ADOLESCENT FACTS

PREGNANCY, BIRTHS AND STDs

Every year, an estimated 750,000 adolescents 15-19 years become pregnant. The pregnancy rate for teenagers aged 15-19 fell 38% between 1990 and 2004 (1). This is the lowest reported teen pregnancy rate since 1976. Despite these changes, the teen pregnancy rate in the United States is one of the highest among industrialized nations (2). Teen birth rates declined from 1991 to 2005, but then rose 5% from 2005 to 2007 (3,4).

Health Risk Behaviors of Adolescents

Data on trends in health risk behaviors come primarily from the following sources:

- The 2007 national school-based Youth Risk Behavior Survey (YRBS) conducted by the Centers for Disease Control and Prevention on the sexual behavior of high-school students in the United States. Students in grades 9–12 from 44 states and 22 local areas were interviewed for the survey. The survey is a component of the Centers for Disease Control and Prevention Youth Risk Behavior Surveillance System. Previous surveys have been conducted approximately every two years since 1990 (5).

- The 2002 National Survey of Family Growth (NSFG) conducted by the National Center for Health Statistics on factors affecting pregnancy and women's health in the United States. The data are based on in-person interviews with a national sample of 7,643 women and 4,928 men aged 15–44 years (6). Numerous surveys of this type have been conducted since 1973.

- The 1995 National Survey of Adolescent Males (NSAM) conducted by the Urban Institute and sponsored by the National Institute of Child Health and Human Development and the Office of Population Affairs. To compile data on reproductive and sexual behaviors, a national representative sample of more than 1,700 males aged 15–19 years were interviewed. The data from the 1995 survey have been compared with a 1988 survey of the same type to analyze trends (7). NSAM data for 1995 can also be compared with the 2002 NSFG.

- The National Longitudinal Study on Adolescent Health (Add Health) conducted by the National Institute of Child Health and Human Development in response to a 1993 congressional mandate. This school-based study of more than 90,000 students in grades 7–12 who attend 145 schools located throughout the United States, the school administrators, and 18,000 parents took place during 1995 and 1996 and was designed to assess how individual, family, and school characteristics affect sexual behaviors, contraceptive use, and pregnancy history, among other adolescent health behaviors. In 2001 and 2002, Add Health respondents 18–26 years old were re-interviewed in a third wave to investigate the influence that adolescence has on young adulthood (8, 9). Multiple studies have now been produced from these data.

Sexual Behavior

According to the YRBS, a significant decrease occurred from 1991 to 2005 in the percentage of high-school students who reported having had sexual intercourse, however no significant change occurred between 2005 and 2007 (Table 1) (10). A similar trend was seen in the NSFG and the NSAM earlier in that time period. In the 2002 NSFG, 46.5% of females aged of 15-19 years reported that they have had sexual intercourse, compared with 55% in 1990 (6). Similarly, in the 1995 NSAM, 55% of adolescent males aged 15–19 years reported that they have had sexual intercourse, compared with 60% in 1988 (7). A significant decrease also occurred between 1991 and 2007 in the percentage of high-school students reporting in the YRBS that they have had sexual intercourse with four or more partners during their lifetime (10). There was also a significant decrease in the percentage of students reporting that they had sexual intercourse during the 3-month period before the survey (10).

Results of the Add Health study indicated that the stronger the relationship is between mother and child, the lower the likelihood of that teen engaging in sexual intercourse in the following year. The results also indicated that the more teens perceive their mothers to disapprove of them engaging in sexual intercourse, the less likely it is for those teens to have sexual intercourse. A third finding showed that teens' perceptions of their mothers' attitudes toward abstinence are more predictive of sexual outcomes than actual maternal attitudes (8).

Recent analyses suggest that trends in behaviors may be changing, coinciding with the 2006 increase in teen birth rates. After major improvement in the 1990s and early 2000s, behavior change related to teen pregnancy risk appears to have stalled or reversed after 2003. Although, overall sexual activity and experience among high school females has been decreasing (1991-2007), this is mostly due to changes among young black females (11). Recent sexual activity among whites and Hispanics has remained relatively unchanged (11).

