

# Using the National Survey of Family Growth

[www.cdc.gov/nchs/nsfg.htm](http://www.cdc.gov/nchs/nsfg.htm)

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National Center for Health Statistics

Workshop presented at the

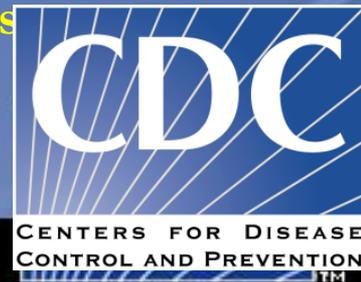
2015 NCHS National Conference on Health Statistics

North Bethesda, MD

August 24, 2015



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# Outline of NSFG Workshop

- Background of the NSFG
- Survey Design and Sample
- Questionnaire Content
- User Tools – How to access data, documentation and support
- Hands-on practice with User Tools and Data
- Questions and discussion

# Purposes of the National Survey of Family Growth (NSFG):

- Addressing Sec 306 of the Public Health Service Act:  
“NCHS shall collect statistics on...family formation, growth, & dissolution.”
- Explaining variations in birth rates: contraception, sexual activity, infertility.
- Monitoring risk of HIV and sexually transmitted diseases: # of sexual partners, condom use, drug use, same-sex contact.
- Describing relationships & families: Marriage, divorce, cohabitation; Roles of fathers in raising children.
- Describing attitudes about sex, marriage, parenthood.

# Proximate Determinants of Fertility

## Intermediate Variables

### Background Characteristics

Race/ethnicity  
Religion  
Labor force participation  
Education  
Income  
Access to health care  
Family background  
Community environment  
(economic, social, etc)

### Intercourse variables:

Timing of first intercourse  
Percent of women who ever had intercourse  
Time spent in marriage or cohabitation (separation, divorce)  
Frequency of intercourse

### Conception variables:

Contraceptive use  
Sterilization  
Infertility

### Pregnancy outcome (gestational) variables:

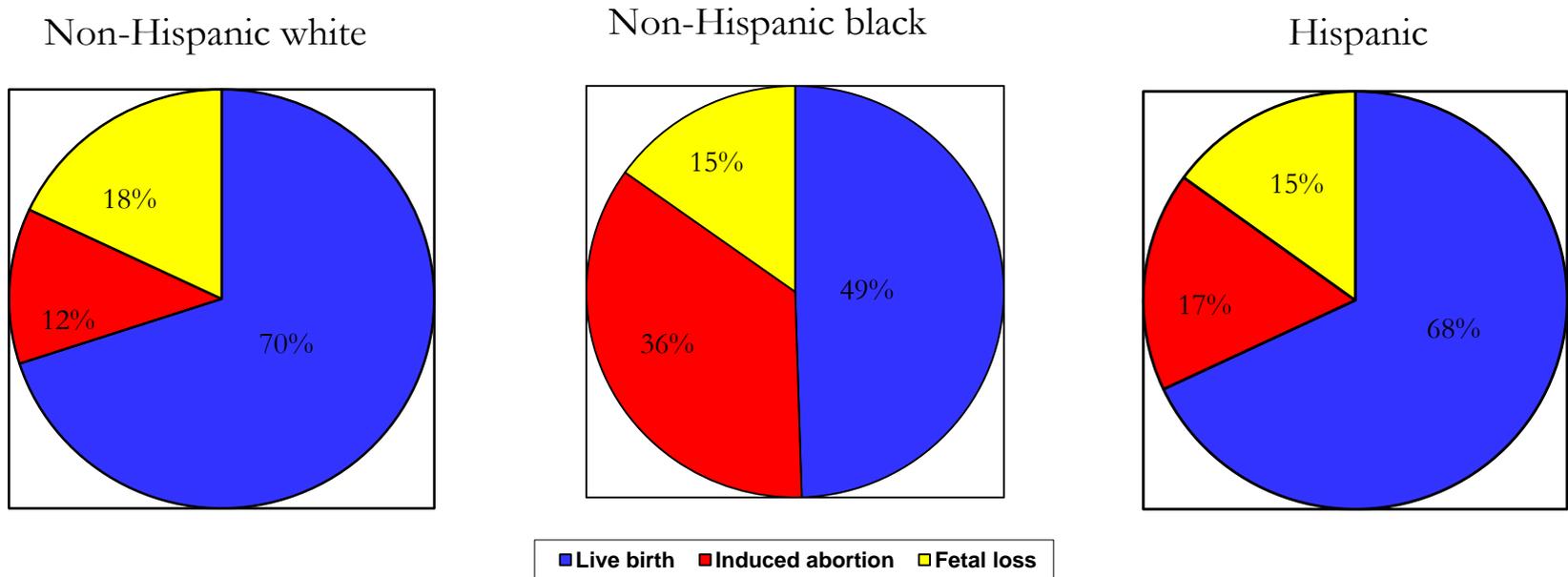
Miscarriage and stillbirth  
Induced abortion

### Fertility



**Live births**

# Percent of pregnancies by outcome and race and Hispanic origin: United States, 2009



SOURCE: Special tabulations based on Curtin, S.C., Abma, J.C., Ventura, S.J., and S.K. Henshaw. Pregnancy Rates for U.S. Women Continue to Drop. NCHS Data Brief no 136. 2013.

## NSFG history in brief

Year	Scope (15-44)	N	Over-Samples	Average Length	Contractor
1973	Ever-Married Women	9,797	Black women	60 Min	NORC
1976	Ever-Married Women	8,611	Black women	60 Min	Westat
1982	All Women	7,969	Black women & teens 15-19	60 Min	Westat
1988	All Women	8,450	Black women	70 Min	Westat
1995	All Women	10,847	Blacks & Hispanics	100 Min	RTI
2002	All Women & Men	12,571 W = 7,643 M = 4,928	Blacks, Hispanics, & Teens	W= 85 min M= 60 min	U of Michigan
2006- 2010	All Women & Men	22,682 W=12,279 M=10,403	Blacks, Hispanics, & Teens	W=~80 min M=~60 min	U of Michigan
2011- 2013	All Women & Men	10,416 W=5,601 M=5,815	Blacks, Hispanics, & Teens	W=~80 min M=~60 min	U of Michigan

# NSFG Funders

- **National Center for Health Statistics (NCHS)**
- **Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)**
- **Office of Population Affairs (OPA)**
  
- Children's Bureau (Admin for Children, Youth and Families)
- ACF's Office of Planning, Research, & Evaluation (OPRE)
- Office of the Assistant Secretary for Planning and Evaluation (OASPE)
  
- CDC's Division of HIV/AIDS Prevention
- CDC's Division of STD Prevention
- CDC's Division of Reproductive Health
- CDC's Division Cancer Prevention & Control
- CDC's Division of Birth Defects and Developmental Disabilities

# Survey Design and Sample

**For more detailed information on the methodology and design of the NSFG, see:**

- R Groves et al. *Planning & Development of the Continuous National Survey of Family Growth, 2006-08*. Vital Health Stat 1 (48). 2009.
- J Lepkowski et al. *The 2006-2010 National Survey of Family Growth: Sample Design and Analysis of a Continuous Survey*. Vital Health Stat 2 (150). 2010.
- J Lepkowski et al. *Responsive Design, Weighting, and Variance Estimation in the 2006-2010 National Survey of Family Growth*. Vital Health Stat 2(158). 2013.

# 2011+ NSFG Currently in the Field

- Interviewing began in September 2011 and is now in the 4<sup>th</sup> year
- Interviews are conducted in-person in the homes of respondents, using laptop computers
- Average interview length of 80 min for females and 60 min for males, including 15-20 min of ACASI content
- Highly skilled female interviewers, trained specifically on NSFG for one week
- \$40 Incentive offered for the interview
- Teens 15-17 must have signed parental consent and also provide assent themselves.
- Interviews conducted in both English & Spanish (since the 1973 NSFG)
- Age range expansion from 15-44 to 15-49 this fall.

