

# Adolescent Sexuality

Sexual awareness blossoms during adolescence and the young person transitions from childhood to a healthy sexual adulthood. This period of transition has become much longer over the last several decades, due to earlier onset of puberty and later ages of achieving full-time employment, economic independence, domestic partnership/marriage, and childbearing (Planned Parenthood Federation of America, 2001a). These changes have led also to adolescents engaging in sexual intercourse at earlier ages, with more partners, and before marriage. Yet during early adolescence teens have difficulty thinking about the consequences of their actions and do not begin thinking abstractly until middle adolescence. It is during late adolescence that teens begin to empathize more with others, achieve autonomy from family and peers, and understand adult roles. Although moral development progresses with age, it is not a linear progression, and adolescents will fluctuate back and forth between mature and immature behaviors.

Sexual expression can be a positive experience representing a healthy intimacy and bond between two people if done responsibly and safely and at a developmentally appropriate age. Adolescents ages 17-21 are capable of forming healthy intimate relationships. Yet often they may not understand when they are using sex to satisfy other needs to feel better about themselves, to be “masculine or feminine”, alleviate loneliness, etc. The Surgeon General states that sexual health includes “the ability to understand and weigh the risks, responsibilities, outcomes and impacts of sexual actions and to practice abstinence when appropriate. It includes freedom from sexual abuse and discrimination and the ability of individuals to integrate their sexuality into their lives, derive pleasure from it, and to reproduce if they so choose” (U.S. Department of Health and Human Services, 2001). Sexual health is interconnected with physical and mental health. Physical and mental health problems contribute to sexual dysfunction and diseases, while sexual dysfunction and diseases contribute to physical and mental health problems.

Factors which have been found to delay the onset of sexual activity include self-esteem, attendance at religious services, participation in extracurricular activities, and academic commitment for girls. Schools can have a positive impact by structuring students’ time, discouraging unhealthy risk-taking, and influencing the selection of friends and larger peer groups. Two-parent families, parental supervision, a close parent-child relationship, and higher socioeconomic status are protective factors for both girls and boys. Having older siblings, especially if they have had sexual intercourse or an adolescent pregnancy or birth, increases the risk of adolescent pregnancy (U. S. Department of Health and Human Services, 2001). In one study of sixth grade students, the greatest predictor of sexual initiation was a high intention to have sex, which was the result of the belief that most friends had had sex already (Planned Parenthood Federation of America, 2001a). The media plays a dual role. A quarter of teens 10-17 years of age encountered unwanted pornography, while one-fifth received unwanted sexual solicitations or approaches. But the media has also served to teach many teens (over 50 percent of high school youth in a national survey) about birth control, contraception, and pregnancy prevention (U.S. Department of Health and Human Services, 2001).

# Sexually Transmitted Infection/ Sexually Transmitted Disease

## Introduction

Some sources refer to sexually transmitted infections as sexually transmitted diseases (STD); however, the term sexually transmitted infection (STI) is broader and more accurate medically since many STIs are not diseases (e.g., scabies and pubic lice) and occur without symptoms (Planned Parenthood Federation of America, 2001b). The term STI is also used to remind people that these infections are contagious even if there are no symptoms.

Compared to adults, adolescents have a higher risk of acquiring STI due to the following behaviors: adolescents are more likely to have multiple partners as opposed to a single long-term relationship; adolescents are more likely to have unsafe sex; and adolescents may select partners who are at a higher risk themselves. Also, adolescent females may be at higher risk than males for acquiring disease due to cervical physiology at that age. The Centers for Disease Control and Prevention in their 2002 STD Treatment Guidelines state that adolescents under 15 who are sexually active are at a greater risk of infection, including those in detention facilities, patients at STI clinics, male homosexuals, and those who inject drugs (Centers for Disease Control and Prevention, 2002a). At least one study demonstrated that patients with genital piercing were at a higher risk of contracting a sexually transmitted disease (Samantha, Tweeten, & Rickman, 1998).

There are unique barriers to prevention, early identification, and treatment among this age group, as well. The lack of insurance or ability to pay for treatment or testing services may prevent many from seeking care. Also, lack of transportation, confidentiality issues, and lack of adolescent-specific services and programs can all be barriers to adolescents who are trying to seek medical care for this sensitive issue.

In the American Medical Association's Guidelines for Adolescent Preventive Services (GAPS) (1997), it is recommended that doctors ask all adolescents about their sexual behaviors that may result in unintended pregnancy and STIs, including HIV infection. They also recommend that all sexually active adolescents be screened for STIs, and those at risk for HIV offered confidential HIV screening with the ELISA and confirmatory test. Female adolescents over 18 years of age who are sexually active should be screened annually for cervical cancer with a Pap test. The Centers for Disease Control and Prevention (2002a) also recommend that counseling and health education for adolescents be developmentally appropriate, direct, and non-judgmental.

The Institute of Medicine (1997) cites three factors needed to protect adolescents from acquiring STIs (and unintended pregnancies): primary abstinence (completely abstaining from intercourse during adolescence); secondary abstinence (become abstinent for long periods of time after having intercourse in the past); and correct and consistent use of a condom if engaging in intercourse on a regular basis.

## National

Healthy People 2010 (U.S. Department of Health and Human Services, 2000b) critical objectives related to adolescent sexual behavior are to:

- ❖ Reduce the number of cases of HIV infection among adolescents and adults. Baseline and target numbers not available to-date
- ❖ Reduce AIDS among adolescents and adults. **Baseline:** 19.5 cases of AIDS per 100,000 persons ages 13 years and older (1998); **Target:** 1.0 new case per 100,000 persons
- ❖ Reduce the number of new AIDS cases among adolescent and adult men who have sex with men. **Baseline:** 17,847 new cases of AIDS among males ages 13 years and older (1998); **Target:** 13,385 new cases
- ❖ Reduce the number of new AIDS cases among adolescent and adult men who have sex with men and inject drugs. **Baseline:** 2,122 new cases of AIDS among males ages 13 years and older (1998); **Target:** 1,592 cases
- ❖ Reduce the proportion of adolescents and young adults with chlamydia trachomatis infections.
  1. **Baseline:** 5 percent of females ages 15-24 attending family planning clinics; **Target:** 3 percent
  2. **Baseline:** 12.2 percent of females ages 15-24 attending STI clinics; **Target:** 3 percent
  3. **Baseline:** 5 percent of males ages 15-24 attending STI clinics; **Target:** 3 percent

Data sources for STIs include infertility programs, lab reporting for the 50 states, national job training programs, and the Indian Health Service. Unfortunately, much of the disease burden is unknown and not well understood due to underreporting, inconsistent case definitions among the states, and unrepresentative data sources.

