be a plausible explanation for the findings. Further, the pattern of school district grade and disciplinary reports corroborated self-reported data.

The investigators chose schools for this study that serve substantial proportions of children from poor families who live in high-crime neighborhoods. In this respect, this was a selective intervention focused on a population at elevated risk for adolescent health-risk behaviors.⁴ However, it is important to emphasize that the intervention package was provided universally to all children in intervention classrooms, without regard to risk. It did not identify subsamples of children as "high risk" and did not segregate the "high-risk" children into separate groups for special assistance or intervention. In this way, it avoided possible labeling and stigmatization of children. It also avoided the often observed problem that special "pullout" programs increase interaction among children at greatest risk, which itself can increase risk iatrogenically for crime, drug use, and other health-risk behaviors.⁴⁵

Starting preventive interventions at elementary school entry and continuing them through grade 6 had greater effects on both educational outcomes and health-risk behaviors than intervening later in the elementary grades. These findings suggest that early and continued intervention in the elementary grades can help put children on a positive developmental course that is maintained through high school. The findings are consistent with our hypothesis that helping parents and teachers to strengthen children's commitment and attachment to school in the elementary grades can produce lasting differences in bonding to school that mediate risk and pre-

vent health-compromising behaviors in adolescence. Studies currently under way are assessing the effects of the intervention on the growth in school bonding over time to more directly test this hypothesis.

The present study does not allow assessment of the relative contribution of the individual elements of the intervention package to the observed outcomes. While it would be desirable to ascertain the specific contributions of teacher training, parent training, and student skills training, it is important to learn that the package of interventions produced positive outcomes in a multiethnic urban sample. Studies currently under way are assessing effects of individual components of this intervention.⁴⁶

It is noteworthy that the interventions tested here were provided only during the elementary grades without any boosters or follow-up intervention in the following 6 years. One explanation for the durability of these effects in contrast to those observed by others⁴⁷ is that this intervention focused on increasing school bonding and achievement rather than on developing norms or skills specifically related to avoiding health-risk behaviors. Developing a strong commitment to schooling in the elementary grades may set children on a developmental path toward school completion and success that is naturally reinforced both by teachers responsive to eager students and by the students' own commitment to schooling. In contrast, school curricula that focus on changing students' norms to be less approving of health-compromising behaviors and on developing their skills to resist social influences to violate those norms may require booster sessions through adolescence to maintain healthy norms or standards for behavior. A promising direction for future prevention studies would be to test a combination of the elementary grade interventions used here with middle school curricula that seek to promote norms against health-risk behaviors such as drug use and to enhance life skills to resist health-compromising social influences.^{3,6,7,31}

The present results indicate that a package of parent-education, teacher training, and skills training for children provided during the elementary grades can significantly improve the achievement of urban children and

reduce the prevalence of violent crime, heavy drinking, and precocious sexual activity—behaviors with large costs to society. The cost of intervention over 6 years was \$2991 per participant. These results suggest that the basic institutions of child socialization, families and schools, can be strengthened through the use of specific theory-grounded methods that empower parents and teachers to more effectively bond children to school during the elementary grades. We are currently following this panel to see the extent to which the differences observed at age 18 years translate into differences in employment, crime, substance abuse, marital stability, and parenting practices in adulthood.

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At-Risk Prevention Activities Involving Children

- **Interagency Children's Health Outreach Taskforce** The Children's Outreach Taskforce Report was received by President Clinton on June 22, 1998 and he issued an Executive Memorandum to direct eight Federal agencies to implement over 150 initiatives to help enroll uninsured children that are eligible for, but not enrolled in health insurance.
- **Preventing Teen Pregnancy** The Department of Health and Human Services have led an initiative to reduce teenage pregnancy. A recent study by the Centers for Disease Control and Prevention of teen pregnancies show that between 1992 and 1995, pregnancy rates for females aged 15-19 decreased.
- **Child Support Progress** A new child support collection system launched nine months ago has located one million delinquent parents and collected 68% more child support in 1997 than 1992. Additionally, the child support enforcement program established 1.3 million paternities, two and a half times the 1992 figure of 510,000.
- **Children's Health Insurance Program** The Children's Health Insurance Program (CHIP) sets aside \$24 billion over five years for states to provide health coverage for children from families whose incomes are too high for Medicaid and too low to afford private insurance. As of June 26, 1998 CHIP plans have been approved for 22 states or territories.
- **Child Care and Medicare Guide: Partners for Healthy Children** This guide will help child care programs, referral agencies and other health care professionals to help determine what children are eligible and how to enroll in Medicaid and CHIP. The guide was distributed at the seventh Family Reunion Conference, hosted by Vice President and Mrs. Gore, in Tennessee.
- **Early Head Start** The Head Start Act Amendments of 1994 established the Early Head Start Program, which expanded the benefits of early childhood development to low income families under three and to pregnant women. In FY 1998, funding for Early Head Start totals \$279 million, and approximately 39,000 children will be served by Early Head Start.

*Do graph
in the ways
children are at risk*

Date: Monday, June 22, 1998

FACT SHEET

Contact: HCFA Press Office (202) 690-6145

INTERAGENCY CHILDREN'S HEALTH OUTREACH TASKFORCE

*Overview: On August 5, 1997, President Clinton signed the **Children's Health Insurance Program** into law. As part of his continuing commitment to improving **children's** health, he brought together federal departments that have regular contact with low-income families. The resulting **Children's Health Outreach Taskforce** is working to find more and better ways to reach out to uninsured **children**. It has developed an approach that involves: 1) educating families about their eligibility; 2) educating Federal, state, and grantee personnel about **children's** health outreach; and 3) coordinating outreach efforts across departments and with the private sector. Particular attention will be given to minority and special needs **children** with unique access problems and to the coordination of eligibility.*

*Upon receiving the **Children's Health Outreach Taskforce Report** today, President Clinton issued an Executive Memorandum that directs eight Federal agencies to implement over 150 initiatives to help enroll the millions of uninsured **children** eligible for but not enrolled in health insurance programs. President Clinton issued the Executive Memorandum at the seventh Family Reunion Conference, hosted by Vice President and Mrs. Gore, in Tennessee.*

Background:

* In a February 18, 1998 Executive Memorandum, the President asked eight federal departments to work together to develop ways to educate families and enroll **children** in Medicaid and the new **Children's Health Insurance Program**, known as CHIP.

* The Interagency **Children's Health Outreach Taskforce** is led by the Department of Health and Human Services and includes other departments and agencies that serve **children** who are potentially eligible for Medicaid or CHIP. These include the Departments of Treasury, Agriculture, Labor, Education, Housing and Urban Development, Interior and the Social Security Administration. Taskforce members also have networks of private sector counterparts who can be involved and educated in **children's** health insurance outreach.

* The Taskforce proposed more than 150 single-event and ongoing activities intended to assure that the effects of the **children's** health outreach efforts are not temporary. Proposed activities fall into three broad efforts:

Educating families about potential eligibility for health insurance.

Efforts to help families learn about eligibility include:

- * A national toll-free number for referral for child health outreach;
- * Informational materials in plain language and application forms available from federal and state agencies and other sources; and
- * Coordinating program enrollment across agencies so applicants for one program will learn when

they or their **children** may be eligible for Medicaid or CHIP.

Educating government workers about children's health outreach.

All Taskforce departments will educate their own workers about the health insurance options for **children** by:

- * Informing clearinghouses and technical assistance centers, providers and eligibility workers about eligibility and access to Medicaid and CHIP;
- * Distributing newsletters to keep federal and state employees informed of developments in **children's** health outreach activities;
- * Educating grantees and potential grantees about the Medicaid and **Children's** Health Insurance programs;
- * Convening regional interagency taskforces for **children's** health outreach; and Secretarial letters to Federal employees.

Coordinating efforts across departments and agencies and with private sector groups.

The Taskforce is also working to coordinate efforts to achieve essential ongoing communication across departments about Medicaid and CHIP outreach, including:

- * Developing models to link school lunch program applications with Medicaid and CHIP applications;
- * Engaging major national associations, advocacy groups and other private organizations in outreach;
- * Linking Internet sites; and
- * Publishing the "Child Care and Medicaid: Partners for Healthy **Children**" guide which will assist child care programs in getting eligible individuals enrolled in Medicaid and CHIP.

Other Areas in Need of Special Attention.

The task force has identified other areas that need and receive special attention as well as ensure optimal use of Medicaid and CHIP coverage.

Special attention for minority and special needs children. Particular attention will be given to minority and special needs **children** with unique access problems, and to eligibility coordination across programs. Taskforce subgroups on minorities, special needs, and eligibility have been established to address these concerns.

Eliminating barriers in the eligibility and application processes. An eligibility subgroup also is looking at the programs to simplify the eligibility and application processes including finding ways to consolidate eligibility and application forms across programs.

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Date: June 25, 1998

FACT SHEET

Contact: HHS Press Office (202) 690-6343

Preventing Teenage Pregnancy

Overview: Teen pregnancy declined significantly in the early 1990s, but it remains a significant problem in this country. Most teen pregnancies are unintended. Each year, as many as one million pregnancies occur among American teenagers aged 15-19 and almost 200,000 teens aged 17 and younger have children. Their babies are often low birth weight, have disproportionately high infant mortality rate, and are also far more likely to be poor. About 80 percent of the children born to unmarried teenagers who dropped out of high school are poor. In contrast, just 8 percent of children born to married high school graduates aged 20 or older are poor.

In his 1995 State of the Union Address, President Clinton challenged "parents and leaders all across this country to join together in a national campaign against teen pregnancy to make a difference." A group of prominent Americans responded to that challenge, forming the National Campaign to Prevent Teen Pregnancy.

On January 4, 1997, President Clinton announced a comprehensive effort by his Administration to prevent teen pregnancy in this country. The new initiative, led by the Department of Health and Human Services, responds to a call from the President and Congress for a national strategy to prevent out-of-wedlock teen pregnancies and to a directive, under the new welfare law, to assure that at least 25 percent of communities in this country have teen pregnancy prevention programs in place.

Building on the variety of efforts already underway, the national strategy works to prevent out-of-wedlock teen pregnancies and encourage adolescents to remain abstinent. The strategy sends the strongest possible message to all teens that postponing sexual activity, staying in school, and preparing to work are the right things to do. It will strengthen ongoing efforts across the nation by increasing opportunities through welfare reform; supporting promising approaches; building partnerships; improving data collection, research, and evaluation; and disseminating information on innovative and effective practices.

Recent Trends

Teen Pregnancy Rates. A study by the Centers for Disease Control and Prevention of teen pregnancies between 1992 and 1995 showed that in each of the 42 states reporting plus the District of Columbia, teen pregnancy rates for females aged 15-19 decreased. Pregnancy rates and rates of decrease vary widely by state. For example, Nevada had 117.1 births per 1,000 adolescent females - a 6.3 percent decrease -- and North Dakota had 56.3 births per 1,000, an 11.8 percent decrease. Across the states who reported, decreases in teen pregnancy rates were greater among blacks than among whites; however, the teen pregnancy rates for blacks remains higher than for whites. Pregnancies are estimated as the sum of live births, legally induced abortions, and estimated fetal losses such as spontaneous abortion or stillbirths.

Teen Birth Rates. After rising steadily from 1986 to 1991, the birth rate for teens aged 15-19 declined for the sixth straight year in 1996, from a high of 62.1 per 1,000 teens aged 15-19 in 1991 to 54.7 in 1996. The decline was 12 percent between 1991 and 1996 and four percent from 1995 to 1996. All 50

states had a sustained decline in their teen birth rates between 1991 and 1995, and 21 of these states had declines of more than 10 percent over this period.

The National Strategy to Prevent Teen Pregnancy

Building on our current efforts to prevent teen pregnancy, the national strategy announced by President Clinton on January 4, 1997 is designed to strengthen the national response to prevent out-of-wedlock teen pregnancies and support and encourage adolescents to remain abstinent:

Implementing New Efforts Under Welfare Reform. Under the welfare law signed by President Clinton on August 22, 1996, unmarried minor parents are required to stay in school and live at home, or in an adult-supervised setting, in order to receive assistance. This approach was proposed by President Clinton in 1994, and incorporated into numerous state demonstration projects approved by the Administration prior to the new welfare law. The law also supports the creation of Second Chance Homes, which will provide teen parents with the skills they need to become good role models and providers for their children, giving them guidance in parenting and in avoiding repeat pregnancies. The welfare law also provides \$50 million a year for five years in new funding for state abstinence education programs. The Balanced Budget Act of 1997 provides funding for a national evaluation of the program. Finally, the new welfare law includes the tough child support enforcement measures President Clinton proposed in 1994, which will send the strongest possible message to young girls and boys that they should not have children until they are ready to provide for them.

Supporting Promising Approaches. The Clinton Administration continues to support innovative teen pregnancy prevention strategies tailored to the unique needs of communities. HHS-supported programs in this area already reach about 30 percent of communities in the United States. HHS programs are based on five principles: parental and adult involvement; strong messages of abstinence and personal responsibility; clear strategies for young people's futures; involvement by all facets of the community; and a sustained commitment to young people.

Building Partnerships. As part of the strategy, HHS is working to build partnerships with national, state, and local organizations. HHS is working with national youth-serving organizations to use their networks to promote activities that provide girls and boys opportunities for the future, including encouraging abstinence; with organizations working on behalf of teenagers with disabilities; and with the National Campaign to Prevent Teen Pregnancy, the private-sector group that has responded to President Clinton's challenge on this issue.

Improving Data Collection, Research, and Evaluation. The national strategy is working to improve data collection, research, and evaluation to further our understanding of the magnitude, trends, and causes of teen pregnancies and births; to develop targeted teen pregnancy prevention strategies; and to assess how well these strategies work.

Disseminating Information on Innovative and Effective Practices. Sharing information about promising and successful approaches is critical to expanding teen pregnancy prevention efforts across the country. Through the national strategy, HHS continues to work with its partners to highlight innovative practices at the federal, state, and local levels and to disseminate new research and evaluation findings. The Department is also working to disseminate new information on the developmental needs of youth and on the use of broad-based activities to help teenagers avoid risky behaviors leading to teen pregnancy.

Sending a Strong Abstinence Message. As part of the national strategy, Secretary Shalala in May 1997 announced two new community grant programs to prevent teen pregnancy and promote responsible

behavior. One program is aimed at teenage girls and the other at teenage boys. The grant program for girls is also part of the Secretary's Girl Power! campaign. Each of the grant programs will total about \$1 million per year, and involve public-private partnerships organized by individual communities. As part of the program, **The Girl Neighborhood Power! - Building Bright Futures for Success** is challenging America's communities to become active partners in assisting 9- to 14-year-old girls to successfully navigate adolescence and achieve maximum potential. The initiative, administered by HRSA, strives to combine several elements including strong "no use" messages about tobacco alcohol, and illicit drugs with an emphasis on physical activity, nutrition, abstinence, mental health, social development, and future careers.

In addition, the national strategy is focusing on boys and young men, by working to increase understanding of motivations for both abstinence and fatherhood and by developing effective prevention strategies for boys. These efforts include working with the Administration's Fatherhood Initiative to ensure that men, including pre-teen and teenage boys, receive the education and support necessary to postpone fatherhood until they are emotionally and financially capable of supporting children. The strategy is also building on existing HHS efforts, such as the Title X Adolescent Male Initiative, which promotes responsible behavior among teenage boys.

Additional HHS Programs

- ☐ **The Community Coalition Partnership Program for the Prevention of Teen Pregnancy** supports demonstration grants for the prevention of teen pregnancies in 13 communities in 11 states since 1995. Coalitions of local and public and private agencies and organizations in communities with high rates of teen pregnancy have been working over the last two years to develop community action plans, coordinate efforts to reduce teen pregnancy, identify gaps in current programs and services, target existing resources, and design evaluation plans. CDC, which administers the program, awarded approximately \$250,000 per year for two years to 13 communities in 11 states to help these communities mobilize and organize their resources to support effective and sustainable teen pregnancy prevention programs. For FY 1998, a total of \$13.7 million was made available to help the 13 community coalition partnerships implement their action plans and evaluate their impact, as well as to support related data collection, evaluation, and dissemination activities.
- ☐ **Reproductive Health and Family Planning Services** (under Title X of the Public Health Service Act) are provided to nearly 5 million persons each year, nearly one third of whom are under 20 years of age. Abstinence counseling and education are an important part of the Title X service protocol for adolescent clients. These services are provided by 84 grantees with more than 4,000 clinic locations. These sites offer reproductive health services including pregnancy prevention, family planning, and diagnosis of sexually transmitted diseases, either on site or by referral. The program has also launched an adolescent male initiative called the "Young Men/Family Planning Partnership Training Program." Under this initiative, Title X clinics employ male high school students as interns while also providing training in clinic operation and peer education; assisting in identifying career paths in allied health and related occupations; and increasing their use of services in a family planning setting.
- ☐ **Healthy Schools, Healthy Communities**, a Health Resources and Services Administration program created in 1994, has established school-based health centers in 26 communities in 20 states to serve the health and education needs of children and youth at high risk for poor health, teenage pregnancy, and other problems. For the first three years of the program, \$1 million each year was provided to fund health education and promotion programs that were coordinated with

the health services grants.

- ☐ **The Social Services Block Grant (SSBG)** (under Title XX of the Social Security Act) provides funding to prevent, reduce, or eliminate dependency; achieve or maintain self-sufficiency; prevent neglect, abuse, or exploitation of children and adults; prevent or reduce inappropriate institutional care; and provide admission or referral for institutional care when other forms of care are inappropriate. SSBG Grants are made directly to the 50 states, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands to fund social services tailored to meet the needs of individuals and families residing within each jurisdiction.
- ☐ **The Community Services Block Grant**, which operates in all 50 states, the District of Columbia, and the territories, enables local community agencies to provide low-income populations, including youth at risk, with job counseling, summer youth employment, GED instruction, crisis hotlines, information and referral to health care, and other services.
- ☐ **The Independent Living Program**, run by the Administration for Children and Families, provides funds to states to support activities ranging from educational programs to programs that help young people who are making the transition from foster care to independent living to avoid early parenthood. This program supports activities in all 50 states and the District of Columbia.
- ☐ **Youth Programs** including Runaway and Homeless Youth Programs, Transitional Living Programs, and the Youth Sports Program, address a wide range of risk factors for teen pregnancy. Together, these programs operate in 620 communities in 50 states and the District of Columbia.
- ☐ HRSA's **Healthy Start** program has 62 projects to reduce infant mortality in the highest-risk areas and to improve the health and well-being of women, infants, and their families. Among a broad array of services provided (including state prenatal hotlines), thousands of teenagers participate in prevention programs exclusively designed for adolescents. The programs encourage healthy lifestyles, youth empowerment, sexual responsibility, conflict resolution, goal setting, and the enhancement of self-esteem.
- ☐ **Maternal and Child Health Services Block Grant** (Title V) funds support a variety of adolescent health programs in 57 states and jurisdictions, including adolescent pregnancy prevention programs, state adolescent health coordinators, family planning, technical assistance, and other prevention services.
- ☐ **The Adolescent Family Life Program (AFL)**, created in 1981, supports research into the causes and consequences of adolescent pregnancy; demonstration projects that provide health, education, and social services to pregnant and parenting adolescents, their children, male partners, and families; and programs aimed at promoting abstinence among pre-adolescents and adolescents as the most effective way of preventing adolescent pregnancies, sexually transmitted diseases, and HIV/AIDS. In FY 1997, the AFL program funded 83 projects in 37 states and the District of Columbia. AFL is administered by the Office of Population Affairs.
- ☐ **Empowerment Zones and Enterprise Communities** in 105 rural and urban areas in 43 states and the District of Columbia have been awarded grants to stimulate economic and human development and to coordinate and expand support services. As they implement their strategic plans, some sites are including a focus on teenage pregnancy prevention and youth development.

- **Health education in schools** supports the efforts of every state and territorial education agency to implement school health programs to prevent the spread of HIV and sexually transmitted diseases (STDs). Assistance is also provided to 13 states to build an infrastructure for school health programs. Efforts are targeted at preventing early sexual activity, STDs, HIV, drug and alcohol abuse, tobacco use, and injuries.
- **Community and Migrant Health Centers**, including family and neighborhood health centers, operate in 3,032 community-based sites through 685 center grantees in all 50 states, the District of Columbia, and six territories. The centers provide primary and specialized health and related services to medically underserved adolescents. Some centers include special hours or clinics for adolescent patients.
- **Indian Health Service (IHS)** provides a full range of medical services for American Indians and Alaska Natives. IHS supports projects targeted at preventing teenage pregnancy, and its prevention and treatment programs also have a special emphasis on youth substance abuse, child abuse, and women's health care.
- **Drug Treatment and Prevention Programs** include services to prevent first time and repeat pregnancies among teenagers. One hundred twenty-two residential substance abuse treatment programs for pregnant and postpartum women, as well as women with dependent children, receive support to provide family planning, education, and counseling services in 39 States, the District of Columbia, and the Virgin Islands. Also, 25 programs to prevent substance use and other adverse life outcomes serve high-risk female teens in 13 States and the District of Columbia.
- **Health Care and Promotion** under Medicaid provides Medicaid-eligible adolescents under age 21 with access to a comprehensive range of preventive, primary, and specialty services within its Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program.
- **The Medicaid program** also funds family planning services at an enhanced match rate for states. The federal government pays 90 percent of state expenditures for Medicaid family planning services, while the state funds the remaining 10 percent. The enhanced match encourages states to fund family planning programs which include patient counseling and education concerning pregnancy prevention and reproductive health. Outreach is a priority for HCFA for informing and enrolling those who are eligible for Medicaid as well as those who are not eligible for Medicaid but will be eligible for coverage under the Children's Health Insurance Program (CHIP). This initiative should result in more adolescents being enrolled in Medicaid and CHIP, thereby ensuring access for covered services related to pregnancy prevention.

HHS has conducted research, surveillance, demonstrations, and evaluations on an ongoing basis to gather and provide information and technical assistance on the magnitude, trends, and causes of teenage pregnancy and on prevention programs and approaches that work, including:

- **"State-Specific Adolescent Pregnancy Rates, United States 1992-1995,"** is a CDC study that compiled teen pregnancy rates from 42 states and the District of Columbia. Though rates vary by state, all the states that reported for the study had decreases in teen pregnancy.
- **"Teenage Births in the United States: National and State Trends, 1990-1996,"** is a National Center for Health Statistics report that brings together the latest and trend data to profile the teenage mother. It has birth rates for each state by race and Hispanic origin to help explain some of the differences across states.

- ☐ **"Beginning Too Soon: Adolescent Sexual Behavior, Pregnancy, and Parenthood"** is a two-volume comprehensive review completed for HHS by Child Trends, Inc. in June, 1995 of the most recent literature on teen sexual behavior, pregnancy and parenthood and the effectiveness of teen pregnancy prevention programs.
- ☐ As part of its Youth Risk Behavior Surveillance System, CDC helps states monitor critical health risk behaviors among teenagers, including sexual risk behaviors that result in HIV infection, other STDs, and teen pregnancy. In 1995, 40 states and territories and 16 large cities collected comparable data.
- ☐ The 1995 **National Survey of Family Growth**, released in May 1997, provides the latest and most comprehensive national data on fertility, contraception, marriage and cohabitation, infertility, adoption, maternity leave, medical services, breast-feeding, smoking and other factors that impact both teenage and adult women, and the health and well-being of their children. The study updates key trends, includes many new topics, and has significant new findings on teenagers. The findings of the 1995 survey showed that the long upward trend in teen sexual activity may finally have stopped with a slight decline between 1990 and 1995 in the percentage of teenagers who have had sexual intercourse. The survey also found a dramatic increase in the use of contraception at first intercourse.
- ☐ The **National Longitudinal Study of Adolescent Health (Add HEALTH)** is a comprehensive study of adolescent health funded by HHS' National Institute of Child Health and Human Development (NICHD) of the National Institutes of Health and other HHS agencies. The study provides information about risky behaviors and resiliency factors in adolescents and about environmental influences, including parents, siblings, peers, schools, neighborhoods, and communities. Preliminary results of the study, released in September 1997, indicate that a feeling of personal connection to home, family, and school is crucial for protecting young people from a vast array of risky behaviors, such as cigarette, alcohol, and marijuana use, violent behavior, suicide, and sexual activity. The **National Survey of Adolescent Males**, supported by NICHD, OPA and other HHS agencies, also shows a decline from 1998 to 1995 in the proportion of adolescent males who are sexually experienced.
- ☐ National Institutes of Health also conducts research and evaluation studies of promising interventions, including the "Adolescent Pregnancy Prevention Program", "Preventing Problem Behavior Among Middle School Students" program, and the "Research on Sexually Transmitted Diseases, Violence, and Pregnancy Prevention" (RSVPP) project.

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Date: Thursday, June 24, 1998

WHITE HOUSE FACT SHEET

Contact: HHS Press Office (202) 690-6343

PRESIDENT CLINTON HAILS CHILD SUPPORT PROGRESS AND SIGNS INTO LAW TOUGH NEW PENALTIES FOR DEADBEAT PARENTS

Today, President Clinton will announce new statistics highlighting the success of Administration child support enforcement efforts and will sign into law tough new penalties for parents who repeatedly refuse to pay child support. At an Oval Office ceremony, the President will announce that a new child support collection system launched nine months ago has already located one million delinquent parents, and the child support enforcement program established a record 1.3 million paternities in 1997. Overall, 68 percent more child support was collected in 1997 than in 1992. The bill he will sign into law, the Deadbeat Parents Punishment Act of 1998, is based on his 1996 proposal for tougher penalties for parents who repeatedly fail to support children living in another state or who flee across state lines to avoid supporting them. Finally, the President will reiterate his position that bankruptcy reform legislation should not make it harder to collect child support and alimony.

New Hire Directory Finds One Million Delinquent Parents. Today, the President will announce that the new National Directory of New Hires had located one million delinquent parents since its October 1, 1997 launch. The directory, proposed by the President in 1994, and enacted as part of the 1996 welfare reform law, helps track parents across state lines and withhold their wages by enabling child support officials to match records of delinquent parents with wage records from throughout the nation. Approximately one-third of all child support cases involve parents living in different states.

A Record Number of Paternity Establishments. The President will also announce that the child support enforcement program established a record 1.3 million paternities in 1997, two and a half times the 1992 figure of 510,000. Much of this success is due to the in-hospital voluntary paternity establishment program begun by the Clinton Administration in 1994, which encourages fathers to acknowledge paternity at the time of the child's birth.

A Record Increase in Child Support Collections. In 1997, the state and federal child support enforcement program collected a record \$13.4 billion for children, an increase of 68% from 1992, when \$8 billion was collected. Not only are collections up, but the number of families that are actually receiving child support has also increased. In 1997, the number of child support cases with collections rose to 4.2 million, an increase of 48% from 2.8 million in 1992.

New Felony Penalties for Egregious Failure to Pay Child Support. The President called for these tough new penalties in July 1996 and again in his 1997 State of the Union address. This new law creates two new categories of felonies, with penalties of up to two years in prison, for more egregious child support evaders:

- ☐ Traveling across state or country lines with the intent to evade child support payments will now be considered a felony if the obligation has remained unpaid for a period longer than one year or is greater than \$5,000.

- ☐ When the obligation has remained unpaid for a period of longer than two years or is greater than \$10,000, willful failure to pay child support to a child residing in another state will be considered a felony.

This bill was sponsored in Congress by Representatives Hyde and Hoyer and Senators DeWine and Kohl, and had overwhelming bipartisan support in both houses.

Responsible Bankruptcy Reform that Doesn't Hurt Children. Finally, the President will reiterate his position that bankruptcy reform legislation should not make it harder to collect child support and alimony. The Administration will work with Congress to produce a bankruptcy reform bill that asks responsibility of both creditors and debtors, while stemming abuse. In those discussions, the President will continue to make protecting child support and alimony a top priority. The House and Senate bills still raise the concern that additional debts will survive bankruptcy and compete with child support and alimony payments for scarce funds.

Date: Friday, June 26, 1998

FACT SHEET

Contact: HCFA Press Office (202) 690-6145

THE CHILDREN'S HEALTH INSURANCE PROGRAM (CHIP)

Overview: Today, over 10 million American children -- one in seven -- are uninsured. To reach these children, many of whom come from working families with incomes too high to qualify for Medicaid but too low to afford private health insurance, President Clinton proposed a comprehensive children's health initiative which was included at his urging in the Balanced Budget Act of 1997. This new initiative -- the Children's Health Insurance Program (CHIP) -- sets aside \$24 billion over five years for states to provide new health coverage for millions of children -- the largest children's health care investment since the creation of Medicaid in 1965. States will be able to use part of their federal funds to expand outreach and ensure that all children eligible for Medicaid and the new CHIP program are enrolled.

The new initiative is a partnership between the federal and state governments that will help provide children with the health coverage they need to grow up healthy and strong. At President Clinton's insistence, the program requires that states use this new money to cover uninsured children -- and not replace existing health coverage. The program also includes important cost-sharing protections so that families will not be burdened with out-of-pocket expenses they cannot afford.

Funds for the program became available to the states beginning October 1, 1997, and HHS is working closely with states as they design plans in accordance with the new law. During January and February 1998, HHS sponsored nine regional conferences to help inform states of all the options available to cover children under CHIP.

To bolster the aggressive outreach strategies that are already part of CHIP, President Clinton's FY 1999 budget includes new policies to help states reach out to uninsured children. Over five years, the budget provides \$900 million for children's health insurance policies to help make sure that all eligible children are covered either under traditional Medicaid or the new CHIP program.

As of June 26, 1998, CHIP plans have been approved for 22 states or territories: Alabama, Colorado, South Carolina, Florida, Ohio, California, New York, Illinois, Michigan, Connecticut, New Jersey, Missouri, Rhode Island, Oklahoma, Massachusetts, Pennsylvania, Wisconsin, Oregon, Texas, Idaho, Puerto Rico, and Indiana. In addition, the District of Columbia and the following 17 states have submitted plans: Tennessee, Nevada, Vermont, Montana, Utah, Maryland, Arkansas, North Carolina, Minnesota, Nebraska, New Mexico, Maine, New Hampshire, Georgia, Iowa, South Dakota and Kentucky.

EXPANDING CHILDREN'S ACCESS TO HEALTH COVERAGE

The federal-state Children's Health Insurance Program (CHIP), created under the new Title XXI of the Social Security Act, will expand health coverage to uninsured children whose families earn too much for

Medicaid but too little to afford private coverage. It builds on Medicaid, the federal-state health insurance program that covers approximately 36 million low-income individuals, including 18 million children. Because Medicaid allows states flexibility in determining eligibility, states currently cover children whose family incomes range generally from below the federal poverty level to as high as 300 percent of poverty. (Note: One State, Tennessee, has no upper income cap.) The majority of states cover children in families between 100 and 150 percent of the poverty level. In the new CHIP program, states may either cover children in families whose incomes are above the Medicaid eligibility threshold but less than 200 percent of poverty, or within 50 percentage points over the state's current Medicaid income limit for children.

Ensuring Meaningful Health Benefits. Under the new program, states have flexibility in targeting eligible uninsured children. States may choose to expand their Medicaid programs, design new child health insurance programs, or create a combination of both. States choosing a new children's health insurance program may offer one of the following benchmark plans: the standard Blue Cross/Blue Shield Preferred Provider Option offered by the Federal Employees Health Benefit Program; a health benefit plan offered by the state to its employees; or, the HMO plan with the largest commercial enrollment in the state. A state may also choose to offer the "equivalent" of one of the benchmark plans. If a state chooses this option, its plan's value must be at least equal to the benchmark plan's and it must include: inpatient and outpatient hospital services; physicians' surgical and medical services; laboratory and X-ray services; and, well baby/child care services, including immunizations. In addition, if the plan a state chooses as its benchmark includes coverage for prescription drugs, mental health services, vision care, and hearing-related expenses, the state's "equivalent" plan must include similar benefits. Under the law, New York, Pennsylvania and Florida can continue to offer their current benefit arrangements (with some modifications to comply with the law's cost-sharing protections). States choosing the Medicaid option will offer the Medicaid benefits for children.

Limiting Patient Costs. Patient out-of-pocket costs for this program are allowed, but are limited. If a state expands its Medicaid program, then existing Medicaid limits apply to the newly enrolled children. If a new health plan is developed, premiums for families whose income is under 150 percent of the poverty level cannot exceed \$19 per family per month and copayments must be nominal. For families with incomes above 150 percent of poverty, cost-sharing must be based on an income-related sliding scale with an annual total for all children not to exceed five percent of the family's income.

Preventing Cost Shifting. To prevent states from shifting children from the traditional Medicaid program to this new program, states must not tighten the Medicaid eligibility standards for children that were in place on March 31, 1997. In addition, states must enroll all children who meet Medicaid eligibility rules in the Medicaid program, not in the new CHIP plan. All states must design their programs to prevent private cost shifting as well. In their child health plans, states will describe methods they will use to prevent "crowd out" or the shifting of children from private insurance to CHIP.

ACCESSING FEDERAL FUNDING

Under the new law, states are eligible to receive an enhanced federal matching rate drawn from an "allotment" for state programs approved by the Secretary of Health and Human Services which expand access to targeted, low-income children under the new CHIP program. Funds will be allocated to each participating state according to their number of uninsured low-income children, accounting for regional cost differences. Minimum available state allocations, which were published in the *Federal Register* in September, range from \$3.5 million for Vermont's relatively small population to a high of \$855 million for California. States may use up to 10 percent of the CHIP benefit expenditures for outreach, services other than the standard benefit package for eligible children, and administrative costs. To access the FY 1998 allocation, states must have their CHIP plans approved by the Secretary of Health and Human Services

by Sept. 30, 1998.

HHS is working closely with states to design CHIP plans which meet the requirements of the new law. HHS has written to each state outlining the new program, and has published a list of the state allotments; a preliminary check-list of information states must submit to HHS when applying for their allotments; and answers to the most commonly asked questions from states about how to develop their children's health insurance programs. The Department will work with states to expedite the development and implementation of state CHIP plans.

EXPANDING OUTREACH

President Clinton's FY 1999 budget includes a significant effort to help states reach out to uninsured children, and ensure that all children eligible for Medicaid and the new CHIP program are enrolled. Over five years, the proposal provides \$900 million for new outreach efforts, including:

- **A broad expansion of the number of places children could get Medicaid coverage immediately on a temporary basis while formal applications are processed.** This process, known as "presumptive eligibility," allows workers in specially designated locations to bring a child immediately into the program on a temporary basis. Under current law, workers in such places as **Head Start** centers and agencies that certify families for the Women, Infants and Children program can grant a child immediate Medicaid coverage. The President's plan would expand that authority to other agencies, such as schools, child care resource and referral centers and child support enforcement programs.
- **New access for states to an outreach fund established by the Temporary Assistance for Needy Families (TANF) program (formerly the Aid to Families with Dependent Children program).** The proposal would help states defray the cost of finding and enrolling children by expanding the use of a \$500 million fund which was originally set up to help states with Medicaid outreach for children who lost cash aid under welfare reform. Few states have used these funds, partly because of the difficulty of targeting such a narrow group. Under the President's plan, Medicaid would pay \$9 of every \$10 spent by states for most outreach activities for all uninsured children qualified for assistance, and not just for outreach to a small subset of the children. Also, the budget proposal would remove the fund's sunset date of 2000 and add an additional \$25 million to the effort.
- **New Presidential Directive to Launch a Government-Wide Effort to Enroll Uninsured Children.** On February 18, 1997, in an executive memorandum to eight Federal agencies with jurisdiction over children's programs, the President directed the establishment of a multi-agency effort to enroll uninsured children. The Departments of Agriculture, Interior, Education, HHS, HUD, Interior, Labor, and Treasury and the Social Security Administration, run programs such as WIC, Food Stamps, **Head Start**, and public housing that cover many of the same children who are uninsured and eligible for Medicaid or other health insurance. The memorandum instructed these agencies: to identify all their employees and grantees who might come into contact with these children and ensure that these individuals are aware of the health insurance programs available to children; to develop an intensive children's outreach initiative, such as distributing information, coordinating toll-free numbers, and simplifying and coordinating application forms; and to report back in 90 days on their plan to help enroll uninsured children.
- **The Announcement of an Historic Private Sector Commitment to Provide Outreach.** On February 18, 1998, the President announced unprecedented new contributions from the private

sector to help ensure that all children who are eligible for health insurance receive it, including:

- **A new toll-free number that directs families around the nation to their state enrollment centers.** The President announced that Bell Atlantic will establish and operate a toll-free number to help states enroll uninsured children and will help automatically direct millions of families around the nation to their local state Medicaid enrollment agency.
- **Over \$23 million in commitments from private foundations across the country.** The Robert Wood Johnson Foundation will spend \$13 million over the next 3 years, to fund innovative state-local coalitions to design and conduct outreach initiatives, simplify enrollment processes, and coordinate existing coverage programs. The Kaiser Family Foundation will spend up to \$10 million over the next 5 years on studies to help understand why eligible children do not enroll in existing programs and how best to provide insurance coverage for these children. America's Promise, with support from the Robert Wood Johnson Foundation and in collaboration with the American Academy of Pediatrics, will mobilize corporations such as SmithKline Beecham and Schering Plough and local communities nationwide in children's health outreach efforts.
- **New initiatives from corporate and advocacy organizations to reach out to uninsured children.** Procter and Gamble, the manufacturer of Pampers diapers, has volunteered to include a letter in its child birth education packages, given to 90 percent of first-time mothers, providing families information about available health insurance options. Grocery stores and chain drug stores across the country will provide information about the new Bell-Atlantic toll-free number to their customers. The National Education Association is launching an unprecedented effort to educate teachers on how they can inform children and their families about health insurance, through national newsletters, conferences, and special training sessions. The American Hospital Association's Campaign for Coverage will increase its nationwide initiative to engage hospitals in helping uninsured Americans, including children.

BUILDING ON PREVIOUS CLINTON ADMINISTRATION ACTIONS

Since 1993, HHS has approved Medicaid waivers for 18 states for comprehensive health care reform projects that have allowed states to control costs and expand coverage. In addition, HHS has approved requests from 19 states for Medicaid waivers as part of larger welfare reform projects, as well as 25 local Medicaid demonstration projects. *When fully implemented, these demonstration projects will extend health coverage to 2.2 million parents and children who otherwise would be uninsured.*

President Clinton also signed into law the Health Insurance Portability and Accountability Act of 1996, creating important new protections for an estimated 25 million Americans (approximately 1 in 10) who move from one job to another, who are self-employed, or who have pre-existing medical conditions.

The new Children's Health Insurance Program also builds on the Clinton Administration's long standing commitment to improving health care for children. The President has issued guidelines to eliminate easy access to tobacco products and to prohibit companies from advertising tobacco to kids. He also recently announced that in 1996, over 90 percent of America's toddlers received the most critical doses of each of the routinely recommended vaccines -- surpassing the goal he set in 1993. And, the FDA recently released a rule that requires manufacturers to do studies on pediatric populations for new prescription drugs as well as those currently on the market.

Combined, this administration's efforts will help assure that children get the healthy **start** they need to live long and productive lives.