# 2011-2013

## National Survey of Family Growth

	Sample Size	Response Rate
All 15-44	10,416	73%
Females 15-44	5,601	73%
Males 15-44	4,815	72%
Teens 15-19	2,125	75%

# **Content of the NSFG Questionnaires**

# Pregnancy history for women: 2011-2013

- Outcome and gestational length
- Timing of learning she was pregnant#
- Timing of first prenatal care visit#
- Smoking during pregnancy#
- Intendedness at time of conception
  
- For live births:
  - Birth weight
  - Payment for delivery
  - Breastfeeding
    - Initiation
    - Duration of any breastfeeding
    - Duration of exclusive breastfeeding

# = Not asked for abortions

# Fathering information for men: 2011-2013

- Men are asked about biological children fathered within the context of specific relationships, as well as non-biological children he has ever lived with
- For each child:
  - Age and sex
  - Living arrangements (where child lives now)
  - When did he learn about the pregnancy (before delivery or after)
  - Paternity establishment
  - Marital or cohabiting status with child's mother at time of delivery
  - For each child < 19 years old:
    - Wantedness of pregnancy when he learned about the pregnancy
    - Happiness about pregnancy when he learned about the pregnancy
- Fathering behaviors and activities with children:
  - Items vary by age of child and co-residential status
- Other pregnancies he fathered that did not end in live birth (Numbers ending in miscarriage, stillbirth, abortion)

# Measures of contraceptive use: *2011-2013*

- **Females**
  - Ever-use of each specific method
  - Method use at first intercourse
  - First method ever used
  - Partner-specific use (up to 3 “most recent partners”)
  - Month-by-month method calendar spanning 3 - 4 years prior to interview (including month of interview)
  - Consistency of condom use in past 4 weeks & past 12 months
- **Males**
  - No method calendar, but comparable contraceptive use items asked within specific relationships
  - Method use at first & last intercourse with each of up to 3 “most recent partners”
  - Past 12 months: all methods used with partner, method used the most, frequency of using any method, & consistency of condom use

# Marriage, Dissolution, and Cohabitation: *2011-2013*

## Marital histories

- Start/end dates, premarital cohabitation, # of children with each spouse, spouse's prior marriage history & # of children

## Cohabitation histories

- Start/end dates, outcomes, engagement status, expectations to marry for current cohabitators, children with each partner
- Men: limited to cohabs with women he ever married + 1<sup>st</sup> cohab partner ever

## Selected spouse/partner characteristics

- Age, race/Hispanic origin, education

# Infertility, reproductive health, and health services: *2011-2013*

- ▶ Infertility services ever used
  - Help to get pregnant
  - Help to prevent miscarriage
  - Length of time tried to become pregnant before 1<sup>st</sup> visit for help
  
- ▶ Health conditions and behaviors related to reproduction
  - Diabetes, ovulatory problems, fibroids, etc.
  - Vaginal douching
  - Pelvic inflammatory disease (PID)
  
- ▶ Birth control and medical services used in past 12 months

# Types of data collected in Audio CASI

- Pregnancies ever had or fathered
- Incarceration experience (males only)
- Alcohol, smoking, (females only), and drug use in last 12 months
- Vaginal, oral, and anal sex with opposite-sex partners
- Same-sex sexual experience (greater detail for males)
- Non-voluntary vaginal intercourse (18-44 only)
- HIV/STI risk behaviors; STI history
- Sexual attraction and sexual orientation/identity
- Income and public assistance received

# **NSFG User Tools and Data Resources**

## National Survey of Family Growth

### National Survey of Family Growth

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The National Survey of Family Growth (NSFG) gathers information on family life, marriage and divorce, pregnancy, infertility, use of contraception, and men's and women's health. The survey results are used by the U.S. Department of Health and Human Services and others to plan health services and health education programs, and to do statistical studies of families, fertility, and health. Links to some of those studies are included on this web site, under "[Publications and Information Products.](#)"

### [For Survey Participants](#)

Have you been selected to take part in the National Survey of Family Growth? Answers to some frequently asked questions can be found here.

### Related Sites

[Surveys and Data Collection Systems](#)
[Vital Statistics: Birth Data](#)
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 [Get email updates](#)
[Spanish \(Español\)](#)
[Sobre la Encuesta](#)


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### What's New

- [2011-2013 National Survey of Family Growth \(NSFG\) Public Use Data Files \(12/2014\)](#)

### Publications

- [Sexual Activity, Contraceptive Use, and Childbearing of Teenagers Aged 15-19 in the United States \(7/2015\)](#)
- [Three Decades of Nonmarital First Births Among Fathers Aged 15-44 in the United States \(6/2015\)](#)
- [HIV Testing in the Past Year Among the U.S. Household Population Aged 15-44: 2011-2013 \(6/2015\)](#)
- [Interpregnancy Intervals in the United States: Data From the Birth Certificate and the National Survey of Family Growth !\[\]\(f62f4c9390b04efd8452b0c1c072bcb4\_img.jpg\) \(4/2015\)](#)
- [Trends in Long-acting Reversible Contraception Use Among U.S. Women Aged 15-44 \(2/2015\)](#)
- [Current Contraceptive Status Among Women Aged 15-44: United States, 2011-2013 \(12/2014\)](#)



# National Survey of Family Growth

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- Key Statistics from NSFG

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## Key Statistics from the National Survey of Family Growth

### B Listing

- Birth control - See [Contraception](#)
- Births (mothers)
  - [Age at first birth](#)
  - [Marital or cohabiting status of mother at time of birth](#)
  - [Number of children ever born \(parity\)](#)
  - [Premarital/nonmarital status of births](#)
  - [Attitudes about childbearing](#) - See [Attitudes: Parenthood and childbearing](#)
- Births (fathers)
  - [Age at first birth fathered](#)
  - [Marital or cohabiting status of father at time of birth](#)



#### Age at first birth fathered

	2002 <sup>1</sup>	2006-2010 <sup>1</sup>	2011-2013 <sup>2</sup>
<b>Mean age at the birth of their first biological child for men 15-44 years of age who ever fathered a biological child</b>	25.1	25.1	25.4

## National Survey of Family Growth

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## Publications and Information Products



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### 2011-2013 Reports

[Sexual Activity, Contraceptive Use, and Childbearing of Teenagers Aged 15-19 in the United States](#) (7/2015)

[Three Decades of Nonmarital First Births Among Fathers Aged 15-44 in the United States](#) (6/2015)

[HIV Testing in the Past Year Among the U.S. Household Population Aged 15-44: 2011-2013](#) (6/2015)

[Trends in Long-acting Reversible Contraception Use Among U.S. Women Aged 15-44](#) (2/2015)

[Current Contraceptive Status Among Women Aged 15-44: United States, 2011-2013](#) (12/2014)

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- [Cycle 3 \(1982\) Reports](#)
- [Cycle 2 \(1976\) Reports](#)
- [Cycle 1 \(1973\) Reports](#)

### 2006-2010 Reports

[Interpregnancy Intervals in the United States: Data From the Birth Certificate and the National Survey of Family Growth](#)  (4/2015)

[Recent Declines in Nonmarital Childbearing in the United States](#) (8/2014)

[Infertility Service Use in the United States: Data From the National Survey of Family Growth, 1982-2010](#)  (1/2011)

### Related Sites

[Surveys and Data Collection Systems](#)
[Vital Statistics: Birth Data](#)

# 2011–2013 NSFG Reports (more to come)

## HIV Testing in the Past Year Among the U.S. Household Population Aged 15–44: 2011–2013

Casey E. Copen, M.P.H., Ph.D.; Anjali Chandra, Ph.D.; and Isaacmarie Febo-Vazquez, M.S.

### Key findings

Data from the National Survey of Family Growth, 2011–2013

- Overall, 19% of persons aged 15–44 in 2011–2013 had been tested for HIV in the past year, including 22% of females and 16% of males.

- Higher percentages of HIV testing in the past year were seen for persons aged 15–24 compared with those aged 25–44, and for non-Hispanic black persons compared with other race and ethnicity groups.

- Four of 10 males who had same-sex sexual contact in the past year had been tested for HIV in the past year, compared with 2 of 10 who had opposite-sex sexual contact in the past year.

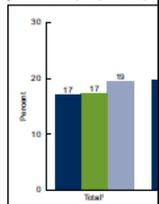
- Levels of HIV testing in the past year were higher for persons with behaviors that increase HIV risk, including having one or more same-sex partners or higher numbers of opposite-sex sexual partners in the past year.

In 2011, more than 1 million Americans aged 13 and over were living with HIV infection, and one in seven did not know their infection status (1). Routine, voluntary HIV testing is a recognized way to reduce HIV transmission (2). Using data from the 2011–2013 National Survey of Family Growth (NSFG), this report updates nationally representative estimates and trends for HIV testing in the past year (excluding donation of blood or blood products, during which individuals are routinely tested) among the U.S. household population aged 15–44 in 2011–2013, broken down by age, race and ethnicity, and sexual behaviors that may be related to HIV risk.

**Keywords:** human immunodeficiency virus; HIV testing; National Survey of Family Growth

In 2011–2013, HIV testing among persons aged 15–44 had increased from 17% in 2002 to 19% in 2011–2013.

Figure 1. Percentages of females and males aged 15–44 who had been tested for HIV in the past year: United States, 2002, 2006–2010, and 2011–2013



Significant increases in HIV testing in the past year were seen for persons aged 15–24 compared with those aged 25–44, and for non-Hispanic black persons compared with other race and ethnicity groups.



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## Current Contraceptive Status Among Women Aged 15–44: United States, 2011–2013

Kimberly Daniels, Ph.D.; Jill Daugherty, Ph.D.; and Jo Jones, Ph.D.

### 2011–2013 of Family

61.7% of women aged 15–44 used contraception.

Methods currently used include the pill (31.7%), sterilization (9.4%), and reversible methods (20.6%).