According to the Centers for Disease Control and Prevention, each year a quarter of the 15 million new cases of STI in the United States occur in adolescents (Ozer, Park, Paul, Brindis, & Irwin, 2003). The U.S. has the highest STI rates of all industrialized countries. For example, the rate of syphilis in the U.S. is more than 15 times greater than in Canada, and six times that of England even though rates have declined since the 1990's in this country (Planned Parenthood Federation of America, 2001b). Chlamydia and gonorrhea are at historical highs, ranking as the first and second most reported diseases on the national notifiable disease list. Human papilloma virus (HPV) is also on the rise, and HPV infections of the cervix and vagina are the most common STIs experienced by young women today.

Adolescent females ages 15-19 had the highest rates of gonorrhea in 2000, compared to all other female age groups. Male adolescents ages 15-19 had the third highest rates of gonorrhea infections among all male age groups (Centers for Disease Control and Prevention, 2001). Gonorrhea rates for male adolescents decreased from 373.6 cases per 100,000 to 327.9 cases per 100,000 between 1996 and 2000. Gonorrhea rates also decreased for adolescent females, but more modestly. In 2001, females ages 15-19 still had the highest reported rates of

gonorrhea (703.2), while for men the highest rate (563.8) occurred in older groups (20-24 year olds) (Ozer, Park, Paul, Brindis, & Irwin, 2003). Black adolescents made up over three quarters of these cases.

Chlamydia rates are also very high among adolescents. Females of this age are six times more likely to have chlamydia than males of the same ages. The rate for females ages 15-19 in 2001 was 2,547.2 per 100,000 and for males ages 15-19 was 383.9 per 100,000 (Ozer, Park, Paul, Brindis, & Irwin, 2003). Chlamydia is a risk factor for Reiter's syndrome (type of arthritis) in men. For women, an untreated case of chlamydia, gonorrhea, or bacterial vaginosis can lead to pelvic inflammatory disease (PID) and damage the fallopian tubes causing ectopic pregnancy, the rate of which for women overall is five times that of the past two decades (Planned Parenthood Federation of America, 2001b). Chlamydia rates increased 33 percent between 1996 and 2001 for adolescents ages 15-19, which may be partly due to increased use of chlamydia screenings and more sensitive screenings (Ozer, Park, Paul, Brindis, & Irwin, 2003).

It also appears that younger teens are at a higher risk of reinfection than older women. In a Kaiser Daily Reproductive Health Report (Kaiser Family Foundation, 2001) on chlamydia reinfection, a study of 32,698 women ages 10-44 found that 16 percent of female adolescents ages 10-14 were most likely to become reinfected within a year, while 11 percent of females ages 15-19 experienced repeat infections.

Syphilis decreased from 6.1 per 100,000 persons in 1996 to 1.9 per 100,000 in 2001 (Ozer, Park, Paul, Brindis, & Irwin, 2003). Female African Americans have higher rates (13.3/100,000), particularly females ages 15-19 who are six to 13 times more likely to be infected than females of the same age in other ethnic groups. Table 17 shows the rates of various STIs among adolescents in 2000.

**Table 17.** Number of reported cases and corresponding rates for chlamydia, gonorrhea, and syphilis by sex and age group, 2000 (Centers for Disease Control and Prevention, 2001).

STI	Age Group	Male		Female	
		Number of Cases	Rate per 100,000	Number of Cases	Rate per 100,000
Chlamydia	10-14	864	9.8	12,203	144.9
	15-19	32,293	358.9	207,859	2,447.0
Gonorrhea	10-14	829	8.3	5,086	53.3
	15-19	33,281	327.9	68,677	715.6
Syphilis	10-14	4	0.0	19	.2
	15-19	162	1.6	295	3.1

AIDS is relatively rare among adolescents and young adults. Ozer, Paul, Park, Brindis, and Irwin (2003) cite the following statistics: There were 372 new cases of AIDS in 2001 among persons ages 13-19 and 1,461 new cases among persons 20-24. Incidence of AIDS is on the rise among these age groups and is primarily contracted from sexual behavior (53 percent of HIV cases in adolescent males and 37 percent in adolescent females). Of teens ages 13-19, females are just as likely as males to acquire HIV and AIDS, with females making up 57 percent of new HIV infections and 48 percent of reported AIDS cases in 2001. A similar yet weaker trend is

seen for young adults ages 20-24. African American adolescents contract HIV more often than any other ethnic groups ages 13-24 (53 percent of all HIV cases ever reported).

In a study of 1,800 young people ages 13-24 from the Kaiser Family Foundation (2003b), it was found that one in five youth believe that birth control pills protect against HIV/AIDS and other STIs. Over 30 percent of teens report engaging in oral sex and 20 percent of teens were not aware of the danger of STI risk from this kind of sexual contact. Three quarters of young people reported that they “knew something” about STIs and HIV/AIDS, but also that they need more information about recognizing STIs and HIV and about testing. Only a quarter of respondents said they knew “a lot” about STIs.