Contraceptive Use

In 2007, the percentage of currently sexually active high-school students who reported in the YRBS that they or their partners used birth control pills before last sexual intercourse significantly decreased to 16.0% from 20.8% in 1991 (Table 1) (10). Pill use among Hispanics and blacks declined from 1991 to 2007 with most of the decline occurring between 1991 and 2001 (11). Statistically significant improvements, however,

Table 1. Youth Risk Behavior Survey. Percentage of High-School Students Who Reported Selected Sexual Risk Behaviors, 1991 - 2007

Behavior	1991	1993	1995	1997	1999	2001	2003	2005	2007
Ever had sexual intercourse	54.1	53.0	53.1	48.4	49.9	45.6	46.7	46.8	47.8
Have had sexual intercourse with four or more partners over lifetime	18.7	18.7	17.8	16.0	16.2	14.2	14.4	14.3	14.9
Had sexual inter-course during the 3 months pre-ceding the survey	37.5	37.5	37.9	34.8	36.3	33.4	34.3	33.9	35.0
Used birth control pills prior to last sexual intercourse*	20.8	18.4	17.4	16.6	16.2	18.2	17.0	17.6	16.0

*Since the 1995 Youth Risk Behavior Survey, the wording of the question about birth control pills has been changed to inquire about birth control pill use prior to last intercourse, instead of at last intercourse.

Data from Centers for Disease Control and Prevention. Trends in the prevalence of sexual behaviors: national YRBS: 1991—2007. Atlanta (GA): CDC; 2008. Available at: http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07_us_sexual_behaviors_trend.pdf. Retrieved March 13, 2009.

Table 2. Youth Risk Behavior Survey. Percentage of High-School Students Reporting Condom Use During Last Sexual Intercourse, 1991-2007*

Characteristic	1991	1993	1995	1997	1999	2001	2003	2005	2007
Sex									
Female	38.0	46.0	48.6	50.8	50.7	51.3	57.4	55.9	54.9
Male	54.5	59.2	60.5	62.5	65.5	65.1	68.8	70.0	68.5
Race/Ethnicity[†]									
Black	48.0	56.5	66.1	64.0	70.0	67.1	72.8	68.9	67.3
Hispanic	37.4	46.1	44.4	48.3	55.2	53.5	57.4	57.7	61.4
White	46.5	52.3	52.5	55.8	55.0	56.8	62.5	62.6	59.7
Total	46.2	52.8	54.4	56.8	58.0	57.9	63.0	62.8	61.5

*Only students reporting sexual intercourse during the 3 months preceding the survey are included.

†Race categories presented in all tables and all text coincide with those in the data sources.

Data from numerous editions of Centers for Disease Control and Prevention. Youth risk behavior surveillance—United States. Atlanta (GA): Centers for Disease Control and Prevention.

can be seen in condom use at last intercourse (Table 2) (10). Reported condom use at last intercourse for all sexually active adolescents in high schools has increased from 46.2% in 1991 to 61.5% in 2007, however no

significant change has occurred between 2003 and 2007 (10). Results of the NSFG and the NSAM also indicate increased condom use at first intercourse (6,7). In 2007, sexually active black adolescents were most likely to report condom use at last intercourse in the YRBS, as has been the case since 1991 (12). Since injectable contraception was introduced in the 1990s, the number of women aged 15-19 using this method has grown to 13.9% in 2002 (13). Published data from the Add Health study shows that increased mother and child connectedness (the teen's view of the relationship with his or her mother) is related to greater use of birth control and lower likelihood of pregnancy (8).

Early Sexual Intercourse
Although there has been a general decrease in sexual activity among adolescents, this trend has begun to occur only recently among those younger than 13 years. In 2007 approximately 7.1% of adolescents reported engaging in first intercourse before 13 years of age, a decrease compared to 10.1% in 1991, however an increase from 6.2% in 2005 (14). Adolescents who are at greatest risk for engaging in early intercourse are those who 1) live in rural areas, 2) have parents who receive welfare, 3) are African American, and 4) are from the South (9). In addition, the likelihood of early first intercourse among females is greater when there is a large age difference between the female adolescent and her partner. A large difference in age of this type also is correlated with the following four factors: 1) decreased likelihood of contraceptive use at first intercourse; 2) increased likelihood of adolescent birth; 3) increased likelihood among females of experiencing voluntary, but unwanted, first sexual intercourse, meaning that they had sexual intercourse of their own free will, but did not want to at that time; and 4) increased number of sexual partners among females during the adolescent years (15).

Adolescents who engage in first intercourse younger than 15 years are more likely to report that it was nonvoluntary. Specifically, in the 2002 NSFG, 20% of female adolescents younger than 15 years reported that their first intercourse was nonvoluntary, compared with 8.5% of those whose first intercourse occurred at age 16 years (6). For those females reporting voluntary first intercourse before age 16 years, 21.6% stated that their partners were 4-6 years older; 12.8% stated their partners were 7 years older or more (6).

