

# **Updating estimates of contraceptive use at first sexual intercourse among teenagers in the United States**

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## **Introduction:**

Monitoring contraceptive use among teenagers is important due to the health and social costs of pregnancy, childbearing, and sexually transmitted diseases (STDs) among the teenaged population. The U.S. birth rate for females aged 15-19 years was 43 births per 1,000 females in 2002 (Martin et al, 2003). While this rate has been declining since 1991, it remains one of the highest among developed countries in the world (United Nations, 2003). Birth and pregnancy rates for black and Hispanic teens are higher than the national averages. In 2000, while the teen pregnancy rate for non-Hispanic white teens was 57, it was 151 for black teens and 132 for Hispanic teens (Martin et al, 2003). Using a method at first sexual intercourse has been shown to significantly influence whether a teenage female will experience a pregnancy before the age of 20 (Moore et al, 1998).

Recent estimates show that nearly 19 million cases of sexually transmitted diseases occurred in the year 2000, of which nearly half (9 million) were among persons 15-24 years of age (Weinstock et al, 2004).

Prior analysis of teenage males has shown that condom use at last (recent) intercourse increased substantially from 1988 to 1995 – from 57 to 67 percent (Sonenstein et al., 1998). Female teens also report higher levels of partners' condom use

during that period (Abma and Sonenstein, 2001; Terry and Manlove, 2002). Data from high school students in the U.S. show similar increases (Centers for Disease Control and Prevention, 2002).

The use of hormonal methods at first sex, primarily the pill prior to 2002, has been rare, at only 8 percent of sexually experienced teen females in 1988 and 1995. Only very small numbers of teens had used the then-new methods of Depo-Provera injectables and Norplant implants by 1995. Equally rare was the use of dual methods – a hormonal method and a condom: only 2 percent of female teens used dual methods at first sex in 1988, and 5 percent in 1995.

Overall, method use at first sex has increased among teen females and males. In 1995 about three-quarters of male and female teens reported using a method at all at first sex, an relatively large increase from their levels in 1988. However, from a different perspective, a nontrivial number -- about one-quarter -- of teenagers had unprotected first sexual intercourse as of 1995.

Using the 2002 National Survey of Family Growth (NSFG) for the most recent estimates, this report will update trends in the use of these methods of contraception at first sex, and will present data on additional methods to the extent sample sizes allow. The NSFG asked females about the following methods in 2002, and a slightly more abbreviated list for males.

- Pill
- Condom
- Vasectomy
- Female sterilizing operation/tubal ligation
- Withdrawal
- Depo-Provera, injectables
- Norplant
- Rhythm or safe period by calendar

Safe period by temperature or cervical mucus test, natural family planning  
Diaphragm  
Female condom, vaginal pouch  
Foam  
Jelly or cream  
Cervical cap  
Suppository, insert  
Today™ sponge  
IUD, coil, loop  
Emergency contraception  
Other method

This analysis will examine trends and differentials among younger and older teens, and among white, black, and Hispanic teens, and will explore associations with other factors known to be related to whether first intercourse is protected.

**Data and Methods:**

The NSFG is a periodic survey designed to provide reliable national data on fertility, marriage, divorce, contraception, infertility, and the health of women in the United States. In 2002 the National Center for Health Statistics (NCHS) conducted Cycle 6 of the NSFG surveying a nationally representative sample of women and men 15-44 years of age. This is the first time the NSFG includes men in its sample. The female interview averaged about 80 minutes in length, while the male interview averaged about 60 minutes. The final sample includes 7,643 women, 1,121 of whom were teenagers, and 4,928 men, 1,121 of whom were teenagers. The overall response rate for the 2002 NSFG was 80 percent, and the response rate for teenagers was 81 percent.

The NSFG is especially appropriate for this analysis because collecting data on contraceptive method use is one of its main missions, so questions are very detailed and thorough. In addition, questions were designed to preserve the time-series when used with data from prior cycles of the NSFG, and from the 1988 and 1995 National Survey of

Adolescent Males (NSAM). This analysis can thus present comparable items for teenagers from the 1988, 1995, and 2002 surveys.

Another strength of the NSFG is that questions are asked in a face-to-face interview, and visual aids were provided such as showcards and life-history calendars. Thus contraceptive methods that the adolescent may not have been familiar with were included in a list on a card that the adolescent read, and the female interviewer was available to explain and describe them. The NSAM was also conducted via face-to-face interviews.

This research will present descriptive statistics to show trends and differentials, providing tests of significance of differences where appropriate.

## **Results**

These cannot be included until the public use file is released in late October.

## **References**

Abma, J, and F Sonenstein. 2001. Sexual Activity and Contraceptive Practices Among Teenagers in the United States, 1988 and 1995. Vital and Health Statistics, Series 23, No. 21. Hyattsville, MD: National Center for Health Statistics, April, 2001.

Centers for Disease Control and Prevention. 2002. Trends in Sexual risk behavior among high school students: United States, 1991- 2000. Morbidity and Mortality Weekly Report, 51(38), 856-859.

Moore KA, Driscoll A, Lindberg LD. A statistical portrait of adolescent sex, contraception, and childbearing. Washington, DC: The National Campaign to Prevent Teen Pregnancy. March 1998

Sonenstein FL, Ku L, Lindberg LD, Turner CF, Pleck JH. Changes in sexual behavior and condom use among teenaged males: 1988 to 1995. Am J Public Health 88(6): 956-59. 1998.

Terry, E and J Manlove. 2000. Trends in Sexual Activity and Contraceptive Use Among Teens. Washington, DC: The National Campaign to Prevent Teen Pregnancy. March, 2000.

Weinstock H, Berman S, Cates Jr., W. 2004. Sexually Transmitted Diseases Among American Youth: Incidence and Prevalence Estimates, 2000. *Perspectives on Sexual and Reproductive Health* 36 (1): 6-10, Jan/Feb 2004.

United Nations. *State of World Population 2003: Making 1 Billion Count: Investing in Adolescents' Health and Rights*. Un