According to a Kaiser Daily HIV/AIDS Report (Kaiser Family Foundation, 2003a), teens would rather hear HIV/AIDS prevention messages from familiar adults in comfortable settings such as at home, church, school, or youth groups. These messages are more likely to successfully convey HIV prevention information to adolescents. SIECUS (Sexuality Information and Education Council of the United States) defines sexuality education as a lifelong process of acquiring information and forming attitudes, beliefs, and values regarding sexual development, reproductive health, interpersonal relationships, affection, intimacy, body image, and gender roles, and addressing biological, sociocultural, psychological, and spiritual aspects of sexuality (SIECUS, 2001). Nationally, 61 percent of teachers reported that their school offers comprehensive sexuality education, focusing not only on delaying sexual behavior, but also on having safer sex and using birth control if they do not wait; 33 percent of teachers reported their schools only teach an abstinence-only-until-marriage message. The majority of health education courses included HIV prevention information, while 94 percent had STI prevention information, and 85 percent pregnancy prevention information. Similarly, over 90 percent of these courses taught resistance, decision-making, and communication skills.

The SIECUS report states that effective programs take a narrow approach by striving to reduce one or more sexual behaviors leading to unintended pregnancy or STIs/HIV infection; utilize theoretical approaches which have been found to influence other health-related risky behaviors; send a continually reinforced clear message about specific behaviors; contain activities addressing social pressures, communication, negotiation, and refusal skills; provide basic information on risk and avoidance of unprotected intercourse; have culturally and age appropriate (as well as appropriate to the sexual experience of the group) goals, teaching methods, and materials; provide enough time to complete activities; and are taught by well trained and motivated teachers and peers.

## Arizona

Healthy Arizona 2010 (Arizona Department of Health Services, 2001) has established the following objectives related to STI/STDs and responsible sexual behavior:

- ❖ Reduce selected sexually transmitted diseases. **Baseline:** HIV: 11.7 new cases per 100,000; Chlamydia: 2,170 per 100,000 females ages 15-24; Gonorrhea: 324 per 100,000 persons ages 15-24; **Target:** HIV: 9 new cases per 100,000; Chlamydia: 1,650 per 100,000 females ages 15-24; Gonorrhea: 270 per 100,000 persons ages 15-24

- ❖ Implement the Youth Risk Behavior Survey (YRBS) and the Behavior Risk Factor Surveillance System (BRFSS) (relevant modules). (This is necessary to collect data for some of the above objectives). (The YRBS was implemented in 2003.)

The Arizona Department of Health Services reports that, in 2001, there was one new case of early stage syphilis among males ages 10-14 in 2001, resulting in a rate of .5 cases per 100,000. For females ages 10-14, there were two cases, resulting in a rate of 1.1 cases per 100,000. There were 2.5 cases of gonorrhea per 100,000 for males ages 10-14; for females ages 10-14, the rate was 19.5 cases per 100,000. There were 17.4 cases of chlamydia per 100,000 males ages 10-14; for females ages 10-14, the rate was 122.6 cases per 100,000. There were .5 cases of genital herpes per 100,000 adolescent males ages 10-14; for females ages 10-14, the rate was 3.7 cases per 100,000. Rates for persons ages 15-19 are shown in Table 18.

Among other sexually transmitted diseases, notably the vaccine preventable hepatitis A and hepatitis B, there were 409 cases of hepatitis A and 164 cases of hepatitis B in 2001 among all ages. There were 88 cases of HIV among adolescents ages 13-19, as well as 43 cases of AIDS.

**Table 18.** STI rates for adolescents ages 15-19 from 1992 to 2001, by gender (Arizona Department of Health Services).

STI	Sex	Rate per 100,000									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Syphilis	Male	11.3	4.6	4.5	2.1	6.1	2.4	5.2	2.8	5.2	5.6
	Female	17.2	12.0	4.7	5.2	12.4	8.7	9.7	11.2	12.4	13.1
	Total	14.9	8.2	4.6	3.7	9.8	5.4	7.3	6.8	8.7	9.2
Gonorrhea	Male	315.5	306.8	267.2	217.4	186.4	166.6	187.5	233.0	197.3	160.9
	Female	494.2	491.2	476.2	400.6	396.2	349.4	355.3	365.5	319.2	292.4
	Total	423.4	396.8	369.9	314.0	308.4	253.2	266.8	295.8	256.0	224.2
Chlamydia	Male	222.8	296.8	285.8	305.0	315.7	329.6	394.6	389.6	301.1	374.6
	Female	2297.9	2648.4	2291.7	2347.0	2317.4	2324.2	2336.8	2332.7	2104.5	2211.5
	Total	1294.6	1445.3	1266.8	1331.6	1357.9	1272.8	1312.8	1309.4	1168.8	1259.2
Herpes	Male	--	--	--	--	--	14.4	11.0	15.0	10.5	10.7
	Female	--	--	--	--	--	117.8	74.2	69.6	66.7	66.1
	Total						63.3	40.9	40.9	37.5	37.4

Sexuality education is not mandated by the State of Arizona. However, when schools choose to teach it they are required to teach about abstinence, but are not required to teach contraception, STIs, HIV/AIDS, and prevention. The following data from the 2002 Arizona School Health Education Profiles (Arizona Department of Education, 2002) shows what is actually being taught in health education in Arizona schools as reported by 345 principals and 329 teachers in middle, junior high and high schools throughout the state. Of principals who responded, 69 percent report that their school has a written policy protecting the rights of

students and/or staff with HIV infections or AIDS. Of existing policies, 94 percent address procedures to protect HIV infected students; 97 percent address maintaining confidentiality; 74 percent address confidential counseling for HIV students; and 83 percent address adequate training about HIV infection. Of teachers who responded, 91 percent reported that during this school year teachers taught about HIV in a health education course in any of grades 6 through 12; 74 percent reported that human sexuality was taught; 69 percent pregnancy prevention; and 75 percent information on STIs. Thirty-five percent of teachers report teaching about HIV in science classes; 30 percent in family life education or life skills classes; 25 percent in physical education; 13 percent in home economics, family and consumer education; and 12 percent in special education. The amount of time devoted to these topics and the frequency of instruction are not reported.