Three factors related to schooling have been identified as being associated with a delay in first intercourse: 1) feeling connected to school, 2) attending a parochial school, and 3) attending a school with a high overall average daily attendance. The following three family characteristics also protect adolescents from early sexual intercourse: 1) feeling connected to parents and family, 2) perceived disapproval by parents of adolescent sex, and 3) perceived disapproval by parents of adolescent use of contraception (9).
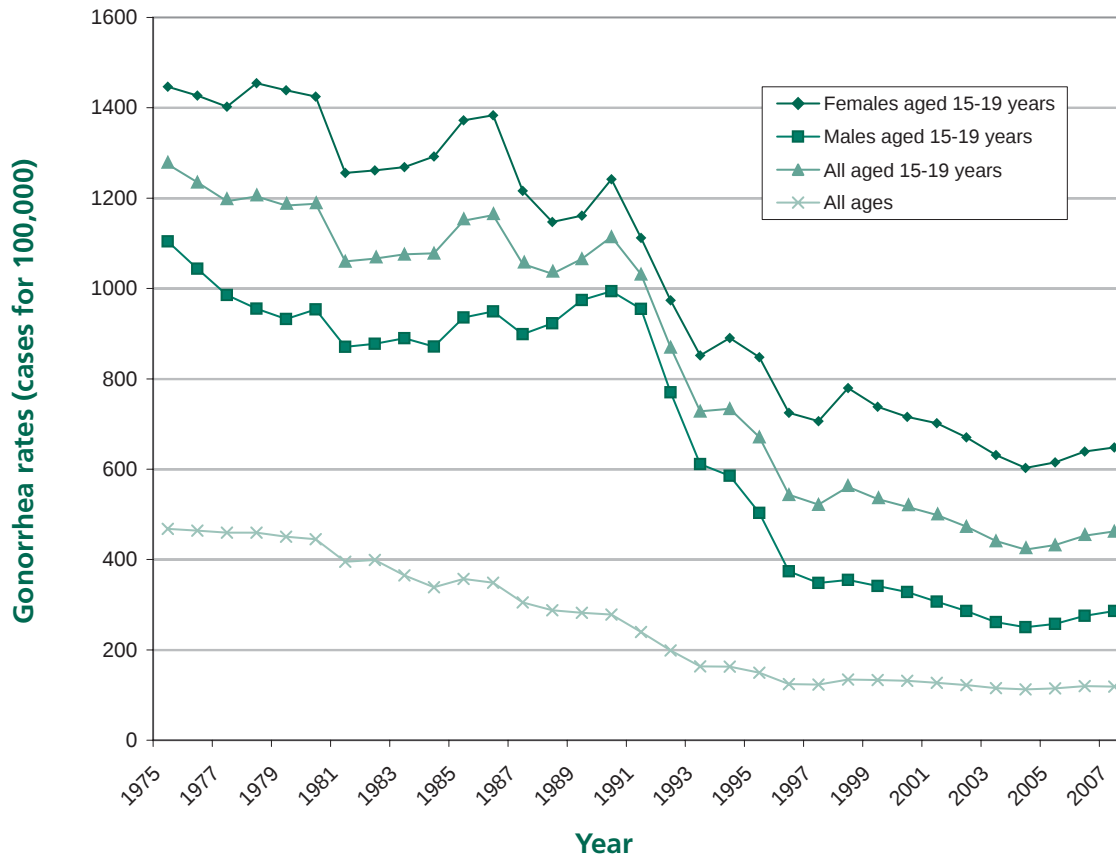
Sexually Transmitted Diseases
Recent estimates suggest that while representing 25% of the ever sexually active population, 15- to 24-year olds acquire nearly one-half of all new sexually transmitted diseases (STDs) (16). Sexually transmitted disease infection rates tend to be higher for females than for males. This discrepancy can be attributed partially to the focus of screening programs on females that result in a lack of identification of males with STDs. Also, many STDs are transmitted more efficiently from males to females than from females to males. The annual direct medical costs associated with STD infection of individuals aged 15-24 years are estimated to be $6.5 billion (in year 2000 dollars) (17).

Adolescents who use alcohol and drugs are more likely to have unplanned and unprotected sex, placing them at risk for Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome (HIV/AIDS) and other STDs. A total of 53.3% of adolescents indicate that the main reason their peers do not use contraception is because of alcohol or drug use (18). In 2007, 22.5% of currently sexually active adolescents had used alcohol or drugs before last sexual intercourse (12).

