Contraceptive Use in the United States, 2002
Single and dual use among racial and socio-economic groups

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Abstract

Objective—This paper presents national estimates of single and dual contraceptive use and method choice in 1995 and 2002, based on Cycles 5 and 6 of the National Surveys of Family Growth (NSFG). The paper focuses on differences and trends among Hispanic, Black, and Non-Hispanic white women, classified by education, income, receipt of public assistance, and other socio-economic indicators. This focus helps to understand trends and differentials in birth and pregnancy rates in the 1990's.

Methods---Data were collected based on in-person interviews with 12,571 men and women 15-44 years of age in the civilian non-institutional population of the United States in 2002. Interviews were conducted by female interviewers in the homes of persons selected for the sample, using laptop computers. This report is based on the sample of 7,643 women interviewed in 2002. Data based on the interviews with 4,928 men will be presented in subsequent reports. The response rate for women in the study was about 80 percent.

Results--- Some of these have been run, but they cannot be included here until the public use file is released in late October. The following measures of use could be discussed:

- The proportion who have ever used each method;
- Use at first premarital intercourse
- Current contraceptive use, including current use of more than one method.

Keywords: Contraceptive use; birth control; National Survey of Family Growth

Introduction

The National Center for Health Statistics (NCHS) conducts the National Survey of Family Growth (NSFG), a periodic survey that collects data on factors affecting the formation, growth, and dissolution of families---including marriage, divorce, and cohabitation; contraception, sterilization, and infertility; pregnancy outcomes; and births.

The National Survey of Family Growth (NSFG) was established and first conducted by the National Center for Health Statistics (NCHS) in 1973. Since then, the NSFG has been conducted 6 times by NCHS—in 1973, 1976, 1982, 1988, 1995, and 2002. In 1973-1995, the NSFG was based on a national sample of women 15-44 years of age. In 2002, a national sample of 7,643 women and 4,928 men were interviewed.

The results in this paper are based primarily on the samples of women in the 1995 and 2002 NSFG surveys. The scope of this paper includes only heterosexual intercourse. Contraceptive use during other forms of sexual activity is outside the scope of the present paper.

The use of contraception, the choice of a specific method of contraception, and how effectively those methods are used, are major factors affecting the birth and pregnancy rates in the United States. Use of barrier methods, including condoms, may also affect trends in sexually transmitted infections, including HIV. It is likely that concerns about HIV and other sexually transmitted diseases were among the factors affecting the trends described in this report.

This report shows results from the 2002 National Survey of Family Growth (NSFG), on several aspects of contraceptive use:

- What method (if any) was used at first premarital sexual intercourse;
- What methods (if any) have ever been used (at some time in one's life);
- What method or methods (if any) are currently being used.

The NSFG questions on contraceptive use occurred in the context of an interview that had already asked about background information, pregnancies, marriages, and cohabitations (if any); any sterilizing operations; and infertility and related conditions.

Strengths and Limitations of the data

The data in this paper come from cycles of the National Survey of Family Growth (NSFG), and as a result they have several strengths:

- First, the data are drawn from interviews with large national samples that were interviewed in comparable ways in 1982, 1995, and 2002. They also have variables that allow us to describe these trends by such characteristics as age, race, education, income, and marital and cohabitation status.

- Second, the data from each survey were processed and coded in ways to make them as comparable as possible, so that trends could be measured as reliably as possible.

- Third, the interviews were conducted in person by female interviewers who received thorough training on the survey, so the quality of the data is generally very good.

- Fourth, the response rates for the survey were high—about 80 percent in 1982, 1988, 1995, and 2002.

- Fifth, the survey collected a rich array of data on contraceptive use, which allows us to show data for this time period on use of contraception at first intercourse, current use, current use of dual or back-up methods, and use at any time in the woman's life ("ever-use").

Sample Design and Fieldwork Procedures

The 2002 National Survey of Family Growth, or NSFG, was based on 12,571 interviews with men and women 15-44 years of age in the noninstitutional population of the United States. The interviews were administered in person by trained female interviewers in the selected persons' homes. The 2002 sample is a nationally representative multistage area probability sample drawn from 120 areas across the country. The sample is designed to produce national, not state, estimates.

Persons were selected for the NSFG in 5 major steps:

- Large areas (counties and cities) were chosen first;
- Within each large area or "Primary Sampling Unit," groups of adjacent blocks, called segments, were chosen at random.
- Within segments, addresses were listed and some addresses were selected at random.
- The selected addresses were visited in person, and a short "screener" interview was conducted to see if anyone 15-44 lived there.
- If so, one person was chosen at random for the interview and was offered a chance to participate.

To protect the respondent's privacy, only one person was interviewed in each selected household. In 2002, teenagers and black and Hispanic adults were sampled at higher rates than others.

The NSFG questionnaires and materials were reviewed and approved by the CDC/NCHS Research Ethics Review Board (formerly known as an Institutional Review Board or IRB), and by a similar board at the University of Michigan. The female questionnaire lasted an average of about 85 minutes**.** All respondents were given written and oral

information about the survey and were informed that participation was voluntary. Adult respondents 18-44 years of age were asked to sign a consent form but were not required to do so. For minors 15-17 years of age, signed consent was required first from a parent or guardian, and then signed assent was required from the minor. The response rate for the survey was about 79 percent—about 80 percent for women and 78 percent for men.