Regarding specific content of HIV curriculum in health education courses, more teachers report teaching about abstinence (83 percent), how HIV is transmitted (83 percent), and how HIV affects the human body (82 percent), than how to correctly use a condom (29 percent), condom efficacy (49 percent), and how to find valid information or services (65 percent). Around 70 percent of teachers do report teaching about the influence of alcohol and other drugs (79 percent), social or cultural influences (72 percent), the number of young people infected (75 percent), and having compassion for persons living with HIV (70 percent). The majority of teachers (94 percent) also report teaching decision making in health education courses; 93 percent report teaching about resisting peer pressure for unhealthy behaviors; and 80 percent about advocating for health. As for the percentage of students required to do any additional work related to health education, only 24 percent report asking students to perform volunteer work; 50 percent asked students to gather information about health services; while 53 percent asked students to identify and analyze advertising.

When asked about training on health education topics over the last two years, nearly half of teachers (49 percent) reported receiving training on HIV, while less than a third received training on STIs (32 percent), and even fewer were trained in human sexuality (23 percent) and pregnancy prevention (25 percent). In fact, when asked about staff development they would like to receive, 60 percent reported HIV, 57 percent STIs, 54 percent pregnancy prevention, and 48 percent human sexuality. Finally, very few teachers reported meeting with parent organizations (18 percent), and inviting families to attend health education classes (35 percent), yet more reported providing families with information on the program (58 percent).

## Teen Pregnancy

### **Introduction**

Teen pregnancy and childbearing rates have continued their significant decline for several years among all racial and ethnic groups and in all parts of the United States. However, teen pregnancy and childbearing remain serious issues. The United States still has the highest teen pregnancy and childbearing rates among comparable industrialized nations (Kirby, 2001).

Teen mothers and their babies are at a greater health risk than women who have children at an older age. Adolescent females are often not prepared emotionally, socially, or financially for the responsibilities of being a parent. They are less likely to get or stay married, complete high school or college, and more likely to need public assistance (U.S. Department of Health and Human Services, Office of Population Affairs, 2000a). Also, teens are less likely to receive

prenatal care in the first trimester and are more likely to smoke during the pregnancy. Babies of adolescent mothers are more likely to be born pre-term, with a low birth weight, and are at greater risk for illnesses and developmental delays that can have life-long impacts. Children born to mothers ages 15-17 have been found to grow up in less supportive and stimulating home environments, to have poorer health, lower cognitive development, worse educational outcomes, and more behavior problems compared to children of 20 or 21 year-old mothers (Kirby, 2001).

## National

Healthy People 2010 (U.S. Department of Health and Human Services, 2000b) has set objectives to:

- ❖ Reduce pregnancies among adolescent females. **Baseline:** 68 pregnancies per 1,000 females ages 15-17 (1996); **Target:** 43 pregnancies per 1,000
- ❖ Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active. **Baseline:** 85 percent of adolescents in grades 9 through 12 abstained from sexual intercourse or used condoms; 50 percent had never had intercourse; 14 percent had intercourse but not in the past 3 months; 21 percent currently were sexually active and used a condom at last intercourse (1999); **Target:** 95 percent

Over the last decade the percentage of high school students ever having had sexual intercourse has declined, while contraceptive use has increased among those sexually active. Both trends contribute to the decrease in teen pregnancy in recent years. According to the Kaiser Family Foundation (2003d), in 2001:

- ❖ 46 percent of all high school students reported ever having had sexual intercourse, as compared to 50 percent in 1999.
- ❖ Over 60 percent of 12<sup>th</sup> graders had had sexual intercourse; the median age at first intercourse was 16.5 years. The majority of teen girls (73 percent) said they were going steady with their first sexual partner.
- ❖ Fewer high school students reported having had four or more partners (14 percent) than in 1999 (19 percent).

When looking at the racial/ethnic breakdown, Black students had the highest frequency for all of the questions regarding sexual behavior as opposed to White and Hispanic students. Almost 61 percent of Blacks reported ever having had sexual intercourse, compared to 48 percent of Hispanics, and 43 percent of Whites (Centers for Disease Control and Prevention, 2002b). However, the percentage for Blacks dropped drastically from 81 percent in 1991. An interesting finding is that 3.6 percent of the 12<sup>th</sup> grade students reported having sex by the time they were 13, but 9.2 percent of the ninth graders reported having sex by the time they were 13, perhaps showing that more students are initiating sexual behavior at a younger age. Males were more likely than females to report ever having sex, having sex before they were 13, and having at least four partners; however, both males and females had the same percentage reporting that they were currently sexually active.

When asked about safe sex practices, 57.9 percent of students who reported being currently sexually active said that they used a condom during their last sexual intercourse compared to 46 percent in 1991, and 18.2 percent reported using oral contraceptives. Black students were more likely to report using condoms (67.1 percent) than White and Hispanic students; conversely, White students were more likely to report using oral contraceptives (23.4 percent) than Black and Hispanic students. As year in school increased, use of condoms decreased and use of oral contraceptives increased. Male students were more likely to report using condoms during their last sexual intercourse than female students.

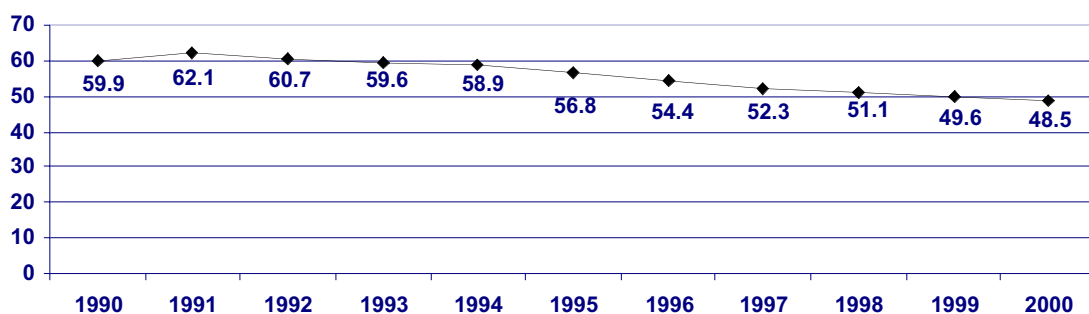
About 25 percent of students reported that they used alcohol or drugs during their last sexual intercourse, the overall prevalence of which was up 18 percent since 1991. Nearly five percent of students reported that they have been pregnant or got someone pregnant. White students were more likely to report having used drugs or alcohol during their last sexual intercourse as compared to Black or Hispanic students, as well as male students versus female students. Black students were more likely to report ever having been pregnant or getting someone pregnant.