STATE CHIP PROGRAMS

Descriptions of approved state CHIP programs follow:

Alabama

Alabama will have access to a preliminary allotment of \$86 million in federal CHIP funds for FY 1998. The state estimates that they will cover as many as 20,000 new children through this expansion of their Medicaid program. Alabama's regular Medicaid benefit package will be extended to the newly eligible children and regular Medicaid cost-sharing rules will apply. The plan will expand eligibility to children up to age 19 who were born on or before September 30, 1983, with family income levels at or below 100 percent of the federal poverty level (the poverty level is \$16,050 for a family of four), and will hire extra outreach workers to increase the number of children located and enrolled in Medicaid. Information on the new program will be advertised through newspapers, a press conference, public service announcements and through the school system. Alabama was the first state approved on January 30, 1998.

Colorado

Colorado will expand children's access to health coverage by building on its own Colorado Child Health Plan, and could receive up to \$42 million in federal CHIP funds for FY 1998. The state plans to cover an additional 23,000 children under this non-Medicaid managed care plan by the third year. The benefit package will include services such as hospital and emergency room transport, inpatient services, medical office visits, and prescription drugs. Coverage will be provided to children from birth through age 17 for families whose income is at or below 185 percent of the federal poverty level. The state will publicize the program through press releases, public service announcements, schools, employers, county agencies and regional and social agencies. Colorado was approved on February 18, 1998.

California

California could receive as much as \$855 million in new funds for FY 1998. The state will expand its Medicaid program, known as Medi-Cal, by implementing an income disregard and by making children under age 19 eligible if they have family incomes at or below 100 percent of the federal poverty level. The state will also expand its current state program, known as Access for Infants and Mothers (AIM), which will cover infants up to age 1 from 200 percent to 250 percent of poverty. Through CHIP, California will also expand its Healthy Families program, which will provide coverage for children age 1-19 with family incomes from 100 percent to 200 percent of the federal poverty level. California anticipates adding a total of close to 100,000 children to the Medi-Cal and Healthy Families programs by the end of FY 1998. As part of its outreach efforts, California will subcontract for a media campaign with private and community based organizations, health brokers and insurance agents to directly identify and assist potential enrollees in filling out the joint application form for the Medi-Cal and Healthy Families program. In addition, California will conduct a provider education campaign to support its outreach effort. California was approved on March 24, 1998.

Connecticut

Connecticut could receive approximately \$35 million in new funds, which state officials will use to insure as many as 15,000 new children by June of 2000. The state will use its new allocation to both expand its

Medicaid population and create a new program based on the state employee's health plan. Under the state's HUSKY program, Medicaid eligibility will be expanded to include children ages 14 through 18 with household incomes of up to 185 percent of the federal poverty level. Previously, the Medicaid program only covered children up to age 13 in families with incomes up to 185 percent of poverty. The state estimates that an additional 14,400 children will be added to the Medicaid program. The new insurance program (Part B of HUSKY) will be targeted toward children up to age 18 in families with incomes up to 235 percent of poverty. The state will apply an income disregard - setting aside certain types of income the family may have - effectively bringing coverage to 300 percent of poverty. Before income disregards are applied, HUSKY Part B will charge families with incomes above 235 percent of poverty premiums of \$30 per child, with an upper limit of \$50 per family. Children with special physical and behavioral health needs will receive those services under a special third part of the program, HUSKY Plus. Outreach for the state will include radio and TV ads, a direct mail campaign, brochures/flyers, video, a toll-free number, web sites and state presentations and mail-in applications. Connecticut was approved on April 27, 1998.

Florida

Florida is the first approved state plan that will expand both its Medicaid program and build upon an existing child health insurance program, Healthy Kids. It is also one of three states whose benefit package was "grandfathered" into the CHIP legislation by Congress. Florida could receive as much as \$270 million for FY 1998. The state will expand its Medicaid coverage for children ages 15-19 by raising the family income cap from 28 percent of the federal poverty level to 100 percent. The CHIP funds will also help expand participation in Healthy Kids from the current 49,000 children to 118,725 new children during each year of the program. There is no cost sharing for the Medicaid program. There are no income limits for participation in Healthy Kids, but the CHIP funds will provide subsidized premiums for individuals with incomes at or below 185 percent of the poverty level. The state plans to simplify its enrollment form and enrollment process and is developing an outreach strategy. The Healthy Kids program has arrangements with local school districts for marketing and outreach. Florida received its approval on March 5, 1998.

Idaho

Idaho could receive as much as \$15.8 million in new funds, which state officials will use to insure nearly 5,000 children with their CHIP allotment by the end of FY 1999. Idaho will use its new allocation to expand insurance coverage to children through the state's Medicaid program. The program will expand eligibility to children up to age 19 in families with incomes up to 160 percent of the federal poverty level. Due to state legislation, the income threshold will be 150 percent of the federal poverty level effective, July 1, 1998. The state has formed a task force to study ways of further expanding Idaho's CHIP program. States can amend their original CHIP plans, but amendments must be approved by HHS. Children in the Medicaid expansion population will receive the state's standard Medicaid benefit package, which includes inpatient and outpatient hospital services, inpatient psychiatric care, physician services, dental services, home health services, lab services, and prescription drugs. Outreach activities include mailing postcards to potential enrollees describing Title XXI. The mailing list is comprised of families who have lost cash assistance between April and December 1997. Idaho was approved on June 15, 1998.

Illinois

Illinois, which currently insures 767,000 children in its Medicaid program, will expand eligibility for children up to age 19 whose families have incomes at or below 133 percent of the federal poverty level. Illinois could receive as much as \$123 million in new funds for FY 1998, which state officials will use to

insure as many as 40,000 additional children within the next three years. Prior to the CHIP expansion, the income level for Medicaid eligibility varied based on the age of the child. Under the new program, income thresholds have been equalized. State outreach efforts will include reviewing automated records to identify eligible participants followed by the notification of those individuals. In addition, the Illinois Department of Public Aid will send a notice to all non-assistance Child Support families informing them of the program and of locations where families can go to enroll their children. Illinois was approved on April 1, 1998.

Indiana

Under the CHIP program, Indiana could receive as much as \$70.5 million in new funds for FY 1998. Indiana will use its new allocation to expand insurance coverage to children through the state's Medicaid program. Indiana officials estimate that they will insure as many as 58,000 more children with their CHIP allotment by the year 2000. The program will expand eligibility to children up to age 19 in families with incomes up to 150 percent of the federal poverty level, and the state has formed a task force to study ways to further expand its CHIP program. Children in the Medicaid expansion population will receive the state's standard Medicaid benefit package, which includes inpatient and outpatient hospital services, inpatient psychiatric care, physician services, dental services, home health care, lab services and prescription drugs. To raise awareness about the program, the state will launch a media campaign and conduct outreach through state and local government agencies and community organizations. Indiana's CHIP plan was approved on June 26, 1998.

Massachusetts

Massachusetts could receive as much as \$43 million this year in new funds, which state officials will use to expand the state Medicaid program and create a separate Family Assistance Plan. With its federal allotment, the state hopes to bring annual enrollment in the program to nearly 51,000 children. Massachusetts will provide the state's regular Medicaid benefit package to the children newly enrolled with CHIP funds. The eligibility level for Medicaid will be increased from the current 133 percent of poverty to children in families with incomes of up to 150 percent of poverty. The state will also use its CHIP funds to create the Family Assistance Plan for children with family incomes between 150 and 200 percent of poverty. Uninsured children with family incomes over 150 percent of poverty will be eligible for either a "direct coverage option" or for financial assistance for families to purchase dependent coverage through their employers, the so-called "premium assistance option." The Family Assistance Program will provide coverage equivalent to the insurance plan offered to federal employees in the state. These families will pay a monthly premium of \$10 per child with a family maximum of \$30 per month. Proposed outreach includes school-based campaigns, distribution of promotional materials, and giving mini-grants to community organizations to help locate hard-to-find potentially eligible children. Massachusetts was approved on May 29, 1998.

Michigan

Michigan could receive as much as \$92 million this year in new funds, which state officials will use to insure as many as 120,000 new children by the end of FY 2000. The state will use its new allocation to implement MICHild. The program will provide comprehensive health care coverage to all children under age 19 whose families have incomes at or below 200 percent of the federal poverty level. The benefit package will mirror the state employees' plan and will be administered by multiple managed care providers. MICHild will not impose co-payments on families with incomes at or below 150 percent of poverty. Some co-payments will apply for families between 151-200 percent of poverty. The state's marketing and outreach effort will include general marketing through the use of demographically targeted

media campaigns and the solicitation of cooperation and outreach from programs, agencies and systems likely to have contact with target families. Michigan was approved on April 7, 1998.

Missouri

Missouri could receive as much as \$52 million in new funds, which state officials will use to insure as many as 90,000 new children by June 30, 1999. Missouri will use its new allocation to expand insurance coverage to children within the state's existing Medicaid managed care program, known as MC+. The program will expand eligibility to children in families with incomes up to 300 percent of the federal poverty level. Missouri's statewide health care reform demonstration plan was also approved through a Section 1115 Medicaid waiver. It will allow the state to slightly alter the Medicaid benefit package and also enroll the CHIP children in Medicaid after the state's CHIP funds are exhausted. This Medicaid waiver will also provide coverage for certain adults, including working parents leaving welfare and mothers who otherwise would have lost their Medicaid following childbirth. Outreach and eligibility efforts will take place throughout the state at the state offices in every county. Free materials will also be available and used by other entities in assisting in the outreach efforts, such as social welfare organizations, schools and health care providers. Missouri was approved on April 28, 1998.

New Jersey

New Jersey could receive approximately \$89 million in new funds, which state officials will use to insure as many as 102,000 new children by the end of the first year of their program. The state will use its new allocation to create NJKidCare. The program will include an expanded Medicaid population and a new state CHIP plan. The Medicaid expansion will provide comprehensive health care coverage to all children under age 19 whose families have incomes at or below 133 percent of the federal poverty level. The state estimates that an additional 34,000 children will be added to the Medicaid program. The new CHIP insurance program will be targeted to children in families with incomes above 133 percent to 200 percent of poverty. The new program will charge families a \$15 per month premium and will extend coverage to an estimated 68,000 children. The state will have a fourfold outreach effort which will include: public awareness; targeted outreach; community education; and consumer education. There is also a commitment by the State at outreach to special populations such as HIV and homeless populations. New Jersey was approved on April 27, 1998.

New York

New York was one of three states for which existing children's health coverage benefit packages were "grandfathered" into the CHIP legislation. The state could receive as much as \$256 million in new funds, which state officials will use to insure as many as 360,000 additional children within the next three years. New York will use its new allocation to expand its existing CHPlus program, which currently provides insurance to 170,000 children up to age 19 whose families have incomes at or below 185 percent of the federal poverty level. CHPlus is a partnership between the state and private insurers with the state subsidizing private coverage for enrollees. The benefit package includes a full range of inpatient and outpatient services. The state's outreach activities will include a statewide media campaign that will be conducted by the New York State Department of Health. New York was approved on April 1, 1998.

Ohio

Under its CHIP plan, Ohio is expanding eligibility within its existing Medicaid program. Currently, Ohio covers 557,000 Medicaid children up to age 19. Under CHIP, the state will expand Medicaid eligibility to cover children up to age 19 whose families have incomes at or below 150 percent of the federal poverty

level. Ohio could receive nearly \$116 million in new funds for FY 1998, and will expand coverage to as many as 133,000 uninsured children by 1999. To encourage enrollment, the state will survey community agencies on how they conduct Medicaid eligibility outreach, and develop media strategies for statewide education provided to Medicaid consumers and providers. Ohio received approval on March 23, 1998.

Oklahoma

Oklahoma could receive as much as \$81 million this year in new funds, which state officials will use to expand its Medicaid program. With its federal allotment, the state hopes to expand its annual enrollment by 71,000 children by the first year of the program. Oklahoma will provide the state's regular Medicaid benefit package to the children newly enrolled with CHIP funds. Oklahoma plans to use its CHIP allotment to provide Medicaid coverage to children born on or after October 1, 1983 with family incomes up to 185 percent of the federal poverty level. The Oklahoma Health Care Authority is collaborating with other interested agencies in the state to develop a marketing and outreach plan. The plan will consist of posters, public service announcements, fact sheets, press releases and outdoor advertising. Oklahoma was approved on May 26, 1998.

Oregon

Oregon could receive as much as \$39 million in new funds, which state officials estimate they will use to enroll approximately 17,000 children in their CHIP program by July 1, 1999. Oregon will use its new allocation to expand coverage to children from birth to age 6 with incomes between 133 percent and 170 percent of the federal poverty level. Coverage will also be extended to children from age 6 to age 19 with family incomes between 100-170 percent of poverty. Children in the new CHIP program will receive the same benefit package as children currently enrolled in the state's Medicaid section 1115 waiver demonstration. The benefit package includes inpatient and outpatient hospital services, inpatient psychiatric services, physician services, dental services, home health services, lab services, prescription drugs and other medically necessary services. Oregon will convene a task force of public and private partners to develop a consolidated Medicaid and CHIP outreach plan. To do this, the State will sponsor a conference comprised of representatives from around the State to identify geographic and cultural communities on which to focus state outreach efforts. It is also expected that the conference will generate ideas for general and specific outreach activities. Oregon was approved on June 12, 1998.

Pennsylvania

Pennsylvania could receive as much as \$117 million this year in new funds, which state officials will use to fund its existing Pennsylvania CHIP program. Pennsylvania is one of three states that had the benefit package of their existing state children's health program grand-fathered under CHIP. Pennsylvania's program currently serves 54,000 children. With its federal allotment, the state hopes to bring annual enrollment in the program up to 63,000 children by the end of the state's fiscal year 1999. Pennsylvania CHIP will provide coverage to children age one through 16 with family incomes at or below 185 percent of poverty. The benefit package includes a full range of inpatient services. Outreach activities in the state include canvassing local businesses, day care centers, school districts, hospitals, religious organizations, social service agencies and civic groups. Pennsylvania was approved on May 28, 1998.

Puerto Rico

Puerto Rico could receive as much as \$9.8 million in new funds for FY 1998 under the CHIP program. Puerto Rico will use its allotment to expand Medicaid eligibility. Medicaid coverage will be expanded to cover children through age 18 in families with incomes below 200 percent of the commonwealth poverty

level (\$8,220 for a family of four). Federal CHIP funding will allow Puerto Rico to cover approximately 20,000 children. Puerto Rico's program will also include children currently under its public health system, which receives no federal funding. Puerto Rico is also unique in that it has elected to contribute more money than the standard federal-state matching funds. Officials in Puerto Rico estimate that there will be 165,000 children in their CHIP plan by the end of FY 1998. Puerto Rico will develop a number of outreach efforts, including disseminating brochures, leaflets, and posters with information on the CHIP program; launching a broad-based media campaign; and appealing directly to eligible children and families.

Rhode Island

Rhode Island could receive as much as \$10.6 million this year in new funds, which state officials will use to insure as many as 3,000 children by the end of FY 2000. Rhode Island will use its allocation to expand its Medicaid program. The program will provide comprehensive health care coverage to children between the ages of 8 and 15 whose family income is between 100 and 250 percent of the federal poverty level. The program will also cover children 15 to 18 whose families have incomes up to 250 percent of poverty. Beginning at 185 percent of the federal poverty level, or about \$30,432 for a family of four, families will begin paying modest premiums or co-payments. In order to effectively reach the target population, multiple outreach methods will take place. The first phase of Rhode Island's outreach efforts, a public information campaign, will last four months. The second phase of outreach will include follow-up and evaluation activities which will last approximately six months. Rhode Island received approval on May 8, 1998.

South Carolina

South Carolina had already begun to expand its Medicaid program when the new CHIP law was enacted, and could receive over \$63 million in new funds for FY 1998. The state will use its share of CHIP funds to expand its Medicaid program, and hopes to enroll an additional estimated 75,000 children. Regular cost-sharing rules apply and eligibility will be extended to children under age 19 whose family incomes are at or under 150 percent of the federal poverty level. The state has placed eligibility workers in public schools, hospitals, clinics, pharmacies and other places frequented by families with potentially eligible children. South Carolina was approved on February 18, 1998.

Texas

Texas could receive as much as \$561 million in new funds, which state officials estimate that they will use to enroll as many as 57,488 children in their CHIP program by October 1, 1999. Texas will use its allotment to expand Medicaid eligibility to children up to age 19 in families with incomes below 100 percent of the federal poverty level. Texas currently covers children from birth to one in families with incomes up to 185 percent of poverty, ages 1-5 up to 133 percent of poverty, ages 6-14 up to 100 percent of poverty and ages 15-19 up to 47 percent of poverty. The state also plans to expand coverage to additional low-income children and families by submitting an amendment to their CHIP program sometime in 1999. Outreach activities including working closely with the entire network of public health providers to disseminate outreach materials to providers so that they may supply information to families with potentially eligible children. Texas was approved on June 15, 1998.

Wisconsin

Wisconsin could receive as much as \$38 million in new funds during the first year, which state officials will use to expand its Medicaid program. The state will initially cover an additional 2,000 children under

its Phase I plan for the new federal CHIP program, and will amend its program with a more comprehensive plan in the near future. Wisconsin plans to expand Medicaid eligibility to children ages 15-18 in families with incomes below 100 percent of the federal poverty level. Presently, the state's Medicaid program covers children under age 6 in families with incomes less than 185 percent of poverty, and children ages six to 14 in families with incomes less than 100 percent of poverty. All eligible children will receive the full Medicaid benefit package with no out-of-pocket costs for families. Wisconsin will use a number of approaches to finding and enrolling children in their expanded Medicaid plan. These measures will include: expansion of school based clinics in 12 Milwaukee public schools, funding of public health agencies to conduct overall outreach activities in coordination with schools, and inclusion of schools as potential outstation sites for Medicaid eligibility workers. Wisconsin was approved on May 29, 1998.

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Date: Monday, June 22, 1998

FACT SHEET

Contact: HCFA Press Office (202) 690-6145

GUIDE TO CHILD CARE & MEDICAID: PARTNERS FOR HEALTHY CHILDREN

The *Child Care and Medicare Guide: Partners for Healthy Children* is designed to improve childrens' health by encouraging enrollment in Medicaid and the new **Children's** Health Insurance Program, known as CHIP. It explains Medicaid and CHIP benefits and activities so that child care programs, referral agencies, and other health professionals can determine when **children** are eligible and how to help them enroll. They can also use it to learn how to establish linkages with these programs so they can make sure **children** they serve are getting the health care coverage and services they need and deserve.

This guide has been produced through a collaboration between the Health Care Financing Administration (HCFA), which runs Medicaid in partnership with states, and the Administration on **Children** and Families (ACF). It is one of many cooperative efforts between these two federal agencies to link child care with health care. The guide is a tool to help child care programs, referral agencies, and other health care professionals facilitate enrollment of **children** in CHIP as well as Medicaid. The guide will be distributed today at the seventh Family Reunion Conference, hosted by Vice President and Mrs. Gore, in Tennessee. The guide includes:

- ☐ Outreach activities that child care programs can perform to enroll eligible **children** into Medicaid and be compensated for, such as assisting families in completing Medicaid applications and obtaining services, informing families about Medicaid through brochures or other promotional materials, and assisting the Medicaid agency in fulfilling the outreach objectives of the Medicaid program;
- ☐ Examples of **children's** programs, local health departments, and various community-based organizations that have working linkages with Medicaid programs and that are successfully identifying and enrolling **children** who are eligible;
- ☐ A description of BBA provisions designed to increase **children's** health care coverage through Medicaid;
- ☐ An explanation of the Early and Periodic Screening, Diagnosis and Treatment program within Medicaid, and of related activities that child care programs can perform, such as making referrals, scheduling appointments and transportation, and conducting case management;
- ☐ A chart of state Medicaid eligibility criteria for pregnant women, infants and **children**; and
- ☐ Each State's Maternal and Child Health toll-free number, which can provide more information about available health care resources.

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Date: Tuesday, March 17, 1998

FACT SHEET

Contact: ACF Press Office (202) 401-9215

IMPROVING HEAD START: A SUCCESS STORY

Overview: Head Start is America's premier early childhood development program, started in 1965 to provide comprehensive developmental services for America's low-income, pre-school children ages three to five and social services for their families. Giving a boost to children's education and helping strengthen the skills of parents to better nurture and provide for their children, Head Start is making a significant difference in the lives of children and families in all 50 states, the District of Columbia, Puerto Rico, and the U.S. territories. President Clinton has made the expansion and improvement of Head Start a top priority for his Administration. With the bipartisan support of Congress, he has delivered on that promise.

Under the Clinton Administration, funding for Head Start has doubled, increasing from \$2.2 billion in FY 1992 to \$4.4 billion in FY 1998. These additional funds have enabled Head Start to increase enrollment by over 116,000 children and their families, enhance the quality of Head Start services, launch a new initiative to serve infants and toddlers, and improve program research. In FY 1998, Head Start will serve an estimated 830,000 children and their families.

President Clinton's FY 1999 budget provides \$4.7 billion for Head Start -- an increase of \$305 million over FY 1998. This funding will enable Head Start to serve an additional 30,000 to 36,000 children in FY 1999, bringing total Head Start enrollment to 860,000 to 866,000 children and their families. This investment also sets the course for reaching the President's goals of serving one million children in Head Start and doubling the number of infants and toddlers in Early Head Start to nearly 80,000 by 2002.

Moving Head Start Into the 21st Century

HHS Secretary Donna E. Shalala identified Head Start as an early priority. In June 1993, she formed a special advisory committee to make recommendations for a renewed Head Start program -- one that responds to the new needs of children, families and communities. The charge of the bipartisan committee was to review the Head Start program and make recommendations for both expansion and improvements.

On Jan. 12, 1994, Secretary Shalala received the advisory committee report recommendations. To create a 21st century Head Start, the advisory committee set forth a set of recommendations that implement three broad principles:

1. **Quality** -- Ensure that every Head Start program can deliver on Head Start's vision, by striving for excellence in serving both children and families.
2. **Expansion** -- Expand the number of children served and the scope of services provided in a way that is more responsive to the needs of families.

3. **Community Partnerships** -- Encourage Head Start to forge partnerships with key community and state institutions, and ensure that these partnerships are constantly renewed and recrafted to fit changes in families, communities, and state and national policies.

Key recommendations in the report called for improved staff training and career development, including better salaries for Head Start workers; improving management of local Head Start centers; reengineering federal oversight; and providing for better facilities.

Within a month of issuance of the report, bipartisan legislation was introduced to reauthorize and strengthen the Head Start program. Legislation moved through Congress quickly, and was signed by President Clinton on May 18, 1994.

The reauthorization bill reflected the Administration's commitment to strengthening the quality of all Head Start programs. It included tough new provisions to ensure that no Head Start grantee will be funded if it falls below a minimum quality level and fails to correct deficiencies promptly.

Revised Head Start Performance Standards

The cornerstone of the bipartisan 1994 legislation was the regulation to develop a major revision of the Head Start Program Performance Standards -- key regulations that set the guidelines for quality in Head Start programs nationwide. In November 1996, HHS published revised Head Start Program Performance Standards, developed with the consultation of thousands in the Head Start field, that improve on the program's existing quality standards. These revised, more user-friendly standards remove rigid and prescriptive requirements, integrate infants and toddlers into the Head Start program, and promote collaboration with other community programs.

Early Head Start

President Clinton's signing of the landmark Head Start Act Amendments of 1994 also established the Early Head Start program, which expands the benefits of early childhood development to low income families with children under three and to pregnant women. In FY 1998, funding for Early Head Start totals \$279 million, and approximately 39,000 children will be served by Early Head Start programs across the country. President Clinton's FY 1999 budget includes \$350 million for Early Head Start, allowing the program to serve nearly 50,000 infants, toddlers, and their families.

Improving Quality

Secretary Shalala's "Advisory Committee on Head Start Quality and Expansion," a bipartisan group, has tackled the issue of quality head-on. Acting on the committee's recommendation, HHS has offered technical assistance, partnership and support to Head Start programs that are ready to pursue excellence -- and terminated the grants of those programs that were not delivering quality services. HHS has helped turn around 200 grantees identified as seriously deficient. Since October 1993, more than 80 grantees have been terminated or have relinquished their Head Start grants.

From 1992 through 1998, HHS will have invested nearly \$700 million in quality improvements to ensure that every Head Start program works. Head Start programs across the country have used these quality resources to fix leaky roofs, make sure facilities are healthy and safe for children, and hire more teachers to reduce class size and eliminate double-session classes.

Head Start Expansion Initiative

On March 25, 1997, Secretary Shalala announced a new Head Start initiative that will expand Head Start services for children while also helping parents on welfare move to work. Under the new initiative, Head Start expansion funds will be used for the first time to build partnerships with child care providers to deliver full-day and full-year Head Start services. Full-day and full-year services, in turn, can help parents attain full-time work. Through the Head Start-child care partnerships, Head Start and child care agencies combine staff and funds to provide high quality services. Children stay in one place all day, rather than attending Head Start for half a day and then moving to child care for the remainder of the day.

Research

Head Start plays an important role as a national laboratory for early childhood development programs. Head Start is now taking up the challenge to focus on measurable results for social competence and school-readiness in young children. To initiate this effort, a unique partnership was created -- Head Start Quality Research Centers -- comprised of four major academic institutions and Head Start grantees around the country. These centers are piloting new approaches to develop sound measures and collect data.

In addition, Head Start is increasing investment in research that follows children and families over time. The program is also collaborating with the National Academy of Sciences and the National Institutes of Health to develop strong scientific research on young children.

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Study Links Smoking During Pregnancy, Child's Behavior

From Associated Press

CHICAGO—Male babies whose mothers smoke during pregnancy could be at a higher risk of growing up to be criminals, new research suggests.

Researchers say a study published in this month's Archives of General Psychiatry is the first to examine the relationship between mothers who smoke and their children's adult behavior.

The researchers—from Emory University in Atlanta, the University of Southern California and

the Institute of Preventive Medicine in Denmark—found that more a quarter of the men whose mothers had the highest levels of smoking and delivery complications were arrested for a violent crime as an adult.

"Our results support our hypothesis that maternal smoking during pregnancy is related to increased rates of crime in adult offspring," the authors wrote, adding that the results "suggest an additional critical reason to support public health efforts aimed at improving maternal health behaviors during pregnancy."

However, David Fergusson, a psychiatric epidemiologist at the Christchurch School of Medicine in New Zealand, said there is not enough research to add prenatal smoking to the list of established risk factor for adult crimes.

Fergusson, who wrote an editorial accompanying the article, said the study did not rule out the possibility that genetics—not smoking—caused behavior problems.

"Mothers who smoke during pregnancy are often young women who have previous misconduct problems and there is

quite an inheritability of misconduct problems," Fergusson said in a telephone interview Sunday.

The researchers based their findings on data for 4,169 males born in Copenhagen between September 1959 and December 1961.

The number of cigarettes their mothers had smoked during the third trimester of pregnancy affected the men's arrests for non-violent and violent crimes as adults, even after factoring out other possible causes such as alcohol use, divorce, income and home environment, researchers said in the study, which was re-

leased Sunday.

Only one other risk factor—delivery complications—was found to be significant.

While stopping short of saying that babies whose mothers smoked while pregnant will become criminals, researchers say their findings are significant.

Further study should be aimed at determining the effects of smoking on the brain of developing fetuses and to see if specific agents in tobacco smoke can be more directly linked to antisocial behavior, they said.

Los Angeles Times

NDAY

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Association; and a grant to co-author Jan Sundquist, M.D., Ph.D., of the Swedish Medical Research Council; and from an American Heart Association National Grant-in-Aid and U.S. Public Health Service grant from the National Heart, Lung, and Blood Institute to Dr. Winkleby.

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Archives Briefs

- **SMOKING DURING PREGNANCY LINKED TO CRIMINALITY OF MALE OFFSPRING**

Maternal smoking during pregnancy predicts persistent criminality and acts of violent crimes rather than delinquency limited to adolescence, according to an article in the March issue of the AMA's *Archives of General Psychiatry*.

Researchers studied the arrest histories at age 34 years of 4,169 males born between September 1959 and December 1961 in Copenhagen, Denmark, to examine maternal smoking during pregnancy as a predictor of offspring crime. The authors found a dose-response relationship between the amount of maternal prenatal smoking and arrests for nonviolent and violent crimes.

"Persistent and violent criminal offending have serious deleterious [harmful] effects on society," conclude the authors. "Our results therefore suggest an additional critical reason to support public health efforts aimed at improving maternal health behaviors during pregnancy."

The authors add that potential physiologic or central nervous system mediators between maternal smoking during pregnancy and offspring criminal outcomes need further study.

(Arch Gen Psychiatry. 1999;56:215-219)

In a commentary in the same issue of the AMA's *Archives of General Psychiatry*, David M. Fergusson, Ph.D., believes it is premature to conclude that maternal prenatal smoking can now be included among the established risk factors for later antisocial behavior. However, after more research has been conducted in this area, Fergusson believes antisocial behavior may be added to the list of established adverse consequences of smoking during pregnancy.

(Arch Gen Psychiatry. 1999;56:223-224)

- **PROPER DEMENTIA DIAGNOSIS MAY HELP ASSURE PATIENTS RECEIVE APPROPRIATE TREATMENT**

People with mild cognitive impairment (MCI) can be

differentiated from those with very mild Alzheimer disease (AD), and from healthy control subjects, according to an article in the March issue of the AMA's *Archives of Neurology*. The researchers compared three groups of subjects, 106 patients with mild AD, 76 patients with MCI and 234 healthy control subjects, to quantitatively characterize and describe the clinical course of patients diagnosed as having MCI.

"This research is an important contribution that provides quantitative neuro-psychological data that clinicians can use as the means to decide if patients are cognitively normal, mildly impaired or have early Alzheimer disease," states Roger N. Rosenberg, M.D., Editor of the AMA's *Archives of Neurology*, in a separate interview. "This is critical for advising patients and families about disease progression and patient care."

The researchers found that the patients with MCI are at increased risk of progressing to AD. "They appear to constitute a clinical entity that can be characterized for treatment interventions," the authors write. They also report that the patients with MCI can be differentiated from the control group in the area of memory but not cognitive functions. When the patients with MCI were compared with those with mild AD, their memory performance was similar but the mild AD patients were more impaired in other cognitive domains as well. Over time, the MCI group declined at a rate greater than that of the controls while those with mild AD declined more rapidly than the patients with MCI.

According to the authors, a great deal of interest has been generated over the clinical identification of the boundary or transitional state between normal aging and dementia, or more specifically, AD. Several studies have indicated that these transitional patients with MCI are at increased risk for developing AD ranging from 10 percent to 12 percent per year. Patients with MCI are entering treatment trials. Some investigators note that while many MCI patients progress to AD, not all do. Consequently, the distinction is important.

(Arch Neurol. 1999;56:303-308)

Note: The Petersen study was supported by grants from the National Institute on Aging.

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Archives of
General Psychiatry

ARCHIVES OF GENERAL PSYCHIATRY

Editor
Jack D. Barchas, MD

Original Article - March 1999

Maternal Smoking During Pregnancy and Adult Male Criminal Outcomes

*Patricia A. Brennan, PhD; Emily R. Grekin; Sarnoff A. Mednick, PhD,
DrMed*

Background: Perinatal risk factors are related to persistent and violent criminal outcomes. Prenatal maternal smoking may represent an additional perinatal risk factor for adult criminal outcomes. Our study examines maternal smoking during pregnancy as a predictor of offspring crime in the context of a prospective, longitudinal design.

Methods: Subjects were a birth cohort of 4169 males born between September 1959 and December 1961 in Copenhagen, Denmark. During the third trimester of pregnancy, mothers self-reported the number of cigarettes smoked daily. When the male offspring were 34 years of age, their arrest histories were checked in the Danish National Criminal Register. Additional data were collected concerning maternal rejection, socioeconomic status, maternal age, pregnancy and delivery complications, use of drugs during pregnancy, paternal criminal history, and parental psychiatric hospitalization.

Results: Results indicate a dose-response relationship between amount of maternal prenatal smoking and arrests for nonviolent and violent crimes. Maternal prenatal smoking was particularly related to persistent criminal behavior rather than to arrests confined to adolescence. These relationships remained significant after potential demographic, parental, and perinatal risk confounds were controlled for.

Conclusions: Maternal prenatal smoking predicts persistent criminal outcome in male offspring. This relationship has not been accounted for by related parental characteristics or perinatal problems. Potential physiologic or central nervous system mediators between maternal smoking during pregnancy and offspring criminal outcomes need further study.

Arch Gen Psychiatry. 1999;56:215-219

Results of several studies suggest a relationship between perinatal complications and antisocial behavior. Pasamanick et al[1] found a

higher rate of pregnancy complications among behavior-disordered children than among age-matched control subjects. Lewis et al[2] found a positive correlation between perinatal complications and rates of recidivism among delinquent children. The significant role of prenatal factors in the development of aggression is also supported by studies of minor physical anomalies, which are small, external deformities that often indicate a history of prenatal trauma. Minor physical anomalies have been correlated with aggression, hyperactivity, impulsivity, and criminal violence.[3-5]

The specific prenatal risk factors associated with acting-out behaviors are numerous and diverse, ranging from toxemia[1] to intrauterine insult.[6] One such risk factor is maternal cigarette smoking during pregnancy. Maternal prenatal smoking has been associated with several externalizing behaviors, including impulsivity, truancy, conduct disorder, and attentional difficulties.[7-9] Maternal prenatal smoking also has been linked to crime in offspring. Rantakallio et al[10] found that individuals whose mothers smoked during pregnancy were twice as likely to have a criminal record at age 22 years as were age-matched controls.

The relationship between maternal prenatal smoking and deviance persists, even when investigators control for potential confounding factors.[10] Weitzman et al[11] found that maternal prenatal smoking predicted behavior problems despite controlling for race, age, sex, birth weight, maternal education, maternal use of alcohol during pregnancy, family income, parental divorce, and quality of the home environment. Other researchers[9,12] found that maternal prenatal smoking predicts behavior problems after controlling for parental psychopathologic factors, pregnancy risks, number of schools attended, and parenting practices.

Studies have linked maternal smoking behavior to several adverse medical outcomes. Prenatal maternal smoking has been associated with chronic ischemia, hypoxia, hypertonicity, increased tremors, and increased startle response in infants, suggesting a relationship between maternal smoking and central nervous system deficits.[13,14] These central nervous system deficits may be the mediating factor between maternal smoking and offspring deviant behavior.

If maternal smoking during pregnancy represents (at least in part) a biological risk for aggression, then it may be predictive of only certain patterns of criminal offending. According to the theory of antisocial behavior by Moffitt,[15] life-course persistent offending is more likely to have a biological basis than adolescent-limited offending (ie, arrests limited to adolescence). The 1 study[10] that examined the relationship between maternal prenatal smoking and crime did not examine this potentially important distinction in patterns of offending.

Results of existing research also suggest that perinatal factors may be especially related to aggressive and criminal outcomes for individuals

exposed to multiple risk factors. In a prospective, longitudinal study in Kauai, Hawaii, Werner[16] found that the effects of perinatal stress on delinquent outcomes were strongest for children exposed to a disruptive family environment. Results of research[17,18] in Denmark showed similar biosocial interactions predicting the outcomes of violent and persistent criminal behavior. No studies to date have examined potential interactive effects of maternal prenatal smoking and other risk factors in the prediction of offspring outcomes.

Previous studies have measured the relationship between maternal prenatal smoking and aggression in children and adolescents, but no study has examined this relationship in individuals older than 22 years. This study extended the current literature by examining the relationship between maternal smoking and offspring deviance in adults up to age 34 years. As such, we differentiated the effects of maternal smoking on adolescent-limited vs life-course persistent criminal offending. Our large sample size also enabled us to examine violent offending as a specific outcome variable.

Our data set also provided several methodological advantages over previous research. First, our sample is population based. Second, mothers' reports of smoking were collected during pregnancy rather than through retrospective reports. Third, related perinatal risk factors were recorded in a detailed, reliable manner by obstetricians and pediatric neurologists in the context of a large-scale birth cohort study. Finally, our data set allowed us to control for a variety of potential confounds and to assess potential interactions of maternal smoking and other risk factors in the prediction of criminal outcomes.

We used a perinatal birth cohort of 4129 males to assess the relationship between maternal prenatal smoking and offspring criminal arrests. We hypothesized that (1) a significant relationship existed between maternal prenatal smoking and offspring criminal behavior, (2) this relationship would be true for violent behavior and persistent criminal behavior rather than for adolescent-limited crime, and (3) the above relationships would remain significant despite controlling for socioeconomic status (SES), maternal rejection, maternal age, pregnancy and delivery complications, use of drugs during pregnancy, paternal criminal history, and parental psychiatric hospitalization. Finally, these data allowed us to explore potential interactions between maternal smoking and other risk factors in the prediction of criminal outcomes.

SUBJECTS AND METHODS

SUBJECTS

Subjects were 4169 males from a total cohort of 9125 individuals born between September 1959 and December 1961 at Rigshospitalet, Copenhagen, Denmark.[19] Excluded from the cohort were females (because of low rates of violent arrests, which precluded reliable statistical analyses) and males whose mothers did not provide a

self-report of smoking behavior during the third trimester of pregnancy (n=93).

PERINATAL FACTORS

Maternal Prenatal Smoking

In prenatal and postnatal interviews, mothers reported the number of cigarettes smoked daily during the third trimester of pregnancy. These self-reports resulted in the placement of mothers into the following cigarette smoking categories for data analyses: 0 (n=2042), 1 to 2 (n=289), 3 to 10 (n=1206), 11 to 20 (n=565), or more than 20 (n=67) smoked daily.

Maternal Prenatal Prescription Drug Use

Self-reports of drug use during pregnancy (scored as yes or no) were also obtained from the mothers in the cohort during prenatal and postnatal interviews at the hospital. The following types of drugs were included in this self-report: antihistamines, diuretics, antiepileptics, psychopharmaceuticals (including barbiturates), antibiotics, analgesics, and hormone treatments. Mothers were not asked about alcohol or illicit drug use during pregnancy.

Pregnancy and Delivery Complications

Obstetricians and their assistants recorded pregnancy and delivery complications during prenatal visits and at delivery at Rigshospitalet. Weighted pregnancy and delivery complications scales were constructed by a team of American and Danish obstetricians and pediatric neurologists. The pregnancy complications scale included items such as bleeding or illness during pregnancy, use of radiation during pregnancy, and preeclampsia. The delivery complications scale included breech delivery, transverse position, forceps extraction, umbilical cord prolapse, and long birth duration (see Baker and Mednick[19] for further details on scale construction).

DEMOGRAPHIC FACTORS

Maternal age (in years) at time of birth of the child was obtained from medical records. The SES (high, middle, or low, determined by parent occupation) was obtained from the Danish Central Person's Register when the child was 1 year old; SES was available for only 3647 of the 4169 study participants. Per the recommendation of Cohen and Cohen,[20] these missing data were recoded to the mean, and a dummy coded variable (1, SES data missing; 0, SES data present) was included as a statistical control in logistic regression analyses.

PARENTAL PSYCHIATRIC HOSPITALIZATION AND CRIMINAL HISTORY

Paternal criminal history (present or absent) was assessed by a check of arrests for index crimes recorded by the Danish National Criminal Register in 1972. Parents' psychiatric hospitalization history (present or absent) was assessed by a check of the Danish Psychiatric Register of the Institute for Psychiatric Demography in 1992. All hospitalizations for psychiatric illness, including substance abuse and dependence, are included in this register.