Chlamydia
In 2007, 1,108,374 cases of chlamydial infection among people of all ages were reported to the Centers for Disease Control and Prevention (19). Females aged 15–19 years had the highest rates of chlamydial infection, with 3,004.7 cases per 100,000 females in that age group (19). This rate increased 6.4% from 2,824 per 100,000 population in 2006 (19). Women aged 20-24 years had the second highest rate of chlamydia with 2,948.8 per 100,000 population (19). Chlamydia rates in women of this age group increased 5.6% from 2006 to 2007 (19). The Centers for Disease Control and Prevention estimates that more than 1 in 10 sexually active adolescent females have chlamydia (20).

Figure 1. Gonorrhea Rates for adolescents as compared with the entire population: 1975-2007.

Data from numerous editions of Center for Disease Control and Prevention. Sexually transmitted disease surveillance. Atlanta (GA): Centers for Disease Control and Prevention.

Gonorrhea

Gonorrhea rates have decreased steadily overall since 1975 (Figure 1). However, in 2007, gonorrhea rates continued to be highest among adolescents and young adults (19). Between 2006 and 2007, the increase for those 15–19 years of age was 2.1%, and for those 20–24 years of age was 0.7% (19). Among females in 2007, 15–19 and 20–24 year-olds had the highest rates of gonorrhea (647.9 cases per 100,000 and 614.5 cases per 100,000, respectively); among males, 20–24 year-olds had the highest rate while 15–19 year-olds had the lowest rate among all 15–24 year-olds (450.1 and 286.0 cases per 100,000, respectively) (19).

From 2001 to 2005, decreases were noted in non-Hispanic black females aged 15–19 years (18.3% decrease) (19). However, non-Hispanic black females aged 15–19 years still have the highest gonorrhea rate of any age or racial/ethnic group (2,955.7 per 100,000 population) (19). This rate was 14.7 times greater than the 2007 rate among non-Hispanic white females of similar age (200.6 per 100,000 population) (19). Non-Hispanic black males aged 15–19 years had a 2007 gonorrhea rate of 1,537.8 cases per 100,000 population, which was 38.7 times higher than the rate among 15–19 year-old non-Hispanic white males of 39.7 per 100,000 population (19).

Herpes

Researchers reported that the number of Americans who tested positive for herpes simplex virus 2 (HSV- 2) infection fell by a relative rate of 19% between 1988 and 2004 (21). This drop was particularly significant among teens. The number of people aged 14–19 who tested positive for HSV-2 dropped from 5.8% in the late 1980s and early 1990s to 1.6% in 1999-2004 (21). The seroprevalence of HSV-2 among non-Hispanic black 14–19 year-olds remains higher (5%) than that of non-Hispanic white 14–19 year-olds (1%) (21).

Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome

In 2007, 1,743 new cases of HIV/AIDS were diagnosed among adolescents aged 13–19 years; 4,907 new cases were reported among those aged 20–24 years (22). Although the cumulative number of individuals aged 13–19 years with AIDS is relatively low, it has increased from 1 case in 1981 to 7,258 cases as of the end of 2007 (22). There were also 1,927 new cases of AIDS diagnosed among individuals aged 20–24 years in 2007 (22). From 2002-2006, the percentage of females with newly diagnosed AIDS who were infected through heterosexual contact was 59% for those aged 13- 19 years and 81% for those aged 20-24 years (23). Because infection can occur 10 years or more before AIDS is diagnosed, most of the people aged 20–24 years diagnosed with AIDS were infected with HIV as either adolescents or preadolescents.

Human Papillomavirus

Human papillomavirus (HPV) is estimated to be the most common STD. In the United States, the greatest prevalence is found among women aged 20–24 years. The overall HPV prevalence in the United States is 26.8% among females aged 14–59 years (19). Among females aged 14–19 years, the HPV prevalence was 24.5% (24). For women aged 20–24 years, HPV prevalence was considerably higher at 44.8% (24). There is a statistically significant trend for increasing HPV prevalence with each year of age from 14–24 years (24).

Syphilis

From 2004 to 2007, rates of primary and secondary syphilis among females aged 15-19 years have increased from 1.5 cases per 100,000 population to 2.4 per 100,000 (19). The highest rates are among females in the 20-24 year age group with 3.5 cases per 100,000 population in 2007 (19). Rates among 15-19 year old males are much lower than those in males in older age groups. However, these rates have increased since 2002 from 1.3 cases per 100,000 population in 2002 to 3.8 in 2007 (19).