Nearly all women use contraception at some point in their lifetimes (1), although at any given time they may not be using contraception for reasons such as seeking pregnancy, being pregnant, or not being sexually active. Using data from the 2011–2013 National Survey of Family Growth (NSFG) on contraceptive use in the month of the interview, this report provides a snapshot of current contraceptive status among women aged 15–44 in the United States. In addition to describing use of any method by age, Hispanic origin and race, and educational attainment, patterns of use are described for the four most commonly used contraceptive methods: the oral contraceptive pill, female sterilization, the male condom, and long-acting reversible contraceptives, which include contraceptive implants and intrauterine devices (2).

**Keywords:** pill • condom • long-acting reversible contraceptives • National Survey of Family Growth

## Sexual Activity, Contraceptive Use, and Childbearing of Teenagers Aged 15–19 in the United States

Glady M. Martinez, Ph.D.; and Joyce C. Abma, Ph.D.

### Key findings

Data from the 2011–2013 National Survey of Family Growth

- In 2011–2013, 44% of female teenagers aged 15–19 had experienced sexual intercourse; the percentage has declined significantly, by 14% for female and 22% for male teenagers, over the past 25 years.

- In the early teen years males were more likely than females to have had sexual intercourse. But the percentage of older teenagers who had sexual intercourse was similar for female and male teenagers.

- In 2011–2013, 79% of female teenagers and 84% of male teenagers used a contraceptive method at first sexual intercourse.
- The condom remained the most common contraceptive method used among teenagers.

- Young women who did not use a method of contraception at first sexual intercourse were twice as likely to become teen mothers as those who used a method.

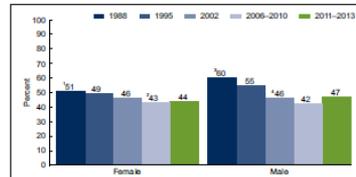
Monitoring sexual activity and contraceptive use among U.S. adolescents is important for understanding differences in their risk of pregnancy. In 2013, the U.S. birth rate for teenagers aged 15–19 dropped 57% from its peak in 1991 (1), paralleling a decline in the teen pregnancy rate (1–3). But these rates are still higher than those in other developed countries (3–6). Using data from the 1988 to 2011–2013 National Survey of Family Growth (NSFG), this report provides trends and recent national estimates of sexual activity, contraceptive use, and childbearing among teenagers aged 15–19.

**Keywords:** adolescents • sexual intercourse • contraceptive use at first sex • National Survey of Family Growth

What percentage of teenagers aged 15–19 had sexual intercourse at least once?

- In 2011–2013, 44% of never-married female teenagers (4.3 million) and 47% of never-married male teenagers (4.8 million) had sexual intercourse at least once.

Figure 1. Never-married females and males aged 15–19 who have ever had sexual intercourse: United States, 1988–2013



The decline in the percentage of female teenagers who had sex at least once from 1988 to 2011–2013 was statistically significant ( $p < 0.05$ ). The difference in the percentage between 2006–2010 and 2011–2013 was not significant. The decline in the percentage of male teenagers who had sex at least once from 1988 to 2011–2013 was statistically significant ( $p < 0.05$ ). There was no significant change in the percentage between 2002 and 2011–2013. © NCHS/CDC/HRSA, National Survey of Family Growth, 1988, 1995, 2002, 2006–2010, and 2011–2013. Male data for 1988 and 1995 from the National Survey of Adolescent Health.



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Centers for Disease Control and Prevention  
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## Three Decades of Nonmarital First Births Among Fathers Aged 15–44 in the United States

Glady M. Martinez, Ph.D.

### Key findings

Data from the National Survey of Family Growth

- The percentage of fathers aged 15–44 whose first births were nonmarital was lower in the 2000s (36%) than in the previous 2 decades.

Nonmarital childbearing in the United States increased from the 1940s to the 1990s, peaked in 2007–2008, and declined in 2013 (1–3). In 2013, the nonmarital birth rate was 44.8 births per 1,000 unmarried women aged 15–44. Using data from the National Survey of Family Growth (NSFG), this study examines nonmarital first births reported by fathers aged 15–44. This report presents trends in nonmarital first births by father's age at birth and Hispanic origin and race. Given increases in births occurring in cohabiting unions (2,4,5), first births within cohabitation are also examined.

## Trends in Long-acting Reversible Contraception Use Among U.S. Women Aged 15–44

Army M. Branum, M.S.P.H., Ph.D.; and Jo Jones, Ph.D.

### Key findings

Data from the National Survey of Family Growth

- Use of long-acting reversible contraceptives (LARCs) declined between 1982 and 1998, remained stable through 2002, and then increased nearly five-fold in the last decade among women aged 15–44, from 1.7% in 2002 to 7.2% in 2011–2013.

- The percentage of women using LARCs has remained highest among women aged 25–34, with more than twice as many women aged 25–34 (11.1%) using LARCs in 2011–2013 compared with women aged 15–24 (3.0%) and aged 35–44 (3.3%).

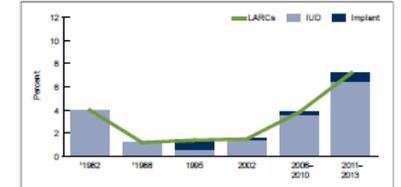
- After decreasing between 1982 and 1998 and remaining stable from 1998 through 1999, LARC-use patterns diverged among Hispanic, non-Hispanic white, and non-Hispanic black women.
- Women who have had at least one birth use LARCs at a higher rate compared with women who have had no previous births, and this difference has increased over time.

Long-acting reversible contraceptives (LARCs), which include intrauterine devices (IUDs) and subdermal hormonal implants, are gaining popularity due to their high efficacy in preventing unintended pregnancies. IUD use was more common among U.S. women in the 1970s before concerns over safety led to a decline in use (1); however, since approval of a 3-year contraceptive implant in 1990 and redesigned IUDs, there has been growing interest in the use of LARCs for unintended pregnancy prevention. Using data from the 1982, 1988, 1995, 2002, 2006–2010, and 2011–2013 National Survey of Family Growth (NSFG), this report examines trends in current LARC use among women aged 15–44 and describes patterns of use by age, race and Hispanic origin, and parity.

**Keywords:** intrauterine devices • hormonal implants • National Survey of Family Growth

Current use of a long-acting reversible contraceptive method increased nearly five-fold in the last decade among women aged 15–44.

Figure 1. Trends in current long-acting reversible contraceptive use, by device



Years were not available in 1980 and 1986. NSFG data were obtained from 1982 to 1998 and later (increases from 2002 to 2011–2013 for all LARCs are statistically significant; lower increases in IUD use from 1988 to 2011–2013 is statistically significant). IUD is intrauterine device. LARCs are long-acting reversible contraceptives. © NCHS/CDC/HRSA, National Survey of Family Growth, 1982, 1988, 1995, 2002, 2006–2010, and 2011–2013.



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# National Survey of Family Growth

http://www.cdc.gov/nchs/nsfg/nsfg\_bibliograph

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## Bibliography for the National Survey of Family Growth

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- [Cycle 3](#) [PDF - 70 KB]
- [Cycles 1 and 2](#) [PDF - 76 KB]

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NSFG

File Form

## Data files for 2011-2013 NSFG

Data files	Availability	Source
<b>Public-use data</b> -- Female respondent (5,601 records) -- Female pregnancy (9,543 records) -- Male respondent (4,815 records)	Public, free	Downloadable, NSFG website
<b>ACASI data</b> -- Female respondent -- Male respondent	Public, free (previous years available by request)	Downloadable, NSFG website
<b>REGION data</b> -- Female and male respondent file	Public, free, but available by request	NSFG team
<b>Contextual data</b> -- Time of interview, state and county -- Time of 2010 census, state	Restricted, fee based	Research Data Center

**CASEID= linking variable across files**

# National Survey of Family Growth

http://www.cdc.gov/nchs/nsfg/nsfg\_2011\_2013\_puf.h

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## 2011-2013 NSFG: Public Use Data Files, Codebooks, and Documentation

Persons with disabilities experiencing problems accessing this page should contact CDC-INFO at [CDC-INFO@cdc.gov](mailto:INFO@cdc.gov), 800-232-4636 or the TTY number at (888) 232-6348 and ask for a 508 Accommodation PR#9342. If emailing please type 508 Accommodation PR#9342 without quotes in the subject line of the email.