MATERNAL REJECTION

Mother's rejection of her infant (high or low) was measured prenatally and when the child was 1 year of age through data collected during mother interviews. This variable has been found to interact with delivery complications in the prediction of violent offending in this sample.[18]

CRIMINAL OUTCOMES

Arrest histories of male offspring in the cohort were obtained from the Danish National Criminal Register, one of the most accurate in the Western world, in 1994. All arrests are recorded in a central location in Denmark.[21] The following criminal offenses were defined as violent: murder, attempted murder, robbery, rape, assault (including domestic assault), and illegal possession of a weapon. Nonviolent offenses were defined as theft, breaking and entering, fraud, forgery, blackmail, embezzlement, vandalism, prostitution, pimping, and narcotics offenses. Persistent and adolescent-limited crimes were defined on the basis of age at arrest. Males in the cohort who were arrested only before age 18 years were categorized as adolescent-limited offenders. Males in the cohort who were arrested before and after age 18 years were categorized as life-course persistent offenders. More than 75% of the life-course persistent offenders were last arrested for an offense at age 25 years or older.

STATISTICAL ANALYSIS

Mantel-Haenszel χ^2 analyses were used to examine the relationship between amount of maternal smoking during pregnancy and outcomes of nonviolent crime, violent crime, persistent crime, and adolescent-limited arrests. The comparison group in all analyses consisted of males in the sample who were never arrested for a criminal index offense. Logistic regression analyses were used to control for the potential confounds of maternal rejection, SES, maternal age, pregnancy and delivery complications, use of drugs during pregnancy, paternal criminal history, and parental psychiatric hospitalization in the relationship between maternal smoking during pregnancy and offspring criminal outcomes. Logistic regression analyses were also used to test for potential interactions of maternal prenatal smoking and other potential risk factors on adult criminal outcomes; $\alpha=.05$ for all analyses.

RESULTS

χ^2 Analyses showed a significant positive relationship between amount of maternal smoking during the third trimester of pregnancy and offspring nonviolent arrests (Mantel-Haenszel $\chi^2_{1,N=3759}=34.58$; $P<.001$) (Figure 1, top). A linear relationship exists between percentage of violent offenders and number of cigarettes the mother smoked daily during her third trimester of pregnancy (Mantel-Haenszel $\chi^2_{1,N=3307}=39.77$; $P<.001$) (Figure 1, bottom).

χ^2 Analyses were also performed to test for a relationship between maternal prenatal smoking and adolescent-limited vs life-course persistent offending. Maternal smoking during the third trimester was related to higher rates of life-course persistent offending (Mantel-Haenszel $\chi^2_{1,N=3289}=31.48$; $P<.001$) and adolescent-limited offending (Mantel-Haenszel $\chi^2_{1,N=3176}=6.85$; $P<.001$).

Logistic regression analyses were performed to test whether the relationship between maternal smoking and offspring criminal outcomes would remain when potential confounds were controlled for. The potential confounds first entered as a block into the model included parental psychiatric hospitalization, pregnancy and delivery complications, mother's use of drugs during pregnancy, father's criminal arrest, maternal rejection, mother's age, and SES. Next, the maternal smoking variable was tested as to whether it would significantly enter the model. Maternal smoking significantly predicted nonviolent arrests ($\chi^2_{1,N=3728}=13.28$; $P<.001$) and violent arrests ($\chi^2_{1,N=3284}=15.74$; $P<.001$) when these confounds were controlled for. Maternal smoking was not significantly related to adolescent-limited offending ($\chi^2_{1,N=3151}=2.70$; $P=.10$) but was significant in the prediction of life-course persistent offending ($\chi^2_{1,N=3266}=9.42$; $P<.01$) after controlling for potential confounds.

The Table presents significance levels and odds ratios of the variables included in logistic regression models predicting nonviolent, violent, and life-course persistent offending. Odds ratios for the maternal smoking variable reflect a multiplicative increase in risk at each increasing level of amount smoked. Compared with males whose mothers did not smoke during the third trimester, males whose mothers smoked more than 20 cigarettes daily during the third trimester were $1.13 \times 1.13 \times 1.13 \times 1.13$ or 1.6 times as likely to be arrested for a nonviolent crime, $1.19 \times 1.19 \times 1.19 \times 1.19$ or 2.0 times as likely to be arrested for a violent crime, and $1.15 \times 1.15 \times 1.15 \times 1.15$ or 1.8 times as likely to be life-course persistent offenders.

Logistic regression analyses were then performed to test for possible interactions between maternal smoking and other potential risk factors in the outcomes of criminal offending. In the first block of these analyses, we entered the following variables: maternal smoking, parental psychiatric hospitalization, pregnancy and delivery complications,

mother's use of drugs during pregnancy, father's criminal arrest, maternal rejection, mother's age, and SES. Next, we tested whether interaction terms produced by combining maternal smoking with the other risk factors produced a significant change in χ^2 in predicting the criminal outcome variable (nonviolent crime, violent crime, adolescent-limited crime, and persistent crime). All interaction terms in these analyses were not significant, with 1 exception. Delivery complications significantly interacted with maternal smoking in the prediction of violent crime ($\chi^2_{1,N=3284}=4.62; P<.05$). Results of post hoc logistic regression analyses controlling for potential confounds and splitting the sample into high and low delivery complications groups showed that the maternal smoking-child violence relationship was only significant in individuals with high levels of delivery complications ($\chi^2_{1,N=1469}=19.73, P<.001$) and not in those with low levels of delivery complications ($\chi^2_{1,1815}=2.21; P=.14$). [Figure 2](#) shows the percentage of violent offenders in each of these delivery complications and maternal smoking groups. More than 25% of the males with the highest levels of both delivery complications and maternal smoking were arrested for a violent criminal offense.

COMMENT

Our results support our hypothesis that maternal smoking during pregnancy is related to increased rates of crime in adult offspring. This general finding is consistent with the literature linking behavior problems, conduct disorder, and adolescent offending to prenatal maternal smoking.^[9-11] Our study extended these findings by showing that maternal smoking is related to persistent offending rather than to adolescent-limited offending.

We did not find strong support for a potential interaction of maternal prenatal smoking and other risk factors in the prediction of adult criminal offending. Only 1 interaction was significant in our analyses. Delivery complications and maternal smoking interacted to predict criminal violence, which is consistent with results of previous works^[18,22] noting the interactive effect of delivery complications on violent offending in particular. Delivery complications and maternal smoking were slightly negatively correlated in this sample ($r=-0.04; P<.05$), so this finding does not simply reflect more deleterious or serious effects of smoking. Instead, it indicates a particular vulnerability that results when these risk factors occur together.

Factors indicating potential social risks such as low SES and parental psychopathologic factors did not interact with maternal prenatal smoking to predict criminal outcomes. The Danish systems of national health care and low rates of severe poverty may reduce the potential effects of these social risk factors for this sample. It is also possible that biosocial interactions may be specific and that only particular social and biological risk factors interact in the prediction of criminal outcomes.

Results of previous research[18] show that maternal rejection, but not low SES, interacted with delivery complications in the prediction of criminal violence.

Maternal smoking during the third trimester predicted nonviolent, violent, and persistent crime even when controlling for parental psychiatric hospitalization, pregnancy and delivery complications, mother's use of prescription drugs during pregnancy, father's criminal arrest, maternal rejection, mother's age, and SES. One important confound that we were not able to assess or control was the mother's psychological history outside of hospitalization, including her use of alcohol or illicit drugs during pregnancy. In studies[9,11] in which these variables were controlled for, the maternal smoking and child behavior problem relationship remained. In addition, we statistically controlled for serious depression, personality disorders, and drug and alcohol abuse that led to psychiatric hospitalization of the mothers. Nevertheless, our study leaves the potential moderating effect of maternal alcohol and other drug use during pregnancy and maternal psychopathologic factors largely unexplored.

Our data set did not include information on specific nicotine doses, smoking during first and second trimesters, paternal smoking, or parental smoking after the birth of the child. Therefore, we were unable to complete more fine-grained analyses on the specific effects of nicotine, specific trimester effects, or the relative impact of prenatal vs postnatal exposure to maternal smoking.

Our data were prospective in nature and did not rely on mothers' retrospective reports later in the life of the child. In addition, our criminal outcome data were available from a reliable and accurate source, and attrition was a minor concern in our study. Our results are in strong agreement with those of Rantakallio et al,[10] who examined 5966 members of a Finnish birth cohort. The fact that similar results were obtained from independent birth cohorts from 2 differing ethnic national populations suggests that these findings may be generalizable to other populations. We theorized that central nervous system damage may mediate the relationship between maternal smoking and offspring criminal outcomes. The next steps in this research may be to attempt to determine specific effects of smoking on the fetal brain and to determine the agent in tobacco smoke that is responsible for these effects.

In this study, maternal smoking during pregnancy predicted persistent criminal offending and violent criminal offending rather than adolescent-limited delinquency. Persistent and violent criminal offending have serious deleterious effects on society. Our results therefore suggest an additional critical reason to support public health efforts aimed at improving maternal health behaviors during pregnancy.

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Brennan and Ms Grekin); the Social Science Research Institute and Department of Psychology, University of Southern California, Los Angeles (Dr Mednick); and Institute of Preventive Medicine, Copenhagen, Denmark (Dr Mednick).

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Archives of
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ARCHIVES OF PEDIATRICS & ADOLESCENT MEDICINE

Editor
Catherine D. DeAngelis, MD, MPH

Abstracts - March 1999

The Relationship Between Early Age of Onset of Initial Substance Use and Engaging in Multiple Health Risk Behaviors Among Young Adolescents

Robert H. DuRant, PhD; Jeffrey A. Smith, PhD; Shelley R. Kreiter, MD; Daniel P. Krowchuk, MD

Background: Previous research based on problem-behavior theory has found that early age of onset of substance use is associated with engaging in multiple health risk behaviors among high school students. It is unknown whether these relationships begin during early adolescence.

Objective: To examine the relationships between early age of onset of cigarette, alcohol, marijuana, and cocaine use and engaging in multiple risk behaviors among middle school students.

Methods: A modified version of the Centers for Disease Control and Prevention Youth Risk Behavior Survey was administered to 2227 sixth through eighth grade students attending 53 randomly selected middle schools in North Carolina. A Health Risk Behavior Scale was constructed from 16 behaviors, including indicators of violence and weapon carrying; current substance use; nonuse of helmets when biking, in-line skating or skateboarding; not wearing a seat belt; riding with a driver who had been drinking; and suicide plans. Among this sample of middle school students, the scale had a mean (SD) of 4.1 (2.7) (range=0-15), and had a high internal reliability coefficient ($\alpha=0.74$). The independent variables included first time use of cigarettes, alcohol, marijuana, and cocaine at age 11 years or earlier; actual age of onset of each substance; race and ethnicity; family composition; sex; school grade; academic ranking; and older age for school grade. These data were analyzed with analysis of variance, Spearman r , and multiple linear regression.

Results: All the independent variables were found to be associated ($P<.005$) with the Health Risk Behavior Scale during the bivariate analyses. When each of these significant variables were entered into a multiple regression model, having smoked at age 11 years or younger accounted for 21.9% of the variation in the Health Risk Behavior Scale. Male sex, early marijuana or cocaine use, older age, lower academic rank, white race, and living in a 1-parent family explained an additional 19.1% of variation in the model (adjusted $R^2=0.41$, $P<.001$). When the

actual ages of onset of the use of substances were analyzed, in order of magnitude; age of onset of smoking; male sex; age of onset of alcohol and marijuana use; age; lower academic ranking; age of onset of cocaine use; white race; and lower academic rating accounted for 52.8% ($P<.001$) of the variation in the Health Risk Behavior Scale.

Conclusion: Even when considering sociodemographic factors, early age of onset of cigarette use was the strongest correlate of the number of health risk behaviors in which these young adolescents had engaged. Early onset of use of other substances was also associated with a clustering of health risk behaviors among this sample of middle school students. The findings suggest that screening for early experimentation with tobacco and other substance use will help identify young adolescents at increased risk for engaging in multiple health risk behaviors.

Arch Pediatr Adolesc Med. 1999;153:286-291

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Morbidity and Mortality among US Adolescents: An Overview of Data and Trends

C. Wayne Sells, MD, MPH, and Robert Wm. Blum, MD, PhD

ABSTRACT

Objectives. This article reviews the health status of adolescents in the United States 1979 through 1994.

Methods. An extensive array of data from federal agencies, private organizations, and published literature was reviewed, analyzed, and cross-validated.

Results. Significant shifts in mortality and morbidity among America's youth have occurred over the past decade. Adolescents have recorded significant reductions in motor vehicle deaths; alcohol, cigarette, and illicit substance use; and gonorrhea and syphilis. Overall, mortality in the second decade of life has declined by 13%. However, reductions in unintentional injuries have been largely offset by increases in teenage homicide, while worsening poverty as well as risk-taking behaviors continue to influence the morbidities of teenagers adversely. Violence, suicide, and teenage pregnancy continue to be overwhelming problems for young people.

Conclusions. After years of downward spiral in the health of America's youth, there have been significant improvements in morbidity and mortality. These findings refute the myth that nothing can be done. (*Am J Public Health*. 1996;86: 513-519)

Introduction

The major causes of mortality and morbidity among teenagers have shifted from infectious to behavioral etiologies. Those shifts were accompanied in the 1980s by a rising national concern over adolescent pregnancy and parenting, teenage substance abuse, and a range of health risk behaviors. This paper is intended as a synthesis of adolescent morbidity and mortality data and an analysis of trends.

Demography of Youth

After the adolescent population (those 10 to 19 years of age) peaked in 1976, the number of young people in the United States declined steadily at a rate of approximately 2% per year until 1985. The decline then slowed to only 2% over the entire 6 years that followed.^{1,2} Since then, the decline has reversed. In 1992, there were more than 35 million young people between the ages of 10 and 19 years in the United States, representing 14% of the population²; by 2020, there will be 43 million teenagers in the United States.¹⁻³

Concurrent with the increase in the adolescent population has been an increase in the proportion of young people of color (African American, Hispanic, Asian/Pacific Islander, or Native American/Eskimo/Aleut)—specifically, a nearly 28% increase between 1980 and 1991. The largest increases were in Hispanic and Asian/Pacific Islander youth.^{1,2} In 1992, among all US teenagers 10 to 19 years of age, 14.8% were African American, 12% were Hispanic, 3.4% were Asian or Pacific Islander, and 1% were Native American, Eskimo, or Aleut.²

Poverty

As the number of young people increases, so too does the number of people living in poverty. It is well known that poverty is closely related to health, education, emotional well-being, and delinquency.⁴ In 1992, 14.6 million US children (21.9% of all US children) under age 18 lived in poverty.⁵ While this figure is alarmingly high, the discrepancy by race is even more stark. Specifically, 17% of White children, 47% of African-American children, and 40% of Hispanic children lived in poverty in 1992 although these groups represented 68%, 14.8%, and 12% of the population, respectively.⁶

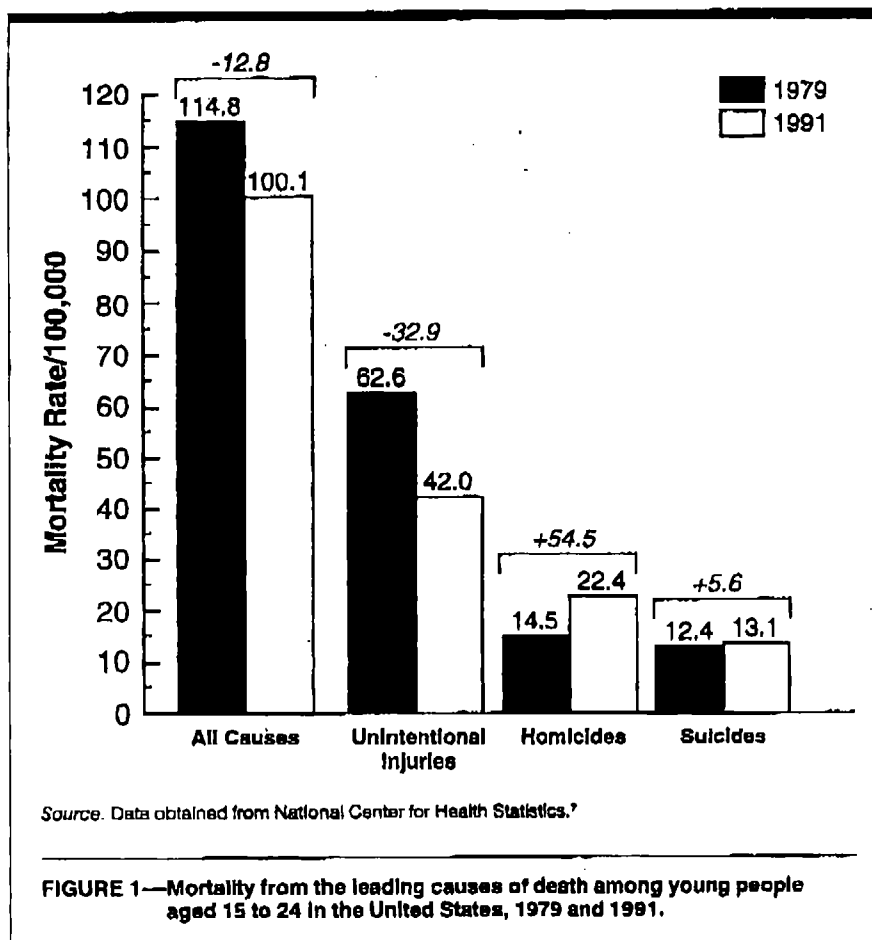
As race is a predictor of poverty in the United States, so too is family structure. The percentage of children growing up in single-parent households increased by more than 10% between 1985 and 1991. With race held constant, the poverty rate for single-parent families was 42%, compared with 8% for two-parent families.⁴ In 1991, the proportion of young families with a head of household under 25 years of age was 38% of all families, an increase of 17% since 1986. While young families are more likely to live in poverty, this is especially true for families of color. Specifically, 31% of young White families lived in poverty in 1991, compared with

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Editor's Note. See related editorial by Miller (p 473) in this issue.



67% of young African-American families and 46% of young Hispanic families.⁶

Major Mortalities among Youth

The relative proportion of deaths from unintentional injuries, homicide, and suicide has changed little over the past decade, representing 77% of all deaths in 1991. Overall, between 1979 and 1991, the national death rate for youth between the ages of 15 and 24 decreased by 13% (Figure 1).⁷ However, while the national death rate between 1979 and 1987 declined significantly for White males and females (17% and 12%, respectively), it showed only a modest decline for African-American females (2%) and actually increased 11% for African-American males.⁸

Motor Vehicle Fatalities

Seventy-eight percent of all unintentional injuries among youth are due to motor vehicle accidents, with males accounting for three fourths of these deaths.⁹ A disproportionate percentage of fatal motor vehicle injuries occur at night¹⁰ and

in rural areas.⁹ Between 1979 and 1992, motor vehicle death rates for adolescents (ages 15 to 24) decreased by 38%.^{7,9} A number of factors have contributed to this improved outcome, including passive restraints, safer automobiles, reduced speed limits, and the uniform increase in the drinking age to 21 across the nation. Despite this improvement, however, the motor vehicle death rate was higher in youth aged 19 and under than in any other age group.⁹

Contributing to the relatively high motor vehicle trauma statistics is the use of alcohol by adolescents. Drivers between the ages of 16 and 20 who were involved in fatal crashes were more likely than any other age group to be alcohol impaired (as determined by blood alcohol levels from 0.01 to 0.1%).¹¹ However, perhaps more dramatic than any other change over the past decade has been a significant reduction in alcohol-related automotive fatalities among young people. The alcohol-related traffic fatality ratio decreased by more than one third between 1987 and 1992 for persons between the ages of 15 and 24. This represents a

reduction from 21.5 per 100 000 persons in 1987 to 14.1 per 100 000 persons in 1992—significantly below the Year 20 goal of 18.1.¹²

Homicide and Violent Crimes

While we have seen dramatic, positive changes in unintentional injury and death among adolescents, the converse is true for interpersonal violence. Between 1979 and 1991, almost 40 000 youth aged 15 to 19 died as a result of firearms.⁴ Of the nearly 9500 firearm deaths in 1991, 60% were homicides, 33% were suicide, and 5% were unintentional injuries. Major contributors to this trend include the increased lethality of weapons coupled with the easy availability of firearms to youth. Surveys suggest that a quarter of US homes contain a handgun¹³ and that nearly half have some type of a firearm. A 1990 survey of gun owners found that more than half reportedly kept their guns unlocked and nearly one in four always kept them loaded.¹⁴ In a national survey of 6th- through 12th-grade students, 59% reported knowing where they could acquire a gun, and one in three reported that they could acquire that gun in less than an hour.¹⁵

The United States has the highest firearm-related homicide rate of any industrialized nation in the world.¹⁵ Homicide is the second leading cause of adolescent fatalities in the United States, accounting for 22% of all deaths among youths aged 14 to 25 in 1991.⁷ The homicide rate in 1991 was 22.4 per 100 000 youth (more than 8000 homicides), an increase of 54% since 1979 or nearly four times the rate in 1960.^{7,16} The homicide rate for males is more than 400% higher than that for females. African-American youth are disproportionately represented in national homicide rates.⁹ Among youth aged 15 to 24, homicide is the leading cause of death for African-American males (158.9 per 100 000) and females (21.6 per 100 000) with rates that are eight and four times respectively, above those of their White counterparts.⁷

Another recent change has been the rise in the number of adolescents who are victims of violent crime.¹⁷ Over the past decades, violent victimization (by femicide, rape, robbery, assault) crime rates have increased by 36% for youths aged 12 to 15 and by 27% for youths aged 16 to 19. Youth personal crimes of theft have decreased over the same period by more than 40% among adolescents.^{17,18} While victimization rates for young people are high, the

fear of such events is even higher. A 1994 national *New York Times/CBS News* poll reported that more than a third of White youths (36%) and more than half of African-American youths (54%) worry about being victimized. The survey reported that of teenagers between the ages of 13 and 17, 31% of Whites and 70% of African Americans knew someone who had been shot in the past 5 years.¹⁹ The 1992 national Youth Risk Behavior Survey reported that 49% of youth aged 12 to 13 and 44% of youth aged 14 to 17 had experienced physical fights in the previous year. Approximately one in seven (15%) young people between the ages of 12 and 21 reported carrying a weapon (gun, knife, or club) in the past 30 days.²⁰

A corollary of increased juvenile violence is the nearly 50% increase in arrests, from 305 per 100 000 in 1985 to 457 per 100 000 in 1991. While the number of violent acts appears to be about the same as a decade ago, the lethality of these acts and the number of arrests have both increased.⁴

Suicide

Suicide is the third leading cause of death for young people. Between 1979 and 1991, suicide among 15- to 24-year-olds increased by nearly 6% to the level of 4751 deaths, or 13.1 per 100 000 persons.⁷ While suicide decreased significantly among youth aged 20 to 24 (8.5%) during the decade of the 1980s, it increased markedly among youth aged 10 to 14 (75%) and youth aged 15 to 19 (34.5%).⁸ Firearms are the most common method of suicide for both young men and women.²¹

Only a fraction of youth who attempt suicide are successful; it is estimated that fewer than 1 in 50 suicide attempts results in death.²² One survey found that 27% of high school students reported a history of suicidal ideation, while more than 8% reported an attempted suicide in the past 12 months. Only 2% of those who attempted suicide actually came to medical attention. Females were more likely than their male counterparts to report suicidal ideation (34% vs 21%) or to have previously attempted suicide (10% vs 6%). Likewise, those with a friend or relative who has committed suicide are themselves four times as likely to make a suicide attempt.²³ Reports of suicidal ideation and attempted suicide are highest for Hispanic youth, followed by White youth, and are lowest for African-American teenagers.²⁴

AIDS

Acquired immunodeficiency syndrome (AIDS) is the sixth leading cause of death in young adults between the ages of 15 and 24.⁷ Of all the AIDS cases, 20% are in individuals aged 20 to 29, most of whom acquired the disease during adolescence.²⁵ With the increasing prevalence of the human immunodeficiency virus (HIV) infection, there is an urgency to educate young people. The percentage of students who reported receiving HIV instruction increased between 1989 and 1991 (from 54% to 83%), as did the proportion who reported discussing HIV and AIDS with their parents (from 54% to 61%).²⁶

Through December of 1994, there were 1965 cases of AIDS among young people aged 13 to 19, with 66% of these cases in males. Among these males, 83% of the cases were attributable to three causes: coagulation disorders, males having sex with males, and intravenous drug use. Among females aged 13 to 19, the leading cause of transmission was heterosexual contact, followed by intravenous drug use and blood transfusions. The leading causes of transmission for women aged 20 to 24 are similar to those for younger women; however, among men in this age group, 87% of all cases were accounted for by males who have sex with males, injection drug use, or both.²⁷

African-American and Hispanic youth are disproportionately represented in the number of AIDS cases among young people aged 13 to 24. African Americans accounted for one third of the cases reported among males and more than half (55%) of all cases among females. Similarly, of all reported cases by sex, Hispanic males represented 20% and Hispanic females, 21%.²⁷

Major Morbidities among Youth

Alcohol and Tobacco Use

While nearly all high school seniors report experience with alcohol, heavy alcohol use among adolescents was dramatically reduced during the 1980s. Specifically, the percentage of seniors who engaged in daily drinking declined by more than 60%, from a peak of 7% in 1978 to less than 3% in 1994.²⁸ Daily consumption of alcohol and drinking to intoxication are more common among males than females. Additionally, White youth report the highest prevalence rates of lifetime, annual, 30-day, and daily alcohol use of any group, whereas African-American seniors report the lowest preva-

lence rates for all categories. While alcohol use appears to be similar between metropolitan and nonmetropolitan areas, regional differences are present, with highest use in the Northeast and the lowest use in the West.²⁹

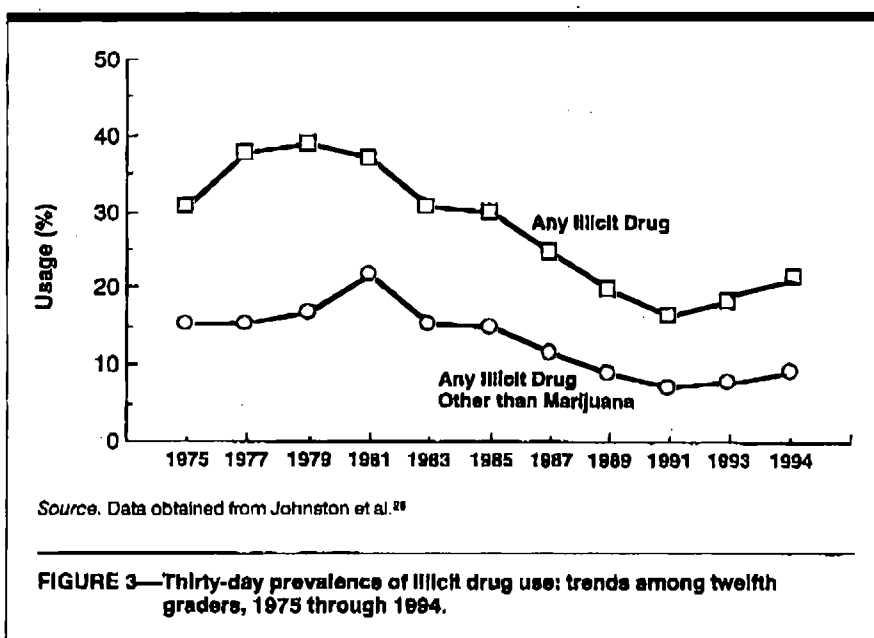
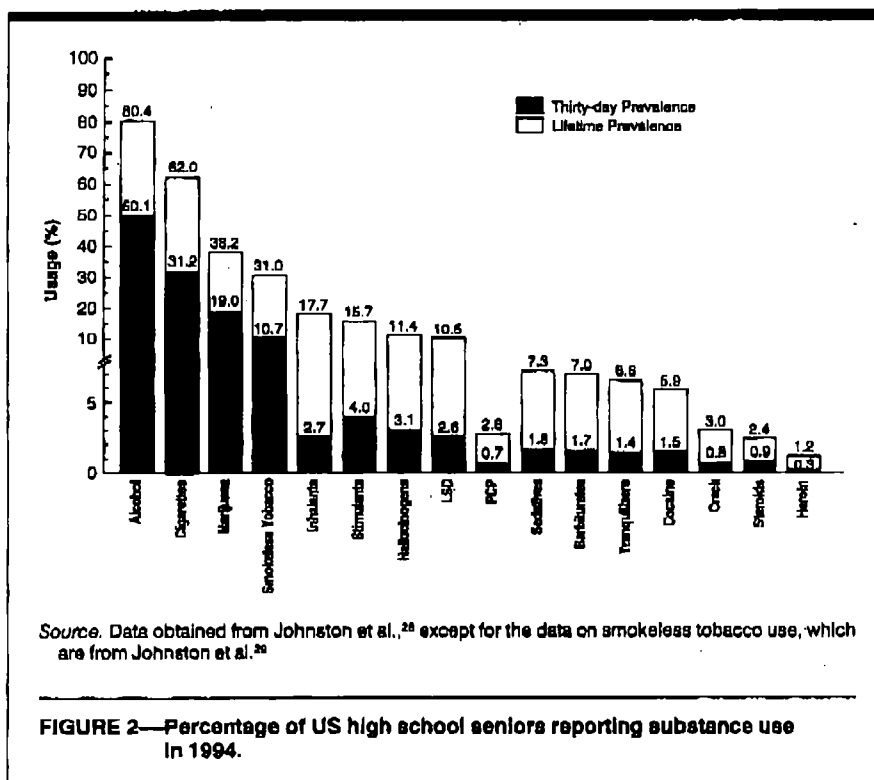
First-time tobacco use nearly always occurs before graduation from high school. Those adolescents at highest risk for tobacco use include youth with low school achievement, with friends who use tobacco, and with lower self-esteem. Of those young people who use marijuana, alcohol, or other drugs, tobacco is often their gateway drug. Studies suggest that cigarette advertising may be effective by changing young peoples' perceptions about how many people smoke and what type of people they are. Adolescent smokers are as addicted to nicotine as adults, and despite reporting wanting to quit, they have difficulty doing so as they experience withdrawal symptoms and relapse rates comparable to those of adults.³⁰ Despite the fact that 48 states and the District of Columbia prohibit the sale of tobacco products to minors, most smokers between the ages of 12 and 17 report buying their own cigarettes (58%).³¹

Cigarettes persist as the most common substance used daily by youth. While daily cigarette use has declined for adults, the rates for high school seniors have held steady for more than a decade at between 18% and 19%, and since 1992, cigarette smoking among adolescents has increased consistently.²⁸ Although the percentages by sex are similar, males are slightly more likely to have reported smoking than females. Regional differences are present, with the highest rates in the Northeast (24%) and the lowest rates in the West (13%). Reported daily smoking rates are similar among youth residing in metropolitan and nonmetropolitan areas. The racial differences in daily cigarette use, however, are striking. White youth reported a prevalence of daily smoking more than five times that of African-American youth and almost twice that of Hispanic youth.²⁹

Illicit Drug Use

Nationwide, illicit drug use continues to be a significant problem for youth and families (Figure 2). Reported annual and 30-day prevalence rates of illicit drug use have fallen since peaking in 1979; overall, the reported 30-day prevalence of illicit drugs among high school seniors has declined significantly, from 39% in 1979 to 22% in 1994 (Figure 3).²⁸ Of concern, however, are the recent increases in the reported use of illicit substances in addi-

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tion to changes in attitudes and beliefs associated with drug use. Annual surveys of US high school students in both 1993 and 1994 reported sharp rises in marijuana use among 8th-, 10th-, and 12th-grade students. Additionally, and perhaps most ominously, the surveys noted decreased perceived dangers of illicit drug use and decreased disapproval of individuals using illicit substances.^{28,29}

While it is commonly believed that illicit drug use is an urban problem, the 1994 Monitoring the Future Survey found similar rates among metropolitan and nonmetropolitan areas. The annual prevalence of illicit drug use among high school seniors is highest for White youth (31%) and Hispanic youth (29%) while the lowest rates appear for African-American teenagers (17%).²⁹

Reproductive Health Issues

Sexual intercourse. The 1970s spark a dramatic increase in adolescent sexual activity; by 1988, the proportion of sexually active teenagers had risen to more than half of high school females and two thirds of males.^{32,33} Approximately 10% youth are sexually active by age 13, one third of males and one fourth of females have had sexual intercourse by age 16, more than half of all males are sexually active by age 17, and most females have had intercourse by age 18.³⁴ Among adolescents in the 9th through 12th grades, African-American youth report the highest proportion of sexual activity (72%), followed by Hispanic youth (53%) and White youth (52%)³⁵; however, the racial discrepancies appear to be decreasing.³⁴

Teenage pregnancy. In 1989, 1 043 61 women under age 20 (one in 8.5 adolescent females) became pregnant; of these 27 810 were under age 15. Of the women under age 20 who became pregnant, nearly half gave birth, 37% had legal abortions, and an estimated 14% miscarried.³⁶ Of those who gave birth, very few made adoption plans. With the decrease in stigmatization of childbearing among unmarried mothers, the chance that an adolescent White woman would make adoption plans for her baby declined from 19% (from 1965 to 1972) to 3% (from 1982 to 1988) while the chances that an adolescent African-American woman would do so decreased from 2% to 1%.³⁷

Pregnancy rates for all women between the ages of 15 and 19 increased by more than 5% between 1985 and 1989 to a level of 114.9 per 1000, their highest level in nearly 20 years. This increase reflects an increase in the proportion of sexually active youth. However, pregnancy rates among sexually experienced teens have declined by 19% over the last 2 decades, suggesting that sexually experienced teens are using birth control more effectively than their counterparts in the past. Pregnancy and birth rates for youth under the age of 15 represent a small but rapidly growing problem; from 1985 to 1989, the pregnancy rate for these teens increased by 4% while the birth rate increased by 31%.³⁶

Pregnancy and birth rates differ markedly among different races. The pregnancy rate for non-White teens aged 15 to 19 was 184.3 per 1000 in 1992, almost twice as high as that for White teens at 93.4 per 1000. For teens under age 15, the pregnancy rate was 4.9 per 1000. When

broken down by racial group, however, the rate was more than 400% higher for African-American youth than for White youth³⁹; similarly, there was a threefold difference between White teens (0.5 per 1000) and Native American teens (1.6 per 1000), and a fivefold difference between White teens and Hispanic teens (2.4 per 1000). In 1991, the birthrates for White and Asian/Pacific Islander youth were significantly less than those of African-American, Hispanic, and American Indian teenagers for mothers under the age of 20. However, while the birthrates are much higher for African-American teens than for White teens, the percentage of increase between 1985 and 1991 is greatest for the latter group: for teens under age 15, the birthrate increased by 33% for White youth compared with 4% for African-American youth; for youth aged 15 to 19, the birthrate for Whites increased by 27% compared with 15% for African Americans.⁴⁰

Although much less is known about teenage fathers than about teenage mothers, this has been a growing area of research over the last decade. The overall rate of fatherhood among males aged 15 to 19 increased by nearly 38% between 1986 and 1991. While the rate of teenage fatherhood for African Americans is more than three times that for Whites, between 1986 and 1991 the percentage increased more for Whites than for African Americans (42% vs 35%).⁴⁰ However, since the males involved in teen pregnancy tend to be older than their female consorts, only 26% of the young men involved in teen pregnancies were under the age of 18.³⁸

Teenage abortion. Abortion rates have decreased for all age groups over the past 5- and 10-year periods among women under the age of 20, with greatest decreases among women under the age of 15.³⁶ Nevertheless, women under age 20 were responsible for 24% of all abortions in 1989.⁴¹ Among those women between the ages of 15 and 19 who became pregnant, the majority of unintended pregnancies ended in abortions (53%).³⁹ White women were more likely to terminate unintended pregnancies than either African-American or Hispanic women.³⁸ Other correlates of choosing abortion include higher socioeconomic status,⁴² higher parental education,⁴³ and a stronger future time perspective than that of parenting peers.⁴⁴

Over the past decade, increasingly restrictive laws have been implemented to limit adolescent access to abortion ser-

vices. Only three states and the District of Columbia have laws that explicitly allow a minor to obtain an abortion without parental consent or notification. Twenty-one states require parental consent or notification prior to a minor obtaining an abortion; in most of these states, however, parental involvement can be avoided through a judicial bypass system.⁴⁵ In the remaining 26 states, no laws currently exist. In states where parental notification is not required, the majority (61%) of unmarried teenagers reported telling at least one parent about their decision to terminate the pregnancy,⁴⁶ leading some to conclude that parental notification laws have little impact on parental notification.⁴⁷ On the other hand, the reduction in abortions among adolescents may be a function of restrictive laws.

Contraceptive use. While rates of intercourse have increased over the past decade, so too has the use of contraception. Two thirds of young people report using some method of contraception at first sexual intercourse. For women aged 15 to 19, the percentage who reported using condoms at sexual debut doubled between 1982 and 1988.⁴⁸ Among sexually active high school students, 78% reported using some form of contraception (birth control pills, condoms, withdrawal, or another method) with the most recent intercourse; however, only 45% (40% of females and 49% of males) reported using condoms.³⁵ Among males, African-American youth and White youth reported the highest condom use (55% and 50%, respectively), while the lowest rates were reported among Hispanic youth (47%). Among females, 42% of White youth reported condom use at last intercourse, compared with 37% of African-American and 28% of Hispanic youth.³⁵

While efforts to improve condom use among adolescents continue, some authors estimate consistent and appropriate condom use to be as low as 10% to 20%.³⁴ Several studies have found little association between increased levels of sexually transmitted disease knowledge and condom use.⁴⁹⁻⁵¹ Thus, while knowledge of the role of condoms in preventing sexually transmitted diseases may be necessary and beneficial, it appears not to be sufficient to ensure condom use. A recent study found that teenagers who discuss AIDS with a health care provider were significantly more likely to use condoms consistently.⁵² Regrettably, in the same study, Hinson et al. reported that of the 80% of all adolescents who saw a health professional in the year preceding their

study, only 13% had been counseled about AIDS.⁵²

Sexually transmitted diseases. Youth under the age of 25 account for two thirds of all sexually transmitted diseases.⁵³ Human papilloma virus and chlamydia appear to be the most common of these diseases among adolescents although their exact prevalence is unknown.^{54,55} Among sexually active female adolescents, the prevalence of cervicovaginal human papilloma virus has been reported to range from 13% to 38%⁵⁵⁻⁵⁷ while reported rates of chlamydia infection range from 10% to 37%, depending on the population studied.⁵⁸

The reported prevalence of gonorrhea among sexually active youth range from 3% to 18%.⁵⁸ Youth aged 10 to 24 were responsible for 63% of all cases of gonorrhea in 1992, reflecting a 20% decrease in the number of reported cases for these youth since 1990. The reported cases were evenly distributed between males and females; however, African American youth were disproportionately represented as they accounted for more than 82% of all cases of gonorrhea reported. White youth were responsible for 13%; Hispanics, 4%; and Asian/Pacific Islanders and American Indian/Alaskan Native combined, less than 1% of all gonorrhea cases.⁵³

Youth between the ages of 10 and 24 accounted for 34% of all (primary and secondary) syphilis infections, with males accounting for 43% of all reported cases. African-American youth accounted for more than 88% of all reported cases of syphilis while White youth were responsible for 7%; Hispanic teens, 5%, and Asian/Pacific Islander and American Indian/Alaskan teens, less than 1%. Between 1990 and 1992, there was a 31% reduction in the reported number of syphilis infections in young people of this age group.⁵³

Discussion

The changes in adolescent health status over the past decade should be cause for both encouragement and alarm. After years of a downward spiral, there have been significant improvements. Overall, mortality has declined by 13% among 15- to 24-year-olds during the 1980s, with dramatic reductions in motor vehicle deaths. One-third fewer teenagers die from motor vehicle injuries today than a decade ago, and alcohol-related vehicular deaths are markedly reduced. These data should stand as a refutation that nothing

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can be done to affect the major morbidities and causes of mortality among youth. Clearly, educational strategies, coupled with technological improvements of cars and roads and a revised legal drinking age, have all contributed to the improved outcomes.