Poor females under 20 who are African American are more likely to have an unintended pregnancy (U.S. Department of Health and Human Services, Office of Population Affairs, 2000a). Teens who give birth are more often poor or from low-income families (83 percent), compared to teens who have abortions (61 percent) or teens in general (38 percent) (Alan Guttmacher Institute, 1999).

Overall, national teen pregnancy rates experienced a 19 percent decrease between 1991 and 1997, from 116.5 pregnancies per 1,000 females ages 15-19 to 94.3 pregnancies per 1,000. Data from a more recent report of the Alan Guttmacher Institute, reported by the Kaiser Network (Kaiser Family Foundation, 2003c), show that teen pregnancies hit a record low in 1999, with 85.6 pregnancies for every 1,000 females ages 15-19. Abortions in 1999 decreased to 24.7 for every 1,000 teen pregnancies, the lowest rate since 1973 (a rate of 22.8 abortions per 1,000 teen pregnancies).

Similarly, teen birth rates have fallen since the 1990s (Martin, Hamilton, Ventura, Menacker, & Park, 2002). Figure 34 shows the birth rates for persons ages 10-19 from 1990 to 2000 (Ventura, Matthews, & Hamilton, 2001).

Figure 34. Birth rates for U.S. adolescents ages 10-19 from 1990 to 2000 (Ventura, Matthew, & Hamilton, 2001).



In 2000, the birth rate for the youngest adolescents (ages 10-14) was .9 births per 1,000. Among teens ages 15-17, the birth rate was 27.4 births per 1,000. Among the oldest teens (ages 18-19), the birth rate was 79.2 births per 1,000.

Birth rates were highest for Mexican American, Black, Puerto Rican, and American Indian adolescents in 2000. Rates were lowest for White, Cuban, and Asian/Pacific Islander adolescents. This pattern has held since 1994; however, birth rates for all racial/ethnic groups declined since 1991. In fact, Black adolescent birth rates reached a historic low in 2000. Table 19 shows birth rates by age group and ethnicity for 2000. For persons ages 15-19, Hispanics had the highest rate (94.4 per 1,000), followed by Blacks (81.9 per 1,000), and American Indians (67.8 per 1,000). The same pattern was found for persons ages 18-19 (Martin, Hamilton, Ventura, Menacker, & Park, 2002).

**Table 19.** Birth rates per 1,000 U.S. adolescents by age group and race/ethnicity, 2000 (Martin, Hamilton, Ventura, Menacker, & Park, 2002).

Race/Ethnicity	Age Group		
	15-17	18-19	15-19
White	15.8	56.8	32.5
Black	52.0	125.1	81.9
American Indian	39.6	113.1	67.8
Asian/Pacific Islander	11.5	37.0	21.6
Hispanic	60.0	143.6	94.4
Total	27.4	79.2	48.5

The cost to U.S. taxpayers for teenage childbearing are between \$7 million and \$15 million a year, while unintended births to teenagers (40 percent of teenage pregnancies) cost more than \$1.3 billion each year, mostly in direct health expenditures (U. S. Department of Health and Human Services, Office of Population Affairs, 2000).

### Arizona

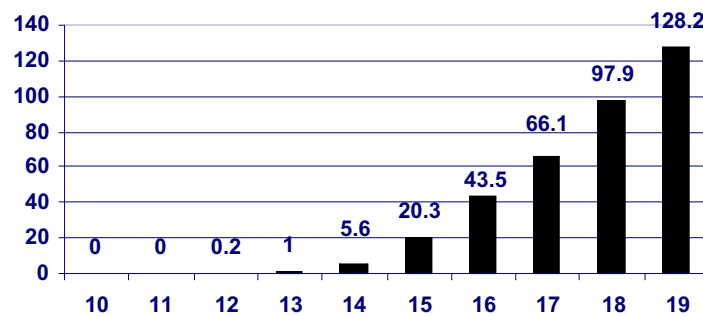
Healthy Arizona 2010 (Arizona Department of Health Services, 2001) has created the following objectives related to responsible sexual behavior:

- ❖ Increase the proportion of adolescents who abstain from sexual intercourse. Baseline and target numbers yet to be determined
- ❖ Increase the proportion of adolescents who use condoms if currently sexually active. Baseline and target numbers yet to be determined
- ❖ Reduce pregnancies among adolescent females (ages 15-17). **Baseline:** 40.2 pregnancies per 100,000 (1998); **Target:** 25 pregnancies per 100,000

The total number of pregnancies in Arizona in 2001 was 94,142, of which about 14 percent were to females ages 10-19. A pregnancy rate is made up of the total number of pregnancies

(live births, fetal deaths, abortions) among a particular population (adolescents) over a certain time period. In 2001, the pregnancy rate for young adolescents ages 10-14 was 1.3 pregnancies per 1,000 adolescents. The overall pregnancy rate for teens ages 15-19 was 71.9 pregnancies per 1,000 adolescent females. The pregnancy rate for teens ages 15-17 reached a record low of 43.2 pregnancies per 1,000 adolescents. For young women ages 18-19, the pregnancy rate was 113.2 pregnancies per 1,000. While these rates have decreased in recent years, the size of the at-risk population has grown; therefore, the decreased pregnancy rate is somewhat deceiving. While a smaller proportion of teens are becoming pregnant, due to the simultaneous increase in the population, the actual number of teen pregnancies has increased. Figure 35 shows the pregnancy rates by age for 2001.