Adolescent Pregnancy
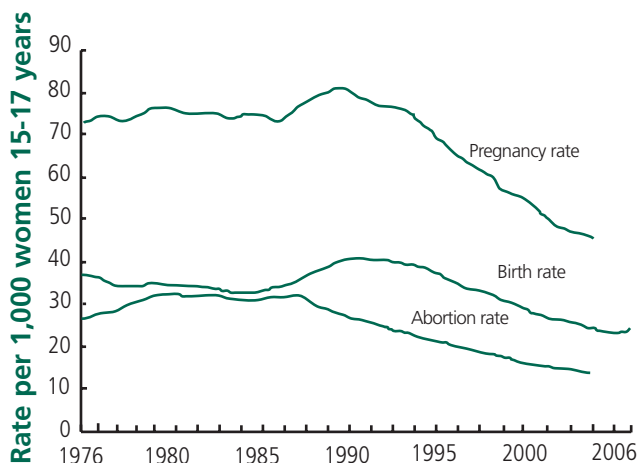
Pregnancy estimates include the sum of live births, induced abortions, and miscarriages. Approximately 750,000 teenagers between the ages of 15-19 become pregnant every year (25). Between 1990 and 2004, teenage pregnancy rates decreased by 38% from 116.8 per 1,000 aged 15-19 years to 72.2 (Table 3) (26).

Table 3. Pregnancy Rates (per 1,000 Women in Specified Group) by Age
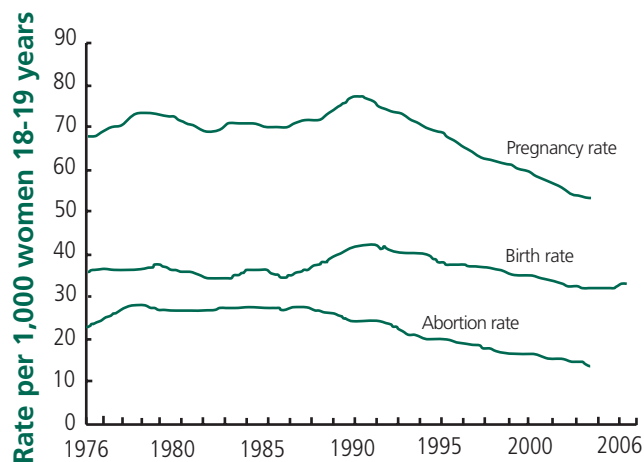
Age (y)	1990	1995	2000	2002	2004
<15	3.4	2.9	2.0	1.7	1.6
15–19	116.8	101.1	84.8	76.0	72.2

Data From Ventura SJ, Abma JC, Mosher WD, Henshaw SK. Estimated pregnancy rates by outcome for the United States, 1990-2004. Natl Vital Stat Rep 2008;56(15):1-25, 28. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_15.pdf. Retrieved April 8, 2009.

Figure 2. Pregnancy, birth and abortion rates for teenagers 15 to 17 years: United States

Pregnancy, birth and abortion rates for teenagers 18 to 19 years: United States

Source: Ventura SJ, Abma JC, Mosher WD, Henshaw SK. Estimated pregnancy rates by outcome for the United States, 1990-2004. Natl Vital Stat Rep 2008;56(15):1-25, 28. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_15.pdf. Retrieved April 8, 2009.

2004 was marked the lowest reported pregnancy rate for teenagers since estimates began in 1976 (Figure 2) (26). Pregnancy rates also decreased among subgroups between 1990 and 2004. Rates for Black and non-Hispanic white teenagers decreased by 45% and 48%, respectively, with larger declines among younger teenagers (26). Among Hispanic teenagers, pregnancy rates fell 24% between 1992 and 2004 (26).

The most recent comparative state data available on adolescent pregnancy are from 2000. For more recent data on an individual state, contact the state's health department. In 2000, pregnancy rates for females aged 15–19 years ranged from 42.0 per 1,000 in North Dakota to 113.0 per 1,000 in Nevada (25). Pregnancy rates also varied considerably by state among female adolescents younger than 15 years. In 2000, pregnancy rates for females younger than 15 years ranged from 1.0 per 1,000 in Maine to 11.0 per 1,000 in Delaware (27). Pregnancy rates for females aged 15–19 years were higher for blacks than for whites in all states with available data for both groups in 2000 (27).

Between 1995 and 2002, most (86%) of the decline in teenage pregnancy was due to improved contraceptive use. The remaining 14% was due to teens delaying sex (28).

Table 4. Birth rates for women aged 15-19 years, by age and race and Hispanic origin of mother: United States, final 1991, 2005, and 2006, and preliminary 2007; and percentage of change in rates, 1991-2005, 2005-2007, and 2006-2007.