But there is a warning in these data as well. The recent decline in motor vehicle deaths among juveniles is not the first time we have seen such positive trends. In the 1980s, a concerted antidrug campaign was accompanied by a dramatic decline in adolescent illicit drug use (in the previous 30 days) from 39% in 1979 to 14% in 1992. However, between 1992 and 1994 there has been a dramatic (52%) increase in illicit drug use despite the spate of reports reinforcing the data that illicit drugs are harmful. When these two factors are taken together, the warning is that information is insufficient to change behavior; thus, without a comprehensive prevention strategy concurrently targeting specific behaviors and underlying etiologies, change will not occur. The trend is recent, and it is probably not too late to reverse it. If it is ignored, another crisis in adolescent substance abuse may occur 5 years from now. Similarly, unless automobile safety campaigns continue to be emphasized, vehicular mortality will once again increase.

Another area in which significant although not dramatic gains have been realized is with pregnancy prevention. Sexually active youth are better contraceptive today than were their predecessors, so unwanted pregnancies have declined in this population. Significant increases in the use of contraception at sexual debut have been reported, as has a dramatic increase in the acceptability of condoms. Clear messages on the benefits of contraception for sexually transmitted disease and pregnancy prevention, coupled with the improved availability of contraceptive technology, have had an impact. Whether welfare reform and any new federal adolescent pregnancy prevention campaigns enhance or erode the modest gains to date is yet to be seen.

Challenging the gains, however, is the dramatic rise in violence among young people and most especially among African-American males. In the 12 years between 1979 and 1991, mortality from violence rose 54.5% among adolescents while violent victimization rose by more than 30%. The ease with which young people can obtain a handgun is clearly a major contributor. While much rhetoric has addressed the problem, as a nation we

have not made a concerted effort to address either the underlying rage and hopelessness that precipitated the epidemic or the behaviors that affect it. Were we to bring the tools and resources we have historically reserved for infectious epidemics to this social one, we would stand a high likelihood of reversing this trend, which is threatening a generation of young people.

Finally, 2 decades of research and literature on those factors associated with positive outcomes among youth raised in high-risk social environments is now available.⁵⁹⁻⁶² If, over the next decade, programs are developed that enhance resilience among youth at highest risk for negative outcomes, there may be dramatic reductions in social morbidities (homicide and suicide) that are akin to those we have seen for motor vehicle deaths. But if we are paralyzed by the myth that nothing can be done, there is a great likelihood of living out that self-fulfilling prophecy. □

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Teen Pregnancy



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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TEEN BIRTH RATE DOWN IN ALL STATES Drives U.S. Birth Rate to Record Low

HHS Secretary Donna E. Shalala released today a new HHS report stating that the national birth rate dropped to a record low in 1997, due in part to the continuing decline in the teen birth rate across the country. Overall, the teen birth rate declined by 16 percent from 1991 to 1997, with all states recording a decline in the birth rate of 15-19 year-olds between 1991 and 1997. It is the sixth year in a row that the teen birth rate has declined.

Teen birth rates declined for white, black, American Indian, Asian or Pacific Islander and Hispanic women aged 15-19. The report also found a continued decline in out-of-wedlock births, record high levels of women getting early prenatal care, and the lowest rate ever reported of smoking by pregnant women.

"Communities and parents all across America have joined with us to help our young people understand that they should delay parenthood until they are truly ready to nurture and support a child of their own," Secretary Shalala said. "This sustained national improvement is evidence that innovative programs to reach teenagers with information and support to make responsible choices are working. It is also a reminder that most teenagers are making good choices—focusing on their futures and saying no to anything that would jeopardize their dreams."

"Births: Final Data for 1997," the latest annual analysis of final birth data prepared by the National Center for Health Statistics, a part of the Centers for Disease Control and Prevention, is a comprehensive report on birth and fertility patterns and key aspects of maternal and infant health based on data from birth certificates. The report includes the latest data for the nation and each state on low birthweight, prenatal care, unmarried childbearing and teenage birth rates.

According to the report, the out-of-wedlock birth rate declined for the third year in a row. The birth rate for unmarried women in 1997 was 44 births per 1,000 unmarried women aged 15-44 years, 2 percent lower than in 1996 and 6 percent lower than 1994 when the rate was at its highest. The birth rate for unmarried black women is lower than in any year since 1969 when this rate was first calculated; the rate has dropped 18 percent since 1991. The number of births to unmarried women declined slightly to 1,257,444 in 1997, while the percent of all births occurring to unmarried women remained unchanged

from the previous year at 32 percent. Of the almost 500,000 births to those 15-19 years of age, 78 percent are to unmarried teens. The birth rate for unmarried teens of all races has dropped 9 percent since 1994; the birth rate for unmarried black teens has fallen 20 percent since 1991.

The birth rate for teenagers continued to decline in 1997, falling another 4 percent to 52.3 births per 1,000 women aged 15-19 years. The rate for young teenagers 15-17 was down 5 percent in the past year and down 17 percent from 1991 when the improvement began. For older teens, those 18-19, the birth rate dropped by 11 percent between 1991 and 1997. The greatest decline in teen birth rates occurred

among Puerto Rican and non-Hispanic black teens, for whom the rate was down about 25 percent during this period.

All states have been successful in reducing the rate of teen births. Between 1991 and 1997, teenage birth rates fell in all states, the District of Columbia and the Virgin Islands. In 10 states and the District of Columbia, the rate was down by more than 20 percent. Teenage birth rates vary considerably from state to state, with the lowest rate in Vermont (26.9 per 1,000 women aged 15-19) to the highest in Mississippi (73.7).

The U.S. birth rate reached a record low of 14.5 births per 1,000 population, with the total number of births, 3,880,894, the lowest since 1987. Birth rates for women in their twenties--the peak childbearing years--have changed little over the decade, while the rise in births to older mothers in their thirties continues but at a slower pace.

Mothers are more likely than ever to receive timely prenatal care during their pregnancies. First trimester prenatal care improved for the eighth consecutive year, reaching 82.5 percent in 1997. All groups have experienced an improvement in prenatal care but gains have been most pronounced among groups with lower levels of care. Since 1989, first trimester care has risen by at least 20 percent among Mexican, Puerto Rican, Central and South American and non-Hispanic black women, and by more than 15 percent for American Indian and Hawaiian mothers. Despite these improvements, American Indian, Mexican and non-Hispanic black women are still less likely to receive early prenatal care.

Midwives delivered about 7 percent of all babies born in 1997, up from 1 percent in 1975; about 95 percent of those deliveries were attended by certified nurse midwives. The cesarean delivery rate increased slightly to 20.8 percent, after declining throughout the 1990s.

In 1997, 13.2 percent of all women giving birth reported that they smoked during pregnancy. This is the lowest level of tobacco use during pregnancy since 1989 when this information first became available on the birth certificate. However, smoking among pregnant teenagers increased again in 1997, particularly among black and Puerto Rican teenagers; white non-Hispanic teenagers are still the most likely of all women to smoke while pregnant.

In contrast to improvements in prenatal care and a reduction in maternal smoking, the rate of preterm births increased sharply in 1997 to 11.4 percent (437,000) and the proportion of infants born low birthweight (291,000) reached the highest level in over two decades, 7.5 percent. The recent trends in preterm births (less than 37 completed weeks of gestation) and low birthweight (less than 5- 1/2 pounds) are due in part to the remarkable rise in multiple births. Preterm and low birthweight rates are much higher among multiple births than among babies born in single deliveries. However, these problems are not limited to multiple births; for example, low birthweight has also been on the rise among single births during the 1990s.

Multiple births increased substantially in 1997. Twin births increased 3 percent to 104,137 and triplet births rose 16 percent to 6,148. Births in quadruplet and quintuplet deliveries were down slightly.

"Births: Final Data for 1997" can be viewed or downloaded on the NCHS Home Page at <http://www.cdc.gov/nchswww>.

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U.S. TEENAGE PREGNANCY RATE DROPS ANOTHER 4% BETWEEN 1995 AND 1996

TEENAGE PREGNANCY DECLINES IN ALL STATES

Levels of teenage pregnancy continued their downward trend at both the national and the state levels in 1996. Nationwide, the teenage *pregnancy* rate, including births, abortions and miscarriages, declined 4% between 1995 and 1996, from 101.1 to 97.3 pregnancies per 1,000 women aged 15-19. The teenage *birthrate* also declined 4%, and the *abortion* rate declined 3% in this short period, according to new data released by The Alan Guttmacher Institute. *Teenage Pregnancy: Overall Trends and State-by-State Information* presents data for the last decade, including national trends by race and among Hispanics.

Teenage pregnancy rates in 1996 varied widely by state, from 50 pregnancies per 1,000 young women in North Dakota to 140 in Nevada and 256 in the District of Columbia. In all but one state--New Jersey--the teenage pregnancy rate was lower in 1996 than in 1992.

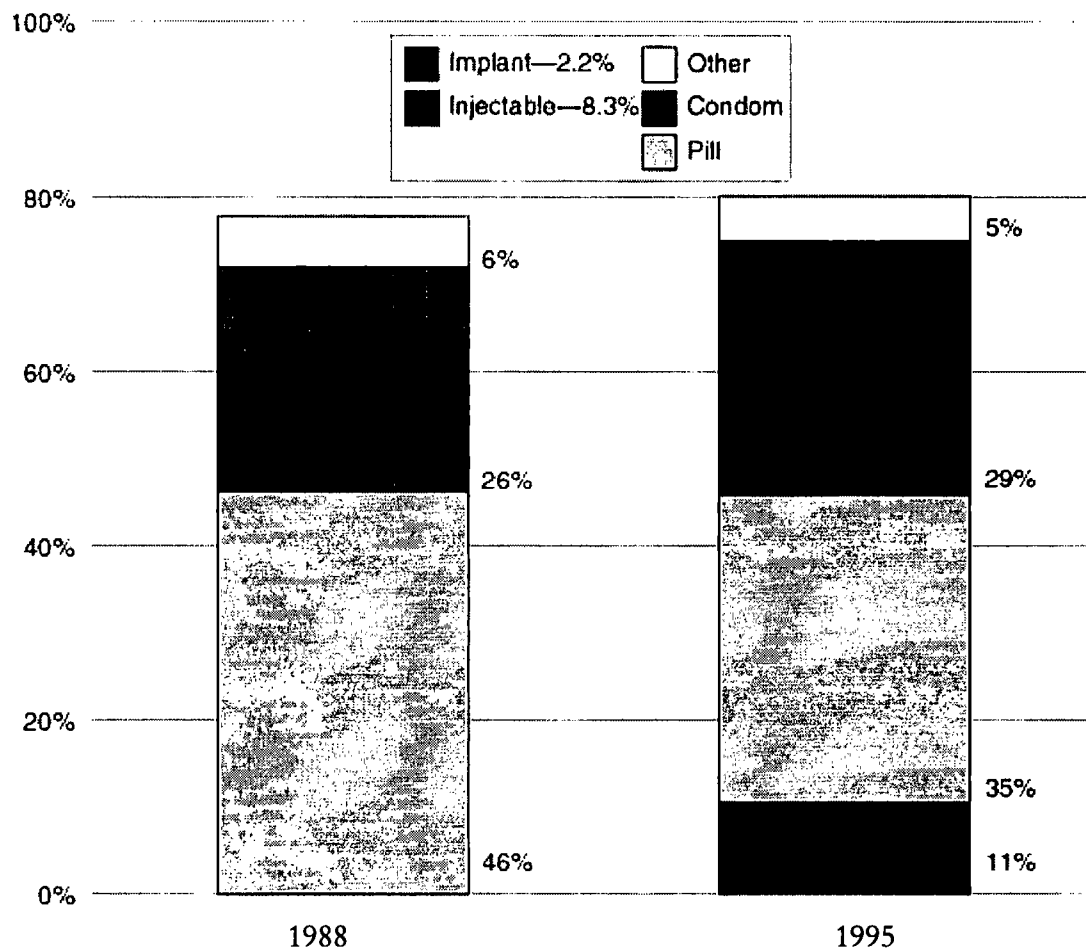
Steep decreases in the early 1990s in the pregnancy rate among sexually experienced teenagers accounted for most of the drop in the overall U.S. pregnancy rate. Most of this decline is due to slight increases in the proportion of sexually active teenagers using a contraceptive method; teenagers' using highly effective, long-acting methods; and modest reductions in failure rates among those using condoms and oral contraceptives.

"Many groups want to take credit for the drop in teenage pregnancy, but the credit truly goes to the teenagers. About 20% of the decrease since the late 1980s is because of decreased sexual activity, and 80% of the decrease is because of more effective contraceptive practice--the methods teenagers are choosing to use and how well they are using them. Many sexually active teenagers are using the highly effective contraceptive implant, Norplant, and injectable, Depo-Provera, which only became available in the early 1990s. Many factors undoubtedly account for these behavioral changes and are much harder to measure. But it is clear that efforts to promote both responsible sexual decision-making and effective contraceptive practice can have big

impacts," comments Jacqueline E. Darroch, the Institute's vice president for research.

Methods used by teens at risk for unintended pregnancy have changed

Women 15-19 at risk for unintended pregnancy



Tabulations from 1988 and 1995 NSFG.

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The Alan Guttmacher Institute [www.agi-usa.org] is a nonprofit organization focused on reproductive health research, policy analysis and public education, with offices in New York and Washington, D.C.

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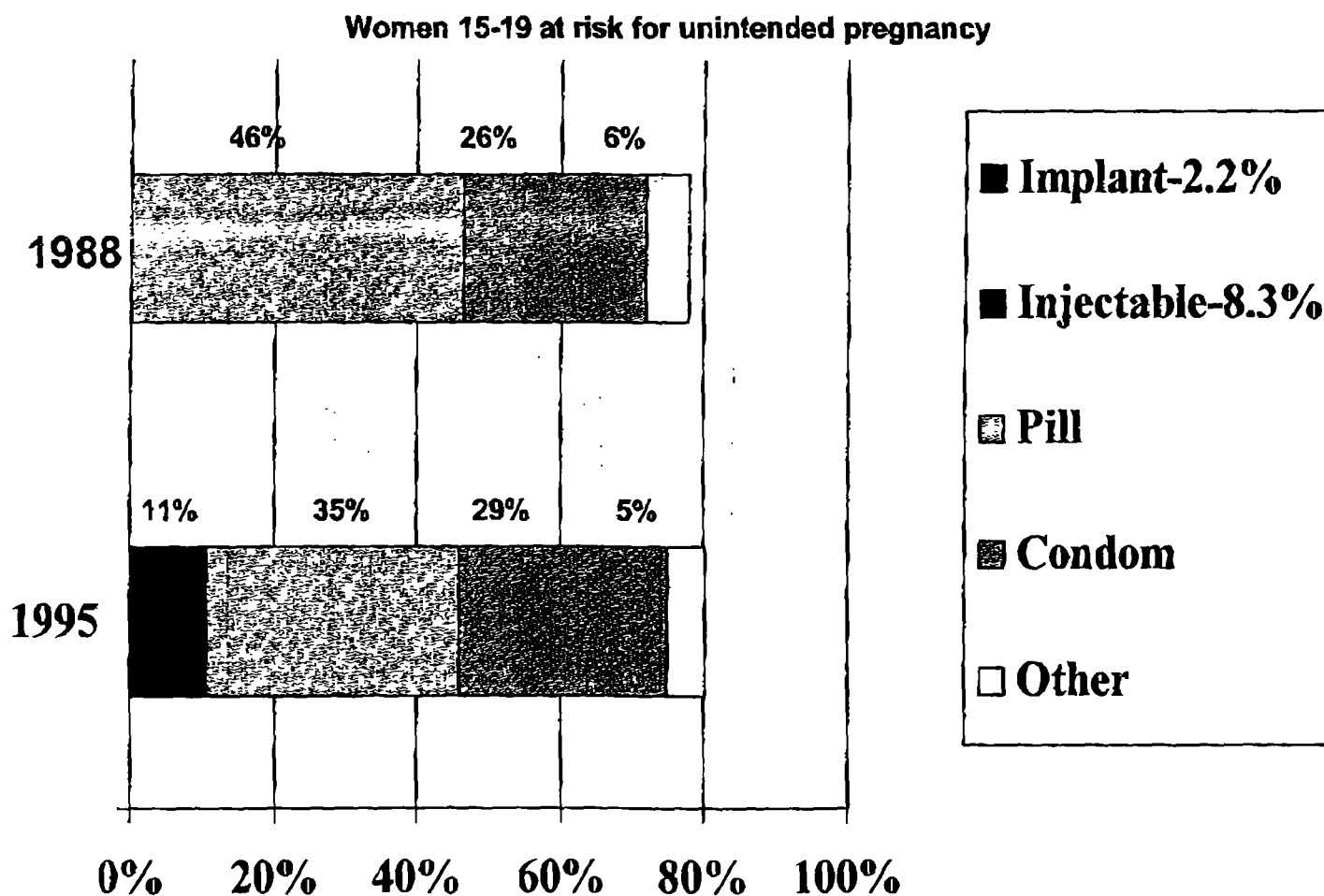
Steep decreases in the early 1990s in the pregnancy rate among sexually experienced teenagers accounted for most of the drop in the overall U.S. pregnancy rate. Most of this decline is due to slight increases in the proportion of sexually active teenagers using a contraceptive method; teenagers' using highly effective, long-acting methods; and modest reductions in failure rates among those using condoms and oral contraceptives.

"Many groups want to take credit for the drop in teenage pregnancy, but the credit truly goes to the teenagers. About 20% of the decrease since the late 1980s is because of decreased sexual activity, and 80% of the decrease is because of more effective contraceptive practice—the methods teenagers are choosing to use and how well they are using them. Many sexually active teenagers are using the highly effective contraceptive implant, Norplant, and injectable, Depo-Provera, which only became available in the early 1990s. Many factors undoubtedly account for these behavioral changes and are much harder to measure. But it is clear that efforts to promote both responsible sexual decision-making and effective contraceptive practice can have big impacts," comments Jacqueline E. Darroch, the Institute's vice president for research.

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The Alan Guttmacher Institute—www.agi-usa.org—is a nonprofit organization focused on reproductive health research, policy analysis and public education, with offices in New York and Washington, D.C.

Methods used by teens at risk for unintended pregnancy have changed



Teenage Pregnancy

Overall Trends and State-by-State Information


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P. 04

Summary

Pregnancy, birth and abortion rates among U.S. teenagers continued their downward trend in 1996. Nationwide, the pregnancy rate declined 4% between 1995 and 1996, from 101.1 to 97.3 pregnancies per 1,000 women aged 15-19 (Table 1). The rate has dropped 9% since 1986 and, more significantly, 17% since peaking in 1990.

The birthrate for teenagers also declined 4% between 1995 and 1996, to 54.4 births per 1,000 women (Table 1). Although the 1996 rate was 8% higher than the 1986 rate, it was 12% lower than the peak rate of 62.1 births per 1,000 reached in 1991.

Teenagers' abortion rate declined 3% between 1995 and 1996 (Table 1). Since 1986, the rate has dropped 31%, to 29.2 abortions per 1,000 women aged 15-19. At the same time, the proportion of teenage pregnancies ending in abortion has fallen from 46% to 35%—a decline of 24%.

White and black adolescents have experienced declines in pregnancy rates, although the magnitude of the changes has varied considerably. Among black women aged 15-19, the nationwide pregnancy rate fell 20% between 1990 and 1996; among white teenagers, it declined 16% during that time (Table 1). The pregnancy rate among Hispanic teenagers, who can be of any race, increased between 1990 and 1992, but then fell 6% by 1996 (Table 2).

Roughly 880,000 pregnancies occurred among women aged 15-19 in 1996; 62% of these pregnancies were to 18-19-year olds (Table 3). California reported the highest number of adolescent pregnancies (126,300), followed by Texas, New York, Florida and Illinois (with about 40,000-80,000 each). The smallest numbers of teenage pregnancies were in Vermont, North Dakota, Wyoming, South Dakota and Alaska, all of which reported fewer than 2,000 pregnancies among women aged 15-19.

Teenage pregnancy rates in 1996 varied widely by state, ranging from 50 pregnancies per 1,000 women aged 15-19 in North Dakota to 140 per 1,000 in Nevada and 256 per 1,000 in the District of Columbia (Table 4). The highest state adolescent pregnancy rates after Nevada's were found in California, Arizona,

Florida and Texas. Minnesota, New Hampshire, Maine and Iowa had the lowest rates after North Dakota's.

Wide variation is also seen in state teenage birthrates for 1996 (Table 4). The highest rates (70-75 births per 1,000 women aged 15-19) were found in Mississippi, Arkansas, Arizona, Texas and New Mexico; in the District of Columbia, 102 births occurred per 1,000 teenage women. The lowest rates (29-32 per 1,000) were in New Hampshire, Vermont, Maine, Minnesota and Massachusetts.

Statewide teenage abortion rates were highest (45-53 abortions per 1,000 women aged 15-19) in New York, Nevada, New Jersey, Maryland and California (Table 4); the rate in the District of Columbia was 121 per 1,000. Teenagers in Utah, North Dakota, South Dakota, West Virginia, Idaho and Iowa had the lowest abortion rates (8-12 abortions per 1,000).

Overall, 35% of pregnancies among 15-19-year olds ended in abortion in 1996 (Table 4). However, in New Jersey, nearly six in 10 (58%) teenage pregnancies ended in abortion; the proportion also exceeded 50% in New York, Massachusetts and the District of Columbia. By contrast, only 15% of pregnancies among teenagers in Utah ended in abortion; the proportion was also below 20% in Oklahoma, Mississippi, Kentucky, Arkansas, Louisiana and West Virginia.

Between 1985 and 1996, teenage pregnancy rates declined in 47 states; in the remaining three (Illinois, Indiana and Nevada) and the District of Columbia, rates declined between 1992 and 1996 (Table 5). In 27 states and the District of Columbia, teenage birthrates were higher in 1996 than in 1985; in all but one of these states, however, the rate was lower in 1996 than in 1992. Teenage abortion rates declined in every state between 1985 and 1996. In the District of Columbia, the rate was higher in 1996 than in 1985, but it declined between 1992 and 1996.

This information is provided through the support of The Andrew W. Mellon Foundation and The Educational Foundation of America.

About the Tables

Data Sources and Methodology

Pregnancies are calculated as the sum of births, miscarriages (including stillbirths) and abortions. The number of births to teenagers in each state and teenage birthrates were obtained from the National Center for Health Statistics.¹ The number of miscarriages was estimated as 20% of births plus 10% of abortion; these proportions attempt to account for miscarriages that occur after the pregnancy has lasted long enough to be noted by the woman (6–7 weeks after the last menstrual period).²

The number of abortions, however, is measured less directly. For 1996, the number of abortions obtained by teenage residents of each state was calculated by starting with the number of abortions in each state that were provided to teenagers (residents and nonresidents) and then reallocating abortions to the woman's state of residence. The number of abortions performed in each state for women of all ages was derived from a survey of all abortion providers conducted by The Alan Guttmacher Institute (AGI).³ The number of abortions obtained by women aged 15–17 and 18–19 in each state was estimated by applying the proportion of abortions provided to women in these age-groups, as documented by the state abortion reporting system, to the AGI total number of abortions in the state. For states with no information on the age of women having abortions (California, Delaware, Florida, Iowa, New Hampshire and Oklahoma), the proportion of abortions obtained by teenagers was estimated on the basis of information from neighboring or similar states.

The reassignment of abortions to the woman's state of residence was also based on information provided by state abortion reporting agencies. For states that did not supply information on the state of residence of teenagers having abortions, the proportion of abortion patients who came from other states and the states from which they came were assumed to be the same for teenagers as for women of all ages. For states with no information about the state of residence of women having abortions, data or estimates of state of residence

were obtained from nonhospital abortion facilities, again on the assumption that the proportion of nonresidents was the same for teenagers as for all women.

For the years before 1996, no data on the state of residence for teenagers were used, and teenagers were assumed to have obtained abortions in other states in the same proportions as other women.

All rates were calculated using population denominators estimated by the U.S. Bureau of the Census.⁴ The 1990 census found slightly more teenagers than had been projected. National population estimates for earlier years were adjusted on the basis of these findings, but state estimates were not.

Interpreting the Data

Because health department abortion statistics are imperfect or nonexistent in many states, care should be used in interpreting the teenage abortion and pregnancy data. For the six states with no information on the age of women having abortions, the teenage abortion rate was estimated from the overall abortion rate, which correlates highly (but not perfectly) with the rate for teenagers. For these states and several others, no information specific to teenagers was available indicating the state of residence of women having abortions in the state; the assumption that teenagers come from other states for abortions at the same rate as all women may not be completely accurate. In particular, minors in states with parental involvement requirements for abortion may travel to other states at higher rates than all women, and some of these minors may not have been reassigned to their state of residence. Time trends may also be affected, since before 1996, no data specific to teenagers were used to assign abortions to the teenager's state of residence.

Births and abortions have been recorded according to the woman's age at the time of the event, not the age when she became pregnant; pregnancy rates are therefore understated. For example, the rate for women aged 18–19 would be higher than that shown if pregnancies beginning at age 19 and ending at age 20 were included.

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4. U.S. Bureau of the Census, Estimates of the population of states by age, sex, race, and Hispanic origin: 1990 to 1996, Dec. 1997, <<http://www.census.gov/population/estimates/state/sasrh/sasrh96.txt>>.

Table 1. Pregnancy, birth and abortion rates per 1,000 women aged 15-19, and abortion ratio (abortions per 100 pregnancies), by race, 1986-1996

Race and measure	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Total											
Pregnancy rate*											
All women 15-19	106.7	106.6	111.4	114.9	117.1	115.8	111.9	109.3	106.1	101.1	97.3
Sexually active women 15-19	210.7	206.7	212.2	219.6	224.3	222.4	215.5	211.1	205.4	196.3	189.5
Birthrate	50.2	50.6	53.0	57.3	60.4	62.1	60.7	59.6	58.9	56.8	54.4
Abortion rate	42.3	41.8	43.5	42.0	40.6	37.6	35.5	34.3	32.2	30.0	29.2
Abortion ratio†	45.7	45.2	45.1	42.3	40.2	37.7	36.8	36.5	35.3	34.6	34.9
White											
Pregnancy rate*	90.0	89.6	93.0	95.8	98.3	97.0	93.0	90.9	88.9	86.0	82.6
Birthrate	42.3	42.5	44.4	47.9	50.8	52.8	51.8	51.1	51.1	50.1	48.1
Abortion rate	35.6	35.1	36.1	34.8	33.9	30.5	28.1	26.9	25.1	23.5	22.6
Abortion ratio†	45.7	45.2	44.9	42.1	40.1	36.6	35.2	34.5	33.0	32.0	32.0
Nonwhite											
All											
Pregnancy rate*	180.7	180.1	189.1	193.4	189.6	189.6	185.2	180.4	172.5	158.7	153.3
Birthrate	84.8	85.5	89.2	85.9	86.5	88.4	85.5	82.5	80.1	82.2	78.1
Abortion rate	71.8	70.4	74.0	71.3	87.1	85.1	84.2	63.1	59.6	54.6	54.2
Abortion ratio†	45.8	45.2	45.5	42.6	41.0	39.8	40.2	40.5	40.1	39.9	41.0
Black											
Pregnancy rate*	u	u	u	u	224.3	223.7	218.7	212.7	202.1	184.8	178.9
Birthrate	95.8	97.6	102.7	111.5	113.1	115.5	112.4	108.6	104.5	96.1	91.4
Abortion rate	u	u	u	u	80.5	77.4	76.2	74.9	69.7	63.2	62.9
Abortion ratio†	u	u	u	u	41.8	40.1	40.4	40.8	40.0	39.7	40.8

*Includes estimated number of pregnancies ending in miscarriages. †Denominator excludes miscarriages. Notes: Data are tabulated according to the woman's age at the pregnancy outcome and, for births, according to the mother's race (not the child's). No data are presented separately for nonwhite women other than blacks because of small numbers and the heterogeneity of the group. u=unavailable.

Table 2. Pregnancy, birth and abortion rates per 1,000 Hispanic women aged 15-19, and abortion ratio (abortions per 100 pregnancies), 1990, 1992 and 1996

Measure	1990	1992	1996
Pregnancy rate*	163.4	176.0	164.6
Birthrate	100.3	107.1	101.8
Abortion rate	39.1	43.2	38.6
Abortion ratio†	28.0	28.7	27.5

*Includes estimated number of pregnancies ending in miscarriages. †Denominator excludes miscarriages. Note: Data are tabulated according to the woman's age at the pregnancy outcome. Hispanic teenagers may be of any race.

Table 3. Number of pregnancies among women aged 15-19, by state of residence, according to age-group, 1996

State	15-17	18-19	15-19
U.S. total	337,530	542,640	880,170
Alabama	6,400	10,120	16,520
Alaska	640	1,130	1,770
Arizona	7,050	10,600	17,650
Arkansas	3,660	6,430	10,090
California*	49,110	77,190	126,300
Colorado	4,660	7,270	11,930
Connecticut	3,440	4,790	8,230
Delaware*	910	1,310	2,220
Dist. of Columbia†	1,400	2,000	3,400
Florida*	18,300	29,990	48,290
Georgia	11,270	16,950	28,220
Hawaii	1,510	2,440	3,950
Idaho	1,240	2,430	3,670
Illinois	17,380	25,130	42,510
Indiana	6,650	12,020	18,670
Iowa*	2,200	4,010	6,210
Kansas	2,720	4,760	7,480
Kentucky	4,600	8,070	12,670
Louisiana	6,700	10,650	17,350
Maine	840	1,580	2,420
Maryland	6,550	9,930	16,480
Massachusetts	5,160	9,010	14,170
Michigan	11,350	18,490	29,840
Minnesota	3,480	5,960	9,440
Mississippi	4,940	7,150	12,090
Missouri	6,060	10,350	16,410
Montana	790	1,440	2,230
Nebraska	1,350	2,520	3,870
Nevada	2,690	4,150	6,840
New Hampshire*	720	1,410	2,130
New Jersey	9,420	14,280	23,700
New Mexico	3,010	4,390	7,400
New York	23,980	37,740	61,700
North Carolina	9,770	15,470	25,240
North Dakota	390	840	1,230
Ohio	11,510	20,270	31,780
Oklahoma*	3,950	7,090	11,040
Oregon	3,740	6,310	10,050
Pennsylvania	10,090	17,040	27,130
Rhode Island	930	1,690	2,620
South Carolina	5,160	7,630	12,790
South Dakota	840	1,130	1,770
Tennessee	6,800	11,360	18,160
Texas	31,800	49,690	80,490
Utah	2,070	4,140	6,210
Vermont	420	790	1,210
Virginia	6,960	12,080	19,040
Washington	6,220	10,110	16,330
West Virginia	1,730	3,230	4,960
Wisconsin	4,250	7,300	11,550
Wyoming	580	930	1,510

*Abortion estimates are based on the proportion of abortions obtained by women of the same age in neighboring or similar states. †Distribution of abortions among teenagers into age-groups 15-17 and 18-19 is based on the proportion among all black teenagers nationally. Notes: Data are tabulated according to the woman's age at the pregnancy outcome. Even though abortions have been tabulated according to state of residence where possible, in states with parental notification or consent requirements for minors, the number of pregnancies shown may be too low because minors may have traveled to other states for abortion services. Pregnancies include estimates of the number of miscarriages. Numbers are rounded to the nearest 10.

Table 4. Ranking of pregnancy, birth and abortion rates per 1,000 women aged 15-19, these rates by age-group, and abortion ratio (abortions per 100 pregnancies), all according to state, 1996

State	Pregnancy rate*				Birthrate				Abortion rate				Abortion ratio†
	Rank‡	15-19	15-17	18-19	Rank‡	15-19	15-17	18-19	Rank‡	15-19	15-17	18-19	
U.S. total	na	97	62	153	na	54	34	86	na	29	19	45	35
Alabama	12	106	89	160	7	69	45	104	24	21	13	32	23
Alaska	35	75	46	117	29	46	26	75	33	18	13	25	28
Arizona	3	118	80	176	3	74	49	111	18	27	19	39	27
Arkansas	8	108	65	174	2	75	45	122	37	16	10	25	18
California§	2	125	80	196	14	63	39	99	5	45	30	70	42
Colorado	21	90	58	141	25	50	30	80	15	28	20	41	36
Connecticut	29	86	58	131	42	37	24	58	8	37	28	55	50
Delaware§	20	95	65	137	18	57	41	80	20	24	15	37	30
Dist. of Columbia**	na	256	185	349	na	102	79	133	na	121	82	173	54
Florida§	4	115	71	185	16	59	37	94	6	40	24	65	40
Georgia	7	109	72	167	8	68	45	103	19	25	16	39	27
Hawaii	15	101	66	149	26	48	28	76	7	39	30	53	45
Idaho	38	70	40	114	27	47	26	78	45	12	7	19	20
Illinois	11	106	70	164	17	57	36	91	10	34	25	50	38
Indiana	25	88	52	143	19	56	33	91	30	19	11	30	25
Iowa§	46	58	34	96	41	38	21	64	48	12	7	18	23
Kansas	34	79	47	130	24	50	28	84	35	18	12	26	26
Kentucky	24	89	54	140	15	61	37	98	43	14	9	21	18
Louisiana	19	97	62	148	9	67	43	102	41	15	10	23	19
Maine	47	57	32	98	48	31	17	55	34	18	11	28	36
Maryland	13	106	68	165	30	46	30	72	4	46	30	71	50
Massachusetts	33	79	48	128	16	32	20	51	9	37	22	59	53
Michigan	27	87	54	140	28	46	28	75	14	29	18	45	38
Minnesota	49	56	33	93	47	32	19	54	38	16	10	25	33
Mississippi	10	108	74	160	1	75	52	110	39	16	10	25	17
Missouri	30	86	52	140	20	54	31	90	29	19	13	30	27
Montana	40	65	38	107	40	39	21	66	36	17	11	26	31
Nebraska	41	62	36	101	39	39	22	64	42	14	8	22	28
Nevada	1	140	90	220	6	70	42	114	2	51	36	76	42
New Hampshire§	48	57	31	100	50	29	15	51	25	20	12	35	42
New Jersey	18	97	63	152	44	35	23	55	3	50	32	78	58
New Mexico	6	110	73	168	5	71	46	111	22	22	16	32	24
New York	9	108	70	163	36	42	26	66	1	53	36	78	58
North Carolina	14	105	68	161	11	63	41	97	18	26	17	40	29
North Dakota	50	50	26	88	45	32	16	58	49	10	6	17	24
Ohio	32	81	48	131	22	50	30	83	32	18	11	29	27
Oklahoma§	23	80	53	149	12	63	37	105	44	13	7	21	17
Oregon	22	90	55	146	21	51	29	85	17	26	18	40	34
Pennsylvania	39	70	42	112	38	39	24	63	26	20	12	34	34
Rhode Island	28	87	51	142	35	42	27	66	11	32	16	57	43
South Carolina	17	98	65	145	13	63	41	94	27	20	14	29	24
South Dakota	45	59	35	95	37	39	22	66	48	10	7	15	20
Tennessee	16	100	62	158	10	66	40	106	31	18	12	28	22
Texas	5	113	74	174	4	73	49	111	21	23	14	36	24
Utah	44	60	34	95	34	43	24	69	50	8	5	12	15
Vermont	43	60	34	103	49	30	15	54	23	22	14	35	42
Virginia	26	87	54	136	31	46	28	72	12	30	19	46	40
Washington	31	85	54	135	32	45	26	74	13	29	20	42	39
West Virginia	37	73	43	117	23	50	29	82	47	11	8	17	19
Wisconsin	42	61	37	100	43	37	22	61	40	15	10	24	29
Wyoming	36	74	46	120	33	44	25	75	28	20	15	27	31

*Includes estimated number of pregnancies ending in miscarriages. †Based on rates for women aged 15-19. ‡Denominator excludes miscarriages. §Abortion estimates are based on the proportion of abortions obtained by women of the same age in neighboring or similar states. **Distribution of abortions among teenagers into age-groups 15-17 and 18-19 is based on the proportion among all black teenagers nationally. Notes: Data are tabulated according to the woman's age at the pregnancy outcome. Even though abortions have been tabulated according to state of residence where possible, in states with parental notification or consent requirements for minors, the pregnancy and abortion rates may be too low because minors may have traveled to other states for abortion services. na-not applicable.

Table 5. Pregnancy, birth and abortion rates per 1,000 women aged 15-19, by state of residence, selected years

State	Pregnancy rate*				Birthrate				Abortion rate			
	1985	1988	1992	1996	1985	1988	1992	1996	1985	1988	1992	1996
U.S. total	110	111	112	97	51	53	61	54	44	43	35	29
Alabama	112†	110†	117	108	64	63	73	69	32†	32†	27	21
Alaska	144†	111†	109†	75	66	57	64	48	59†	38†	30†	18
Arizona	128	127	133	118	67	69	82	74	43	40	32	27
Arkansas	111	115	116	108	72	70	75	75	23	27	23	16
California	151.†	154†	159†	125†	54	58	74	63	79†	76†	64†	45†
Colorado	112	102	111	90	48	49	58	50	51	39	37	28
Connecticut	96	107	96	86	33	36	39	37	52	58	44	37
Delaware	101†	117†	121†	85†	50	53	60	57	37†	49†	44†	24†
Dist. of Columbia	211	209	277	256	72	74	116	102	113	110	125	121
Florida	126†	133†	127†	115†	58	63	66	59	51†	52†	43†	40†
Georgia	132	122	127	109	70	69	75	68	44	37	34	25
Hawaii	125	134	138	101	48	49	54	48	61	68	67	39
Idaho	78	73	77	70	48	45	52	47	21	17	14	12
Illinois	103†	112†	112†	108	50	54	64	57	38†	43†	33†	34
Indiana	87	89	95	88	51	52	59	56	24	25	22	19
Iowa	67†	69†	67†	58†	33	33	41	38	25†	27†	16†	12†
Kansas	84	88	90	79	49	49	56	50	23	27	21	18
Kentucky	92†	96	99	89	62	60	65	61	16†	22	19	14
Louisiana	109	107	109	97	71	68	76	67	22	23	15	15
Maine	92	82	70	57	44	41	40	31	36	30	20	18
Maryland	121	129	118	106	47	51	51	46	59	61	52	46
Massachusetts	86	97	87	79	30	32	38	32	45	53	38	37
Michigan	107	111	108	87	44	47	57	46	50	49	37	29
Minnesota	62	69	64	58	30	31	36	32	24	29	19	16
Mississippi	113	106	122	108	77	73	84	75	19	16	19	16
Missouri	95	99	100	86	53	55	63	54	29	30	22	19
Montana	82	74	81	65	42	39	46	39	28	24	24	17
Nebraska	75	75	71	62	37	37	41	39	27	27	20	14
Nevada	125	142	145	140	53	65	71	70	57	59	54	51
New Hampshire	89†	87†	62†	57†	32	33	31	29	46†	43†	22†	20†
New Jersey	113	112	97	97	38	39	39	35	63	60	45	50
New Mexico	116	124	129	110	70	72	80	71	30	35	30	22
New York	117	116	120	108	39	40	45	42	64	61	60	53
North Carolina	114	122	121	105	57	61	70	63	41	45	34	26
North Dakota	60	57	59	50	34	31	37	32	17	18	13	10
Ohio	96	96	93	81	50	52	58	50	33	31	21	18
Oklahoma	113†	105†	100†	90†	67	62	70	63	29†	27†	14†	13†
Oregon	95	105	99	80	42	48	53	51	41	43	32	26
Pennsylvania	87	87	84	70	41	41	45	39	35	34	27	20
Rhode Island	89	86	96	87	37	38	48	42	40	36	36	32
South Carolina	102	114	110	98	61	65	70	63	26	33	23	20
South Dakota	70	69	74	59	42	44	48	39	18	15	14	10
Tennessee	104	110	112	100	60	64	71	66	29	31	24	18
Texas	131†	117	123	113	73	69	79	73	39†	31	26	23
Utah	75	69	65	60	49	44	46	43	15	15	9	8
Vermont	82	81	71	60	35	33	36	30	36	37	26	22
Virginia	106	106	101	87	47	46	52	46	45	46	35	30
Washington	103	109	107	85	43	47	51	45	46	47	42	29
West Virginia	87†	78†	85	73	55	50	56	50	19†	17†	16	11
Wisconsin	73†	74	73	61	37	38	42	37	25†	26	21	15
Wyoming	98	82	81	74	54	48	50	44	30	23	19	20

*Includes estimated number of pregnancies ending in miscarriages. †Abortion estimates are based on the proportion of abortions obtained by women of the same age in neighboring or similar states. Notes: Abortion data for 1996 are not exactly comparable with those for earlier years because of a change in the way state of residence was calculated. Data are tabulated according to the woman's age at the pregnancy outcome. Even though for 1996 abortions have been tabulated according to state of residence where possible, in states with parental notification or consent requirements for minors, the pregnancy and abortion rates may be too low because minors may have traveled to other states for abortion services.