**Figure 35.** Pregnancy rates per 1,000 female adolescents in Arizona, by age, 2001 (Arizona Department of Health Services).



Looking at the racial/ethnic breakdown of teen pregnancy shows subgroup differences. Hispanic females accounted for 32.8 percent of the population under 19, but contributed over half of the pregnancies for this age group in 2001. Hispanic teens ages 15-17 had the highest rate of pregnancy at 79.7 pregnancies per 1,000 adolescents. Black teens had a rate of 57.5 pregnancies per 1,000, while American Indians had a rate of 43.5 pregnancies per 1,000. Asian teens had a rate of 22.8 pregnancies per 1,000, and White non-Hispanic teens had a rate of 20.8 pregnancies per 1,000 adolescents. For adolescents ages 18-19, Hispanic adolescents had the highest pregnancy rate of 176.0 pregnancies per 1,000, while Black adolescents had a rate of 146.4 pregnancies per 1,000. American Indians had a rate of 133.4 per 1,000. White non-Hispanic and Asian adolescents had the lowest rates of 71.7 pregnancies per 1,000 and 57.1 pregnancies per 1,000, respectively.

Figure 36 shows the pregnancy rates for adolescents ages 10-14 from 1997 to 2000, by race/ethnicity. The pregnancy rate for Hispanic adolescents decreased from 4 per 1,000 in 1997 to 2.7 per 1,000 in 2000 for this age group. For American Indians, the rate dropped from 3 per 1,000 in 1999, to 1.6 in 2000.

Figure 36. Pregnancy rates among Arizona adolescents ages 10-14 by race/ethnicity, 1997-2000 (Arizona Department of Health Services).

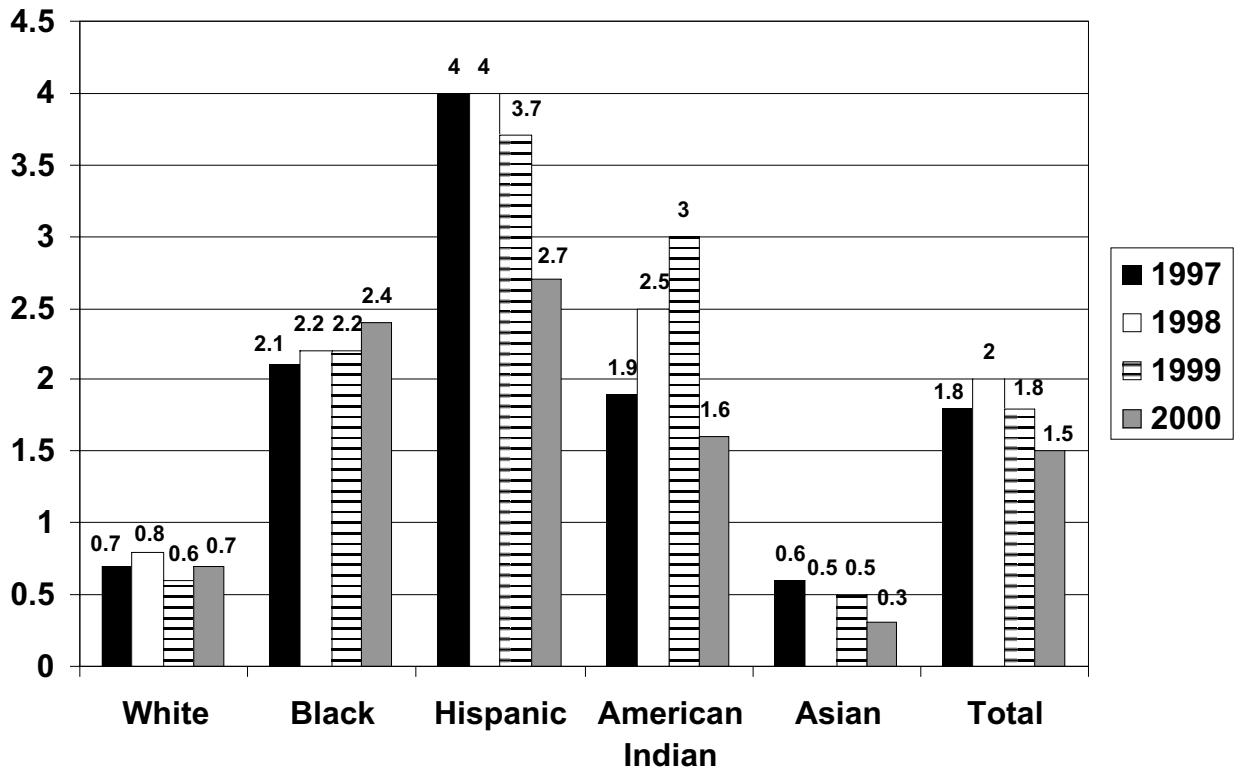
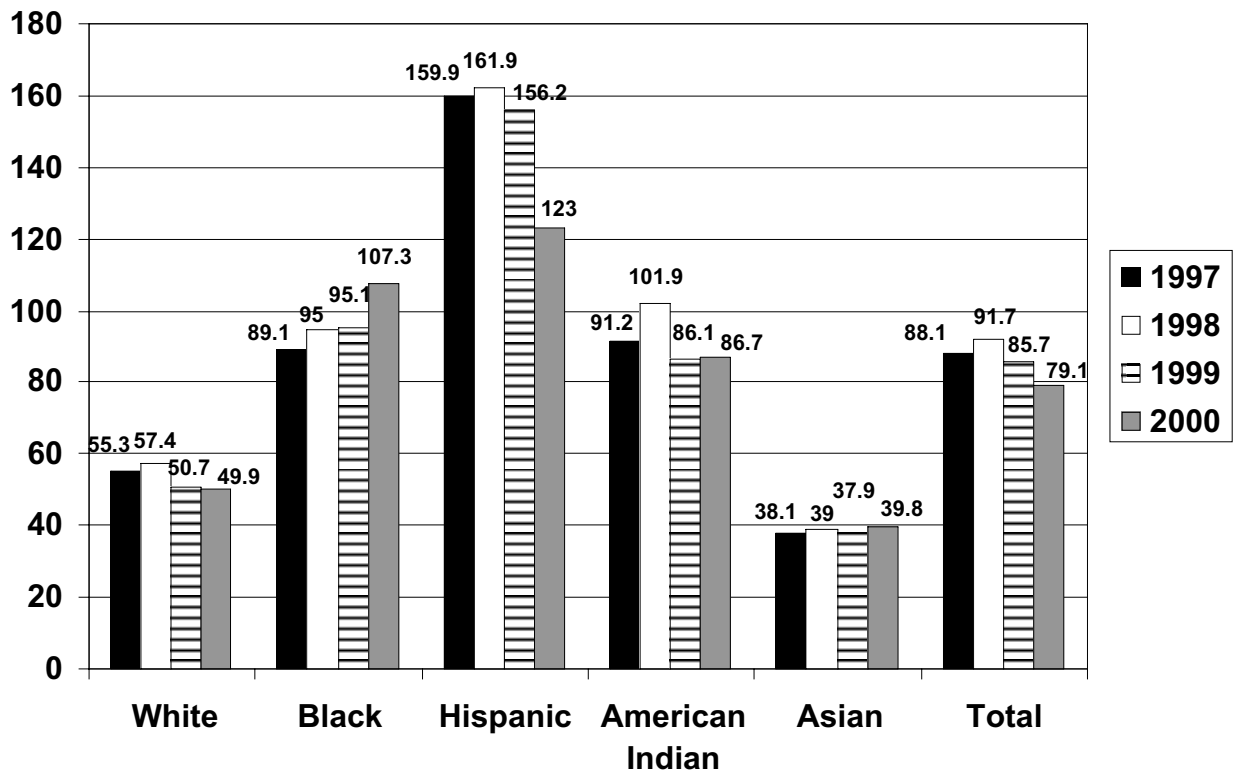