Age and Race Hispanic origin of mother	Year				Percent change		
	2007	2006	2005	1991	2006-2007	2005-2007	1991-2005
10-14 y							
All races and origins[1]	0.6	0.6	0.7	1.4	0	-14	-50
Non-Hispanic white[2]	0.2	0.2	0.2	0.5	0	0	-60
Non-Hispanic black[2]	1.5	1.6	1.7	4.9	-6	-12	-65
American Indian or Alaska Native total[2,3]	0.9	0.9	0.9	1.6	0	0	-44
Asian or Pacific Islander total[2,3]	0.2	0.2	0.2	0.8	0	0	-75
Hispanic[4]	1.2	1.3	1.3	2.4	-8	-8	-46
15-19 y							
All races and origins[1]	42.5	41.9	40.5	61.8	1	5	-34
Non-Hispanic white[2]	27.2	22.6	25.9	43.4	2	5	-40
Non-Hispanic black[2]	64.3	63.7	60.9	118.2	1	6	-48
American Indian or Alaska Native total[2,3]	59.0	55.0	52.7	84.1	7	12	-37
Asian or Pacific Islander total[2,3]	17.3	17.0	17.0	27.3	2	2	-38
Hispanic[4]	81.7	83.0	81.7	104.6	-2	0	-22
15-17 y							
All races and origins[1]	22.2	22.0	21.4	38.6	1	4	-45
Non-Hispanic white[2]	11.8	11.8	11.5	23.6	0	3	-51
Non-Hispanic black[2]	35.8	36.2	34.9	86.1	-1	3	-59
American Indian or Alaska Native total[2,3]	31.7	30.7	30.5	51.9	3	4	-41
Asian or Pacific Islander total[2,3]	8.4	8.8	8.2	16.3	-5	2	-50
Hispanic[4]	47.8	47.9	48.5	69.2	0	-1	-30
18-19 y							
All races and origins[1]	73.9	73.0	69.9	94.0	1	6	-26
Non-Hispanic white[2]	50.5	49.3	48.0	70.6	2	5	-32
Non-Hispanic black[2]	109.3	108.4	103.0	162.2	1	6	-36
American Indian or Alaska Native total[2,3]	101.3	93.0	87.6	134.2	9	16	-35
Asian or Pacific Islander total[2,3]	30.7	29.5	30.1	42.2	4	2	-29
Hispanic[4]	137.1	139.7	134.6	155.5	-2	2	-13

[1]Includes origin not stated.

[2]Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (CMB) standards. In 2007, 27 states reported multiple-race data. The multiple-race data of these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." Multiple-race reporting areas vary for 2006-2007; see "Technical Notes."

[3]Data for persons of Hispanic origin are included for this race group; see "Technical Notes."

[4]Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTE: For information on the relative standard errors of the data and further discussion, see reference 5.

Source: Hamilton BE, Martin JA, Ventura SJ. Births: preliminary data for 2007. Natl Vital Stat Rep 2009;57(12):1-13. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_12.pdf. Retrieved April 8, 2009.

Pregnancy Outcome

Abortion

In 2005, 820,151 induced legal abortions for females of all ages were reported to the Centers for Disease Control and Prevention—a decrease of 2.3% from 2004 (29). In 2005, 16.6% of all legal abortions were performed on females aged 19 years or younger (29). Abortion rates were 1 per 1,000 for adolescents under 15 years and 26 per 1,000 for women aged 19 years (29).

Births to Adolescent Mothers

The birth rate among teenagers 15-19 years increased by 5% between 2005-2007, ending the continuous decline occurring from 1991-2005 (Table 4) (4). Final birth data from 2006 indicate that there were 435,436 births to teenagers aged 15-19 years, a 3% increase from 2005 (3). This represents the largest single-year increase since 1989-1990. This increase was apparent across 26 states representing nearly every region of the country (3).

Preliminary data from 2007 shows the birth rate was 42.5 births per 1,000 females aged 15-19 years, up from 41.9 in 2006 (4). However, the birth rate for younger teenagers aged 10-14 remained the same at 0.6 per 1,000 in both 2006 and 2007, compared to 0.7 in 2005 (3,4). The birth rate for teenagers 15–17 years rose approximately 1% in 2007 to 22.2 per 1,000 (4). This represents a 4% increase between 2005-2007 (4). During 1991–2005, this rate dropped 45% (3). Among older teenagers 18–19 years, the

Table 5. Number and percentage of births to unmarried women, by age: United States, final 2006 and preliminary 2007

	Number of Births		Percent	
Age of mother	2007	2006	2007	2006
All ages, unmarried	1,714,643	1,641,946	39.7	38.5
Under 20 years	386,702	372,876	85.7	84.4
Under 15 years	6,142	6,288	98.8	98.3
15-19 years	380,560	366,588	85.5	84.2
15-17 years	130,519	127,749	92.8	91.9
18-19 years	250,041	288,839	82.1	80.6
20-24 years	644,591	625,780	59.5	57.9
25-29 years	389,169	366,085	32.2	31.0
30-34 years	185,425	173,586	19.3	18.3
35-39 years	86,343	81,828	17.3	16.4
40-54 years	22,411	21,791	19.9	19.4

NOTE: For information on the relative standard errors of the data and further discussion, see reference 5.