### Codebooks and Documentation

- Codebooks:
  - Webdoc interactive codebook
- User's Guide:
  - Main Text [PDF - 1.16 MB]
    - Part 1 General Information for Users
    - Part 2 Topic-Specific Notes
  - Appendix 1: File Indexes for 2011-2013 NSFG

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- Variance Estimation Examples
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- Program Statements
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### Related Sites

- Surveys and Data Collection Systems
- Vital Statistics: Birth Data

Contact Us:

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## Downloadable Data Files

- Female Respondent Data File (2011-2013\_FemResp.dat)
- Female Pregnancy Data File (2011-2013\_FemPreg.dat)
- Male Respondent Data File (2011-2013\_Male.dat)

ASCII data files

## Program Statements

- SAS Program Statements
  - Female respondent file (2011-2013\_FemRespSetup.sas)
  - Pregnancy file (2011-2013\_FemPregSetup.sas)
  - Male respondent file (2011-2013\_MaleSetup.sas)
- SPSS Program Statements
  - Female respondent file (2011-2013\_FemRespSetup.sps)
  - Pregnancy file (2011-2013\_FemPregSetup.sps)
  - Male respondent file (2011-2013\_MaleRespSetup.sps)
- STATA Program Statements
  - Female respondent file
    - 2011-2013\_FemRespSetup.dct
    - 2011-2013\_FemRespSetup.do
  - Pregnancy file
    - 2011-2013\_FemPregSetup.dct
    - 2011-2013\_FemPregSetup.do
  - Male respondent file
    - 2011-2013\_MaleSetup.dct
    - 2011-2013\_MaleSetup.do

SAS, SPSS, and STATA  
program statements

[http://www.cdc.gov/nchs/nsfg/nsfg\\_2011\\_2013\\_puf.htm#downloadable](http://www.cdc.gov/nchs/nsfg/nsfg_2011_2013_puf.htm#downloadable)

## Other Data Files

The NSFG ACASI data for 2011-2013 are now included as part of the main NSFG public use files. In addition to the main 2011-2013 public use data files, there are other files available containing Region

## Data Access

- Data Access
- Data Linkage
- Data Visualization Gallery
- Interactive Tables and Databases
- National Death Index
- Public-Use Data Files
- Research Data Center

NCHS Home > Data Access



## Data User's Agreement

Federal law (The Public Health Service Act (Section 308 (d))) provides that these data may be used only for the purpose of health statistical reporting and analysis. Any effort to determine the identity of any person or establishment is prohibited by this law.

NCHS does all it can to assure that the identity of data subjects cannot be disclosed. All direct identifiers, as well as any characteristics that might lead to identification, are omitted from the data files. In addition, a small number of records have had one or more responses slightly modified through statistical perturbation. These modifications do not affect point estimates or statistical significance, but are intended to prevent definitive identification of individual respondents.

**By downloading National Survey of Family Growth data, you signify your agreement to comply with the following legal requirements:**

1. To use these data for statistical reporting and analysis only;
2. To make no use of the identity of any person or establishment discovered inadvertently and advise the Director, NCHS, of any such discovery (301-458-4500); and
3. To not link these data with individually identifiable data from any other data set.

Accept terms and Right-Click or Ctrl-Click on Mac and choose "Save Target As" to download file.

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[http://www.cdc.gov/nchs/data\\_access/ftp\\_dua.htm?url\\_redirect=ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Datasets/NSFG/](http://www.cdc.gov/nchs/data_access/ftp_dua.htm?url_redirect=ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/NSFG/)

Click on "I accept..." and then you'll be directed to FTP site:  
FTP directory /pub/Health\_Statistics/NCHS/Datasets/NSFG/ at  
ftp.cdc.gov

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# FTP directory /pub/Health\_Statistics/NCHS/Datasets/NSFG/ at ftp.cdc.gov

To view this FTP site in File Explorer: press Alt, click View, and then click Open FTP Site in File Explorer.

---

[Up to higher level directory](#)

09/04/1998 12:00AM	0	<a href="#">.cache</a>
09/04/1998 12:00AM	0	<a href="#">.cache+</a>
04/05/2012 12:00AM	19,838,925	<a href="#">1973NSFGData.dat</a>
04/05/2012 12:00AM	31,716,306	<a href="#">1976NSFGData.dat</a>
04/05/2012 12:00AM	32,648,974	<a href="#">1982NSFGData.dat</a>
04/05/2012 12:00AM	30,022,850	<a href="#">1988FemRespData.dat</a>
04/05/2012 12:00AM	55,991,727	<a href="#">1988PregData.dat</a>
04/05/2012 12:00AM	141,726,902	<a href="#">1995FemRespData.dat</a>
04/05/2012 12:00AM	8,916,776	<a href="#">1995PregData.dat</a>
11/15/2010 12:00AM	150,852	<a href="#">2002curr_ins.dat</a>
02/23/2005 12:00AM	6,089,664	<a href="#">2002FemPreg.dat</a>
02/23/2005 12:00AM	37,664,704	<a href="#">2002FemResp.dat</a>
11/29/2007 12:00AM	289,133	<a href="#">2002HHvars.dat</a>
02/23/2005 12:00AM	14,719,936	<a href="#">2002Male.dat</a>
10/12/2011 12:00AM	11,557,488	<a href="#">2006_2010_FemPreg.dat</a>
10/12/2011 12:00AM	76,780,587	<a href="#">2006_2010_FemResp.dat</a>
10/12/2011 12:00AM	47,281,635	<a href="#">2006_2010_Male.dat</a>
12/11/2014 12:00AM	4,580,640	<a href="#">2011_2013_FemPregData.dat</a>
12/11/2014 12:00AM	27,769,758	<a href="#">2011_2013_FemRespData.dat</a>
12/11/2014 12:00AM	22,327,155	<a href="#">2011_2013_MaleData.dat</a>
04/06/2010 12:00AM	15,960,000	<a href="#">C5FieldworkData.asc</a>
11/15/2010 12:00AM	312,320	<a href="#">c6_curr_ins.sas7bdat</a>
01/20/2015 04:26PM	214,016	<a href="#">cyc2psu.sas7bdat</a>
04/02/2010 12:00AM	312,320	<a href="#">hpartynew.sas7bdat</a>
04/02/2010 12:00AM	150,852	<a href="#">HHPARTYPNEWASC.DAT</a>
06/18/2015 11:31AM	Directory	<a href="#">sas</a>
12/10/2014 12:00AM	Directory	<a href="#">spss</a>
12/10/2014 12:00AM	Directory	<a href="#">stata</a>

---

[ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Datasets/NSFG/](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/NSFG/)

# NSFG Documentation for 2011-2013

- **User's Guide**

- Part 1: Overview
- Part 2: Topic-specific notes for analysts
- 7 Appendixes including:
  - File Indexes (*App 1*)
  - Syntax Guidance for Common File Manipulations (*App 2*)
  - Recode Specs & Recode “Cross-walks” (*Apps 3 & 4*)
  - Questionnaire Changes since 2006-2010 NSFG (*App 5*)
  - FAQ for the NSFG (*App 6*)
  - List of restricted use variables and modified variables (*App 7*)

- **Questionnaires in 2 formats:**

- CAPI-Lite Questionnaires
- CAPI Reference Questionnaires (CRQs)

- **Codebooks** (entries for every variable on the 3 data files)

- Webdoc: interactive, online, searchable
- PDFs can be created from Webdoc

# User's Guide – Part 2

- **Topic-specific information** such as:
  - Abortion under-reporting for women
  - Quality of birth reporting for women
  - Sex education topics
  - Religion variables
- **File-specific information** on particular variables or series that may help in your analyses
  - Data issues or problems
  - Guidance on how variables are mapped (e.g., family planning services, method use)

# NSFG 2011-2013

- Female Respondent File Codebook
- Female Pregnancy File Codebook
- Male Respondent File Codebook
- Public Use Data Files, Codebooks, and Documentation

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## National Survey of Family Growth

Search:  in All Files  Search variable name only  [\(search tips\)](#)

[NSFG 2011-2013 :: Female Pregnancy File Codebook :: Pregnancy Variables :: 5. Selected respondent file variables \(raw and recode\)](#)

Search feature for key words or question numbers; can check by file

### POVERTY ( 381-383 )

**Variable Type :** respondent recode

**Description :** Poverty level income (respondent recode)

Each codebook entry anchors you to file, section, series, etc.

value	label	Total
0-99	0-99 PERCENT OF POVERTY LEVEL	4035
100-199	100-199 PERCENT OF POVERTY LEVEL	2272
200-299	200-299 PERCENT OF POVERTY LEVEL	1278
300-399	300-399 PERCENT OF POVERTY LEVEL	785
400-499	400-499 PERCENT OF POVERTY LEVEL	459
500-HIGH	500 PERCENT OF POVERTY LEVEL OR GREATER	714
<b>Total</b>		<b>9543</b>

**Universe :** Applicable for all pregnancies (respondent-level variable) (This variable has been topcoded for public use.)