HHS FACT SHEET

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

April 29, 1999

Contact: HHS Press Office
(202) 690-6343

PREVENTING TEENAGE PREGNANCY

Overview: *Despite the recent decline in the teen birth rate, teen pregnancy remains a significant problem in this country. Most teen pregnancies are unintended. Each year, more than 900,000 pregnancies occur among American teenagers aged 15-19. And almost 190,000 teens aged 17 and younger have children. Their babies are often low birth weight and have disproportionately high infant mortality rates. They are also far more likely to be poor. About 80 percent of the children born to unmarried teenagers who dropped out of high school are poor. In contrast, just 8 percent of children born to married high school graduates aged 20 or older are poor.*

In his 1995 State of the Union Address, President Clinton challenged "parents and leaders all across this country to join together in a national campaign against teen pregnancy to make a difference." A group of prominent Americans responded to that challenge, forming the National Campaign to Prevent Teen Pregnancy.

On January 4, 1997, President Clinton announced a comprehensive effort by his Administration to prevent teen pregnancy in this country. The new initiative, led by the Department of Health and Human Services, responds to a call from the President and Congress for a national strategy to prevent out-of-wedlock teen pregnancies and to a directive, under the new welfare law, to assure that at least 25 percent of communities in this country have teen pregnancy prevention programs in place.

Building on the variety of efforts already underway, the national strategy works to prevent out-of-wedlock teen pregnancies and encourage adolescents to remain abstinent. The strategy sends the strongest possible message to all teens that postponing sexual activity, staying in school, and preparing to work are the right things to do. It will strengthen ongoing efforts across the nation by increasing opportunities through welfare reform; supporting promising approaches; building partnerships; improving data collection, research, and evaluation; and disseminating information on innovative and effective practices.

Recent Trends

After rising steadily from 1986 to 1991, the birth rate for teens aged 15-19 declined for the sixth straight year in 1997, from a high of 62.1 per 1,000 teens aged 15-19 in 1991 to 52.3 in 1997. The decline was 16 percent between 1991 and 1997. All 50 states had a decline in their teen birth rates between 1991 and 1997, and 10 of these states had declines of more than 20 percent over this period. In addition, from 1991 to 1995, the pregnancy rate for 15- to 19-year-olds fell 12 percent. Recent declines in both birth and abortion rates indicate that teen pregnancy rates are continuing to fall.

The National Strategy to Prevent Teen Pregnancy

Building on our current efforts to prevent teen pregnancy, the national strategy announced by President Clinton on January 4, 1997 is designed to strengthen the national response to prevent out-of-wedlock teen pregnancies and support and encourage adolescents to remain abstinent:

Implementing New Efforts Under Welfare Reform. Under the welfare law signed by President Clinton on August 22, 1996, unmarried minor parents are required to stay in school and live at home, or

in an adult-supervised setting, in order to receive assistance. This approach was proposed by President Clinton in 1994, and incorporated into numerous state demonstration projects approved by the Administration prior to the new welfare law. The law also supports the creation of Second Chance Homes, which will provide teen parents with the skills they need to become good role models and providers for their children, giving them guidance in parenting and in avoiding repeat pregnancies. The welfare law also provides \$50 million a year for five years in new funding for state abstinence education programs. The Balanced Budget Act of 1997 provides funding for a national evaluation of the program. Finally, the new welfare law includes the tough child support enforcement measures President Clinton proposed in 1994, which will send the strongest possible message to young girls and boys that they should not have children until they are ready to provide for them.

Supporting Promising Approaches. The Clinton Administration continues to support innovative teen pregnancy prevention strategies tailored to the unique needs of communities. HHS-supported programs in this area already reach about 30 percent, or 1,410 communities in the United States. HHS programs are based on five principles: parental and adult involvement; strong messages of abstinence and personal responsibility; clear strategies for young people's futures; involvement by all facets of the community; and a sustained commitment to young people.

Building Partnerships. As part of the strategy, HHS is working to build partnerships with national, state, and local organizations. HHS is working with national youth-serving organizations to use their networks to promote activities that provide girls and boys opportunities for the future, including encouraging abstinence; with organizations working on behalf of teenagers with disabilities; and with the National Campaign to Prevent Teen Pregnancy, the private-sector group that has responded to President Clinton's challenge on this issue.

Improving Data Collection, Research, and Evaluation. The national strategy is working to improve data collection, research, and evaluation to further our understanding of the magnitude, trends, and causes of teen pregnancies and births; to develop targeted teen pregnancy prevention strategies; and to assess how well these strategies work.

Disseminating Information on Innovative and Effective Practices. Sharing information about promising and successful approaches is critical to expanding teen pregnancy prevention efforts across the country. Through the national strategy, HHS continues to work with its partners to highlight innovative practices at the federal, state, and local levels and to disseminate new research and evaluation findings. The Department is also working to disseminate new information on the developmental needs of youth and on the use of broad-based activities to help teenagers avoid risky behaviors leading to teen pregnancy.

Sending a Strong Abstinence Message. The national strategy places a special emphasis on sending a strong abstinence message. As part of this effort, Secretary Shalala in May 1997 announced two new community grant programs to prevent teen pregnancy and promote responsible behavior. One program is aimed at teenage girls and the other at teenage boys. The grant program for girls is also part of the Secretary's Girl Power! campaign. Each of the grant programs totals about \$1 million per year, and involve public-private partnerships organized by individual communities.

In addition, the national strategy is focusing on boys and young men, by working to increase understanding of motivations for both abstinence and fatherhood and by developing effective prevention strategies for boys. These efforts include working with the Administration's Fatherhood Initiative to ensure that men, including pre-teen and teenage boys, receive the education and support necessary to postpone fatherhood until they are emotionally and financially capable of supporting children. The strategy is also building on existing HHS efforts, such as the Title X Adolescent Male Initiative, that promote responsible behavior among teenage boys.

Additional HHS Programs

- **The Community Coalition Partnership Program for the Prevention of Teen Pregnancy** is one of HHS's most comprehensive and innovative teen pregnancy prevention programs. In 1995,

the Centers for Disease Control and Prevention awarded grants to community-wide coalitions in communities with high rates of teen pregnancy. CDC awarded approximately \$250,000 per year for two years to 13 communities in 11 states to help these communities mobilize and organize their resources to support effective and sustainable teen pregnancy prevention programs. For FY 1998, a total of \$13.7 million was made available to help the 13 community coalition partnerships implement their action plans and evaluate their impact, as well as to support related data collection, evaluation, and dissemination activities.

- **Reproductive Health and Family Planning Services** (under Title X of the Public Health Service Act) are provided to nearly 5 million persons each year, nearly one third of whom are under 20 years of age. Abstinence counseling and education are an important part of the Title X service protocol for adolescent clients. The program has also launched an adolescent male initiative called the "Young Men/Family Planning Partnership Training Program." Under this initiative, Title X clinics employ male high school students as interns while also providing training in clinic operation and peer education; assisting in identifying career paths in allied health and related occupations; and increasing their use of services in a family planning setting. A second effort in this initiative is outreach beyond the traditional family planning provider network to organizations committed to working with young men. As part of this effort, the HHS Office of Population Affairs supports research grants to male-oriented organizations that wish to add family planning education services for young men in their existing programs.
- **Healthy Schools, Healthy Communities**, a Health Resources and Services Administration program created in 1994, has established school-based health centers in 26 communities in 20 states to serve the health and education needs of children and youth at high risk for poor health, teenage pregnancy, and other problems.
- **The Social Services Block Grant (SSBG)** (under Title XX of the Social Security Act) provides funding to prevent, reduce, or eliminate dependency; achieve or maintain self-sufficiency; prevent neglect, abuse, or exploitation of children and adults; prevent or reduce inappropriate institutional care; and provide admission or referral for institutional care when other forms of care are inappropriate. SSBG Grants are made directly to the 50 states, the District of Columbia, and Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands to fund social services tailored to meet the needs of individuals and families residing within each jurisdiction.
- **The Community Services Block Grant**, which operates in all 50 states, the District of Columbia, and the territories, enables local community agencies to provide low-income populations, including youth at risk, with job counseling, summer youth employment, GED instruction, crisis hotlines, information and referral to health care, and other services.
- **The Independent Living Program**, run by the Administration for Children and Families, provides funds to states to support activities ranging from educational programs to programs that help young people who are making the transition from foster care to independent living to avoid early parenthood. This program supports activities in all 50 states and the District of Columbia.
- **Youth Programs** including Runaway and Homeless Youth Programs, Transitional Living Programs, and the Youth Sports Program, address a wide range of risk factors for teen pregnancy. Together, these programs operate in 620 communities in 50 states and the District of Columbia.
- HRSA's **Healthy Start** program has 62 projects to reduce infant mortality in the highest-risk areas and to improve the health and well-being of women, infants, and their families. Among a broad array of services provided (including state prenatal hotlines), thousands of teenagers participate in prevention programs exclusively designed for adolescents. The programs encourage healthy lifestyles, youth empowerment, sexual responsibility, conflict resolution, goal setting, and the enhancement of self-esteem.
- **Maternal and Child Health Services Block Grant** (Title V) funds support a variety of

adolescent health programs in 57 states and jurisdictions, including adolescent pregnancy prevention programs, state adolescent health coordinators, family planning, technical assistance, and other prevention services.

- **The Adolescent Family Life Program (AFL)**, created in 1981, supports research into the causes and consequences of adolescent pregnancy; demonstration projects that provide health, education, and social services to pregnant and parenting adolescents, their children, male partners, and families; and programs aimed at promoting abstinence among pre-adolescents and adolescents as the most effective way of preventing adolescent pregnancies, sexually transmitted diseases, and HIV/AIDS. During FY 1998, AFL supported a total of 83 demonstration projects.
- **Empowerment Zones and Enterprise Communities** in 105 rural and urban areas in 43 states and the District of Columbia have been awarded grants to stimulate economic and human development and to coordinate and expand support services. As they implement their strategic plans, some sites are including a focus on teenage pregnancy prevention and youth development.
- **Health education in schools** supports the efforts of every state and territorial education agency to implement school health programs to prevent the spread of HIV and sexually transmitted diseases (STDs). Assistance is also provided to 13 states to build an infrastructure for school health programs. Efforts are targeted at preventing early sexual activity, STDs, HIV, drug and alcohol abuse, tobacco use, and injuries.
- **Community and Migrant Health Centers**, including family and neighborhood health centers, operate in 3,032 community-based sites through 685 center grantees in all 50 states, the District of Columbia, and six territories. The centers provide primary and specialized health and related services to medically underserved adolescents. Some centers include special hours or clinics for adolescent patients.
- **Indian Health Service (IHS)** provides a full range of medical services for American Indians and Alaska Natives. IHS supports projects targeted at preventing teenage pregnancy, and its prevention and treatment programs also have a special emphasis on youth substance abuse, child abuse, and women's health care.
- **Drug Treatment and Prevention Programs** include services to prevent first time and repeat pregnancies among teenagers. One hundred twenty-two residential substance abuse treatment programs for pregnant and postpartum women, as well as women with dependent children, receive support to provide family planning, education, and counseling services in 39 States, the District of Columbia, and the Virgin Islands. Also, 25 programs to prevent substance use and other adverse life outcomes serve high-risk female teens in 13 States and the District of Columbia.
- **Health Care and Promotion** under Medicaid provides Medicaid-eligible adolescents under age 21 with access to a comprehensive range of preventive, primary, and specialty services within its Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program.
- **The Medicaid program** also funds family planning services at an enhanced match rate for states. The federal government pays 90 percent of state expenditures for Medicaid family planning services, while the state funds the remaining 10 percent. The enhanced match encourages states to fund family planning programs which include patient counseling and education concerning pregnancy prevention and reproductive health.

Evaluation and Research

HHS has conducted research, surveillance, demonstrations, and evaluations on an ongoing basis to gather and provide information and technical assistance on the magnitude, trends, and causes of teenage pregnancy and on prevention programs and approaches that work, including:

- **"Declines in Teenage Birth Rates, 1991-97: National and State Patterns,"** is a National Center

for Health Statistics report that brings together the latest and trend data to profile the teenage mother. It has birth rates for each state by race and Hispanic origin to help explain some of the differences across states.

- **"Beginning Too Soon: Adolescent Sexual Behavior, Pregnancy, and Parenthood"** is a two-volume comprehensive review completed for HHS by Child Trends, Inc. in June, 1995 of recent literature on teen sexual behavior, pregnancy and parenthood and the effectiveness of teen pregnancy prevention programs.
- As part of its **Youth Risk Behavior Surveillance System**, CDC helps states monitor critical health risk behaviors among teenagers, including sexual risk behaviors that result in HIV infection, other STDs, and teen pregnancy.
- The 1995 **National Survey of Family Growth**, released in May 1997, provides the latest and most comprehensive national data on fertility, contraception, marriage and cohabitation, infertility, adoption, maternity leave, medical services, breast-feeding, smoking and other factors that impact both teenage and adult women, and the health and well-being of their children. The study updates key trends, includes many new topics, and has significant new findings on teenagers. The findings of the 1995 survey showed that the long upward trend in teen sexual activity may finally have stopped with a slight decline between 1990 and 1995 in the percentage of teenagers who have had sexual intercourse. The survey also found a dramatic increase in the use of contraception at first intercourse.
- The **National Longitudinal Study of Adolescent Health** is a comprehensive study of adolescent health funded by HHS' National Institute of Child Health and Human Development (NICHD) of the National Institutes of Health and other HHS agencies. The study provides information about risky behaviors and resiliency factors in adolescents and about environmental influences, including parents, siblings, peers, schools, neighborhoods, and communities. Preliminary results of the study, released in September 1997, indicate that a feeling of personal connection to home, family, and school is crucial for protecting young people from a vast array of risky behaviors, such as cigarette, alcohol, and marijuana use, violent behavior, suicide, and sexual activity. The **National Survey of Adolescent Males**, supported by NICHD, OPA and other HHS agencies, is also providing relevant information on the behavior of young men and women.
- National Institutes of Health also conducts research and evaluation studies of promising interventions, including the "Adolescent Pregnancy Prevention Program", "Preventing Problem Behavior Among Middle School Students" program, and the "Research on Sexually Transmitted Diseases, Violence, and Pregnancy Prevention" (RSVPP) project.

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Jazz royalty: Duke Ellington, left, with trumpeter Louis Armstrong in New York in 1970 and with frequent collaborator Ella Fitzgerald, above, in Frankfurt in 1966

Ellington, including several other concerts, films, a book and a PBS special.

And that's only scratching the surface. From Washington to Moscow, America's most prolific and acclaimed composer is being celebrated with concerts, lectures, workshops, exhibits and album reissues.

Edward Kennedy "Duke" Ellington was born April 29, 1899,

Please see COVER STORY next page ►

with Ellington events

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New York Jazz at Lincoln Center program of concerts, ops and lectures is ongoing. Information call 212-9 or check out www.lincolncenter.org.

'Angin' With Duke: Lin- center Jazz Orchestra Vynton Marsalis, May n. (check local listings). anion album also will ores.

ack and Tan and Sym- In Black, American Classics, today, 1 and n. Two film shorts fea- llington. The first, from ds him trying to save io from bill collectors.

5% used illicit drugs, 25% smoked tobacco and 65% consumed alcohol.

► Only five of the movies examined were substance-free.

► Consequences of substance use typically were not shown; for instance, less than 15% of young characters who smoked marijuana or cigarettes experienced any apparent consequences of their use.

► 26% of movies portrayed illicit drug use in a humorous context.

► On a positive note, only

teen shootings last week.

Donald Roberts, a Stanford University professor who worked largely on the movie portion of the study released Wednesday, said, "There is no single cause for any human behavior."

And Peter Christenson, a Lewis and Clark College professor who worked on the music portion, said that finding one target to blame for the Littleton shootings is "silly. . . I hate this very simplified dialogue in the press."

Teen responsibility means fewer births

By Kim Painter
USA TODAY

Teen births continued a six-year decline, helping to drive the nation's overall birthrate to a record low in 1997, the government reports today.

The annual report on births also shows that more women than ever are getting early prenatal care and that the Caesarean-section rate is rising after a seven-year decline.

But policymakers are focusing on the teen numbers: 52.3 births per 1,000 teen girls in 1997, down 16% from 1991. The rate is down in every state.

Many see it as evidence of a successful push to get teens to postpone sex or handle it more responsibly.

"The credit really goes to the teen-agers," says Jacqueline Darroch, a researcher at the private Alan Guttmacher Institute in New York.

Guttmacher releases a report today showing that teen pregnancies — births, abortions and miscarriages — also continued to drop, hitting a 23-year low in 1996.

The pregnancy rate was 97.3 per 1,000 15- to 19-year-olds, a drop of 17% since 1990.

An unpublished Guttmacher analysis suggests that 20% of the drop is the result of fewer teens having sex, and 80% reflects better use of birth control, including new highly effective injections and implants, Darroch says.

Sarah Brown, director of the National Campaign to Prevent Teen Pregnancy, says she

hasn't seen the Guttmacher analysis, but "my hunch is that abstinence plays a larger role."

In any case, one force behind the trends is positive peer pressure, she says: "Kids are saying, 'Don't do it, or use a condom.' They're very blunt."

The government report also highlighted these 1997 findings:

► 3,880,894 babies were born, the fewest since 1987.

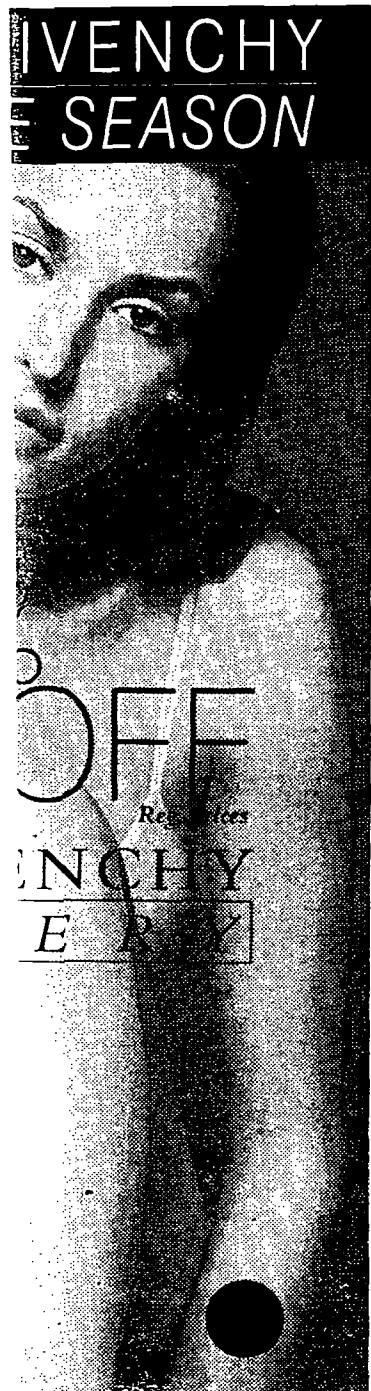
► The nation produced babies at the lowest rate on record — 14.5 for every 1,000 people. Looked at another way, there were 65 babies born for every 1,000 women of child-bearing age, matching a record low reached in 1976. The teen birth drop and the changing age structure of the population, with baby-boomer women aging out of their pregnancy years, contributed to the overall drops. But researchers say early 1998 figures suggest numbers are rising again.

► More pregnant women than ever, 82.5%, received medical care in the first three months.

► The proportion of babies born by C-section rose to 20.8%, reversing a seven-year decline. The change in part is because fewer women deliver vaginally after a previous C-section.

► The multiple-birth boom continued, with twins up 3% and triplets up 16% from 1996; births involving four or more babies became slightly less common.

► The birthrate for unmarried women dropped to 44 per 1,000, down 6% from its 1994 peak.



U.S. Birth Rate at New Low as Teen-Age Pregnancy Falls

By SHERYL GAY STOLBERG

WASHINGTON, April 28 — The teen-age birth rate, which has been dropping steadily for six years, has dipped so sharply that it has helped push the nation's overall birth rate to the lowest point since the Government began keeping records in 1909, according to data made public today by the National Center for Health Statistics.

The birth rate, calculated as the number of births per 1,000 people in a given group, is one measure of how the native-born population grows. The rate among girls ages 15 to 19 dropped 16 percent from 1991 to 1997, the most recent year for which figures are available. In one year alone, from 1996 to 1997, the rate dropped 4 percent.

In absolute numbers, there were fewer babies born in 1997 — 3.88 million, nearly 500,000 of them to teen-agers — than in any year since 1987, the center said. It cited the declining teen-age birth rates, coupled with the aging of the general population, as the reasons the overall birth rate in 1997 dropped to a low of 14.5 births per 1,000 Americans.

The previous low of 14.6 per 1,000 was recorded in 1975 and 1976, said Stephanie Ventura, a demographer with the health statistics center. By comparison, Ms. Ventura said, the birth rate in 1957, at the height of the

baby boom, was 25.3 per 1,000.

The dip does not forecast a decline in population, demographers say, because it does not account for the influx of immigrants and because American women are still having enough babies, about two per couple, to replenish the population.

"What this means is that births will make a smaller contribution to our annual growth rate than they have in the past," said Carl Haub, a demographer at the Population Reference Bureau, a nonprofit research institution here.

The sustained declines in teen-age births were seen as good news by the Clinton Administration, which cited the new figures as evidence that teen-age pregnancy prevention programs are working.

"Communities and parents all across America have joined with us to help our young people understand that they should delay parenthood until they are ready to nurture and support a child of their own," said Donna E. Shalala, the Secretary of Health and Human Services.

Vice President Al Gore, who is scheduled to discuss the figures on Thursday at the White House in a public meeting with teen-agers, said in a prepared statement, "This good news shows us that when Americans come together in support of our basic values, we can send a clear message

Births and immigration will assure the continued growth of the nation.

that our children should not be having children."

But experts say teen-agers, as much as their parents or other adults, are responsible for the drop. Studies show young people are delaying sex until they are older, having sex less frequently and using birth control more often, and more responsibly. The Alan Guttmacher Institute, a research organization that has analyzed the trends, cited teen-agers' use of Norplant, the contraceptive implant, and Depo-Provera, an injectable contraceptive that became available in the early 1990's, as important reasons for the decline.

"Many groups want to take credit for the drop in teen-age pregnancy, but the credit truly goes to the teen-agers," said Jacqueline E. Darroch, the institute's vice president, in a statement accompanying a study to be released Thursday. "About 20 percent of the decrease since the late 1980's is because of decreased sexual

activity, and 80 percent of the decrease is because of more effective contraceptive practice."

The teen-age birth rates dropped in all 50 states, although they vary considerably from state to state, with Vermont having the lowest rate, 26.9 births per 1,000, and Mississippi the highest, 73.7 per 1,000. There were declines in all racial and ethnic groups, but the greatest dips were recorded among Puerto Rican and non-Hispanic black teen-agers, for whom the rate dropped about 25 percent during the six-year period.

"The teen birth rate is the only age group where we have seen a sustained decline in the birth rate since the early 1990's," said Ms. Ventura, who is the co-author of the center's latest analysis of state-by-state birth data, from which the statistics made public today are drawn. "The rates for women in their 20's have been flat, and for women in their 30's, the rates are increasing."

Out-of-wedlock births also declined for the third year in a row, and the birth rate for unmarried black women is lower now than in any year since 1969, when it was first calculated, the center found. Births to unmarried women declined slightly in 1997 but still accounted for 32 percent of overall births. Among teen-agers, 78 percent of new mothers were unwed.

Federal Panel Set to Urge Moratorium on Spread of Gambling

Continued From Page A1

could face tough opposition. Before the recommendations could take effect, they would have to be approved

One of the most heated debates here today concerned whether a moratorium should be imposed on expansion of gambling, which would include any form of gambling a state or local jurisdiction does not current-

are likely to oppose any further efforts to do so.

Besides the content of the report, commission members are also wrestling with its tone.

"What's missing in my view is an

casino industry plays in society.

"At one time gambling was rare and considered extraneous," said Richard C. Leone, the former New Jersey Treasurer and now president

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Teen pregnancy rate continues to fall

April 29, 1999

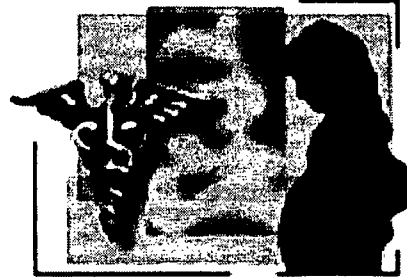
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Record low national birth rate

Analyzing reasons for decline

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WASHINGTON (AP) -- Talking about sex isn't easy for Laverne Coates, and she would rather assume that her daughter isn't having it.

"I don't want to hear about it," she said. "I don't want to know about it."

She's made it clear, though, that pregnancy is not acceptable, and somehow, her daughter Tamara got the message. Tamara has been having sex for two years, she says, but she always uses contraception.

"To me, having a child in high school is not fun," Tamara Hayman, 18, of Baltimore said in an interview.

ALSO

State-by-state statistics on teen pregnancy

Evidently, a lot of teens are getting the message: Teen pregnancy plummeted 17 percent in the 1990s to the lowest level since 1973, according to statistics being released today. Teen abortion rates were down, too.

"We have made real progress -- and must do more -- to encourage more young people to delay parenthood," said Vice President Al Gore, who plans a roundtable discussion with teen-agers at the White House today.

Researchers point to a mix of reasons, including more reliable contraception, fear of AIDS, a new focus on abstinence and even the strong economy.

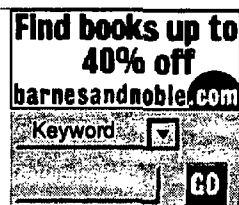
And there's fresh evidence that the peer pressure so many parents worry about actually does more good than harm.



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about actually does more good than harm.

Record low national birth rate

Two new reports document the decline. New statistics from the Department of Health and Human Services show that births to teen-agers fell 4 percent in 1997, helping to push the national birth rate for all women to a record low.

And a report from the Alan Guttmacher Institute finds teen pregnancy dropped 4 percent in 1996 and fell 17 percent from its peak in 1990. The Guttmacher statistics combine the birth data with statistics on abortion and estimates for miscarriages.

The HHS report, which looks at a host of birth data, also found a new record low for births to unmarried black women and a continued decline in out-of-wedlock births in 1997. The year saw a record high for women getting early prenatal care and a record low rate of women smoking during pregnancy, down to 13.2 percent.

Nationwide, there were about 880,000 teen pregnancies in 1996 -- just under one for every 10 teen women. Sixty-two percent of them were 18- and 19-year-olds; the rest were 15 to 17 years old. The report did not look at teens under 15.

About one in three pregnancies were aborted, as the teen abortion rate dropped 3 percent in 1996. It fell 31 percent from 1986.

Analyzing reasons for decline

Most of the decline in pregnancy is due to increased use of birth control, said Jacqueline E. Darroch, a vice president at Guttmacher, a private research group. She noted that 11 percent of 15- to 19-year-olds now use long-acting, highly effective birth control methods such as Depo-Provera shots.

Condom use also increased as fear of AIDS spread in the '90s. And national surveys point to decreased teen sexual activity as well.

Other explanations are harder to pin down, including an explosion of abstinence and pregnancy prevention programs and a strong economy that may be giving teens more hope for the future. Also, for the first time, research suggests positive peer pressure may be stronger than the negative pressures parents usually fear.

Hanging out with friends who do well in school and don't drink or smoke will help a teen avoid pregnancy, researchers found. But, contrary to many parents' fears, hanging out with kids who engage in these and other risky behaviors doesn't make much difference, said Brad Brown of the University of Wisconsin, who analyzed a federal survey of teens for the National Campaign to Prevent Teen Pregnancy.

U.S. rates comparatively higher than some nations

Still, some at the campaign are concerned that people believe the teen pregnancy problem has been solved. They note that U.S. rates are still higher than those of other industrialized nations.

Tamara Kreinin, who travels the country for the campaign, worries that condom use will decline as fear of AIDS recedes. "What I'm hearing from kids is you don't die from AIDS any more," she said.

But HHS Secretary Donna Shalala was more optimistic.

"I don't think people are that naive about American teen-agers," she said. "We need to keep the same focus and philosophy and send consistent messages to every generation."

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Los Angeles Times

February 13, 1998, Friday, Home Edition

SECTION: Part A; Page 1; National Desk

LENGTH: 878 words

HEADLINE: LATINA TEENS DEFY DECLINE IN BIRTHRATES

BYLINE: MELISSA HEALY, TIMES STAFF WRITER

DATELINE: WASHINGTON

BODY:

Bucking a national trend toward declining teen birthrates, young Latinas are bearing children at higher rates than any other ethnic group, according to 1995 figures released Thursday by the National Center for Health Statistics.

Soaring birthrates among teens of Mexican origin propelled the increase. These teens gave birth at more than twice the rate of the nation's teens as a whole and more than three times the rate of white teenagers, according to the report.

The 1995 survey of births by ethnicity marks the first time that the childbearing level for Latina teens has surpassed that of blacks. From 1989 to 1995, births to Latina teenagers rose 32% even as teen birthrates declined among non-Latina black and white teens.

For Southern California and other areas with dense concentrations of Latinos, the new figures support projections of potentially explosive population growth, not only because of this group's high birthrate but also because childbearing at a young age means generations are more closely spaced. California was the birthplace of 37% of those Latinos born in the United States during 1995.

*

Demographers have projected that California's Latinos, who now constitute 30% of the state's population, will become an absolute majority by 2040 thanks to a combination of heavy immigration and high birthrates.

Women of Mexican origin from 15 to 19 years of age gave birth in 1995 at a rate of 125 children per 1,000 women. The comparable figure was 39 for non-Latina white teenagers and 99 for blacks.

According to the NCHS report, the number of babies born nationwide to women of Latino descent has risen every year since 1989. In that year, 14% of all babies born in the United States were Latino. By 1995, that figure had risen to 18%. On average, according to the report, women of Mexican origin have 3.3 children, compared with 1.8 for non-Latina whites and 2.2 for non-Latina

Los Angeles Times February 13, 1998, Friday,

blacks.

The National Center for Health Statistics, which prepared the report issued Thursday, is the statistical arm of the Centers for Disease Control and Prevention. It is the nation's most authoritative tracker of health and fertility rates.

Analysts there suggested that the high rate of births to Latinas reflected more than a propensity toward early childbearing. Latinas report that a relatively high proportion of their pregnancies are wanted, and those who have unplanned pregnancies are reluctant to seek abortions.

While these trends are apparent among all subgroups of Latinas, they are strongest among women of Mexican origin--a population that is much larger than those from Puerto Rico, Cuba and South and Central America.

In addition, Latinas in 1995 had a lower rate of contraceptive use (59%) than non-Latina whites (66%) and blacks (62%). Investigators, however, uncovered one seeming contradiction: The rise in Latina birthrates comes at a time when rate of contraceptive use among this group has been on the rise.

Among health care providers operating in Los Angeles' Latino communities, the news of the rising teen birthrates came as little surprise. But clinic directors such as Chiyo Maniwa, director of Project NATEEN in Hollywood, say its causes are as varied as the population itself.

Maniwa cited cultural preferences for larger families, the role of the Catholic Church in discouraging contraception and abortion, and economic and educational obstacles that prompt some Latinas to choose early childbearing.

She added that many teens served by her organization have suffered from disruptions in their family relationships, with parents having left them behind as children to seek work in the United States

"Many of our teens are very isolated, their family connections are very loose or limited," said Maniwa. "Some whose mothers came first, they were left in South America and are not bonded."

In 1995, 21% of babies born to non-Latina white women of all ages were born out of wedlock, while 70% of children born to non-Latina black women were born outside of marriage.

Latinas ranged between these two poles, with 38% of Mexican-origin children, 44% of Central and South American children and 60% of Puerto Rican children born out of wedlock.

The study also reported a "dramatic increase in timely prenatal care" among Latinas, up 19% from 1989 to 1995. It noted that this improvement left Latina mothers at a level of prenatal care similar to that of blacks and well below that of non-Latina whites.

While one clinic director in Los Angeles hailed that advance, she warned that the trend may have reversed since 1995. Alice Heidy, executive director of the Clinica Para Las Americas in Los Angeles, said many immigrant women have been scared to seek early prenatal care out of a growing fear that their

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immigration status could be affected or that they would be required to pay back past Medi-Cal expenses.

The 1996 welfare reform bill barred immigrants who had entered the country legally after August 1996 from access to publicly funded health and welfare benefits. Some regional offices of the Immigration and Naturalization Service and of the California Department of Health Services have sought to enforce such strictures on legal immigrants who arrived before that point as well.

LANGUAGE: English

LOAD-DATE: February 28, 1998

Birthrate Drops for Teens of All Races

By JUDITH HAVEMANN
Washington Post Staff Writer

AI

The percentage of teenage girls having babies declined for the sixth year in a row, falling in every state and the District of Columbia, and among every major racial and ethnic group for the first time, the federal government reported yesterday.

Although nearly half a million American teenagers still give birth every year, the overall rate has fallen 12 percent since 1991.

The birthrate for African American teenagers is down 21 percent since the beginning of the decade to the lowest level ever reported.

The rate for Hispanics, the nation's fastest-growing minority group, remains the highest, but the new statistics show it falling for the first time, by 4.8 percent between 1995 and 1996.

"These are not isolated statistics from certain parts of the country," said Health and Human Services Secretary Donna

E. Shalala. "In every state, teen pregnancy rates are starting to come down because we have sent a consistent message to young people that having sexual activity before they are ready to take on permanent responsibilities is unacceptable."

Researchers and others who study teenage pregnancy attributed the decline to a combination of factors, but said they suspect the chief reason is that

See BIRTHS, A8, Col. 1

BIRTHS. From A1

teenagers are having less sex and using more contraceptives. Researchers also found the first evidence of relatively widespread use of injectable and implanted contraceptives. These methods are used by nearly 25 percent of sexually active black teenagers, the study found.

The teenage birthrate is an important barometer because women who give birth at very young ages are far more likely to have babies with low birth weights than older mothers. They are also more likely to impair their own emotional and psychological development and their ability to become economically self-sufficient.

Moreover, children born to teenage mothers are more likely to struggle academically, drop out of school, go to prison and wind up on welfare than children born to older women.

The pattern is emerging at a time of increased national attention to the issue of teenage sex and pregnancy. The new welfare law contains provisions aimed at reducing the level of sexual activity among young mothers and numerous programs around the country are focused on the issue.

Overall, white teenagers are still less apt to have a child than either blacks or Hispanics. Among non-Hispanic whites, 3.9 percent gave birth, compared with 10.2 percent of Hispanics and 9.2 percent of blacks.

The black rate has been going down since 1991; the Hispanic rate has fallen only for a single year.

The figures, released by the National Center for Health Statistics, cover women ages 15 to 19.

Teenage births represented about 12.6 percent of all births in

1996, a figure essentially unchanged since 1991. Out-of-wedlock birth rates for adult women in their peak child-rearing years are considerably higher than the rates for teenagers and have not fallen during the decade.

"Teen birth rates have dropped everywhere, but in some places more than others," said Stephanie J. Ventura, the principal researcher for the study. The biggest declines have been in the northern states of both the North and Midwest.

States reported widely differing levels of teenage births. Vermont has the lowest rate, with only 2.8 percent of teenagers giving birth, compared with 10.5 percent in the District of Columbia. Virginia reported a rate of 7.5 percent, and Maryland's rate was 7.2 percent.

Over the past half-century, the teenage birth rate has reflected the dramatic changes in American society. The rate was highest in 1957—roughly similar to the current Hispanic rate—when early marriage and childbearing were commonplace. But the rate fell until the mid-1980s, and then began a steady rise that continued until 1991.

Kristin Moore, the president of Childtrends, a research group, said the trend toward lower teenage birthrates brings the United States back in line with other modern industrial economies. But the why is less clear. "There are an expanding number of programs out there," she said, "but we don't have the definitive answer as yet."

Debbie-
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The Washington Post

FRIDAY, MAY 1, 1998

Birth Rates for Teen-Agers Declined Sharply in the 90's

By TAMAR LEWIN

In a trend that some credit mostly to abstinence education and others to better use of contraception, teen-age birth rates nationwide declined substantially from 1991 to 1996.

According to the National Center for Health Statistics, the sharpest declines were among black teen-agers, until recently the group with the highest level of births.

While black teen-agers still have babies at almost twice the rate of whites, their birth rate declined 21 percent from 1991 to 1996, and is now at the lowest level ever reported.

There were 91.7 births for every 1,000 black teen-age women ages 15 to 19 in 1996, while whites had 48.4 per 1,000, and Hispanic teen-agers had 101.6.

"What's significant is that these declines are in every state," said Donna E. Shalala, Secretary of Health and Human Services. "I give a lot of credit to the African-American community, which has put out a clear, consistent message from the churches, the schools and all sorts of civic organizations, a drumbeat to young women and young men that they should not become parents until they are truly ready to support a child, that having children too early will limit their options."

Over all, in 1996, the teen-age birth rate was 54.7 for every 1,000 young women ages 15 to 19, down 11.9 percent from the 1991 rate of 62.1.

Although the 1996 numbers were previously reported as part of the Centers for Disease Control and Prevention's vital statistics report last fall, the special five-year report Dr. Shalala issued yesterday placed a spotlight on the decline in teen-age births.

Isabel Sawhill, president of the National Campaign to Prevent Teen Pregnancy, a private nonpartisan initiative, said: "Birth rates went up sharply from 1986 to 1991, and then they started coming down again. Nobody knows for sure why this is occurring. We're not sure why they popped in the first place, and anything that pops up can pop down again. But we do know that behind this drop in birth rates is both an increase in contraception and a reduction in sexual activity, the first reduction in decades and decades."