Figure 37 shows the pregnancy rates for adolescents ages 15-19 from 1997 to 2000, by race/ethnicity. The same pattern holds for these older Hispanic adolescents, but not for American Indian adolescents, whose rate of pregnancy stayed at around 86 per 1,000 since 1999, down from almost 102 per 1,000 in 1998.

Figure 37. Pregnancy rates among Arizona adolescents ages 15-19 years by race/ethnicity, 1997-2000.

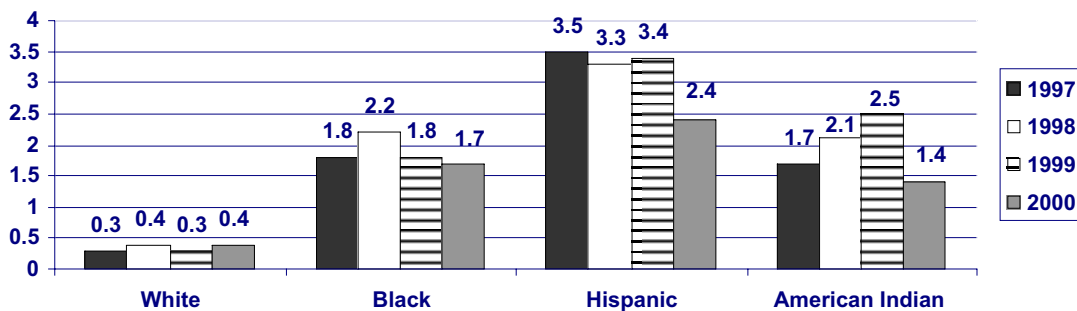


The abortion rate for all teens was 4.1 abortions per 1,000 adolescents ages 10-19 in 2001. For females ages 18-19, the abortion rate was 12.5 abortions per 1,000 adolescents; for those 15-17 years old, the abortion rate was 5.0 abortions per 1,000 adolescents; finally for those less than 17 years old, the abortion rate was 2.0 abortions per 1,000 adolescents. In all age groups, Black adolescents had the highest rates of abortions in 2001, at 2.8 per 1,000 for adolescents ages 10-17. For Black adolescents ages 15-17, the rate was 7.2 per 1,000, and 15.3 per 1,000 for those ages 18-19 (Arizona Department of Health Services).

The birth rate in 2001, which is the total number of live births for a particular population in a given year, for those ages 15-19 was 63.3 live births per 1,000 adolescents, and for those ages 10-14 was 1.0 live births per 1,000. These rates are well above the national rates for teen births among the same age groups. In 2001, 80 percent of births to 15-19 year olds were to unwed mothers. Nearly 77 percent of teen births were to mothers who had no previous live births. Sixty-two percent of teen births were to mothers who had entered prenatal care in the first trimester. In order to pay for labor and delivery, Arizona Health Care Cost Containment System (AHCCCS), the state Medicaid program, paid for 73.7 percent of births; 2.0 percent utilized the Indian Health Service; 2.4 percent reported self-pay; and 20.0 percent had private insurance.

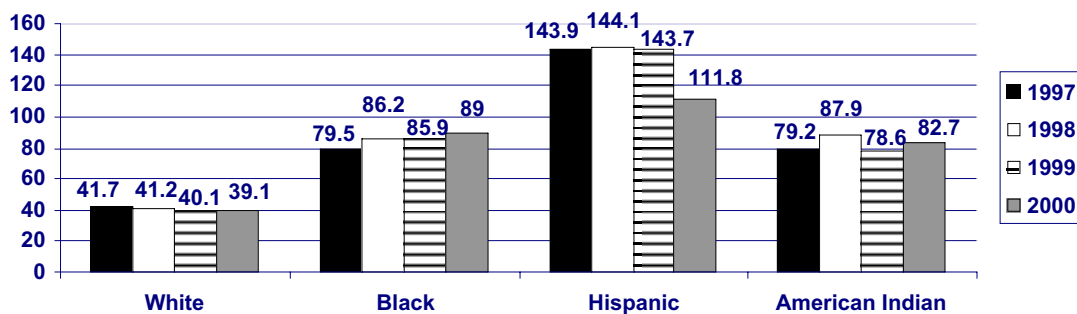
As shown in Figure 38, among adolescents ages 10-14, Hispanics had the highest birth rates with 2.4 per 1,000 in 2000. The next highest were Blacks with 1.7 per 1,000, followed by American Indians who had a rate of 1.4 births per 1,000 (Arizona Department of Health Services).