Recode specs: [pdf](#)

Recode specs excerpt from Appendix 3 of User's Guide

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Search:  in   [\(search tips\)](#)

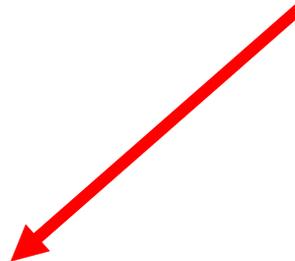
Search variable name only

[NSFG 2011-2013 :: Female Respondent File Codebook](#)

**SECTION A: Calendar Instructions; Demographic Characteristics; Household Roster; Childhood Background**

- [\(AA\) Age and date of birth](#)
- [\(AB\) Marital/cohabiting status](#)
- [\(AC\) Hispanic origin and race](#)
- [\(AD\) Household roster](#)
- [\(AF\) Regular school and GED](#)
- [\(AG\) Childhood background](#)

[prev](#) [next](#)



[Create codebook for SECTION A: Calendar Instructions; Demographic Characteristics; Household Roster; Childhood Background](#)

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- Female Respondent File Codebook ▶
- Female Pregnancy File Codebook ▶
- Male Respondent File Codebook ▶
- Public Use Data Files, Codebooks, and Documentation ▶

**NSFG**  
2011-2013

**National Survey of Family Growth**

Search:  in **All Files**  Search variable name only  [\(search tips\)](#)

[NSFG 2011-2013 :: Female Pregnancy File Codebook :: Preg pregnancy-based recodes](#)

**OUTCOME ( 315-315 )**

**Variable Type :** pregnancy recode

**Description :** Pregnancy outcome (recode)

value	label	Total
1	LIVE BIRTH	6670
2	INDUCED ABORTION	993
3	STILLBIRTH	71
4	MISCARRIAGE	1451
5	ECTOPIC PREGNANCY	120
6	CURRENT PREGNANCY	238
	<b>Total</b>	<b>9543</b>

**Universe :** Applicable for all pregnancies

Recode specs: [pdf](#) ←

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**OUTCOME\*\*:** "Pregnancy outcome"

*This recode assigns a single outcome code to each pregnancy, even if the pregnancy had multiple outcomes. If there were multiple outcomes for the pregnancy (e.g., 2 fetuses, with 1 born alive but other being a stillbirth), OUTCOME gives the following priority:*

- live birth (either vaginal or Cesarean delivery)*
- induced abortion*
- stillbirth*
- miscarriage*
- ectopic pregnancy*

The raw variable indicating pregnancy outcome is BC-1 PREGEND, and for each pregnancy up to 6 outcomes are recorded. There were no pregnancies in the 2011-13 NSFG data with more than 2 outcomes reported (PREGEND1, PREGEND2, and PREGEND3). There is also a Blaise-computed variable **pregoutcome** defined in Flow Check B-42a that indicates whether the pregnancy ended in live birth (code 1), ended in non-live birth (code 2), or is a current pregnancy (code 3). The computed variable **outcom\_s** has the same code categories as **pregoutcome**, but reflects the pregnancy outcome after all key details about the pregnancy, including pregnancy order, have been verified and corrected in Section B's summary screens.

SAS logic:

```

If outcom_s= then OUTCOME= -1; /* impute this case */
Else if outcom_s = 1 then OUTCOME = 1;
Else if outcom_s = 3 then OUTCOME = 6;
Else if outcom_s = 2 then do;
  If PREGEND1=3 or PREGEND2=3 or PREGEND3=3 then OUTCOME = 2;
  Else if PREGEND1=2 or PREGEND2=2 or PREGEND3=2 then OUTCOME = 3;
  Else if PREGEND1=1 or PREGEND2=1 or PREGEND3=1 then OUTCOME = 4;
  Else if PREGEND1=4 or PREGEND2=4 or PREGEND3=4 then OUTCOME = 5;
  Else if PREGEND1=dk/rf then do;
    If BC-1b HOWENDDK=1 (live birth) then OUTCOME=1;
    Else if HOWENDDK in(5,8,9) then OUTCOME= -1; /* impute this case */
  End;
End;

```

**User note:** *If interested in all outcomes for a multiple-gestation pregnancy (i.e., 2 or more fetuses, use raw variables BC-1 PREGENDn. To determine if a pregnancy resulted in a multiple birth (e.g., twins, triplets), see computed variable nbrntv\_s.*

**Imputation Note:** *Done for cases with outcom\_s =missing or HOWENDDK=5, dk, or rf. Outcom\_s will be missing (system) if both BC-1 PREGEND1=dk/rf and BC-1b HOWENDDK=dk/rf.*  
 ❖ *If outcom\_s=, then OUTCOME could be imputed to any value other than 6=current pregnancy.*  
 ❖ *If OUTCOME was imputed and HOWENDDK NE 1 (live birth), then OUTCOME can only be imputed to a value of 2, 3, 4, or 5 (non-live*

# 2011-2013 Contextual Data Files

- Use remotely or in an RDC (NCHS, CDC/Atl, or Census Data Centers)
  - ✦ application required (see: <http://www.cdc.gov/rdc/> )
  - ✦ **charges apply**
- Smaller file for the 2011-2013 data
  - State FIPS code at time of interview
  - County FIPS code at time of interview
  - State FIPS code for residence at 2010 Census

## Cycles 1-6, 2006-2010, and 2011-2013 of the NSFG

- Public use files from all previous cycles can be downloaded
- Questionnaires, User's Guides, and Codebooks are on the NSFG web site
- ACASI/Omitted Items files (Cycle 4, 5, 6, & 2006-2010) are available free, upon request
- Contextual files for Cycle 5, 6, and 2006-2010 data available through RDC

# NSFG - sample weights & design variables

The sample weights adjust for:

- Oversampling
- Screener and Interview non-response
- Adjusted to Census Bureau population estimates (age, race, sex)
  
- SAS, STATA, SPSS all have software that will use weights and design variables to compute correct sampling errors.
- Specific syntax examples are on the NSFG web site based on 2002 data, and can be adapted for 2011-2013 data.

**It is important to use the weights & design variables to make valid national estimates using the NSFG.**

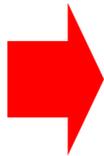
# Weight variables for 2011-2013 NSFG

Description	Variable name
Sample weight	Wgt2011_2013
Stratum	SEST
Cluster	SECU

# Pooling data across NSFG cycles (female data) (can pool additional data files)

Design variable	2002	2006-2010	2011-2013
Stratum variable	SEST	SEST	SEST
Cluster/Panel Variable	SECU_R – fem resp SECU_P – fem preg	SECU	SECU
Final post-stratified, fully adjusted case weight	FINALWGT	WGTQ1Q16	WGT2011_2013

To pool data, define 4 new variables for each file, and then “set” or append the new datasets.



**2002 NSFG:**  
 stratvar=sest  
 panelvar=secu\_r  
 weightvar=finalwgt  
 survey=2002

**2006-10 NSFG:**  
 stratvar=sest  
 panelvar=secu  
 weightvar=wgtq1q16  
 survey=2008

**2011-13 NSFG:**  
 stratvar=sest  
 panelvar=secu  
 weightvar=wgt2011\_2013  
 survey=2012

# Combining male & female data from 2011-2013

- Make sure you are using comparable variables
  - Consult recode specs and male/female recode crosswalk
  - This point also important when pooling data across years
- See example in Appendix 2 of 2011-2013 User's Guide

**WGT2011\_2013**  
**SEST**  
**SECU**

```
DATA FEMDATA;  
SET FEMRESP (KEEP=CASEID [other variables you wish to include]);  
R_SEX=1; ** female;  
RUN;  
  
DATA MALEDATA;  
SET MALERESP (KEEP=CASEID [other variables you wish to include]);  
R_SEX=2; ** male;  
RUN;  
  
data MF_POOLED;  
set femdata maledata;  
RUN;
```

## To learn more about the NSFG:

- Visit the NSFG webpage

[www.cdc.gov/nchs/nsfg.htm](http://www.cdc.gov/nchs/nsfg.htm)

- Join the NSFG Announcements ListServ

- Contact the NSFG team

Email: [nsfg@cdc.gov](mailto:nsfg@cdc.gov)

Phone: 301-458-4222

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*NSFG team: Joyce Abma, Anjani Chandra (team leader), Casey Copen, Kim Daniels, Jill Daugherty, Isaedmarie Febo-Vazquez, Gladys Martinez*