Experts of every political stripe heralded the declines and agreed that the last few years were the end of an era in which teen-agers started

sexual intercourse at ever-earlier ages — a trend extending from the 1950's, when 27 percent of women turning 18 had had sex, to the mid-1980's, when 56 percent had done so.

Pregnancy and abortion rates among teen-agers are dropping, too, but there is no consensus about what is behind those declines.

Conservative groups, like Focus on the Family, in Colorado, say that abstinence education turned the tide.

"We believe abstinence has played the central role in what's happening," said Amy Stephens, a spokeswoman for Focus on the Family.

"Privately funded abstinence programs started in the late 1980's and went on in the 1990's, and now there is Federal funding for programs that give kids a direct message about what we want them to do. Kids respond when they get a direct message instead of the mixed message that if you're going to have sex, you should use a condom, but oh, also, we don't think you should have sex."

But groups like the Alan Guttmacher Institute, a nonprofit research and education group in New York, emphasize the effects of better contraception.

"Now that the level of sexual activity is not increasing, we're seeing the result of more widespread and more

effective contraceptive use," said Jacqueline E. Darroch, the institute's senior vice president for research. "The proportion of sexually active teen girls using contraception, even at first intercourse, is increasing. My sense of why the black teens' birth rate is declining the fastest is that they are the most likely to use long-lasting contraceptives like Norplant and DepoProvera, which are very reliable."

Nearly 500,000 babies were born to those ages 15 to 19 in 1996 and 11,000 more to girls 14 and under.

Teen-age mothers are much less

likely than older women to receive timely prenatal care or gain the recommended weight during their pregnancy, and much more likely to smoke and have a low-birthweight infant, according to the National Center for Health Statistics.

The level of teen-age births was far higher in the 1950's and 1960's: the historic high point for such births was 1957, when there were 96 births per 1,000 women ages 15 to 19. But in those days, the vast majority of teen-age mothers were married, while today, the vast majority are single.

Teen-age birth rates vary greatly

by state, with many Northern states like Vermont, New Hampshire, Minnesota, North Dakota, Maine and Massachusetts having fewer than 35 births per 1,000 teen-age women, less than half the rate of Southern and Western states like Alabama, Arizona, Georgia, Mississippi, New Mexico, and Texas. The District of Columbia has the highest teen-age birth rate, 105.5 births for every 1,000 women ages 15 to 19, down from 114.4 in 1991.

Despite the declining rates, the United States still has by far the highest rate of teen-age births of any

industrialized nation.

Ms. Sawhill's group released research yesterday showing that parents have great influence on teen-agers' sexual decision-making.

The group said parents could help prevent teen-age pregnancy by talking candidly to their children about sex from an early age and being clear about their own values, supervising their adolescents' after-school activities, discouraging one-on-one dating before age 16, and stopping teen-agers from dating anyone who is not within two or three years of their own age.

The New York Times

FRIDAY, MAY 1, 1998

NEW YORK TIMES, July 1, 1998

Birth Rate for Unmarried Black Women Is at 40-Year Low

Related Articles

Teen-Age Birth Rates Decline Significantly (May 1)
Rules Set in Effort to Reduce Some Births (March 3)

By STEVEN A. HOLMES

WASHINGTON — The birth rate for unmarried black women, long a focal point in the debate over the causes of poverty among blacks, has reached its lowest point in 40 years, federal health officials said Tuesday.

According to figures compiled by the National Center for Health Statistics there were 74.4 births per 1,000 unmarried black women in 1996, the last year for which complete data are available. That rate is significantly below the peak of 90.7 per 1,000 unmarried black women in 1989.

Tuesday's report showed that the out-of-wedlock birth rate has been dropping for all age groups of black women. Demographers and health officials said that the reasons — an increase in contraceptive use, sex education and efforts by some community groups to encourage abstinence — should allow the trend to continue.

"There's just been no let up, and it's not been slowing down," said Stephanie Ventura, a demographer with the National Center for Health Statistics who wrote the report. "And it's not just for teen-agers. For all black women under 30, the declines have been really big."

The figures on fertility rates for unmarried black women are part of an annual report on births compiled by the National Center for Health Statistics, a division of the federal Centers for Disease Control and Prevention. Using data from birth certificates submitted by the states, the report analyzed the 3.9 million births that occurred in 1996 and highlighted a number of trends, including these:

- Fewer babies were born that year than in any year since 1987, part of a continuing decline that put the number of births at 6 percent below the recent high point, which was 1990.

- The number of women having multiple births rose sharply, and resulted in 5,298 sets of triplets, 560 sets of quadruplets and 81 sets of quintuplets. The multiple births contributed to a 10 percent increase in the number of low birth-weight babies since 1984.

- Smoking among pregnant teen-agers increased, particularly among Mexican, Puerto Rican and African-American teen-agers, though overall smoking during pregnancy continued to decrease.

But, one of the most closely watched numbers is the out-of-wedlock birth rate for black women, long considered one of the clearest indicators of many problems that have plagued poor black communities. The decline in that rate is part of a continuing decrease in the birth rate among all black women — teen-age and adult, married and unmarried. There has even been a small but notable decrease in the overall birth rate among unmarried women, to 44.8 per 1,000 in 1996 from 46.9 per 1,000 in 1994. That stems from a drop in the birth rate among unmarried white women, which had more than doubled from 1980 to 1994 before it began to drop, hitting 37.6 per 1,000 women in 1996.

The fact that the out-of-wedlock birth rate among blacks is lower now than it was in the 1950s and 1960s surprised even experts who follow these trends.

"If you had asked me about that before these data came out, I would not have been aware of that," Jacqueline Darroch, vice president for

Research at the Alan Guttmacher Institute. "And I don't think it people would be either."

Ms. Darroch and federal health officials gave a number of reasons for the decrease in the out-of-wedlock birth rate for black women that included improved contraceptive use, especially a sharp increase among African-American women of passive, long-acting birth control methods such as Norplant, Depo-Provera and intrauterine devices.

Some health officials also say that stepped up efforts by community groups to provide sex education or help young black women abstain from sex are beginning to pay off. And some said that the AIDS epidemic is causing more black women to take precautions like using condoms that can also lower the pregnancy rate.

"We really did scare people," said Donna Shalala, secretary of health and human services. "The remarkable increase in condom use by African-Americans is directly attributed to AIDS."

Changes in the welfare system have not been a significant factor, according to some people who monitor fertility rates. Noting that out-of-wedlock birth rates for black women have been dropping steadily since 1989, they assert that the decline started before states and the federal government enacted welfare reform measures.

"This is happening at a time when the economy is improving," said Kristin Moore, president of Child Trends, Inc., Washington-based research and advocacy group. "We're seeing a trend that predated welfare reform, so I would more likely look at the economy as a hypothesis rather than welfare reform."

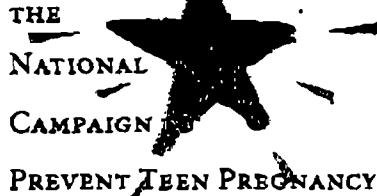
Even as the number of unmarried black women bearing children has been dropping, the percentage of black children who are born out-of-wedlock remains high. It was 69.8 per cent of black births in 1996. The comparable figures for non-Hispanic whites was 21.5 percent and for Hispanic women, 40.7 percent.

Demographers say the government has kept accurate birth statistics by race and marital status since 1955. Until 1969, the statistics lumped black women into a category that included all racial minorities, but experts say the vast portion of births to nonwhites in those years were to black women. The previous low birth rate for unmarried black women was 75.2 per 1,000 in 1984.

Some experts said that the percentage of children born outside of marriage was more meaningful than the birth rate of unmarried women as a sign that too many African American children are being raised in environments where they are most at risk to become engaged in crime, drug abuse, or other anti-social behavior.

"If you care about the link between black poverty and children in single-parent households, you want to know what percentage of black babies are born into one-parent households," said Stephan Thernstrom, co-author of "America in Black and White: One Nation Indivisible." "I don't think there's been a decline in that. That would be real news."

END



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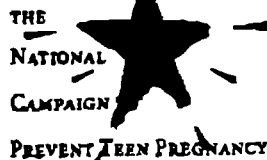
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Here are some teen pregnancy
stats. you will definitely find
helpful. The first is a key
Statistics Fact Sheet published by
the Campaign and the second is
national trends fact sheet published
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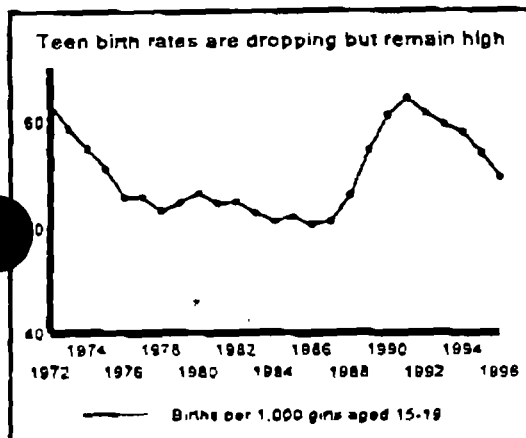
TEEN PREGNANCY

Key Statistics

How bad is the problem?

☆ The United States has the highest rates of teen pregnancy and births in the western industrialized world. Teen pregnancy costs the United States at least \$7 billion annually.¹

☆ More than 4 out of 10 young women become pregnant at least once before they reach the age of 20—nearly one million a year.² Eight in ten of these pregnancies are unintended³ and 80 percent are to unmarried teens.⁴



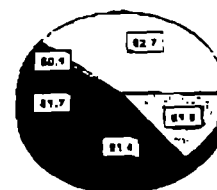
☆ The teen birth rate has declined slowly but steadily for five years. In 1986, the birth rate reached 50.2 births per 1,000 females ages 15-19, its lowest point in more than half a century. Between 1986 and 1991, the teen birth rate rose by one-fourth, peaking at 62.1 per 1,000 females in 1991. Since 1991, the rate has declined by approximately 12 percent, to 54.7 per 1,000 in 1996.⁵

☆ The younger a sexually experienced teenage girl is, the more likely she is to have had unwanted or non-voluntary sex. Close to four in ten girls who had first intercourse at 13 or 14 report it was either non-voluntary or unwanted.⁶

Who suffers the consequences?

☆ Teen mothers are less likely to complete high school, (only one-third receive a high school diploma)⁷ and more likely to end up on welfare (nearly 80 percent of unmarried teen mothers end up on welfare).⁸ The children of teenage mothers have lower birth weights,⁹ are more likely to perform poorly in school,¹⁰ and are at greater risk of abuse and neglect.¹¹ The sons of teen mothers are 13 percent more likely to end up in prison while teen daughters are 22 percent more likely to become teen mothers themselves.¹¹

Taxpayers pay a high price for teen childbearing
Total: \$6.9 billion (2,831 per teen parent)



(estimated annual costs to taxpayers of teen childbearing, 1994 dollars)

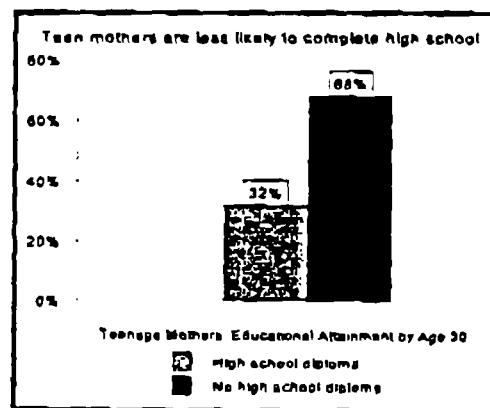
Lost Tax Revenue (\$2.7)

Public Assistance Expenditures (\$0.1)

Health Care Costs for the Children of Teen Mothers (\$1.7)

Foster Care Costs (\$1.4)

Criminal Justice Costs (\$1.0)

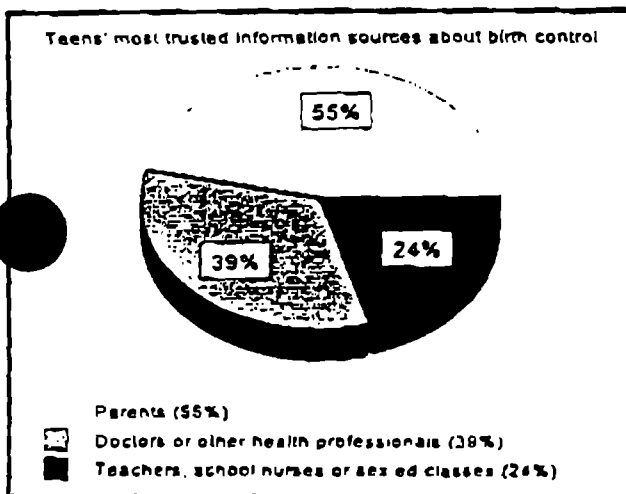
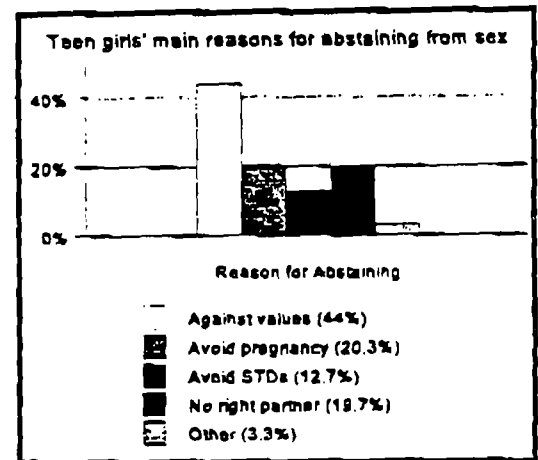


What helps prevent teen pregnancy?

☆ The primary reason that teenage girls who have never had intercourse give for abstaining from sex is that having sex would be against their religious or moral values. Other reasons cited include desire to avoid pregnancy, fear of contracting a sexually transmitted disease (STD), and not having met the appropriate partner.¹²

☆ Teenagers who have strong emotional attachments to their parents are much less likely to become sexually active at an early age.¹³

☆ Most people say teens should remain abstinent but should have access to contraception. Ninety-five percent of adults in the United States—and 85 percent of teenagers—think it important that school-aged children and teenagers be given a strong message from society that they should abstain from sex until they are out of high school. Almost 60 percent of adults also think that sexually active teenagers should have access to contraception.¹⁴



☆ Contraceptive use among sexually active teens has increased but remains inconsistent. Two-thirds of teens use some method of contraception (usually a condom) the first time they have sex.¹⁵ A sexually active teen who does not use contraception has a 90 percent chance of pregnancy within one year.¹⁶

☆ Parents rate high among many teens as trustworthy and preferred information sources on birth control. One in two teens say they "trust" their parents most for reliable and complete information about birth control, only 12 percent say a friend.¹⁷

☆ Teens who have been raised by both parents (biological or adoptive) from birth, have lower probabilities of having sex than teens who grew up in any other family situation. At age 16, 22 percent of girls from intact families and 44 percent of other girls have had sex at least once.¹⁸ Similarly, teens from intact, two-parent families are less likely to give birth in their teens than girls from other family backgrounds.¹⁹

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National Vital Statistics System **nchs**

From the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

Teenage Births in the United States: National and State Trends, 1990-96

by Stephanie J. Ventura, M.A.; Sally C. Curtin, M.A.; and T. J. Mathews, M.S.
Division of Vital Statistics

Overview

Every year in America almost 500,000 teenagers give birth. Most are unmarried and many are not ready for the emotional, psychological, and financial responsibilities and challenges of parenthood. Teenage childbearing has important health and social consequences for these young women, their babies, and their families. Recently, the teenage birth rate has declined in all States. Rates for black teenagers have dropped more than for any other population group. Contributing to this decline are indications that teenagers today are less likely to be sexually active, and sexually active teenagers are more likely to use contraception. This publication presents the latest statistics as well as trends on the important topic of teenage childbearing in the United States. Data are from the National Center for Health Statistics' (NCHS) National Vital Statistics System.

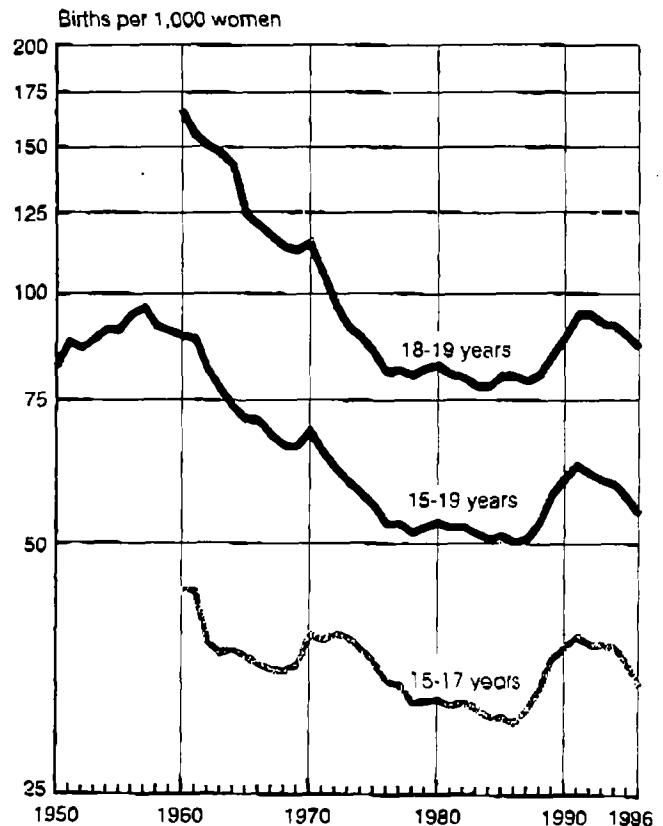
Patterns of teen childbearing can be examined in terms of numbers and rates of births. The numbers indicate how many teenagers gave birth in a given year. The teenage birth rate is defined as the number of births to a group of 1,000 teenagers. Rates among different population groups can be compared because they are all computed on the basis of 1,000 women. The number of births to teenagers is affected by both the birth rate (the proportion of teens giving birth) and the number of teen-aged women in the population. Therefore, trends in the birth rate and the number of births are not necessarily the same. To measure *pregnancies*, data on live births must be combined with information on induced abortion and fetal loss. Because abortion and fetal loss statistics are not as current as live birth statistics, this report focuses on trends in births, with a brief discussion of pregnancy trends.

Teenage Birth Rate Declines in 90's; Reverses Trend of the Late 80's

The U.S. birth rate for teenagers in 1996 was 54.7 live births per 1,000 women aged 15-19 years, down 4 percent

from 1995 (56.8). The teenage birth rate has declined steadily since 1991 when the rate was 62.1, an overall decline of 12 percent. These recent declines reverse the 24-percent rise in the teenage birth rate from 1986 to 1991 (figure 1 and table 1).

Figure 1. Birth rates for teenagers by age:
United States, 1950-96



NOTE: Rates are plotted on a log scale.



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Teenage Birth Rate in 90's Higher Than in Early 80's

Despite the recent declines however, the rate for 1996 is still higher than it was during the early to mid-1980's (50-53 per 1,000) when the rate was at its lowest point. The teenage birth rate was substantially higher in the 1950's and early 1960's than it is now. The highest recorded teenage birth rate was 96.3 in 1957.

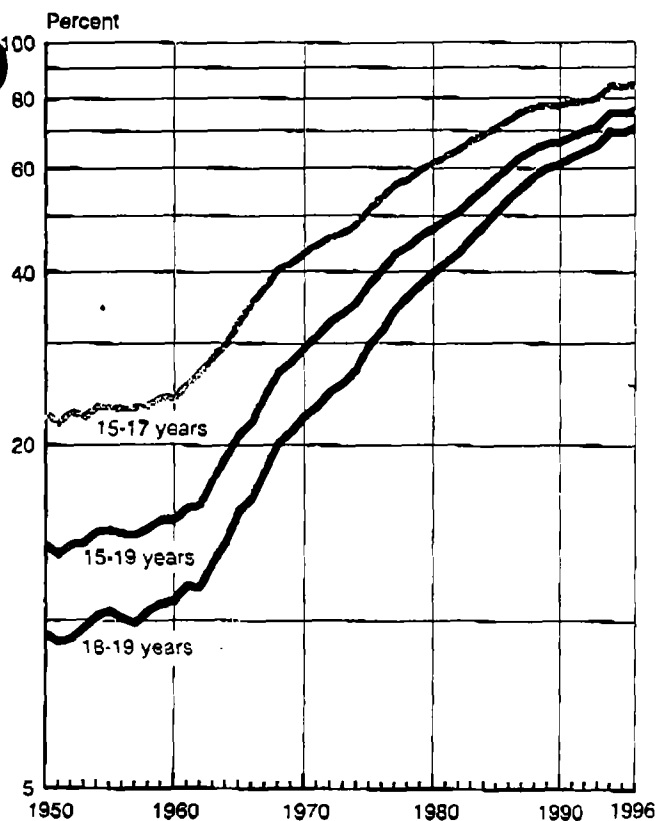
Most Teenage Mothers Are Unmarried

The issues in teenage childbearing are different now than in past decades. Most teenagers giving birth prior to 1980 were married, whereas most teenagers giving birth recently are unmarried (figure 2). The percent unmarried among teenage mothers 15-17 years more than tripled between 1950 and 1996, rising from 23 percent to 84 percent; among older teenage mothers, the percent unmarried in 1996 (71 percent) was nearly 8 times the percent in 1950 (9 percent).

The increases in the proportion of teenage mothers who are unmarried reflect the convergence of two important demographic trends:

- Sharply increasing birth rate among unmarried teenagers especially during the 1980's

Figure 2. Percent of births to unmarried teenagers by age: United States, 1950-96



NOTE: Percents are plotted on a log scale.

- Decline in marriage among teenagers since the mid-1970's

It is important to note, however, that while most teenage births are nonmarital, the majority of births to unmarried women are not to teenagers.

Teenage Birth Rates and Pregnancy Rates Fall

The teenage birth rate describes the number of births in a given year to a group of 1,000 teenagers. Thus, on average in 1996 (preliminary data), 55 out of 1,000 women aged 15-19 had a baby. Total teenage pregnancies include live births combined with estimates of induced abortions and fetal losses. Abortion and fetal loss data are not as current as the data on live births. According to the most recent estimates, the teenage pregnancy rate for 1994 was 108 pregnancies per 1,000 women aged 15-19 years, nearly twice the birth rate in that year (58.9). The pregnancy rate declined 8 percent from 1991 to 1994 and has continued to fall since 1994. This is based on the continued decline in the teenage birth rate and preliminary data that indicate a drop in abortions among teenagers since 1994.

Births and Birth Rates Decline for Younger and Older Teenagers

While teenage childbearing patterns differ considerably by age, rates for all age groups have declined in the 1990's, with greater declines for younger than for older teenagers.

Teenagers Under 15 Years

The birth rate in 1996 for teenagers under 15 years of age was 1.2 births per 1,000 young women 10-14 years of age. This rate has fallen since 1991, when the rate was 1.4 (table 2). The number of young women under 15 years of age who had a baby in 1996 was 11,242. This number has fallen in recent years; in 1991-95, there were 12,000 to 13,000 births each year to young women aged 10-14 years. The decline in the number of births to very young teenagers has occurred despite the increase in the number of teenagers in this age group.

Rates and Numbers Fall for Teenagers 15-17 and 18-19 Years

The birth rate for teenagers 15-17 years was 34.0 per 1,000 in 1996, 12 percent lower than in 1991 (38.7). Half of the recent decline occurred between 1995 and 1996. The rate for older teenagers 18-19 years dropped 8 percent from 94.4 per 1,000 in 1991 to 86.5 in 1996; the decline between 1995 and 1996 was 3 percent. Despite the recent declines, however, the birth rates for younger and older teenagers are still higher than they were in the early to mid-1980's (figure 1).

Overall, the number of births to teenagers 15-19 years declined by 5 percent between 1991 (519,577) and 1996

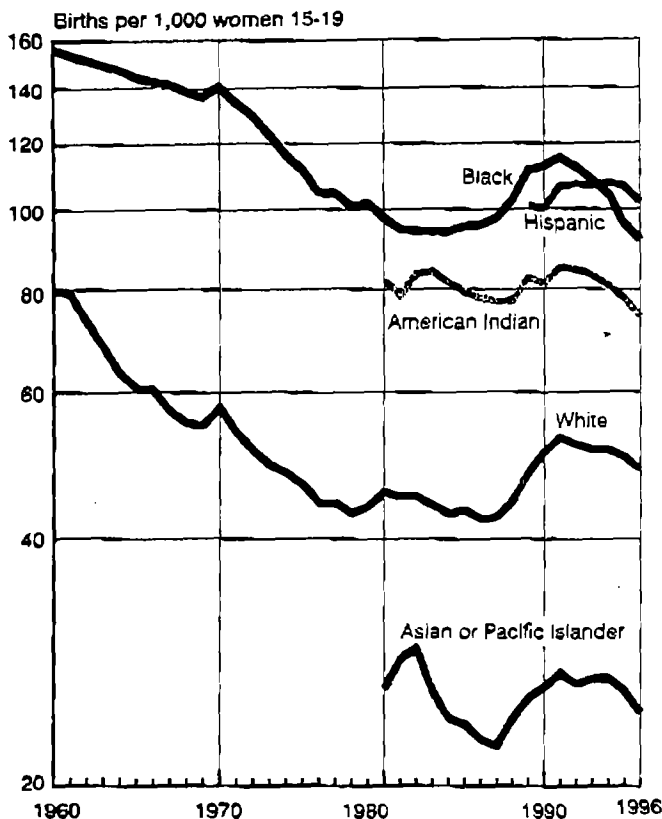
(494,272). This decline resulted from the 12-percent drop in the teenage birth rate, which more than compensated for the 8-percent increase in the number of women aged 15-19 years. The decline in the number of births to teenagers in the 1990's followed a period of increase during the late 1980's, when the number increased 13 percent from 1986 to 1990. As is true for the teenage birth rate, the number of births to teenagers was substantially higher several decades ago. The number peaked in 1970, when there were 644,708 births to women aged 15-19 years, nearly one-third more than the number reported in 1996 (table 1).

Rates for Black Teenagers at Record Lows

Teenage birth rates for ages 15-19 years dropped 5-12 percent between 1991 and 1996 for white, American Indian, Asian or Pacific Islander, and Hispanic women (figure 3 and table 2). The largest declines since 1991 by race were for black women. The overall rate for black teenagers 15-19 years fell 21 percent between 1991 and 1996, to the lowest rate ever recorded, 91.7 per 1,000. The rate for Hispanic teenagers changed little between 1991 and 1995, before declining 5 percent between 1995 and 1996.

Black teenagers experienced the most substantial reductions in rates for teenagers in both age groups 15-17 and 18-19

Figure 3. Birth rate for teenagers 15-19 years by race and Hispanic origin: United States, 1960-96



NOTE: Rates are plotted on a log scale.

years. The rate for young black teenagers, 15-17 years, declined 23 percent between 1991 and 1996, while the rate for older black teenagers, 18-19 years, fell 16 percent. Despite the sharp decline in the rates for black teenagers, their birth rates and the rates for Hispanic teenagers remain higher than for other groups. Hispanic teenagers now have the highest teenage birth rates.

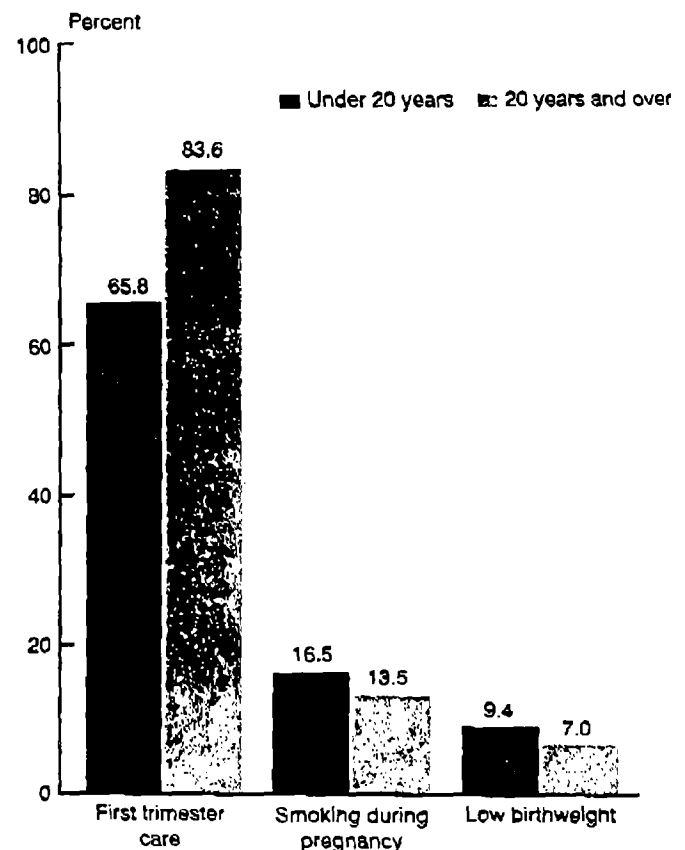
Serious Health Consequences for Teenage Childbearing

Teenage mothers are much less likely than older women to receive timely prenatal care and more likely to have no care at all (figure 4). Teenage mothers are also more likely to smoke and less likely to gain adequate weight during pregnancy. As a consequence of these and other factors, babies born to teenagers are at greatly elevated risk of low birthweight (less than 2,500 grams or 5 lb 8 oz), of serious and long-term disability, and of dying during the first year of life.

Teenage Birth Rates Vary Greatly by State

State-level birth rates for teenagers vary substantially (figure 5 and tables 3 and 4). In 1995, the most recent year for which State-specific rates can be calculated, rates varied from 28.6 (Vermont) to 105.5 (District of Columbia). Some of the

Figure 4. Selected characteristics for teenage mothers and mothers aged 20 years and over: United States, 1995



differences in overall rates by State reflect differences in the composition of the teenage populations by race and Hispanic origin. Given that birth rates for Hispanic and black teenagers are more than double the rates for non-Hispanic white teenagers (table 4), States with relatively high proportions of Hispanic and/or black teenagers in their populations would be expected to have higher overall teenage birth rates. In comparing teenage birth rates across States, it is important to keep these compositional differences in mind.

Rates Decline for All States

Birth rates for teenagers 15–19 years declined between 1991 and 1995 in all States and the District of Columbia, echoing the national trends during this time. (Declines in 5 States were not statistically significant.) (See figure 6 and table 3.) The reductions in State-specific teenage birth rates reflect and in many cases exceed those reported for the country as a whole. While the U.S. rate fell 8 percent between 1991 and 1995, rates fell by 8.0 percent or more in 33 States. Rates dropped by 12.0 percent or more in 12 States; declines in 5 States exceeded 16.0 percent. While the decline in the teenage birth rate varied among States, States with both high and low teenage birth rates were successful in achieving reductions.

Declines in Sexual Activity and Increases in Condom Use Are Key Factors

The declines—for the country and for the States—in birth rates for teenagers since 1991 likely reflect a combination of demographic and behavioral factors. According to the 1995 National Survey of Family Growth (NSFG), conducted by NCHS, the proportion of teenagers who are sexually experienced has stabilized, reversing the steady increases over the past two decades. Moreover, teenagers are now more likely to use contraceptives at first intercourse, especially condoms. In addition, some teenagers, particularly black teenagers, are using injectable and implant contraceptives. Similar changes in sexual experience for teenage males have been reported in the National Survey of Adolescent Males. Initial results from the National Longitudinal Study on Adolescent Health (Add Health), a congressionally mandated survey of students in grades 7 through 12, suggest that a feeling of personal connection to home, family, and school is essential for protecting young people from a vast array of risky behaviors, including sexual activity.

For more information on teenage birth rates and other aspects of teenage pregnancy and childbearing, the following references may be consulted:

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Table 1. Births birth rates for teenagers 15-19 of age, by age of mother: United selected, 1 -75 and 1980-86

[Birth rates per 1,000 women in specified group]

Year	All races ¹			White			Black		
	Total	15-17 years	18-19 years	Total	15-17 years	18-19 years	Total	15-17 years	18-19 years
Number of births									
1996 ²	484,272	186,762	307,509	346,509	124,031	222,477	131,059	66,218	74,841
1995	499,873	192,508	307,365	349,636	127,165	222,470	133,694	59,112	74,582
1994	505,488	195,169	310,319	348,081	126,388	221,693	140,968	62,663	78,405
1993	501,093	190,535	310,558	341,817	121,309	220,508	143,163	63,156	79,997
1992	505,415	187,549	317,866	342,739	118,786	223,953	146,800	63,002	83,798
1991	519,577	188,226	331,351	352,359	118,609	233,550	150,956	63,571	87,385
1990	521,826	183,327	338,499	354,482	114,934	239,548	151,613	62,861	88,732
1989	506,503	181,044	325,459	340,472	111,736	228,736	160,699	63,832	86,867
1988	478,353	176,624	301,729	323,830	109,739	214,091	140,608	61,866	78,752
1987	462,312	172,591	289,721	315,464	108,592	206,872	134,050	59,361	74,689
1986	461,805	168,572	293,333	317,970	107,177	210,793	131,594	57,003	74,591
1985	467,485	167,789	299,696	324,590	107,993	216,597	130,867	55,656	75,201
1984	469,582	166,744	302,838	326,301	106,782	219,619	131,497	55,932	75,585
1983	489,286	172,673	316,613	343,109	111,163	232,036	133,953	57,332	76,621
1982	513,758	181,162	332,596	383,742	117,644	246,098	137,456	59,362	78,094
1981	527,382	187,397	339,985	375,432	122,561	252,871	140,344	60,944	79,400
1980	552,161	198,222	353,939	393,564	129,341	264,223	147,378	65,089	82,309
1975	582,238	227,270	354,968	410,129	148,344	261,785	181,044	74,846	86,098
1970	644,708	223,590	421,118	463,608	143,646	319,962	171,826	76,882	94,944
1965	590,864	188,604	402,290	443,754	124,294	319,460	141,026	62,488	78,538
1960	586,966	182,408	404,558	458,130	129,544	328,686	118,044	---	---
1955	484,087	149,722	334,375	372,678	103,503	269,175	108,375	---	---
1950	419,535	126,841	292,594	318,822	85,107	233,715	98,100	---	---
Birth rate									
1996 ²	54.7	34.0	86.5	48.4	28.6	78.8	91.7	64.9	133.0
1995	56.8	36.0	89.1	50.1	30.0	81.2	96.1	69.7	137.1
1994	58.9	37.6	91.6	51.1	30.7	82.1	104.5	78.3	148.3
1993	59.6	37.8	92.1	51.1	30.3	82.1	108.6	79.8	151.9
1992	60.7	37.8	94.5	51.8	30.1	83.8	112.4	81.3	157.9
1991	62.1	38.7	94.4	52.8	30.7	83.5	115.5	84.1	158.6
1990	63.9	37.5	88.6	50.8	29.5	78.0	112.8	82.3	152.9
1989	57.3	36.4	84.2	47.9	28.1	72.9	111.5	81.9	151.9
1988	53.0	33.6	79.9	44.4	26.0	69.6	102.7	75.7	142.7
1987	50.6	31.7	78.5	42.5	24.6	68.9	97.6	72.1	135.8
1986	50.2	30.5	79.6	42.3	23.8	70.1	95.8	69.3	135.1
1985	61.0	31.0	79.6	43.3	24.4	70.4	95.4	69.3	132.4
1984	50.6	31.0	77.4	42.9	24.3	69.4	94.1	69.2	129.1
1983	51.4	31.8	77.4	43.9	25.0	68.8	93.9	69.6	127.1
1982	52.4	32.3	79.4	45.0	25.5	70.8	94.3	69.7	128.9
1981	52.2	32.0	80.0	44.9	25.4	71.5	94.5	69.3	131.0
1980	53.0	32.5	82.1	45.4	25.5	73.2	97.8	72.5	135.1
1975	55.6	36.1	85.0	48.4	28.0	74.0	111.8	85.6	162.4
1970	68.3	38.8	114.7	57.4	29.2	101.5	140.7	101.4	204.9
1965	70.5	36.6	124.5	60.6	27.8	111.9	144.6	99.3	227.6
1960	89.1	43.9	166.7	79.4	35.5	154.6	156.1	---	---
1955	90.3	---	---	79.1	---	---	---	---	---
1950	81.6	---	---	70.0	---	---	---	---	---

--- Data not available.

¹Includes races other than white and black.

²Data for 1996 are preliminary; figures are based on weighted data rounded to the nearest individual, so categories may not add to totals.

NOTE: Figures for 1950-75 are by race of child; see references.

Table 2. Birth rates for women under 20 years of age, by age, race, and Hispanic origin, United States, 1990-96, and percent change in rates, 1991-96

(Rates per 1,000 women in specified group)

Age and race and Hispanic origin of mother	1996 ¹	1995	1994	1993	1992	1991	1990	Percent change, 1991-96
10-14 years								
Total	1.2	1.3	1.4	1.4	1.4	1.4	1.4	-14.3
White, total	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.0
Non-Hispanic White	---	0.4	0.5	0.5	0.5	0.5	0.5	---
Black	3.7	4.2	4.6	4.6	4.7	4.8	4.9	-22.9
American Indian ²	1.8	1.8	1.9	1.4	1.6	1.6	1.6	12.5
Asian or Pacific Islander	0.6	0.7	0.7	0.6	0.7	0.8	0.7	-25.0
Hispanic ³	2.6	2.7	2.7	2.7	2.6	2.4	2.4	8.3
15-19 years								
Total	64.7	56.8	58.9	59.6	60.7	62.1	58.9	-11.9
White, total	48.1	50.1	51.1	51.1	51.8	52.8	50.1	-8.9
Non-Hispanic White	---	39.3	40.4	40.7	41.7	43.4	42.5	---
Black	91.7	96.1	104.5	108.6	112.4	115.5	112.8	-20.6
American Indian ²	75.1	78.0	80.8	83.1	84.4	85.0	81.1	-11.6
Asian or Pacific Islander	25.4	26.1	27.1	27.0	26.6	27.4	26.4	-7.3
Hispanic ³	101.6	106.7	107.7	106.8	107.1	106.7	100.3	-4.8
15-17 years								
Total	34.0	36.0	37.6	37.8	37.8	36.7	37.5	-12.1
White, total	29.4	30.0	30.7	30.3	30.1	30.7	29.5	-7.5
Non-Hispanic White	---	22.0	22.8	22.7	22.7	23.6	23.2	---
Black	64.9	69.7	78.3	79.8	81.3	84.1	82.3	-22.8
American Indian ²	47.0	47.8	51.3	53.7	53.8	52.7	48.6	-10.9
Asian or Pacific Islander	15.6	15.4	16.1	16.0	15.2	16.1	16.0	-3.1
Hispanic ³	68.9	72.9	74.0	71.7	71.4	70.8	66.9	-2.4
18-19 years								
Total	86.5	89.1	91.5	92.1	94.5	94.4	88.6	-8.4
White, total	78.4	81.2	82.1	82.1	83.8	83.5	78.0	-6.1
Non-Hispanic White	---	66.1	67.4	67.7	69.8	70.5	66.6	---
Black	133.0	137.1	148.3	151.9	157.9	158.6	152.9	-16.1
American Indian ²	124.3	130.7	130.3	130.7	132.6	134.3	129.3	-7.4
Asian or Pacific Islander	41.5	43.4	44.1	43.3	43.1	43.1	40.2	-3.7
Hispanic ³	150.7	157.9	158.0	159.1	159.7	158.5	147.7	-4.9

0.0 Quantity more than zero but less than 0.05.

--- Data not available.