Source: Hamilton BE, Martin JA, Ventura SJ. Births: preliminary data for 2007. Natl Vital Stat Rep 2009;57(12):1-13. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_12.pdf. Retrieved April 8, 2009.

Table 6. Percentage of live births to unmarried mothers: United States, each state and territory, final 2006 and preliminary 2007

Area	2007	2006
United States	39.7	38.5
Alabama	38.4	36.6
Alaska	37.2	36.8
Arizona	45.2	44.0
Arkansas	43.4	41.8
California	38.9	37.6
Colorado	25.4	27.6
Connecticut	35.1	34.0
Delaware	46.9	45.5
District of Columbia	58.5	57.6
Florida	46.1	44.4
Georgia	43.3	42.4
Hawaii	36.9	36.0
Idaho	25.5	24.3
Illinois	40.1	38.7
Indiana	42.4	41.4
Iowa	34.3	33.8
Kansas	36.5	35.2
Kentucky	39.3	35.3
Louisiana	50.9	49.8
Maine	39.1	37.1
Maryland	40.9	39.7
Massachusetts	33.4	32.2
Michigan	39.4	38.3
Minnesota	32.7	31.7
Mississippi	53.7	52.8
Missouri	40.5	39.3
Montana	35.9	36.0
Nebraska	33.4	32.3
Nevada	42.0	41.3
New Hampshire	31.4	29.4
New Jersey	34.4	33.0
New Mexico	51.8	51.2
New York	40.7	40.0
North Carolina	41.2	40.1
North Dakota	32.6	31.7
Ohio	42.2	40.5
Oklahoma	41.3	40.9
Oregon	35.1	34.3
Pennsylvania	39.7	38.3
Rhode Island	44.0	40.5
South Carolina	46.6	45.6
South Dakota	38.4	37.1
Tennessee	42.8	41.4
Texas	40.7	39.4
Utah	19.6	18.8
Vermont	36.6	34.5
Virginia	35.2	33.8
Washington	33.2	31.9
West Virginia	40.3	37.9
Wisconsin	35.4	34.1
Wyoming	34.7	33.0
Puerto Rico	59.3	57.8
Virgin Islands	71.5	70.8
Guam	—	57.7
American Samoa	33.0	34.7
Northern Marianas	46.1	58.8

— Data not available.
[1]Ecludes data for the territories.

NOTE: For information on the relative standard errors of the data and further discussion, see reference 5.

Source: Hamilton BE, Martin JA, Ventura SJ. Births: preliminary data for 2007. Natl Vital Stat Rep 2009;57(12):1-13. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_12.pdf. Retrieved April 8, 2009.

birth rate increased 1% from 2006 to 73.9 per 1,000 (4). In 2006, this rate had increased 4% to 73.0 per 1,000 compared with 69.9 in 2005 (30). During 1991–2005, the birth rate for teenagers 18-19 years had declined 26% (3).

In 2006, birth rates for white and black non-Hispanic teenagers 15–19 years increased 3% and 5%, to 26.6 and 63.7 per 1,000, respectively (3). In 2007 this rate increased another 1% from 2005 (4). The birth rate for Hispanic teenagers declined in 2007 by 2% from 2006, to 81.7 per 1,000 (4). Between 2006 and 2007, the largest single year birth rate increase was reported for American Indian or Alaska Native teenagers aged 15-19 years at 59.0 per 1,000, a 7% increase from 2006 (4).

Childbearing by unmarried women reached a record high of over 1.7 million births in 2006, up 4% from 2006 (4). Since 2002, rates have increased by 26% for women in all age groups (Table 5) (4). In 2007, about 6 out of 7 births to teenagers were nonmarital (4). The percentage of births to unmarried adolescents varies considerably by state and race (Table 6). The birthrate for white unmarried females aged 15–19 years in 2006 was 31.4 per 1,000 unmarried females, compared with its peak of 35.8 per 1,000 unmarried females in 1994 (3). Among unmarried black females in the same age group, the rate decreased in 2006 to 63.5 per 1,000 compared with its peak of 107.8 per 1,000 in 1991 (3).