*Amy Branum, Chief, Reproductive Statistics Branch*

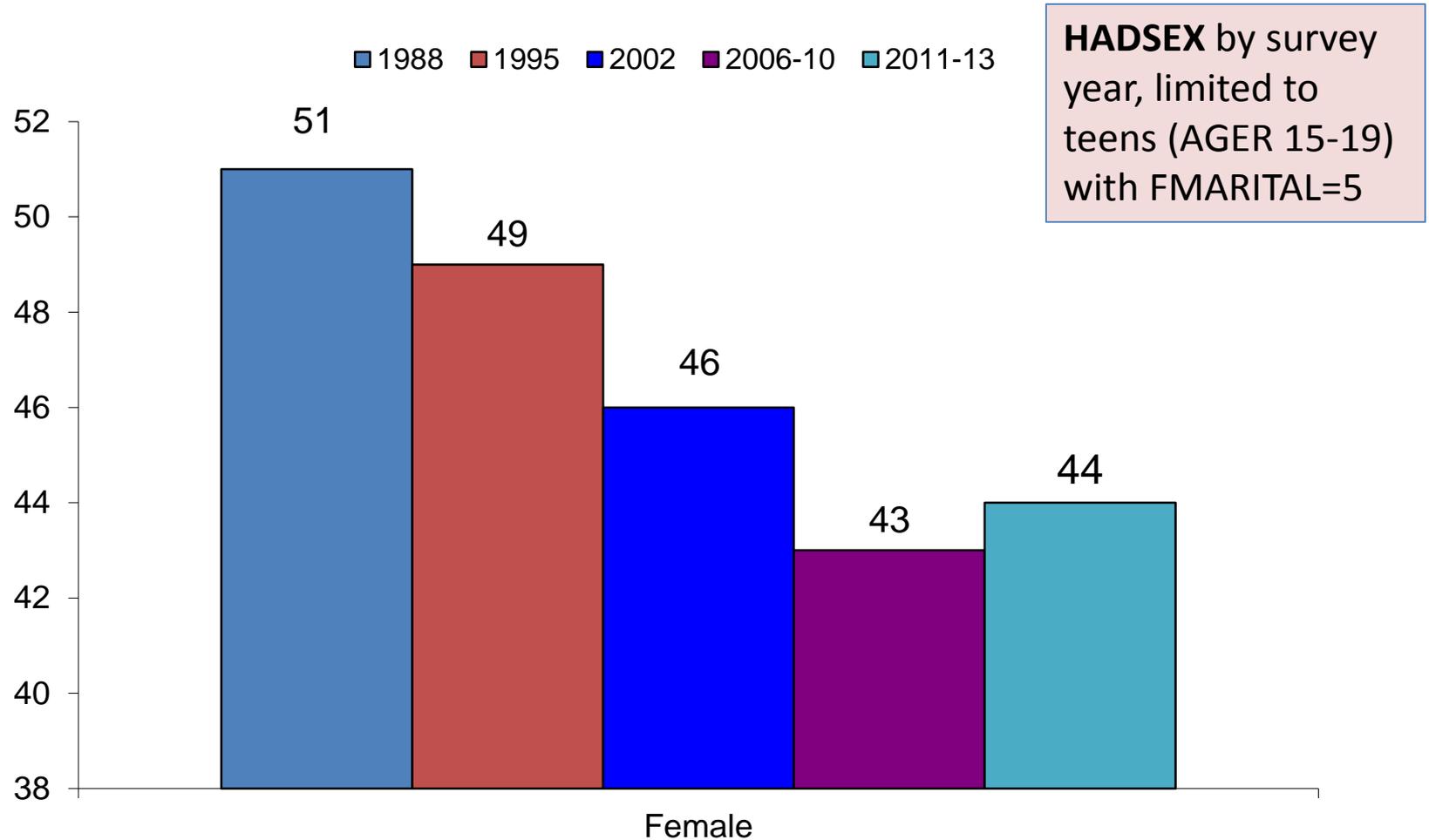
*Delton Atkinson, Director, Division of Vital Statistics*

# National Survey of Family Growth

## Examples with SAS and Stata code

1. Percent of never-married females aged 15-19 who have ever had sexual intercourse
2. Percent of sexually experienced females who have ever used the Pill
3. Percent of births in the 5 years before the interview that were intended at conception, by age and marital status at birth

# Hands-On Example #1: Percent of never-married teens 15-19 who have ever had sexual intercourse: United States, 1988-2013



Source: Martinez, G. and Abma, J.C. Sexual Activity, Contraceptive Use, and Childbearing of Teenagers Aged 15-19 in the United States. National Survey of Family Growth. National Center for Health Statistics. Data Brief no. 209. 2015.

**National Survey of Family Growth**

Search:  in   [\(search tips\)](#)

Search variable name only

[NSFG 2011-2013 :: Female Respondent File Codebook :: SECTION C: Marital and Relationship History :: \(CE\) Ever had intercourse](#)

**rhadsex ( 1282-1282 )**

**Variable Type :** computed

**Description :** Whether R Has Ever Had Sex (Heterosexual Vaginal Intercourse) (Computed in Flow Check C-42)

value	label	Total
1	YES	4858
5	NO	743
<b>Total</b>		<b>5601</b>

**Universe :** Applicable for all respondents

**Notes :** use recode [HADSEX](#)

[prev](#) [next](#)

Use recode HADSEX instead of raw variable rhadsex.

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- Female Respondent File Codebook ▶
- Female Pregnancy File Codebook ▶
- Male Respondent File Codebook ▶
- Public Use Data Files, Codebooks, and Documentation ▶

**National Survey of Family Growth**

Search:  in   Search variable name only  ([search tips](#))

[NSFG 2011-2013 :: Female Respondent File Codebook](#) :: [SECTION R: Recode Variables and Imputation Flags](#) :: [Section C Recodes](#)

**HADSEX ( 4431-4431 )**

**Variable Type :** recode

**Description :** Whether R has ever had sexual intercourse with a male (RECODE)

value	label	Total
1	YES, R EVER HAD INTERCOURSE	4858
2	NO, R NEVER HAD INTERCOURSE	743
<b>Total</b>		<b>5601</b>

**Universe :** Applicable for all respondents

Recode specs: [pdf](#)

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- Female Respondent File Codebook ▶
- Female Pregnancy File Codebook ▶
- Male Respondent File Codebook ▶
- Public Use Data Files, Codebooks, and Documentation ▶

# SAS Code: Never married female teens who had ever had sex

```
*create a library name to point to;
libname nsfg 'c:\wherever the data is stored';

options nocenter nofmtterr;
*create value labels;
proc format;
value yesno 1="yes" 2="no";
run;
*open dataset and keep specified variables;
data FEMALE;
set library.dataset/* (replace with your PUF fem resp file filename) */
      (keep=caseid hadsex fmarital ager sest secu wgt2011_2013 );
*divide weight by 1000 to get numbers in thousands – optional;
wgt1000=wgt2011_2013/1000;
* Create subpopulation variable for all never married teens;
nmteen=2;
if ager lt 20 and fmarital=5 then nmteen=1;
run;
proc sort data=female out=FSORTED;
  by SEST SECU;
run;

*weighted frequency SE and 95% CI;
proc surveyfreq data=Fsorted;
cluster SECU;
stratum SEST;
title "Percentage of never married female teens aged 15-19 who ever had sex: 2011-2013";
table nmteen*hadsex/ NOCELLPERCENT NOTOTAL NOFREQ NOWT CL row NOSPARSE;
weight wgt1000;
format hadsex yesno.;
run;
```

# SAS Output: Never married female teens who had ever had sex

Percentage of never married female teens aged 15-19 who ever had sex: 2011-2013

The SURVEYFREQ Procedure

## Data Summary

Number of Strata	18
Number of Clusters	72
Number of Observations	5601
Sum of Weights	60887.363

Table of nmteen by HADSEX

nmteen	HADSEX	95% Confidence Limits for Percent		Row Percent	Std Err of Row Percent	95% Confidence Limits for Row Percent	
1	yes	5.8065	7.8342	44.0588	2.8203	38.4045	49.7131
	no	7.2945	10.0251	55.9412	2.8203	50.2869	61.5955
2	yes	78.9827	82.7258	95.6631	0.4692	94.7224	96.6037
	no	2.8828	4.4484	4.3369	0.4692	3.3963	5.2776

## Stata Code: Never married female teens who ever had sex

\*open dataset and keep specified variables

set more off

```
use "\\cdc\project\femresp_2011_2013.dta", clear /* (replace with your PUF fem resp file filename) */  
keep CASEID HADSEX FMARITAL AGER SEST SECU WGT2011_2013
```

\*divide weight by 1000 to get numbers in thousands – optional

```
gen wgt1000=WGT2011_2013/1000
```

\*create and assign value labels

```
label define yesno 1 "yes" 2 "no"  
label values HADSEX yesno
```

\*create teen never married subpop variable

```
gen teennm=.  
replace teennm= 1 if AGER<=19 & FMARITAL==5
```

\*set survey info

```
svyset [pweight=wgt1000], strata(SEST) psu(SECU)
```

\*run survey tabulation of hadsex

```
tab HADSEX , subpop(teennm) /*unweighted frequencies*/  
svy: tab HADSEX , subpop(teennm) count format(%13.2fc) /*weighted counts*/  
svy: tab HADSEX , subpop(teennm) se percent ci /*weighted frequencies, se, 95%CI*/
```

# Stata Output: Never married female teens who ever had sex

```
. svy: tab HADSEX , subpop(teennm) se percent ci /*weighted frequencies, se, 95%CI*/
(running tabulate on estimation sample)
```