¹Data for 1996 are preliminary.

²Includes births to Alaska and Eskimos.

³Persons of Hispanic origin may be of any race.

Table 3. Birth rates for teenagers 15-19 years of age, by age group and State, and percent change for 15-19 year-olds, United States, 1991 and 1995

[Rate per 1,000 women in specified group]

State	1991			1995			Percent change, 1991-95
	15-19 years	15-17 years	18-19 years	15-19 years	15-17 years	18-19 years	15-19 years
United States ¹	62.1	38.7	94.4	56.8	36.0	89.1	-8.5
Alabama	73.9	47.7	109.5	70.3	47.2	104.4	-4.6
Alaska	65.4	35.3	111.7	50.3	29.8	80.6	-23.1
Arizona	80.7	51.4	122.6	75.3	48.9	114.7	-6.6
Arkansas	79.8	49.4	122.8	73.5	47.9	112.1	-7.9
California	74.7	46.9	113.6	68.2	43.4	106.8	-8.6
Colorado	68.2	35.3	91.4	51.3	32.8	80.1	-11.8
Connecticut	40.4	26.3	59.4	39.4	26.8	59.5	-2.6**
Delaware	61.1	40.3	87.1	57.1	39.6	82.8	-6.6**
District of Columbia	114.4	102.8	125.5	105.5	77.2	144.1	-7.8
Florida	68.8	44.0	102.9	61.6	40.0	95.7	-10.4
Georgia	76.3	50.8	110.9	71.0	48.3	108.3	-7.0
Hawaii	58.7	34.7	91.5	48.1	27.7	76.4	-18.1
Idaho	53.9	29.3	90.8	49.0	26.9	81.9	-8.1
Illinois	64.8	40.6	99.1	60.0	38.5	94.4	-7.4
Indiana	60.5	35.2	95.2	57.5	34.7	92.2	-4.9
Iowa	42.6	22.8	71.5	38.6	22.2	64.7	-9.3
Kansas	55.4	29.4	94.1	52.3	30.1	87.3	-5.6
Kentucky	68.9	42.6	105.5	62.6	39.0	98.1	-9.2
Louisiana	76.1	51.1	111.4	69.9	45.3	106.8	-8.2
Maine	43.5	23.8	70.1	33.7	19.3	56.7	-22.4
Maryland	54.3	36.2	79.8	47.6	31.9	72.5	-12.3
Massachusetts	37.8	25.2	52.9	34.3	21.7	53.2	-9.3
Michigan	59.0	35.5	91.1	49.2	30.0	79.6	-16.6
Minnesota	37.3	20.7	61.4	32.4	19.4	53.5	-13.2
Mississippi	85.6	60.1	120.4	80.5	57.8	114.8	-5.9
Missouri	64.5	38.7	100.7	55.5	32.6	92.0	-13.9
Montana	46.7	23.8	83.0	41.9	22.8	71.7	-10.4
Nebraska	42.4	23.6	69.2	37.6	22.1	61.1	-11.3
Nevada	75.3	43.9	119.1	73.4	44.0	120.4	-2.5**
New Hampshire	33.3	17.1	53.8	30.6	14.7	57.1	-8.0
New Jersey	41.6	26.3	62.9	38.0	24.4	59.5	-8.7
New Mexico	79.8	50.0	124.4	74.4	49.0	114.4	-6.7
New York	46.0	29.1	69.0	43.9	27.5	68.6	-4.6
North Carolina	70.5	48.2	101.7	64.0	41.6	97.9	-9.3
North Dakota	35.6	18.1	62.4	33.5	17.9	58.4	-5.8**
Ohio	60.5	36.2	93.8	53.4	32.6	85.6	-11.7
Oklahoma	72.1	41.7	115.6	64.0	38.8	103.3	-11.2
Oregon	54.9	31.3	90.7	50.5	30.0	83.1	-7.9
Pennsylvania	46.9	29.2	70.5	41.7	26.3	65.6	-11.1
Rhode Island	45.4	30.1	63.6	42.9	26.4	68.3	-5.6**
South Carolina	72.9	48.0	105.4	65.2	43.5	97.1	-10.6
South Dakota	47.5	26.3	79.2	40.5	21.6	69.9	-14.8
Tennessee	75.2	47.8	112.1	68.0	42.0	108.3	-9.5
Texas	78.9	50.4	119.3	75.8	50.7	114.1	-3.9
Utah	48.2	27.0	79.8	42.3	25.2	67.3	-12.2
Vermont	39.2	21.3	62.0	28.6	10.8	56.9	-27.1
Virginia	53.5	31.8	81.2	48.5	30.5	74.8	-9.3
Washington	53.7	31.0	86.5	47.5	28.0	77.7	-11.5
West Virginia	57.8	32.4	93.2	52.6	30.4	85.9	-9.0
Wisconsin	43.7	24.8	71.2	37.8	22.7	61.8	-13.4
Wyoming	54.2	26.4	98.6	47.3	24.7	84.3	-12.8
Puerto Rico	72.4	50.8	105.9	74.3	54.3	104.1	2.6**
Virgin Islands	77.9	48.6	124.0	63.0	38.3	100.1	-19.1
Guam	95.7	55.0	156.1	108.4	70.3	167.2	13.3

** Not significant at $p < 0.05$.¹Excludes data for Puerto Rico, Virgin Islands, and Guam.

NOTES: Birth rates by State shown in this table are based on population estimates provided by the U.S. Bureau of the Census and, therefore, the rates shown here may differ from rates computed on the basis of other population estimates. Rates by State for 1995 have been revised; therefore rates shown in this table may differ slightly from rates for 1995 previously published.

4. Rate (for teenagers 15-19 years of age, by age and race/Hispanic origin): United States and each State, 1995
[rates per 1,000 women in specified group]

State	15-19 years					15-17 years					18-19 years				
	All ¹	White				All ¹	White				All ¹	White			
		Total	Non-Hispanic	Black	Hispanic ²		Total	Non-Hispanic	Black	Hispanic ²		Total	Non-Hispanic	Black	Hispanic ²
United States ³	58.8	50.1	39.3	98.0	105.5	36.0	30.1	22.0	69.8	72.6	89.1	80.9	66.1	138.8	154.2
Alabama	70.3	55.9	55.5	99.4	89.4	47.2	34.0	30.9	73.8	*	104.4	88.0	87.1	137.8	*
Alaska	50.3	36.5	34.7	*	*	29.8	19.1	18.0	*	*	80.6	61.8	58.9	*	*
Arizona	75.3	75.6	47.4	77.5	132.1	49.9	49.2	26.6	51.4	95.7	114.7	114.5	78.2	115.0	185.5
Arkansas	73.5	62.2	61.3	112.2	98.8	47.9	37.2	36.8	84.3	*	112.1	99.8	98.1	154.8	*
California	68.2	73.2	36.3	85.2	111.6	43.4	46.5	20.1	58.4	75.3	106.8	114.5	62.4	130.8	165.4
Colorado	51.3	50.1	34.4	77.1	114.9	32.8	31.8	19.7	54.9	83.2	80.1	78.4	57.4	112.0	181.9
Connecticut	39.4	33.3	20.8	83.8	117.3	28.8	22.0	11.2	60.8	93.8	59.5	51.2	35.5	122.9	154.9
Delaware	57.1	43.2	38.1	102.9	*	39.6	28.9	22.8	79.5	*	82.8	66.8	60.4	138.0	*
District of Columbia	105.5	25.8	9.4	154.8	89.6	77.2	33.0	*	90.2	*	144.1	22.5	*	326.4	*
Florida	61.8	51.0	45.8	100.6	69.1	40.0	30.8	26.7	73.2	46.2	95.7	82.8	78.4	144.5	103.1
Georgia	71.0	55.7	52.6	101.4	123.4	48.3	35.1	33.2	73.9	79.2	108.3	87.2	82.5	145.5	188.8
Hawaii	48.1	24.1	22.4	48.7	90.0	27.7	9.8	8.4	*	60.3	76.4	43.9	41.9	*	132.2
Idaho	49.0	48.9	43.7	*	107.4	26.9	26.9	23.6	*	64.9	81.9	81.4	73.4	*	170.0
Illinois	80.0	45.8	33.0	126.2	114.8	38.5	26.2	17.8	93.9	73.7	94.4	77.0	57.8	178.2	178.8
Indiana	57.5	52.2	51.0	106.1	85.8	34.7	30.0	29.3	78.2	51.8	92.2	85.9	84.2	152.2	134.1
Iowa	38.6	36.5	34.8	116.4	111.9	22.2	20.1	18.7	95.4	87.8	64.7	62.5	60.6	*	*
Kansas	52.3	47.4	43.6	115.5	100.9	30.1	28.1	22.8	82.5	73.1	87.3	81.0	76.3	169.5	143.8
Kentucky	62.8	59.1	58.9	102.2	*	39.0	35.8	35.6	73.8	*	98.1	94.2	93.9	146.3	*
Louisiana	69.9	48.4	48.8	103.6	35.1	45.3	26.5	26.7	74.7	22.0	108.8	81.0	81.9	147.0	53.4
Maine	33.7	33.2	33.0	*	*	19.3	19.1	19.0	*	*	58.7	55.6	55.1	*	*
Maryland	47.6	33.0	31.1	81.4	58.6	31.9	18.7	17.3	61.4	39.8	72.5	65.6	53.1	112.9	88.7
Massachusetts	34.3	30.5	22.8	77.8	112.9	21.7	18.5	12.0	58.4	89.0	53.2	48.8	39.2	105.4	147.3
Michigan	49.2	38.6	36.4	100.7	91.6	30.0	21.3	19.8	73.2	58.5	79.8	66.3	62.9	142.9	141.4
Minnesota	32.4	28.5	24.8	121.0	111.5	19.4	14.7	13.5	98.4	71.4	53.5	45.8	43.1	158.4	173.9
Mississippi	80.5	56.3	56.4	108.1	*	57.8	34.8	35.0	83.4	*	114.8	88.2	88.4	145.8	*
Missouri	55.5	47.3	48.8	108.7	70.1	32.6	25.5	25.0	77.9	47.1	92.0	81.9	81.4	157.4	105.3
Montana	41.9	35.4	34.1	*	*	22.9	18.2	17.5	*	*	71.7	62.1	60.1	*	*
Nebraska	37.6	33.7	30.1	100.4	102.5	22.1	18.9	18.4	70.6	67.8	61.1	58.1	50.8	146.0	154.3
Nevada	73.4	72.2	55.2	101.7	134.5	44.0	41.8	30.5	77.8	85.0	120.4	120.9	95.3	140.4	208.8
New Hampshire	30.6	30.6	30.2	*	*	14.7	14.6	14.2	*	*	57.1	57.1	58.7	*	*
New Jersey	38.0	28.8	16.5	85.7	83.9	24.4	16.9	8.4	61.7	57.2	59.5	46.9	29.3	124.2	124.1
New Mexico	74.4	73.8	43.0	68.3	98.5	49.0	48.5	23.0	49.6	70.0	114.4	112.7	74.8	*	142.0
New York	43.9	39.1	24.7	68.4	84.8	27.5	23.2	13.2	46.7	56.8	68.6	63.2	42.2	95.8	127.6
North Carolina	64.0	51.7	48.6	92.8	155.2	41.8	30.1	28.4	68.3	87.9	97.9	84.2	79.0	129.6	257.1
North Dakota	33.5	28.1	27.3	*	*	17.9	13.9	13.2	*	*	58.4	50.6	49.7	*	*
Ohio	53.4	45.5	44.5	107.2	87.2	32.6	25.5	24.8	79.2	56.5	85.6	76.1	74.7	152.0	132.7
Oklahoma	64.0	57.4	55.1	99.2	93.2	38.8	33.7	32.0	69.2	80.9	103.3	93.6	90.4	146.6	143.5

See footnotes at end of table.

Table 4. Birth rates for teenagers 15-19 years of age, by age and race/Hispanic origin: United States and each State, 1995—Con.
[Rates per 1,000 women in specified group]

State	15-19 years					16-17 years					18-19 years				
	All ¹	White				All ¹	White				All ¹	White			
		Total	Non-Hispanic	Black	Hispanic ²		Total	Non-Hispanic	Black	Hispanic ²		Total	Non-Hispanic	Black	Hispanic ²
Oregon	50.5	50.0	43.5	88.4	130.6	30.0	29.2	24.7	69.8	86.2	83.1	83.0	73.3	*	200.9
Pennsylvania	41.7	32.9	29.1	109.3	130.7	26.3	18.8	15.7	83.7	101.4	65.6	54.8	50.0	148.7	174.9
Rhode Island	42.9	37.4	28.4	92.6	115.2	28.4	21.6	16.2	61.4	75.9	68.3	62.1	50.1	*	173.3
South Carolina	65.2	51.9	51.3	86.2	78.1	43.5	31.4	30.8	62.7	*	97.1	82.1	81.5	120.7	*
South Dakota	40.5	30.8	30.3	*	*	21.5	14.8	14.3	*	*	69.9	55.2	54.7	*	*
Tennessee	68.0	57.3	56.8	109.5	90.5	42.0	32.2	31.8	79.4	59.7	108.3	96.0	95.3	157.8	*
Texas	75.8	75.2	47.0	91.4	112.2	50.7	49.6	26.9	64.6	80.7	114.1	113.6	78.1	133.4	158.2
Utah	42.3	41.4	37.3	*	109.0	25.2	24.5	21.1	*	81.3	67.3	66.1	60.9	*	148.8
Vermont	28.6	28.8	29.1	*	*	10.8	10.9	10.9	*	*	56.8	58.0	59.4	*	*
Virginia	48.5	38.9	37.1	83.1	70.5	30.5	21.5	20.2	60.8	45.3	74.8	64.0	61.5	116.4	108.2
Washington	47.5	45.8	39.1	78.2	119.7	28.0	26.6	21.8	52.3	79.0	77.7	75.6	65.6	114.0	181.5
West Virginia	52.6	51.7	51.8	82.3	*	30.4	29.5	29.6	54.5	*	85.9	84.8	86.0	*	*
Wisconsin	37.8	29.6	25.9	132.7	108.6	22.7	15.0	13.0	101.2	73.2	61.8	50.1	48.1	183.3	162.8
Wyoming	47.3	45.4	41.2	*	95.9	24.7	23.7	20.7	*	*	84.3	80.9	74.8	*	*
Puerto Rico	74.3	---	---	---	---	54.3	---	---	---	---	104.1	---	---	---	---
Virgin Islands	63.0	---	---	---	---	38.3	---	---	---	---	100.1	---	---	---	---
Guam	108.4	---	---	---	---	70.3	---	---	---	---	167.2	---	---	---	---

* Figure does not meet standards of reliability or precision (based on fewer than 20 births or fewer than 1,000 women in specified group).

--- Data not available.

¹Includes races other than white and black.

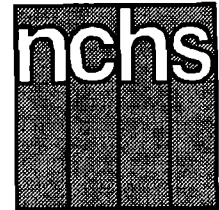
²Persons of Hispanic origin may be of any race.

³Excludes data for Puerto Rico, Virgin Islands, and Guam.

NOTES: Birth rates by State shown in this table are based on population estimates provided by the U.S. Bureau of the Census and, therefore, the rates shown here may differ from rates computed on the basis of other population estimates. Rates for all races by State for 1995 have been revised; therefore rates shown in this table may differ slightly from rates for 1995 previously published.

National Vital Statistics System

from the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics



Teenage Births in the United States: National and State Trends, 1990-96

by Stephanie J. Ventura, M.A.; Sally C. Curtin, M.A.; and T. J. Mathews, M.S.
Division of Vital Statistics

Overview

Every year in America almost 500,000 teenagers give birth. Most are unmarried and many are not ready for the emotional, psychological, and financial responsibilities and challenges of parenthood. Teenage childbearing has important health and social consequences for these young women, their babies, and their families. Recently, the teenage birth rate has declined in all States. Rates for black teenagers have dropped more than for any other population group. Contributing to this decline are indications that teenagers today are less likely to be sexually active, and sexually active teenagers are more likely to use contraception. This publication presents the latest statistics as well as trends on the important topic of teenage childbearing in the United States. Data are from the National Center for Health Statistics' (NCHS) National Vital Statistics System.

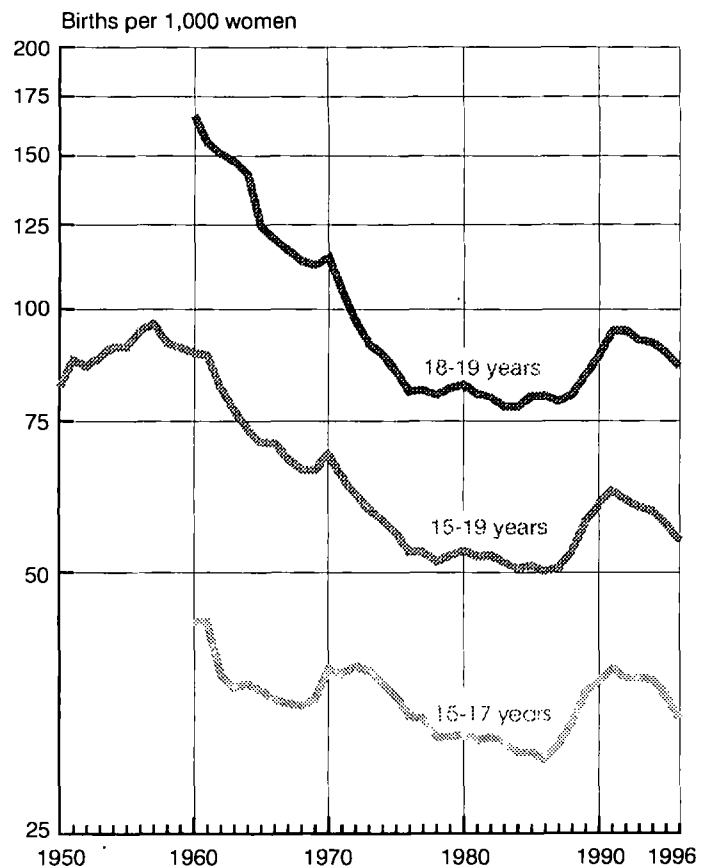
Patterns of teen childbearing can be examined in terms of numbers and rates of births. The numbers indicate how many teenagers gave birth in a given year. The teenage birth rate is defined as the number of births to a group of 1,000 teenagers. Rates among different population groups can be compared because they are all computed on the basis of 1,000 women. The number of births to teenagers is affected by both the birth rate (the proportion of teens giving birth) and the number of teen-aged women in the population. Therefore, trends in the birth rate and the number of births are not necessarily the same. To measure *pregnancies*, data on live births must be combined with information on induced abortion and fetal loss. Because abortion and fetal loss statistics are not as current as live birth statistics, this report focuses on trends in births, with a brief discussion of pregnancy trends.

Teenage Birth Rate Declines in 90's; Reverses Trend of the Late 80's

The U.S. birth rate for teenagers in 1996 was 54.7 live births per 1,000 women aged 15-19 years, down 4 percent

from 1995 (56.8). The teenage birth rate has declined steadily since 1991 when the rate was 62.1, an overall decline of 12 percent. These recent declines reverse the 24-percent rise in the teenage birth rate from 1986 to 1991 (figure 1 and table 1).

Figure 1. Birth rates for teenagers by age:
United States, 1950-96



NOTE: Rates are plotted on a log scale.



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National Center for Health Statistics



Teenage Birth Rate in 90's Higher Than in Early 80's

Despite the recent declines however, the rate for 1996 is still higher than it was during the early to mid-1980's (50–53 per 1,000) when the rate was at its lowest point. The teenage birth rate was substantially higher in the 1950's and early 1960's than it is now. The highest recorded teenage birth rate was 96.3 in 1957.

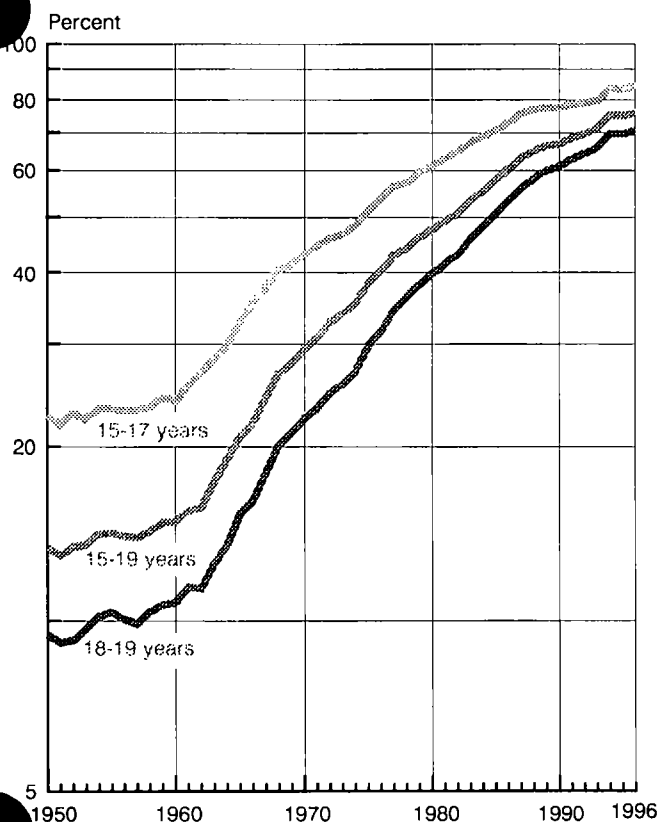
Most Teenage Mothers Are Unmarried

The issues in teenage childbearing are different now than in past decades. Most teenagers giving birth prior to 1980 were married, whereas most teenagers giving birth recently are unmarried (figure 2). The percent unmarried among teenage mothers 15–17 years more than tripled between 1950 and 1996, rising from 23 percent to 84 percent; among older teenage mothers, the percent unmarried in 1996 (71 percent) was nearly 8 times the percent in 1950 (9 percent).

The increases in the proportion of teenage mothers who are unmarried reflect the convergence of two important demographic trends:

- Sharply increasing birth rate among unmarried teenagers especially during the 1980's

Figure 2. Percent of births to unmarried teenagers by age: United States, 1950–96



NOTE: Percents are plotted on a log scale.

- Decline in marriage among teenagers since the mid-1970's

It is important to note, however, that while most teenage births are nonmarital, the majority of births to unmarried women are not to teenagers.

Teenage Birth Rates and Pregnancy Rates Fall

The teenage birth rate describes the number of births in a given year to a group of 1,000 teenagers. Thus, on average in 1996 (preliminary data), 55 out of 1,000 women aged 15–19 had a baby. Total teenage pregnancies include live births combined with estimates of induced abortions and fetal losses. Abortion and fetal loss data are not as current as the data on live births. According to the most recent estimates, the teenage pregnancy rate for 1994 was 108 pregnancies per 1,000 women aged 15–19 years, nearly twice the birth rate in that year (58.9). The pregnancy rate declined 8 percent from 1991 to 1994 and has continued to fall since 1994. This is based on the continued decline in the teenage birth rate and preliminary data that indicate a drop in abortions among teenagers since 1994.

Births and Birth Rates Decline for Younger and Older Teenagers

While teenage childbearing patterns differ considerably by age, rates for all age groups have declined in the 1990's, with greater declines for younger than for older teenagers.

Teenagers Under 15 Years

The birth rate in 1996 for teenagers under 15 years of age was 1.2 births per 1,000 young women 10–14 years of age. This rate has fallen since 1991, when the rate was 1.4 (table 2). The number of young women under 15 years of age who had a baby in 1996 was 11,242. This number has fallen in recent years; in 1991–95, there were 12,000 to 13,000 births each year to young women aged 10–14 years. The decline in the number of births to very young teenagers has occurred despite the increase in the number of teenagers in this age group.

Rates and Numbers Fall for Teenagers 15–17 and 18–19 Years

The birth rate for teenagers 15–17 years was 34.0 per 1,000 in 1996, 12 percent lower than in 1991 (38.7). Half of the recent decline occurred between 1995 and 1996. The rate for older teenagers 18–19 years dropped 8 percent from 94.4 per 1,000 in 1991 to 86.5 in 1996; the decline between 1995 and 1996 was 3 percent. Despite the recent declines, however, the birth rates for younger and older teenagers are still higher than they were in the early to mid-1980's (figure 1).

Overall, the number of births to teenagers 15–19 years declined by 5 percent between 1991 (519,577) and 1996

(494,272). This decline resulted from the 12-percent drop in the teenage birth rate, which more than compensated for the percent increase in the number of women aged 15–19 years. The decline in the number of births to teenagers in the 1990's followed a period of increase during the late 1980's, when the number increased 13 percent from 1986 to 1990. As is true for the teenage birth rate, the number of births to teenagers was substantially higher several decades ago. The number peaked in 1970, when there were 644,708 births to women aged 15–19 years, nearly one-third more than the number reported in 1996 (table 1).

Rates for Black Teenagers at Record Lows

Teenage birth rates for ages 15–19 years dropped 5–12 percent between 1991 and 1996 for white, American Indian, Asian or Pacific Islander, and Hispanic women (figure 3 and table 2). The largest declines since 1991 by race were for black women. The overall rate for black teenagers 15–19 years fell 21 percent between 1991 and 1996, to the lowest rate ever recorded, 91.7 per 1,000. The rate for Hispanic teenagers changed little between 1991 and 1995, before declining 5 percent between 1995 and 1996.

Black teenagers experienced the most substantial reductions in rates for teenagers in both age groups 15–17 and 18–19

years. The rate for young black teenagers, 15–17 years, declined 23 percent between 1991 and 1996, while the rate for older black teenagers, 18–19 years, fell 16 percent. Despite the sharp decline in the rates for black teenagers, their birth rates and the rates for Hispanic teenagers remain higher than for other groups. Hispanic teenagers now have the highest teenage birth rates.

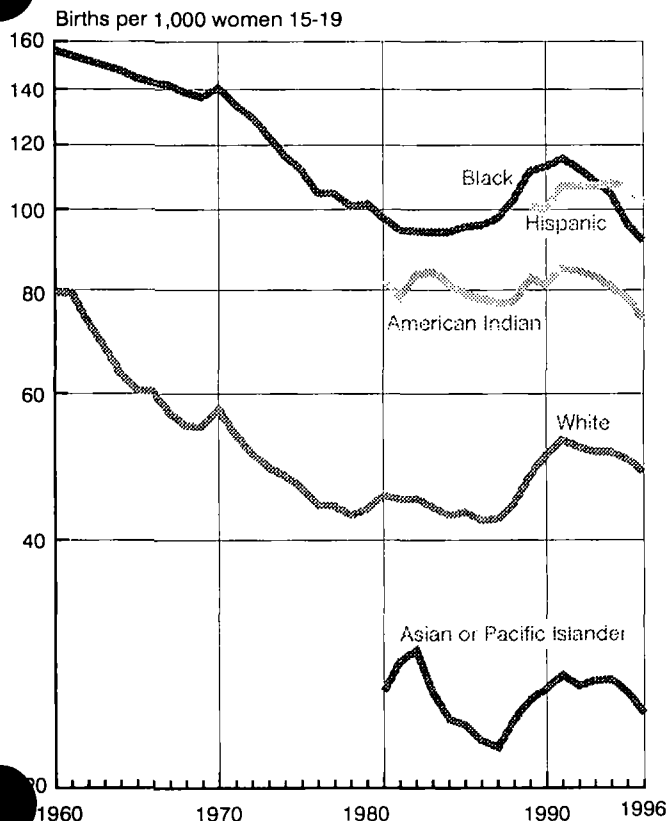
Serious Health Consequences for Teenage Childbearing

Teenage mothers are much less likely than older women to receive timely prenatal care and more likely to have no care at all (figure 4). Teenage mothers are also more likely to smoke and less likely to gain adequate weight during pregnancy. As a consequence of these and other factors, babies born to teenagers are at greatly elevated risk of low birthweight (less than 2,500 grams or 5 lb 8 oz), of serious and long-term disability, and of dying during the first year of life.

Teenage Birth Rates Vary Greatly by State

State-level birth rates for teenagers vary substantially (figure 5 and tables 3 and 4). In 1995, the most recent year for which State-specific rates can be calculated, rates varied from 28.6 (Vermont) to 105.5 (District of Columbia). Some of the

Figure 3. Birth rate for teenagers 15-19 years by race and Hispanic origin: United States, 1960-96



NOTE: Rates are plotted on a log scale.

Figure 4. Selected characteristics for teenage mothers and mothers aged 20 years and over: United States, 1995

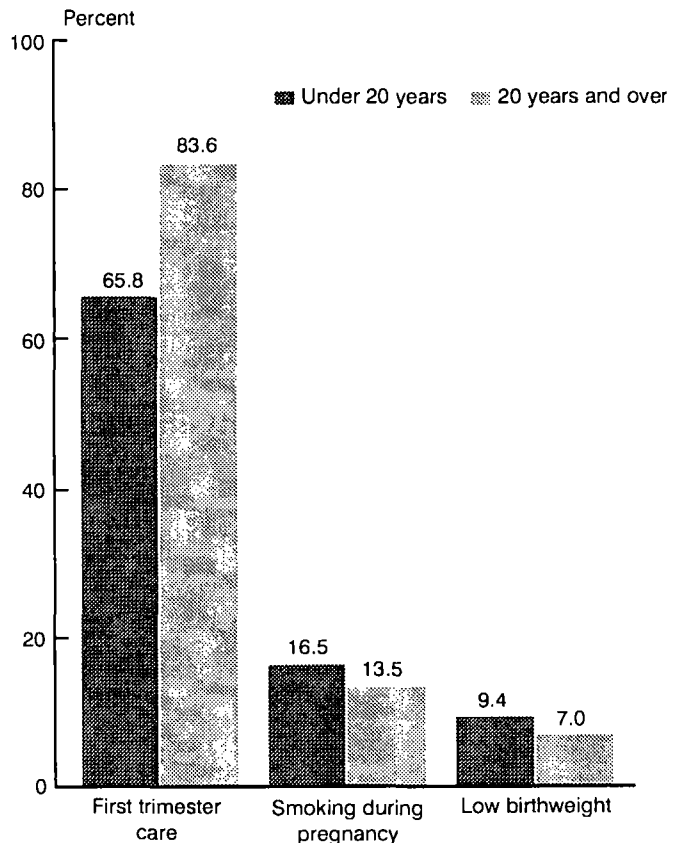


Figure 5. Teenage birth rates by State, 1995

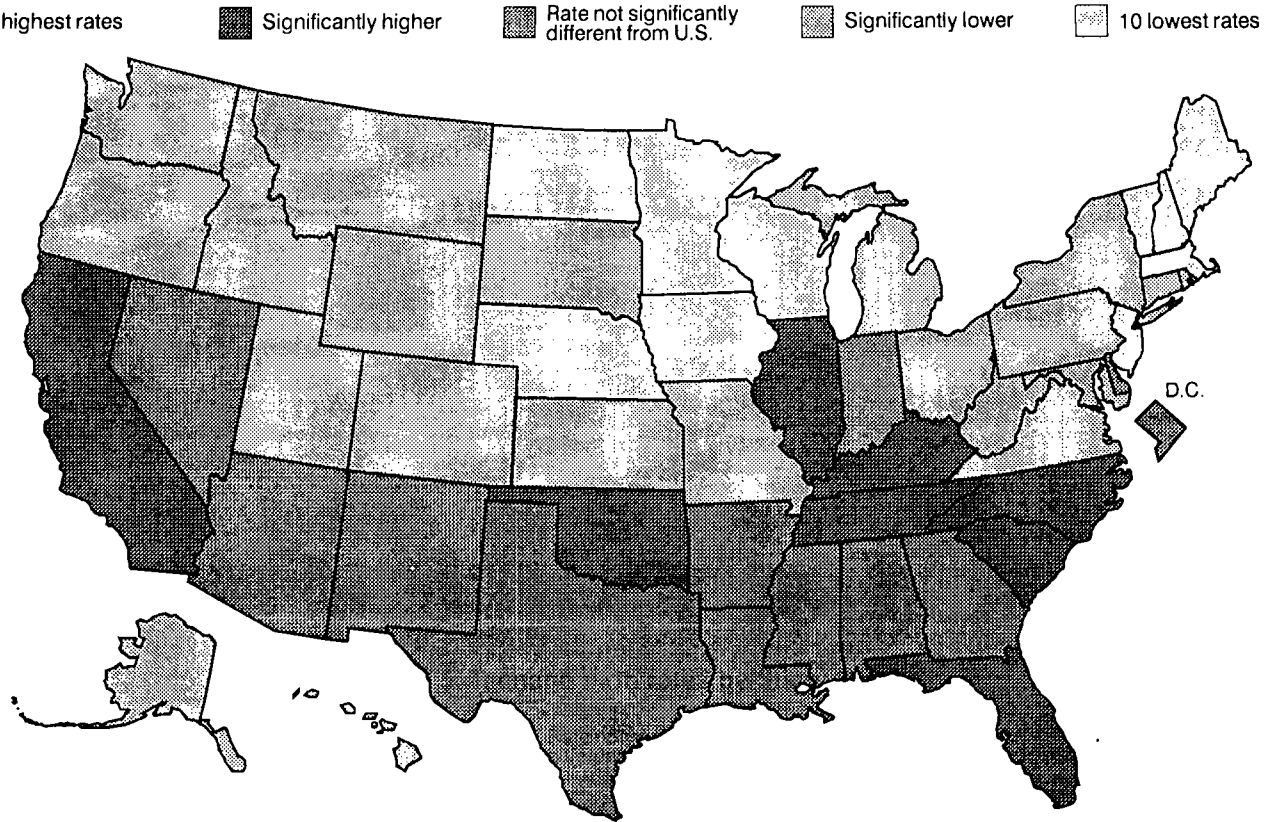
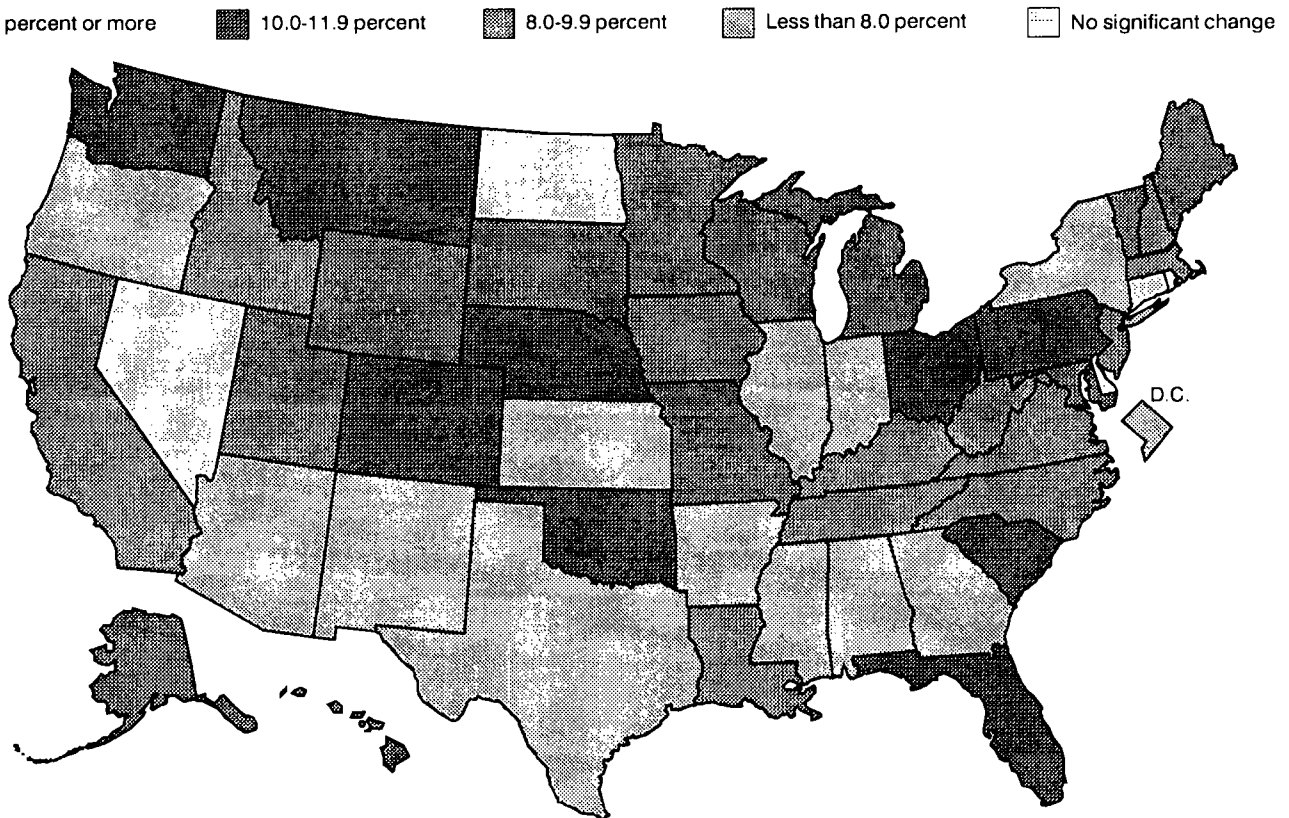


Figure 6. Percent declines in teenage birth rates by State, 1991-95



differences in overall rates by State reflect differences in the composition of the teenage populations by race and Hispanic origin. Given that birth rates for Hispanic and black teenagers are more than double the rates for non-Hispanic white teenagers (table 4), States with relatively high proportions of Hispanic and/or black teenagers in their populations would be expected to have higher overall teenage birth rates. In comparing teenage birth rates across States, it is important to keep these compositional differences in mind.

Rates Decline for All States

Birth rates for teenagers 15–19 years declined between 1991 and 1995 in all States and the District of Columbia, echoing the national trends during this time. (Declines in 5 States were not statistically significant.) (See figure 6 and table 3.) The reductions in State-specific teenage birth rates reflect and in many cases exceed those reported for the country as a whole. While the U.S. rate fell 8 percent between 1991 and 1995, rates fell by 8.0 percent or more in 33 States. Rates dropped by 12.0 percent or more in 12 States; declines in 5 States exceeded 16.0 percent. While the decline in the teenage birth rate varied among States, States with both high and low teenage birth rates were successful in achieving reductions.

Declines in Sexual Activity and Increases in Condom Use Are Key Factors

The declines—for the country and for the States—in birth rates for teenagers since 1991 likely reflect a combination of demographic and behavioral factors. According to the 1995 National Survey of Family Growth (NSFG), conducted by NCHS, the proportion of teenagers who are sexually experienced has stabilized, reversing the steady increases over the past two decades. Moreover, teenagers are now more likely to use contraceptives at first intercourse, especially condoms. In addition, some teenagers, particularly black teenagers, are using injectable and implant contraceptives. Similar changes in sexual experience for teenage males have been reported in the National Survey of Adolescent Males. Initial results from the National Longitudinal Study on Adolescent Health (Add Health), a congressionally mandated survey of students in grades 7 through 12, suggest that a feeling of personal connection to home, family, and school is essential for protecting young people from a vast array of risky behaviors, including sexual activity.