Low Birth Weight

In 2006, there were 43,369 low-birth-weight babies (2,500 g or less) born to mothers aged 15–19 years (Table 8) (3). This figure represents 10% of all babies born that year to adolescents in that age group. In that same year, 856 low-birth-weight babies were born to mothers younger than 15 years (3). For both age groups, a larger percentage of low-birth-weight babies were born to non-Hispanic black mothers (16.7% to females younger than 15 years; 14.5% to females aged 15–19 years) than to non-Hispanic white mothers (12.3% to females younger than 15 years; 8.9% to females aged 15–19 years) (3).

Prenatal Care

Adolescents are more likely to experience pregnancy complications and give birth to low-birth-weight babies than older females. This occurs primarily because adolescents do not receive early prenatal care. In 2003 (latest year for which data are available), 70.8% of

Table 7. Number (Percentage) of Live Births by Month Prenatal Care Began, Race and Hispanic Origin, and Age of Mother, 2003

Age and Race	All Births	Early Prenatal Care (1st–3rd Month)	Late Prenatal Care (7th–9th Month) or No Care
<15 y			
Black, non-Hispanic	2,531	1,058 (43.2)	413 (16.9)
Hispanic	2,250	1,142 (52.4)	305 (14.0)
White, non-Hispanic	1,316	723 (56.2)	176 (13.7)
All races	6,341	3,030 (49.3)	944 (15.4)
15-19 y			
Black, non-Hispanic	93,623	60,117 (65.8)	7,031 (7.7)
Hispanic	124,616	83,053 (68.3)	9,384 (7.7)
White, non-Hispanic	161,828	121,256 (76.3)	6,967 (4.4)
All races	394,919	273,266 (70.8)	24,681 (6.4)

Data from Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Munson ML. Births: final data for 2003. Natl Vital Stat Rep 2005;54(2):1-116.

Table 8. Number (Percentage) of Babies Born at Low Birth Weight by Age, Race, and Hispanic Origin of Mother, 2006

Age and Race	All Births	Low-Birth-Weight Babies
<15 y		
Black, non-Hispanic	2,462	411 (16.7)
Hispanic	2,456	268 (10.9)
White, non-Hispanic	1,267	156 (12.3)
All races	6,396	856 (13.4)
15-19 y		
Black, non-Hispanic	103,725	15,025 (14.5)
Hispanic	145,669	11,801 (8.1)
White, non-Hispanic	169,729	15,079 (8.9)
All races	435,436	43,369 (10)

Data from Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S. Births: final data for 2006. Nat Vital Stat Rep 2007;57(7):1-102.

females aged 15–19 years began prenatal care in the first trimester (Table 7), compared with 79.0% of those aged 20–24 years and 89.9% of those aged 30–34 years (32). That same year, 6.4% of females aged 15–19 years received late or no prenatal care. More than 22% began prenatal care during the second trimester (32).

Smoking During Pregnancy

Adolescents are more likely to smoke during pregnancy than are older women. This is another factor that contributes to the higher likelihood of adolescents having low-birth-weight babies. In 2003, smoking rates during pregnancy decreased to 15.4% for women

aged 15–19 years from 17.5% in 1999 (32). The rate was highest for women aged 18–19 years (17.1%) (32). From 1999 to 2003, the rate of smoking during pregnancy among white adolescents aged 15-19 years decreased 27.9% (32, 33). The rate among black and Hispanic adolescents aged 15-19 decreased 6.3% and 3.3%, respectively (32, 33). In 2005, according to the CDC Pregnancy Risk Assessment and Monitoring System (PRAMS), the prevalence of smoking during pregnancy for teenagers under the age of 20 was 20.2% compared to 21.3% among ages 20-24 years, 11.1% among ages 25-34 years, and 8.4% among those 35 and older across 26 sites (34).

Adoption

More than 90% of adolescents who give birth choose to raise the infants themselves. Adolescents rarely relinquish their children for adoption (30). Nationwide, 8% of infants born to unmarried adolescents aged 17 years or younger are placed for adoption (31).

Impact of Adolescent Childbearing

Adolescent mothers are significantly less likely to receive a high-school diploma than women who postpone childbearing. They also are more likely to live in poverty, receive public assistance, and have long periods of welfare dependency. Adolescent fathers are more likely to finish fewer years of schooling, earn less income annually by age 27 years, and participate less in the work force than men who delay fathering until age 21 years. Children of adolescent mothers are more likely to have health and cognitive disadvantages and to be neglected or abused. The daughters of adolescent mothers are more likely to become adolescent mothers themselves, and the sons of adolescent mothers are more likely to be incarcerated. The costs of teenage childbearing in the United States are substantial with an estimated cost of $9.1 billion in public funding in 2004 (35).

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