Over 200 female interviewers were hired and trained by the survey contractor, the University of Michigan's Institute for Social Research, under the supervision of NCHS. Interviewing occurred from March of 2002 until the end of February, 2003. All of the data in this report were collected by Computer-Assisted Personal Interviewing, or CAPI. The questionnaires were programmed into laptop computers, and administered by an interviewer. Respondents in the 2002 survey were offered $40 as a "token of appreciation" for their participation. More detailed information about the methods and procedures of the study will be published in a forthcoming report**.** (**Groves et al, SERIES 1).**

In the first 5 cycles of the NSFG, in 1973, 1976, 1982, 1988, and 1995, national samples of women 15-44 years of age in the civilian non-institutional population of the United States were interviewed. In 2002, the national sample included both women and men 15-44 years of age. This paper presents data on contraceptive use, primarily from the sample of 7,643 women in 2002, but also from 1995.

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Measurement of Contraceptive Use

The scope of this report is limited to contraceptive use (as reported by women) during heterosexual vaginal intercourse. Measuring contraceptive use during heterosexual intercourse is one of the central goals of the NSFG because it is a very important factor affecting birth and pregnancy rates and family formation. The NSFG questionnaire for women begins with some questions on demographic background characteristics, and then asks detailed questions on any pregnancies, births, marriages, or cohabitations the woman has had. The questions on contraception are next, and include:

- Whether she has <u>ever</u> used each of 19 methods of contraception at any time in her life

- Whether she or her partner used any of these methods the first time she had intercourse with a male;
- What methods she has used in the last 3 years before the survey, and
- What method or methods she is using currently (that is, in the month or so up to the interview).

In the 2002 NSFG, up to 4 methods of contraception were collected and coded for each month in a 3-4 year period up to the interview. It was therefore possible to measure the total percent who used a given method of contraception, even if they were also using another method in that month.

In 1995 and 2002, the questions on contraceptive use were improved to ask women directly about methods used for both birth control and prevention of sexually transmitted infections.

Classifying Current Contraceptive Use

Women were asked to report if they were using more than one method in a given month. Most women were using only one method in the month of interview. Classifying women by the most effective method they are using helps to measure the extent to which women are **protected from unintended pregnancy**. Therefore, women are classified by the most effective method they reported using, because it is primarily their use of that method that determines their risk of unintended pregnancy. However, in other tables in this paper, if women and their partners were using more than one method currently, they were classified as using each of the methods they reported.

Statistical Analysis

Sampling errors will be produced with SUDAAN software. (www.rti.org/sudaan) All estimates are weighted to reflect the US female civilian non-institutional population of the United States. (Women 15-44 years of age living on military bases or in institutions were not included in the survey or in this paper.)

RESULTS

We will describe trends in contraceptive use within the black, Hispanic, and white populations by:

- **education,**
- **poverty level income,**
- **receipt of public assistance,**

and other socio-economic characteristics. We will also include some measures of HIV/STD risk for these groups as independent or control variables.

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- The National Institute for Child Health and Human Development (NICHD);
- the Office of Population Affairs;
- the CDC's National Center for Health Statistics (NCHS/CDC),
- the CDC's National Center for HIV, STD, and TB Prevention;
- the CDC's Division of Reproductive Health;
- the CDC's Office of Women's Health;
- the Office of Planning, Research, and Evaluation of the Administration for Children and Families (ACF); the Children's Bureau of the ACF;
- and the Office of the Assistant Secretary for Planning and Evaluation (OASPE).

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DEFINITIONS

Contraceptors:

A woman who reported using a method or methods for any reason in the month of interview was classified by the most effective method she used (additional methods were coded in CONSTAT2-CONSTAT4 as described above).

The priority order of use-effectiveness codes was:
female (contraceptive) sterilization, male (contraceptive) sterilization, Norplant implant, IUD, Lunelle 1-month injectable, Depo-Provera 3-month injectable, pill, Contraceptive Patch, Morning-after pill, Male condom, diaphragm (with or without jelly or cream), female condom (vaginal pouch), Today sponge, cervical cap, Natural Family Planning or Temperature rhythm methods, Calendar rhythm, withdrawal, foam, suppository or insert, jelly or cream, and other methods, in that order.

The ranking of the effectiveness of methods uses data (when available) and other knowledge to estimate the failure rate for each method when used by a national sample of users. A failure rate is simply the percent who have a pregnancy in the first 12 months of using the method. Much of these data are from previous cycles of the NSFG. **(e.g., Fu et al, 1999; and Ranjit et al,, FPP, 2001**) This measure is sometimes called "typical use," and is the best estimate of the likely failure rate for a national cross-section of users.

Two recent studies **(Fu et al, 1999, table 1; Ranjit et al, 2001, FPP**) were used to obtain the failures rates in typical use as estimated from previous cycles of the National Survey of Family Growth (NSFG). These rates were:

	Failure rate	Rank
Female sterilization	less than 1%	highest (most effective)
Male sterilization	less than 1%	
Implant	1%	
Injectable	3%	
Pill	8%	
Male condom	15%	
Periodic Abstinence	25%	
Withdrawal	27%	
Spermicides	29%	lowest (least effective)

Ever-use of birth control methods.—These data are based on a series of questions that begins like this:

"Card 30 lists methods that some people use to prevent pregnancy or to prevent sexually transmitted disease. As I read each one, please tell me if you have ever used it for any reason. Please answer yes even if you have only used the method once.

Have you ever used birth control pills?
Have you ever used condoms or rubbers with a partner?
Have you ever had sex with a partner who had a vasectomy?
Have you ever had sex with a partner who used withdrawal or 'pulling out'?
Have you ever used Depo-Provera or injectables (or shots) ?

This series of questions continued until 19 methods had been asked about.