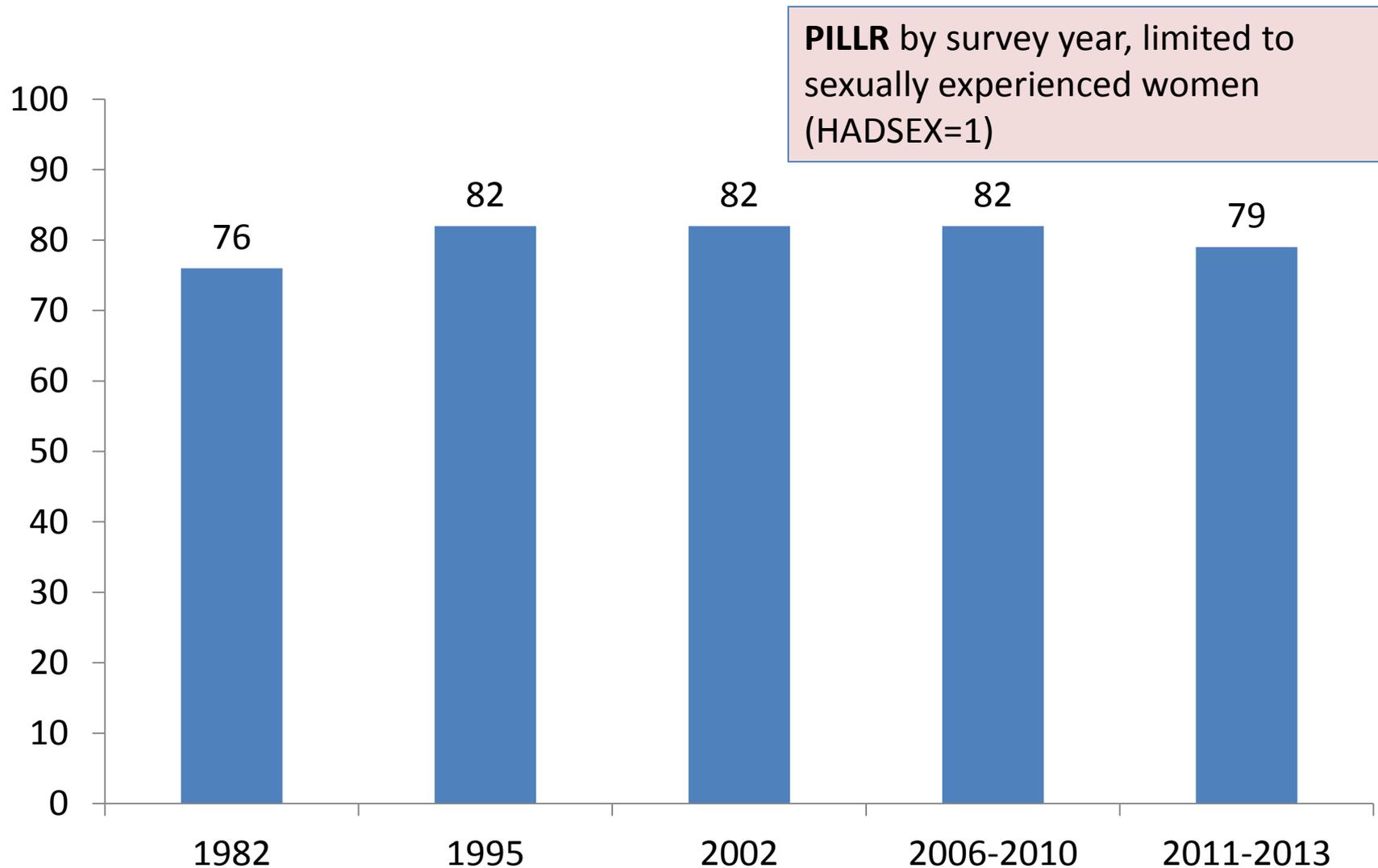
```
Number of strata   =          18      Number of obs       =          1025
Number of PSUs    =          72      Population size     =       9425.4695
                                          Subpop. no. of obs =          1025
                                          Subpop. size       =       9425.4695
                                          Design df         =           54
```

whether R has ever had sexual intercour se with a male (RECODE)	percentages	se	lb	ub
yes	<b>44.06</b>	<b>2.82</b>	38.5	49.77
no	55.94	2.82	50.23	61.5
Total	100			

```
Key: percentages = cell percentages
     se           = linearized standard errors of cell percentages
     lb           = lower 95% confidence bounds for cell percentages
     ub           = upper 95% confidence bounds for cell percentages
```

```
.
end of do-file
```

## Hands-On Example #2: Percent of sexually experienced females 15-44 who have ever used the Pill: United States, 1982-2013



Sources: Daniels, K, Mosher, W.D., and J. Jones. Contraceptive Methods Women Have Ever Used: United States, 1982-2010. National Survey of Family Growth. National Center for Health Statistics. NHR 62. 2013. Special tabulation by NCHS for 2011-2013

## National Survey of Family Growth

Search:  in   Search variable name only  ([search tips](#))

[NSFG 2011-2013 :: Female Respondent File Codebook :: SECTION E: Contraceptive History and Pregnancy Wantedness :: \(EA\) Contraceptive methods ever used and method discontinuation](#)

### PILL ( 1756-1756 )

**Variable Type :** raw

**EA-1 :** Have you ever used birth control pills?

value	label	Total
1	Yes	3892
5	No	1705
8	Refused	4
<b>Total</b>		<b>5601</b>

**Universe :** Applicable for all respondents

**Notes :** use recode [PILLR](#)

[prev](#) [next](#)

Raw variable, pill, for all women

Use recode PILLR instead of raw variable PILL.



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<http://www.icpsr.umich.edu/icpsradmin/nsfg/variable/614733?studyNumber=9998>

## National Survey of Family Growth

Search:  in   [\(search tips\)](#)

Search variable name only

[NSFG 2011-2013 :: Female Respondent File Codebook :: SECTION R: Recode Variables and Imputation Flags :: Section D and E Recodes](#)

### PILLR ( 4566-4566 )

**Variable Type :** recode

**Description :** Ever used the pill for any reason (RECODE)

value	label	Total
1	YES	3906
2	NO	1695
<b>Total</b>		<b>5601</b>

**Universe :** Applicable for all respondents

Recode specs: [pdf](#)



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Link to pdf with recode specs. The recode variable corrects for later reports of pill use in Section E after question EA-1 (shown on previous slide) was asked.

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**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Centers for Disease Control and Prevention**

National Center for Health Statistics

Hyattsville, MD 20782

(301) 458-4000



# SAS Code: Ever use of the pill among sexually experienced women

```
options nocenter nofmtterr;
*create value labels;
proc format;
value yesno 1="yes" 2="no";
run;

*open dataset and keep specified variables;
data FEMALE;
set library.dataset /* (replace with your female respondent file filename) */
      (keep=caseid wgt2011_2013 sest secu pillr hadsex);

*divide weight by 1000 to get numbers in thousands – optional;
wgt1000=wgt2011_2013/1000;
run;

proc sort data=female out=FSORTED;
by SEST SECU;
run;

*weighted frequency SE and 95% CI;
proc surveyfreq data=FSORTED;
cluster SECU;
stratum SEST;
title "Ever use of pill among sexually experienced women 2011-2013";
table hadsex*pillr/NOCELLPERCENT NOTOTAL NOFREQ NOWT CL row NOSPARESE;
weight wgt1000;
format pillr yesno. hadsex yesno.;
run;
```

# SAS Output: Ever use of the pill among sexually experienced women

Ever use of pill among sexually experienced women 2011-2013

The SURVEYFREQ Procedure

## Data Summary

Number of Strata	18
Number of Clusters	72
Number of Observations	5601
Sum of Weights	60887.363

Table of HADSEX by PILLR

HADSEX	PILLR	95% Confidence Limits for Percent		Row Percent	Std Err of Row Percent	95% Confidence Limits for Row Percent	
yes	yes	66.0542	72.0541	78.7618	1.1706	76.4150	81.1087
	no	16.7342	20.5068	21.2382	1.1706	18.8913	23.5850
no	yes	1.9274	3.3976	21.6017	2.7360	16.1163	27.0871
	no	8.1122	11.2136	78.3983	2.7360	72.9129	83.8837

# STATA Code: Ever use of the pill among sexually experienced women

\*open dataset and keep specified variables

set more off

```
use "\\cdc\femresp_2011_2013.dta", clear /* (replace with your PUF fem resp file filename) */  
keep CASEID WGT2011_2013 SEST SECU PILLR HADSEX
```

\*divide weight by 1000 to get numbers in thousands – optional

```
gen wgt1000=WGT2011_2013/1000
```

\*create and assign value labels

```
label define yesno 1 "yes" 2 "no"  
label values HADSEX PILLR yesno
```

\*set survey info

```
svyset [pweight=wgt1000], strata(SEST) psu(SECU)
```

\*run cross tabulation of hadsex and pillr

```
tab HADSEX PILLR, row /*unweighted frequencies*/  
svy: tab HADSEX PILLR, count format(%13.2fc) /*weighted counts*/  
svy: tab HADSEX PILLR, se row percent ci /* weighted frequencies, se, 95%CI*/
```

# STATA Output: Ever use of the pill among sexually experienced women

```
. svy: tab HADSEX PILLR, se row percent ci /* weighted frequencies, se, 95%CI*/
(running tabulate on estimation sample)
```

```
Number of strata   =      18                Number of obs     =      5601
Number of PSUs    =      72                Population size   = 60887.363
                                                Design df        =       54
```