For more information on teenage birth rates and other aspects of teenage pregnancy and childbearing, the following references may be consulted:

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Table 1. Births and birth rates for teenagers 15–19 years of age, by age and race of mother: United States, selected years, 1950–75 and 1980–96

Birth rates per 1,000 women in specified group]

Year	All races ¹			White			Black		
	Total	15–17 years	18–19 years	Total	15–17 years	18–19 years	Total	15–17 years	18–19 years
Number of births									
1996 ²	494,272	186,762	307,509	346,509	124,031	222,477	131,059	56,218	74,841
1995	499,873	192,508	307,365	349,635	127,165	222,470	133,694	59,112	74,582
1994	505,488	195,169	310,319	348,081	126,388	221,693	140,968	62,563	78,405
1993	501,093	190,535	310,558	341,817	121,309	220,508	143,153	63,156	79,997
1992	505,415	187,549	317,866	342,739	118,786	223,953	146,800	63,002	83,798
1991	519,577	188,226	331,351	352,359	118,809	233,550	150,956	63,571	87,385
1990	521,826	183,327	338,499	354,482	114,934	239,548	151,613	62,881	88,732
1989	506,503	181,044	325,459	340,472	111,736	228,736	150,699	63,832	86,867
1988	478,353	176,624	301,729	323,830	109,739	214,091	140,608	61,856	78,752
1987	462,312	172,591	289,721	315,464	108,592	206,872	134,050	59,361	74,689
1986	461,905	168,572	293,333	317,970	107,177	210,793	131,594	57,003	74,591
1985	467,485	167,789	299,696	324,590	107,993	216,597	130,857	55,656	75,201
1984	469,582	166,744	302,938	326,301	106,782	219,519	131,497	55,932	75,565
1983	489,286	172,673	316,613	343,199	111,163	232,036	133,953	57,332	76,621
1982	513,758	181,162	332,596	363,742	117,644	246,098	137,456	59,362	78,094
1981	527,392	187,397	339,995	375,432	122,561	252,871	140,344	60,944	79,400
1980	552,161	198,222	353,939	393,564	129,341	264,223	147,378	65,069	82,309
1975	582,238	227,270	354,968	410,129	148,344	261,785	161,044	74,946	86,098
1970	644,708	223,590	421,118	463,608	143,646	319,962	171,826	76,882	94,944
1965	590,894	188,604	402,290	443,754	124,294	319,460	141,026	62,488	78,538
1960	586,966	182,408	404,558	458,130	129,544	328,586	118,044	---	---
1955	484,097	149,722	334,375	372,678	103,503	269,175	108,375	---	---
1950	419,535	126,941	292,594	318,822	85,107	233,715	98,100	---	---
Birth rate									
1996 ²	54.7	34.0	86.5	48.4	28.6	78.8	91.7	64.9	133.0
1995	56.8	36.0	89.1	50.1	30.0	81.2	96.1	69.7	137.1
1994	58.9	37.6	91.5	51.1	30.7	82.1	104.5	76.3	148.3
1993	59.6	37.8	92.1	51.1	30.3	82.1	108.6	79.8	151.9
1992	60.7	37.8	94.5	51.8	30.1	83.8	112.4	81.3	157.9
1991	62.1	38.7	94.4	52.8	30.7	83.5	115.5	84.1	158.6
1990	59.9	37.5	88.6	50.8	29.5	78.0	112.8	82.3	152.9
1989	57.3	36.4	84.2	47.9	28.1	72.9	111.5	81.9	151.9
1988	53.0	33.6	79.9	44.4	26.0	69.6	102.7	75.7	142.7
1987	50.6	31.7	78.5	42.5	24.6	68.9	97.6	72.1	135.8
1986	50.2	30.5	79.6	42.3	23.8	70.1	95.8	69.3	135.1
1985	51.0	31.0	79.6	43.3	24.4	70.4	95.4	69.3	132.4
1984	50.6	31.0	77.4	42.9	24.3	68.4	94.1	69.2	128.1
1983	51.4	31.8	77.4	43.9	25.0	68.8	93.9	69.6	127.1
1982	52.4	32.3	79.4	45.0	25.5	70.8	94.3	69.7	128.9
1981	52.2	32.0	80.0	44.9	25.4	71.5	94.5	69.3	131.0
1980	53.0	32.5	82.1	45.4	25.5	73.2	97.8	72.5	135.1
1975	55.6	36.1	85.0	46.4	28.0	74.0	111.8	85.6	152.4
1970	68.3	38.8	114.7	57.4	29.2	101.5	140.7	101.4	204.9
1965	70.5	36.6	124.5	60.6	27.8	111.9	144.6	99.3	227.6
1960	89.1	43.9	166.7	79.4	35.5	154.6	156.1	---	---
1955	90.3	---	---	79.1	---	---	---	---	---
1950	81.6	---	---	70.0	---	---	---	---	---

--- Data not available.

¹Includes races other than white and black.²Data for 1996 are preliminary; figures are based on weighted data rounded to the nearest individual, so categories may not add to totals.

NOTE: Figures for 1950–75 are by race of child; see references.

Table 2. Birth rates for women under 20 years of age, by age, race, and Hispanic origin, United States, 1990–96, and percent change in rates, 1991–96

[Rates per 1,000 women in specified group]

Age and race and Hispanic origin of mother	1996 ¹	1995	1994	1993	1992	1991	1990	Percent change, 1991–96
10–14 years								
Total	1.2	1.3	1.4	1.4	1.4	1.4	1.4	–14.3
White, total	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.0
Non-Hispanic White	---	0.4	0.5	0.5	0.5	0.5	0.5	---
Black	3.7	4.2	4.6	4.6	4.7	4.8	4.9	–22.9
American Indian ²	1.8	1.8	1.9	1.4	1.6	1.6	1.6	12.5
Asian or Pacific Islander	0.6	0.7	0.7	0.6	0.7	0.8	0.7	–25.0
Hispanic ³	2.6	2.7	2.7	2.7	2.6	2.4	2.4	8.3
15–19 years								
Total	54.7	56.8	58.9	59.6	60.7	62.1	59.9	–11.9
White, total	48.1	50.1	51.1	51.1	51.8	52.8	50.1	–8.9
Non-Hispanic White	---	39.3	40.4	40.7	41.7	43.4	42.5	---
Black	91.7	96.1	104.5	108.6	112.4	115.5	112.8	–20.6
American Indian ²	75.1	78.0	80.8	83.1	84.4	85.0	81.1	–11.6
Asian or Pacific Islander	25.4	26.1	27.1	27.0	26.6	27.4	26.4	–7.3
Hispanic ³	101.6	106.7	107.7	106.8	107.1	106.7	100.3	–4.8
15–17 years								
Total	34.0	36.0	37.6	37.8	37.8	38.7	37.5	–12.1
White, total	28.4	30.0	30.7	30.3	30.1	30.7	29.5	–7.5
Non-Hispanic White	---	22.0	22.8	22.7	22.7	23.6	23.2	---
Black	64.9	69.7	76.3	79.8	81.3	84.1	82.3	–22.8
American Indian ²	47.0	47.8	51.3	53.7	53.8	52.7	48.5	–10.8
Asian or Pacific Islander	15.6	15.4	16.1	16.0	15.2	16.1	16.0	–3.1
Hispanic ³	68.9	72.9	74.0	71.7	71.4	70.6	65.9	–2.4
18–19 years								
Total	86.5	89.1	91.5	92.1	94.5	94.4	88.6	–8.4
White, total	78.4	81.2	82.1	82.1	83.8	83.5	78.0	–6.1
Non-Hispanic White	---	66.1	67.4	67.7	69.8	70.5	66.6	---
Black	133.0	137.1	148.3	151.9	157.9	158.6	152.9	–16.1
American Indian ²	124.3	130.7	130.3	130.7	132.6	134.3	129.3	–7.4
Asian or Pacific Islander	41.5	43.4	44.1	43.3	43.1	43.1	40.2	–3.7
Hispanic ³	150.7	157.9	158.0	159.1	159.7	158.5	147.7	–4.9

0.0 Quantity more than zero but less than 0.05.

--- Data not available.

¹Data for 1996 are preliminary.²Includes births to Aleuts and Eskimos.³Persons of Hispanic origin may be of any race.

Table 3. Birth rates for teenagers 15–19 years of age, by age group and State, and percent change for 15–19 year-olds, United States, 1991 and 1995

[Rate per 1,000 women in specified group]

State	1991			1995			Percent change, 1991–95
	15–19 years	15–17 years	18–19 years	15–19 years	15–17 years	18–19 years	15–19 years
United States ¹	62.1	38.7	94.4	56.8	36.0	89.1	–8.5
Alabama	73.9	47.7	109.5	70.3	47.2	104.4	–4.8
Alaska	65.4	35.3	111.7	50.3	29.8	80.6	–23.1
Arizona	80.7	51.4	122.6	75.3	48.9	114.7	–6.6
Arkansas	79.8	49.4	122.8	73.5	47.9	112.1	–7.9
California	74.7	46.9	113.6	68.2	43.4	106.8	–8.6
Colorado	58.2	35.3	91.4	51.3	32.8	80.1	–11.8
Connecticut	40.4	26.3	59.4	39.4	26.8	59.5	–2.6**
Delaware	61.1	40.3	87.1	57.1	39.6	82.8	–6.5**
District of Columbia	114.4	102.8	125.5	105.5	77.2	144.1	–7.8
Florida	68.8	44.0	102.9	61.6	40.0	95.7	–10.4
Georgia	76.3	50.6	110.9	71.0	48.3	106.3	–7.0
Hawaii	58.7	34.7	91.5	48.1	27.7	76.4	–18.1
Idaho	53.9	29.3	90.8	49.0	26.9	81.9	–9.1
Illinois	64.8	40.6	99.1	60.0	38.5	94.4	–7.4
Indiana	60.5	35.2	95.2	57.5	34.7	92.2	–4.9
Iowa	42.6	22.8	71.5	38.6	22.2	64.7	–9.3
Kansas	55.4	29.4	94.1	52.3	30.1	87.3	–5.6
Kentucky	68.9	42.6	105.5	62.6	39.0	98.1	–9.2
Louisiana	76.1	51.1	111.4	69.9	45.3	106.6	–8.2
Maine	43.5	23.8	70.1	33.7	19.3	56.7	–22.4
Maryland	54.3	35.2	79.8	47.6	31.9	72.5	–12.3
Massachusetts	37.8	25.2	52.9	34.3	21.7	53.2	–9.3
Michigan	59.0	35.5	91.1	49.2	30.0	79.6	–16.6
Minnesota	37.3	20.7	61.4	32.4	19.4	53.5	–13.2
Mississippi	85.6	60.1	120.4	80.5	57.8	114.8	–5.9
Missouri	64.5	38.7	100.7	55.5	32.6	92.0	–13.9
Montana	46.7	23.6	83.0	41.9	22.9	71.7	–10.4
Nebraska	42.4	23.6	69.2	37.6	22.1	61.1	–11.3
Nevada	75.3	43.9	119.1	73.4	44.0	120.4	–2.5**
New Hampshire	33.3	17.1	53.8	30.6	14.7	57.1	–8.0
New Jersey	41.6	26.3	62.9	38.0	24.4	59.5	–8.7
New Mexico	79.8	50.0	124.4	74.4	49.0	114.4	–6.7
New York	46.0	29.1	69.0	43.9	27.5	68.6	–4.6
North Carolina	70.5	46.2	101.7	64.0	41.6	97.9	–9.3
North Dakota	35.6	18.1	62.4	33.5	17.9	58.4	–5.8**
Ohio	60.5	36.2	93.8	53.4	32.6	85.6	–11.7
Oklahoma	72.1	41.7	115.6	64.0	38.8	103.3	–11.2
Oregon	54.9	31.3	90.7	50.5	30.0	83.1	–7.9
Pennsylvania	46.9	29.2	70.5	41.7	26.3	65.6	–11.1
Rhode Island	45.4	30.1	63.6	42.9	26.4	68.3	–5.6**
South Carolina	72.9	48.0	105.4	65.2	43.5	97.1	–10.6
South Dakota	47.5	26.3	79.2	40.5	21.5	69.9	–14.8
Tennessee	75.2	47.8	112.1	68.0	42.0	108.3	–9.5
Texas	78.9	50.4	119.3	75.8	50.7	114.1	–3.9
Utah	48.2	27.0	79.8	42.3	25.2	67.3	–12.2
Vermont	39.2	21.3	62.0	28.6	10.8	56.9	–27.1
Virginia	53.5	31.8	81.2	48.5	30.5	74.8	–9.3
Washington	53.7	31.0	86.5	47.5	28.0	77.7	–11.5
West Virginia	57.8	32.4	93.2	52.6	30.4	85.9	–9.0
Wisconsin	43.7	24.8	71.2	37.8	22.7	61.8	–13.4
Wyoming	54.2	26.4	98.6	47.3	24.7	84.3	–12.8
Puerto Rico	72.4	50.8	105.9	74.3	54.3	104.1	2.6**
Virgin Islands	77.9	48.6	124.0	63.0	38.3	100.1	–19.1
Guam	95.7	55.0	156.1	108.4	70.3	167.2	13.3

Not significant at $p < 0.05$.

Excludes data for Puerto Rico, Virgin Islands, and Guam.

NOTES: Birth rates by State shown in this table are based on population estimates provided by the U.S. Bureau of the Census and, therefore, the rates shown here may differ from rates computed on the basis of other population estimates. Rates by State for 1995 have been revised; therefore rates shown in this table may differ slightly from rates for 1995 previously published.

Table 4. Birth rates for teenagers 15–19 years of age, by age and race/Hispanic origin: United States and each State, 1995

[Rates per 1,000 women in specified group]

State	15–19 years					15–17 years					18–19 years				
	All ¹	White				All ¹	White				All ¹	White			
		Total	Non-Hispanic	Black	Hispanic ²		Total	Non-Hispanic	Black	Hispanic ²		Total	Non-Hispanic	Black	Hispanic ²
United States ³	56.8	50.1	39.3	96.0	105.5	36.0	30.1	22.0	69.8	72.6	89.1	80.9	66.1	136.8	154.2
Alabama	70.3	55.9	55.5	99.4	89.4	47.2	34.0	33.9	73.6	*	104.4	88.0	87.1	137.8	*
Alaska	50.3	36.5	34.7	*	*	29.8	19.1	18.0	*	*	80.6	61.6	58.9	*	*
Arizona	75.3	75.6	47.4	77.5	132.1	48.9	49.2	26.6	51.4	95.7	114.7	114.5	78.2	115.0	185.5
Arkansas	73.5	62.2	61.3	112.2	98.8	47.9	37.2	36.8	84.3	*	112.1	99.8	98.1	154.8	*
California	68.2	73.2	36.3	85.2	111.6	43.4	46.5	20.1	56.4	75.3	106.8	114.5	62.4	130.6	165.4
Colorado	51.3	50.1	34.4	77.1	114.9	32.8	31.8	19.7	54.3	83.2	80.1	78.4	57.4	112.0	161.9
Connecticut	39.4	33.3	20.6	83.8	117.3	26.8	22.0	11.2	60.8	93.8	59.5	51.2	35.5	122.9	154.9
Delaware	57.1	43.2	38.1	102.9	*	39.6	26.9	22.8	79.5	*	82.8	66.8	60.4	138.0	*
District of Columbia	105.5	25.8	9.4	154.8	89.6	77.2	33.0	*	90.2	*	144.1	22.5	*	326.4	*
Florida	61.6	51.0	45.8	100.6	69.1	40.0	30.8	26.7	73.2	46.2	95.7	82.8	76.4	144.5	103.1
Georgia	71.0	55.7	52.6	101.4	123.4	48.3	35.1	33.2	73.9	79.2	106.3	87.2	82.5	145.5	188.8
Hawaii	48.1	24.1	22.4	48.7	90.0	27.7	9.8	8.4	*	60.3	76.4	43.9	41.9	*	132.2
Idaho	49.0	48.9	43.7	*	107.4	26.9	26.9	23.6	*	64.9	81.9	81.4	73.4	*	170.0
Illinois	60.0	45.8	33.0	126.2	114.6	38.5	26.2	17.6	93.9	73.7	94.4	77.0	57.8	178.2	176.8
Indiana	57.5	52.2	51.0	106.1	85.8	34.7	30.0	29.3	76.2	51.6	92.2	85.9	84.2	152.2	134.1
Iowa	38.6	36.5	34.8	116.4	111.9	22.2	20.1	18.7	95.4	87.8	64.7	62.5	60.6	*	*
Kansas	52.3	47.4	43.6	115.5	100.9	30.1	26.1	22.8	82.5	73.1	87.3	81.0	76.3	169.5	143.8
Kentucky	62.6	59.1	58.9	102.2	*	39.0	35.8	35.6	73.8	*	98.1	94.2	93.9	146.3	*
Louisiana	69.9	48.4	48.8	103.6	35.1	45.3	26.5	26.7	74.7	22.0	106.6	81.0	81.9	147.0	53.4
Maine	33.7	33.2	33.0	*	*	19.3	19.1	19.0	*	*	56.7	55.6	55.1	*	*
Maryland	47.6	33.0	31.1	81.4	58.6	31.9	18.7	17.3	61.4	39.8	72.5	55.6	53.1	112.9	86.7
Massachusetts	34.3	30.5	22.8	77.8	112.9	21.7	18.5	12.0	58.4	89.0	53.2	48.8	39.2	105.4	147.3
Michigan	49.2	38.6	36.4	100.7	91.6	30.0	21.3	19.8	73.2	58.5	79.6	66.3	62.9	142.9	141.4
Minnesota	32.4	26.5	24.8	121.0	111.5	19.4	14.7	13.5	98.4	71.4	53.5	45.8	43.1	158.4	173.9
Mississippi	80.5	56.3	56.4	108.1	*	57.8	34.8	35.0	83.4	*	114.8	88.2	88.4	145.8	*
Missouri	55.5	47.3	46.8	108.7	70.1	32.6	25.5	25.0	77.9	47.1	92.0	81.9	81.4	157.4	105.3
Montana	41.9	35.4	34.1	*	*	22.9	18.2	17.5	*	*	71.7	62.1	60.1	*	*
Nebraska	37.6	33.7	30.1	100.4	102.5	22.1	18.9	16.4	70.6	67.8	61.1	56.1	50.8	146.0	154.3
Nevada	73.4	72.2	55.2	101.7	134.5	44.0	41.8	30.5	77.6	85.0	120.4	120.9	95.3	140.4	208.9
New Hampshire	30.6	30.6	30.2	*	*	14.7	14.6	14.2	*	*	57.1	57.1	56.7	*	*
New Jersey	38.0	28.6	16.5	85.7	83.9	24.4	16.9	8.4	61.7	57.2	59.5	46.9	29.3	124.2	124.1
New Mexico	74.4	73.6	43.0	68.3	98.5	49.0	48.5	23.0	49.6	70.0	114.4	112.7	74.8	*	142.0
New York	43.9	39.1	24.7	66.4	84.6	27.5	23.2	13.2	46.7	55.8	68.6	63.2	42.2	95.8	127.5
North Carolina	64.0	51.7	48.6	92.6	155.2	41.6	30.1	28.4	68.3	87.9	97.9	84.2	79.0	129.6	257.1
North Dakota	33.5	28.1	27.3	*	*	17.9	13.9	13.2	*	*	58.4	50.6	49.7	*	*
Ohio	53.4	45.5	44.5	107.2	87.2	32.6	25.5	24.8	79.2	56.5	85.6	76.1	74.7	152.0	132.7
Oklahoma	64.0	57.4	55.1	99.2	93.2	38.8	33.7	32.0	69.2	60.9	103.3	93.6	90.4	146.6	143.5

See footnotes at end of table.

Table 1. Birth rates for teenagers 15–19 years of age, by age and race/Hispanic origin: United States and each State, 1995—Con.

[Rates per 1,000 women in specified group]

State	15–19 years					15–17 years					18–19 years				
	All ¹	White				All ¹	White				All ¹	White			
		Total	Non-Hispanic	Black	Hispanic ²		Total	Non-Hispanic	Black	Hispanic ²		Total	Non-Hispanic	Black	Hispanic ²
Oregon	50.5	50.0	43.5	88.4	130.6	30.0	29.2	24.7	69.8	86.2	83.1	83.0	73.3	*	200.9
Pennsylvania	41.7	32.9	29.1	109.3	130.7	26.3	18.8	15.7	83.7	101.4	65.6	54.8	50.0	148.7	174.9
Rhode Island	42.9	37.4	29.4	92.6	115.2	26.4	21.6	16.2	61.4	75.9	68.3	62.1	50.1	*	173.3
South Carolina	65.2	51.9	51.3	86.2	78.1	43.5	31.4	30.8	62.7	*	97.1	82.1	81.5	120.7	*
South Dakota	40.5	30.8	30.3	*	*	21.5	14.8	14.3	*	*	69.9	55.2	54.7	*	*
Tennessee	68.0	57.3	56.8	109.5	90.5	42.0	32.2	31.8	79.4	59.7	108.3	96.0	95.3	157.8	*
Texas	75.8	75.2	47.0	91.4	112.2	50.7	49.8	26.9	64.6	80.7	114.1	113.6	78.1	133.4	158.2
Utah	42.3	41.4	37.3	*	109.0	25.2	24.5	21.1	*	81.3	67.3	66.1	60.9	*	148.8
Vermont	28.6	28.8	29.1	*	*	10.8	10.9	10.9	*	*	56.9	58.0	59.4	*	*
Virginia	48.5	38.9	37.1	83.1	70.5	30.5	21.5	20.2	60.8	45.3	74.8	64.0	61.5	116.4	106.2
Washington	47.5	45.8	39.1	76.2	119.7	28.0	26.6	21.8	52.3	79.0	77.7	75.6	65.8	114.0	181.5
West Virginia	52.6	51.7	51.8	82.3	*	30.4	29.5	29.6	54.5	*	85.9	84.8	85.0	*	*
Wisconsin	37.8	28.6	25.9	132.7	108.6	22.7	15.0	13.0	101.2	73.2	61.8	50.1	46.1	183.3	162.6
Wyoming	47.3	45.4	41.2	*	95.9	24.7	23.7	20.7	*	*	84.3	80.9	74.8	*	*
Puerto Rico	74.3	---	---	---	---	54.3	---	---	---	---	104.1	---	---	---	---
Virgin Islands	63.0	---	---	---	---	38.3	---	---	---	---	100.1	---	---	---	---
Guam	108.4	---	---	---	---	70.3	---	---	---	---	167.2	---	---	---	---

* Figure does not meet standards of reliability or precision (based on fewer than 20 births or fewer than 1,000 women in specified group).

--- Data not available.

¹Includes races other than white and black.²Persons of Hispanic origin may be of any race.³Excludes data for Puerto Rico, Virgin Islands, and Guam.

NOTES: Birth rates by State shown in this table are based on population estimates provided by the U.S. Bureau of the Census and, therefore, the rates shown here may differ from rates computed on the basis of other population estimates. Rates for all races by State for 1995 have been revised; therefore rates shown in this table may differ slightly from rates for 1995 previously published.

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September 12, 1997 / 46(36);837-842

State-Specific Birth Rates for Teenagers -- United States, 1990-1996

During the late 1980s, birth rates for teenagers in the United States increased sharply. Although rates have declined steadily since 1991 (1,2), age-, race-, ethnicity-, and state-specific rates have varied substantially. Despite recent declines, the U.S. birth rate for teenagers remains high compared with other industrialized countries. In 1996, an estimated 505,514 females aged less than 20 years gave birth; two thirds of births to teenagers are unintended (3). The adverse consequences of teenage childbearing include increased poverty for both mother and child. This report presents state-specific birth rates for females aged 15-19 years for 1991 and 1995 and compares race/ ethnicity-specific birth rates for U.S. females aged less than 20 years for 1990-1996. These findings indicate that, during 1991-1995, birth rates among teenagers declined significantly in all but five states and the District of Columbia, and declines nationwide during 1991-1996 were especially large for teenagers aged 15-17 years and for black teenagers. Recent declines in abortions and abortion rates for teenagers, coupled with the trends described in this report for birth rates for teenagers, indicate that, since 1991, pregnancy rates for teenagers also have declined.

Data for 1990-1995 (the most recent year for which state-specific data were available) were derived from the complete file of all births registered in state vital statistics offices (1,4). Data for 1996 were derived from preliminary files containing 94% of births; the preliminary data series was initiated in 1995 (2). Births were reported by mother's state of residence. Population denominators for the birth rates were obtained from the Bureau of the Census (5,6). Race/ethnicity-specific data are presented for Hispanics, non-Hispanic whites, blacks, American Indians/Alaskan Natives, and Asians/Pacific Islanders. Data for non-Hispanic blacks are not presented separately from data for all blacks because both sets of data are virtually identical (97% of births to blacks are to non-Hispanic females). Because preliminary data for 1996 were not available for race/ethnicity cross-classification, the most recent data for non-Hispanic white females were for 1995.

The preliminary birth rate for teenagers aged 15-19 years in 1996 was 54.7 births per 1000 females aged 15-19 years, a 4% decline from the rate for 1995 (56.8) ([Table 1](#)). From 1986 to 1991, the rate increased 24% (from 50.2 to 62.1) (1); however, from 1991 to 1996, the rate declined 12%. Although rates declined in all subgroups, the percentage decline was greater for teenagers in younger age groups (14% for those aged 10-14 years and 12% for those aged 15-17 years) than for those who were older (8% for those aged 18-19 years).

In general, birth rates during 1991-1996 declined for teenagers in all racial/ethnic groups for which 1996 rates could be computed. During this period, the rate for blacks aged 15-17 years declined 23%, compared with a decline of 16% for those aged 18-19 years. From 1991 to 1995 (the most recent year for which data were available), the rate for non-Hispanic whites aged 15-17 years declined 7%, compared with a decline of 6% for those aged 18-19 years. From 1995 to 1996, rates for Hispanics aged 15-19 years declined 5%, even though rates in this group had been stable during 1991-1995. During 1991-1996, rates for American Indians/Alaskan Natives and Asians/ Pacific Islanders aged 15-19 years declined 12% and 7%, respectively.

From 1991 to 1995 (the most recent year for which state-specific data were available), state-specific birth rates for teenagers varied substantially ([Table 2](#)). * During this period, rates for those aged 15-19 years declined in all states and the District of Columbia, and declined significantly in most (45) states. Statistically significant percentage declines ranged from 3.6% (Texas) to 26.9% (Vermont) ([Table 2](#)). Rates declined greater than or equal to 12.0% in 12 states, 10.0%-11.9% in nine states, 8.0%-9.9% in 12 states, and less than 8.0% in 12 states ([Figure 1](#)).

Reported by: Reproductive Statistics Br, Div of Vital Statistics, National Center for Health Statistics, CDC.

Editorial Note

Editorial Note: The findings in this report indicate that, from 1991 to 1996, birth rates for all U.S. teenagers declined; rates declined for all age groups and for all racial/ethnic groups. Birth rates are used to assess the effectiveness of programs to reduce teenage pregnancy; comprehensive assessment of such trends also requires that data on legal induced abortion and fetal loss be combined with live-birth data to produce teenage pregnancy rates. From 1991 to 1992, the teenage pregnancy rate declined 3% (from 115.0 pregnancies per 1000 females aged 15-19 years to 111.3 per 1000, respectively) (4,7), reflecting declines in both birth and abortion rates for teenagers. More recently, abortion statistics for 1993-1994 indicate a continued decline in abortions and abortion rates for teenagers (8). The declines in both birth and abortion rates for teenagers suggest a sustained decline in teenage pregnancy rates.

Teenage childbearing patterns varied substantially by race/ethnicity, possibly reflecting differences in income, education, access to health care, and health-care coverage. Rates historically have been higher for black and Hispanic teenagers than for other groups (1,2,4). Because recent declines in teenage birth rates have been greater for blacks, race-specific differences in rates have narrowed.

State-specific variations in birth rates for teenagers especially reflected differences in the racial/ethnic composition of the teenage population. Overall, rates were higher in states with higher proportions of Hispanic and/or black teenagers. For example, rates were higher in states in the South and Southwest with proportionately higher Hispanic and black populations ([Table 2](#)). The state-specific data in this report were not adjusted for these compositional differences because the race-/ethnicity-specific data are not available for 1995.

Although birth rates for teenagers were substantially higher during the early 1970s than during recent years, most teenagers giving birth during the earlier period were married; most of those giving birth during more recent periods were unmarried (1,2,4). The sustained increases in the percentage of births to unmarried teenagers slowed during the early 1990s.

Findings from the 1995 National Survey of Family Growth suggest two trends have contributed to the declines in teenage birth (and pregnancy) rates. First, the long-term increase in the proportion of teenaged women who were sexually experienced leveled after having increased during 1982-1990 (from 47% to 55%). In addition, among sexually experienced teenagers who used any method of contraception, condom use increased substantially (3).

Recognition of the consequences of teenage pregnancy has prompted initiatives to reduce teenage pregnancy in state and local jurisdictions. Although a variety of programs have been developed to reduce the incidence of teenage pregnancy, only a limited number have been rigorously evaluated (9), and no single approach has been identified. Instead, states and local jurisdictions are being encouraged to consider a wide variety of approaches and strategies for preventing teenage pregnancy. The U.S.

Department of Health and Human Services (DHHS) is coordinating and supporting an intensive multifaceted strategy to reduce teenage pregnancy (10). Basic elements of this strategy include increasing opportunities through welfare reform (e.g., provisions promoting personal responsibility for minor parents, abstinence education, incentives for states that reduce out-of-wedlock childbearing, and strict enforcement of child support laws); supporting approaches tailored to the unique needs of individual communities (e.g., DHHS' Community Coalition Partnership Program for the Prevention of Teen Pregnancy and the Adolescent Family Life Program); building partnerships among concerned citizens from all sectors of society; sharing information about promising and successful approaches in teenage pregnancy-prevention programs; and improving data collection, research, and evaluation.

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- State-specific rates for teenagers aged less than 15 years are excluded from this analysis because the numbers of births were too small to compute reliable rates for many states.

Table_1

Note: To print large tables and graphs users may have to change their printer settings to landscape and use a small font size.

TABLE 1. Rate* of births for females aged <20 years, by age group and race/ethnicity United States, 1990-199

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Table_2

Note: To print large tables and graphs users may have to change their printer settings to landscape and use a small font size.

TABLE 2. Rate* of births for females aged 15-19 years, by age group and state, and percentage change for females aged 15-19 years -- United States, 1991 and 1995

State	1991			1995			% Change from 1991 to 1995
	15-17	18-19	15-19	15-17	18-19	15-19	
Alabama	47.7	109.5	73.9	47.2	104.3	70.3	- 4.9
Alaska	35.3	111.7	65.4	29.6	81.2	50.2	-23.3
Arizona	51.4	122.6	80.7	47.7	121.0	75.7	- 6.2
Arkansas	49.4	122.8	79.8	47.9	112.0	73.5	- 7.9
California	46.9	113.6	74.7	43.4	107.0	68.2	- 8.7
Colorado	35.3	91.4	58.2	32.7	80.3	51.3	-11.9
Connecticut	26.3	59.4	40.4	26.6	59.7	39.3	- 2.8+
Delaware	40.3	87.1	61.1	39.2	83.4	57.0	- 6.7+
District of Columbia	102.8	125.5	114.4	78.3	145.7	106.8	- 6.6+
Florida	44.0	102.9	68.8	40.0	96.4	61.7	-10.3
Georgia	50.6	110.9	76.3	48.3	106.7	71.1	- 6.8
Hawaii	34.7	91.5	58.7	27.6	76.3	47.9	-18.4
Idaho	29.3	90.8	53.9	26.7	82.7	49.0	- 9.1
Illinois	40.6	99.1	64.8	38.4	94.0	59.9	- 7.6
Indiana	35.2	95.2	60.5	34.7	92.2	57.5	- 5.0
Iowa	22.8	71.5	42.6	22.1	64.9	38.6	- 9.3
Kansas	29.4	94.1	55.4	29.9	87.6	52.2	- 5.8
Kentucky	42.6	105.5	68.9	38.9	98.2	62.5	- 9.2
Louisiana	51.1	111.4	76.1	45.3	106.8	69.9	- 8.1
Maine	23.8	70.1	43.5	19.2	56.7	33.6	-22.7
Maryland	35.2	79.8	54.3	32.0	72.6	47.7	-12.2
Massachusetts	25.2	52.9	37.8	21.7	53.5	34.3	- 9.2
Michigan	35.5	91.3	59.0	30.1	79.3	49.2	-16.6
Minnesota	20.7	61.4	37.3	19.4	53.8	32.4	-13.1
Mississippi	60.1	120.4	85.6	57.7	115.2	80.6	- 5.9
Missouri	38.7	100.7	64.5	32.6	91.9	55.5	-13.9
Montana	23.6	83.0	46.7	22.8	72.1	41.8	-10.6
Nebraska	23.6	69.2	42.4	22.0	61.4	37.6	-11.3
Nevada	43.9	119.1	75.3	43.8	121.1	73.3	- 2.6+
New Hampshire	17.1	53.8	33.3	14.6	57.1	30.5	- 8.4
New Jersey	26.3	62.9	41.6	24.4	59.6	38.0	- 8.7
New Mexico	50.0	124.4	79.8	48.9	115.2	74.5	- 6.6
New York	29.1	69.0	46.0	27.6	69.1	44.0	- 4.3
North Carolina	46.2	101.7	70.5	41.6	98.1	64.1	- 9.1
North Dakota	18.1	62.4	35.6	17.8	58.5	33.5	- 5.9+
Ohio	36.2	93.8	60.5	32.6	85.7	53.4	-11.8
Oklahoma	41.7	115.6	72.1	38.7	103.4	64.0	-11.3
Oregon	31.3	90.7	54.9	30.0	83.6	50.7	- 7.7
Pennsylvania	29.2	70.5	46.9	26.2	65.9	41.7	-11.1
Rhode Island	30.1	63.6	45.4	26.5	68.9	43.1	- 5.1+
South Carolina	48.0	105.4	72.9	43.5	97.1	65.1	-10.7
South Dakota	26.3	79.2	47.5	21.4	70.1	40.5	-14.8
Tennessee	47.8	112.1	75.2	42.0	108.1	67.9	- 9.7
Texas	50.4	119.3	78.9	50.6	115.4	76.1	- 3.6
Utah	27.0	79.8	48.2	25.2	67.7	42.4	-12.0
Vermont	21.3	62.0	39.2	10.8	57.0	28.6	-26.9
Virginia	31.8	81.2	53.5	30.7	74.8	48.7	- 9.1
Washington	31.0	86.5	53.7	28.0	78.1	47.6	-11.3
West Virginia	32.4	93.2	57.8	30.5	85.6	52.7	- 8.8

Wisconsin	24.8	71.2	43.7	22.6	62.1	37.8	-13.5
Wyoming	26.4	98.6	54.2	24.6	84.5	47.2	-13.0
Total	38.7	94.4	62.1	36.0	89.1	56.8	- 8.5

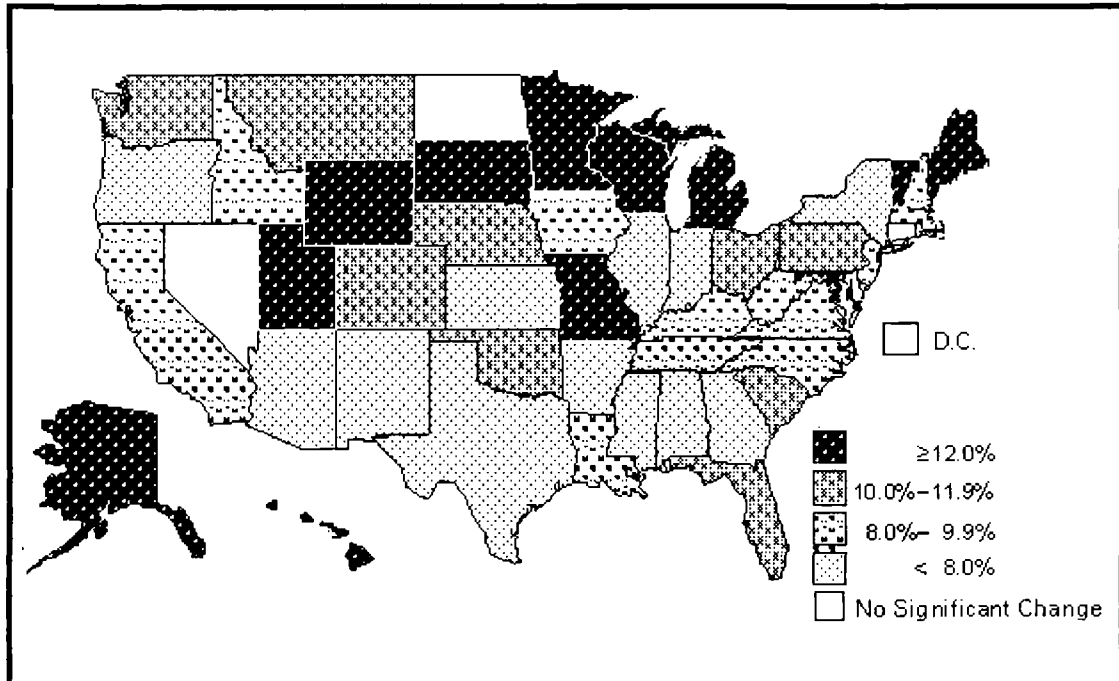
* Per 1000 females.

+ Not statistically significant at $p < 0.05$.

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Figure_1

FIGURE 1. Percentage decline in teenage birth rates*, by state — United States, 1991–1995



*Per 1000 females aged 15–19 years.

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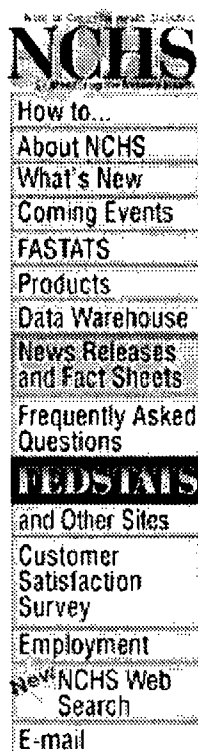
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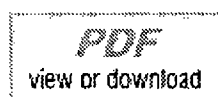
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Teenage Births in the United States: State Trends, 1991-96, an Update

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Updated 6/30/98

A new report from the National Center for Health Statistics, Centers for Disease Control and Prevention provides State specific birth rates for teenagers for 1991 and 1996 and the percent change between 1991 and 1996. It is an update to the special report on teenage childbearing issued by NCHS in April of this year.

During the 1991-96 period, teenage birth rates fell in all States and the District of Columbia and the Virgin Islands. Declines ranged from 6 to 29 percent and were statistically significant in all but three States. Between 1991 and 1996, rates fell by 16.0 percent or more in 13 States; declines in four of these States exceeded 20.0 percent. Eleven States registered declines of 13.0 to 15.9 percent, and 12 States and the District of Columbia registered declines of 10.0 to 12.4 percent. Declines of 5.5 to 9.9 percent were found for 11 States.

Nationally, the birth rate for teenagers continued to decline in 1996, and has now fallen by 12 percent to 54.4 births per 1,000 women aged 15-19 years, compared with 62.1 in 1991. Teenage birth rates by State vary substantially, from 28.6 (New Hampshire) to 102.1 (District of Columbia); the highest rate reported was 116.8 (Guam). Differences in overall rates by State reflect differences in the teenage populations of the States by race and Hispanic origin.



Birth rates for teenage subgroups 15-17 and 18-19 years also vary substantially by State.

There are serious health consequences for teenage childbearing and thus teen birth rates are tracked closely and documented carefully. The new report is available and can be downloaded from the NCHS home page on the Internet: www.cdc.gov/nchswww/

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