Figure 38. Birth rates by race/ethnicity among Arizona adolescents ages 10-14 years, 1997-2000 (Arizona Department of Health Services)



As shown in Figure 39, the same pattern emerges among older adolescents ages 15-19.

Figure 39. Birth rates by race/ethnicity among Arizona adolescents ages 15-19 years, 1997-2000 (Arizona Department of Health Services).



Low birth weight is defined as a neonate weighing less than 2500 grams (five pounds, eight ounces). The percentage of low birth weight births was down in 2001 to 16.1 percent for mothers under 19 years of age, from 18.5 percent in 1991, and 17 percent in 2000. Table 20 shows the percentage of low weight births by ethnicity for different age groups in 2000. Among births to adolescents younger than 15 years of age, Whites had the highest percentage of low birth weight babies (13.2 percent). Hispanics had the highest number of births in this age group, with the greatest number of low birth weight babies. The same is true for adolescents ages 15-17 and ages 18-19 (Arizona Department of Health Services).

**Table 20.** Number and percentage of low birth weight births among Arizona adolescents by race/ethnicity and age group, 2000 (Arizona Department of Health Services).

Race/Ethnicity	Less than 15		15 to 17		18 to 19	
	Total Births	LBW Births	Total Births	LBW Births	Total Births	LBW Births
White non-Hispanic	38	13.2% (5)	1040	8.7% (90)	2681	8.6% (231)
Hispanic	144	9.7% (14)	2567	9.6% (246)	3837	7.3% (280)
Black	12	8.3% (1)	198	14.6% (29)	362	14.6% (53)
American Indian	20	0	405	5.4% (22)	664	6.9% (46)
Asian	1	0	29	17.2% (5)	70	10.0% (7)
Unknown	1	0	45	8.9% (4)	75	4.0% (3)
Total	216	9.3% (20)	4284	9.2% (396)	7689	5.3% (410)

Among pregnant females under 15 in 2001, the majority (96.5 percent) did not drink or smoke during pregnancy; none used only alcohol during pregnancy; 3 percent smoked; and .5 percent smoked and drank (Arizona Department of Health Services). The numbers of smokers increases for older teens, with 5.6 percent of 15-17 year olds and 7.7 percent of 18-19 year olds smoking during pregnancy. However, the majority of 15-17 year olds (93.9 percent) and 18-19 year olds (91.7 percent) did not smoke or drink during pregnancy.

Data from the 2003 Youth Risk Behavior Survey given to Arizona high school students (Arizona Department of Education, 2003) show the following:

- ❖ A total of 43.1 percent of students said they have had sexual intercourse (61.3 percent of 12<sup>th</sup> graders); of these 28.4 percent have not had sexual intercourse during the past three months.
- ❖ Of students who had had sexual intercourse during the past three months,
- ❖ 29.4 percent drank alcohol or used drugs before last sexual intercourse.
- ❖ 57.5 percent used a condom during last sexual intercourse.
- ❖ 18 percent used birth control pills during last sexual intercourse.
- ❖ Over seven percent of students reported having ever been physically forced to have sexual intercourse when they did not want to (10.2 percent of females).

- ❖ Among all students, 4.3 percent reported having had sexual intercourse for the first time before age 13; 9<sup>th</sup> graders more frequently reported this (6.4 percent of them compared to 4.6 percent of 10<sup>th</sup> graders).
- ❖ Thirty percent of students reported having had sexual intercourse with one or more people during the past three months.
- ❖ Almost 11 percent of students said they had sexual intercourse with four or more people during their life.
- ❖ Over 80 percent of students reported either never having had sex, not having had sex in the last three months, or using a condom the last time they had sex.
- ❖ 4.5 percent of students reported having been pregnant or having gotten someone pregnant one or more times.

According to the 2001 Youth Risk Behavior Survey of over 5,000 American Indian high school students in 75 schools throughout Arizona (Bureau of Indian Affairs, 2001):

- ❖ The number of students reporting ever having sexual intercourse decreased from 63 percent in 1997 to 59 percent in 2001. The older the student the more likely to have reported having sexual intercourse: 12<sup>th</sup> graders (75 percent), 11<sup>th</sup> graders (66 percent), 10<sup>th</sup> graders (56 percent), and 9<sup>th</sup> graders (47 percent). More males have had this experience (66 percent) than females (52 percent).
- ❖ Within 3 months preceding the survey, 39 percent reported being sexually active. Of these students, 56 percent reported using a condom; 8 percent reported using birth control pills; and 39 percent reported using alcohol or other drugs during intercourse. Twenty-four percent of students reported having four or more partners during their lifetime, with over twice as many males reporting this (33 percent) compared to females (15 percent).
- ❖ Of all students, 9 percent were ever pregnant or had gotten someone pregnant.

### **What would help?**

- ❖ Parents and those who work with adolescents can improve their overall communication skills and relationships with teens to make it possible to discuss issues related to dating relationships and sexuality.
- ❖ Those who work with and care about Arizona's adolescents can foster open communication with youth about sexuality, reproductive health, risky behavior, and the impact on their lifelong health and well-being.
- ❖ Communities can increase education efforts and accessibility of information related to human sexuality, sexually transmitted infections, HIV/AIDS, and pregnancy prevention.
- ❖ Health care providers can provide adolescent-friendly services that promote prevention, early detection, and treatment of sexually transmitted infections.

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