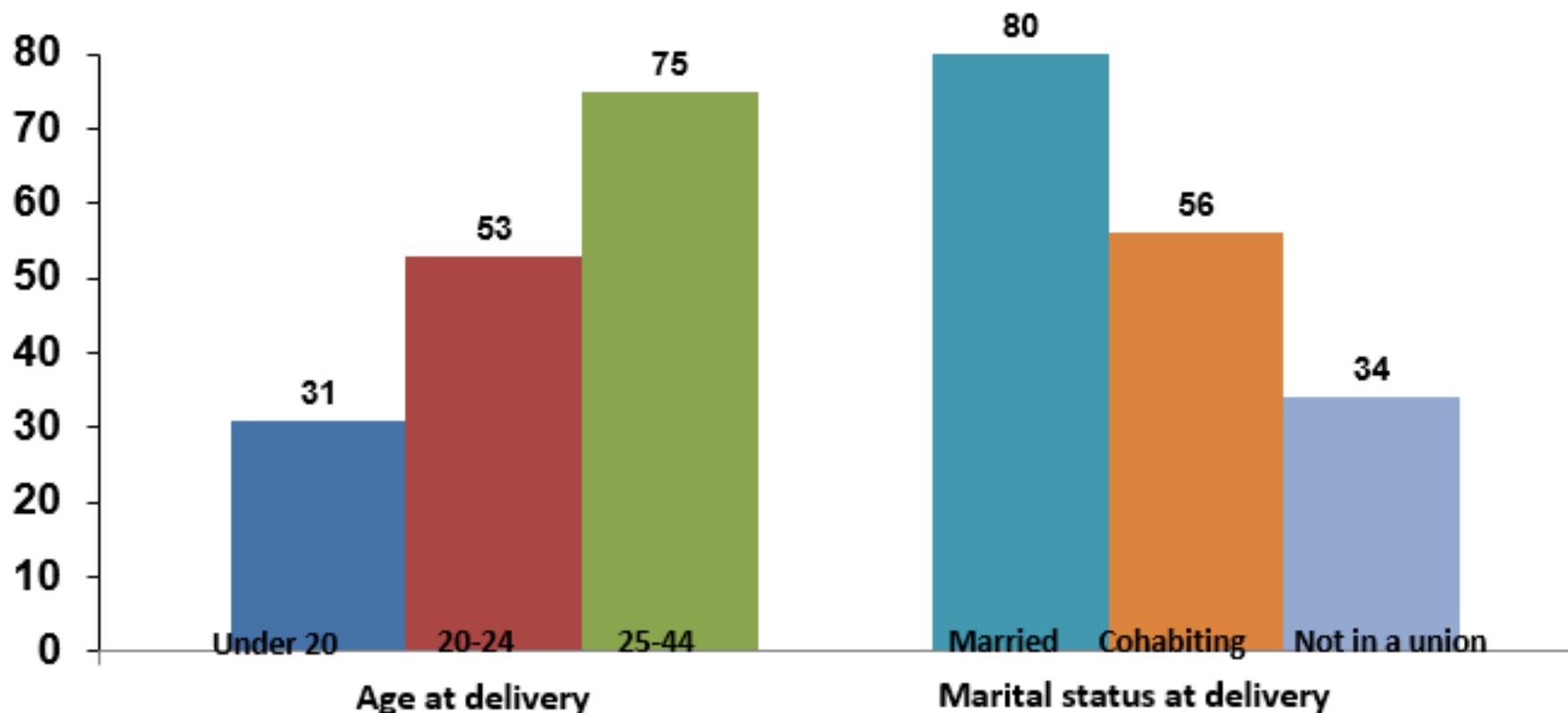
whether R has ever had sexual intercour se with a male (RECODE)	Ever used the pill for any reason (RECODE)		
	yes	no	Total
yes	78.76 (1.171) [76.32,81.01]	21.24 (1.171) [18.99,23.68]	100
no	21.6 (2.736) [16.62,27.59]	78.4 (2.736) [72.41,83.38]	100
Total	71.72 (1.458) [68.7,74.55]	28.28 (1.458) [25.45,31.3]	100

Key: **row percentages**  
(linearized standard errors of row percentages)  
[95% confidence intervals for row percentages]

```
Pearson:
Uncorrected  chi2(1)          =  974.9328
Design-based F(1, 54)       =  366.9956   P = 0.0000
```

```
.
.
end of do-file
```

### Hands-On Example #3: Percent of births in the 5 years before the interview that were intended at conception, by mother's age and marital status at delivery: United States, 2011-2013



Source: NCHS special tabulation. For prior data releases see Table 2 and Figure 2 in Mosher WD, Jones J, Abma J. Intended and Unintended Births in the United States: 1982-2010. NHR #55. Hyattsville, MD: National Center for Health Statistics. 2012.

## National Survey of Family Growth

Search:  in   [\(search tips\)](#)

Search variable name only

[NSFG 2011-2013](#) :: [Female Pregnancy File Codebook](#) :: [Pregnancy Variables](#) :: [4. Section B and E pregnancy-based recodes](#)

### WANTRESP ( 350-350 )

**Variable Type :** pregnancy recode

**Description :** Wantedness of pregnancy - respondent - Cycle 5, 6 version (recode)

value	label	Total
1	LATER, OVERDUE	566
2	RIGHT TIME	4012
3	TOO SOON, MISTIMED	2913
4	DIDN'T CARE, INDIFFERENT	92
5	UNWANTED	1924
6	DON'T KNOW, NOT SURE	36
<b>Total</b>		<b>9543</b>

**Universe :** Applicable for all pregnancies

Recode specs: [pdf](#)

[prev](#) [next](#)

<http://www.icpsr.umich.edu/icpsradmin/nsfg/variable/613604?studyNumber=9998>

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- Female Respondent File Codebook ▶
- Female Pregnancy File Codebook ▶
- Male Respondent File Codebook ▶
- Public Use Data Files, Codebooks, and Documentation ▶

# SAS Code (1): Percent of births that were intended at conception, by age and marital status at delivery

```
options nocenter nofmterr;
```

```
data preg201113;
```

```
set library.dataset /* (replace with your PUF preg file filename) */
```

```
(keep = AGER WANTRESP OUTCOME DATEND RMAROUT6 AGEPEG cmintvw WGT2011_2013 SECU SEST);
```

```
*divide weight by 1000 to get numbers in thousands – optional;
```

```
WGT1000 = WGT2011_2013/1000;
```

```
* Create a new variable based on the wantedness recode (WANTRESP) to combine two categories to result in "intended" births
```

```
* and assign 'didn't care' and 'don't know' to the category "intended" (individual analyst's decision)
```

```
* all other codes will remain as they are on the recode. ;
```

```
WANTREC=WANTRESP;
```

```
if WANTRESP in (1,2) then WANTREC=1; * if pregnancy occurred at the right time or later than R wanted, we classify it as INTENDED ;
```

```
if WANTRESP in (4,6) then WANTREC=1; * if respondent didn't care/was indifferent, or didn't know, we coded as INTENDED ;
```

```
* Create a new variable based on the "marital status at outcome" recode to combine the 4 "not currently married" categories into 1 ;
```

```
MARCOHAB = .;
```

```
IF RMAROUT6 = 1 THEN MARCOHAB = 1; ELSE *MARRIED AT TIME OF OUTCOME;
```

```
IF RMAROUT6 = 5 THEN MARCOHAB = 2; ELSE *COHABITING AT TIME OF OUTCOME;
```

```
IF RMAROUT6 in (2 3 4 6) THEN MARCOHAB = 3; *NOT MARRIED/NOT COHABITING AT TIME OF OUTCOME;
```

```
* create a subpopulation variable for births in the last 5 years ;
```

```
BIRTHFIV=.
```

```
if OUTCOME=1 and (DATEND >= (cmintvw - 60)) then BIRTHFIV=1;
```

```
run;
```

## SAS Code (2): Percent of births that were intended at conception, by age and marital status at delivery

\*assign value labels;

**proc format;**

value WANTF 1='Intended' 3='TOO SOON, MISTIMED' 5='UNWANTED';

value MARCOHF 1='MARRIED' 2='COHABITING' 3='NOT MARRIED OR COHABITING';

value AGEF 0-1999='UNDER 20 YEARS' 2000-2499='20-24 YEARS' 2500-4499='25-44 YEARS';

**run;**

proc sort data=preg201113 out=SORTED;

by SEST SECU;

run;

\*weighted frequency SE and 95% CI;

**proc surveyfreq** data=SORTED;

weight WGT1000;

cluster SECU;

stratum SEST;

tables BIRTHFIV\*AGEPREG\*WANTREC/ ROW CL NOCELLPERCENT NOTOTAL nowt NOSPARE;

tables BIRTHFIV\*MARCOHAB\*WANTREC/ ROW CL NOCELLPERCENT NOTOTAL nowt NOSPARE;

TITLE '2011-2013: Live births within the past 5 years - intendedness of birth at conception by age at birth and union status at birth';

format AGEPREG agef. MARCOHAB marcohf. WANTREC wantf.;

**run;**

# SAS Output: Percent of births that were intended at conception, by age at delivery

2011-2013: Live births within the past 5 years - intendedness of birth at conception by age at birth and union status at birth 5  
14:27 Friday, August 14, 2015

The SURVEYFREQ Procedure

## Data Summary

Number of Strata 18  
Number of Clusters 72  
Number of Observations 9543  
Sum of Weights 105355.191

Table of AGEPEG by WANTREC  
Controlling for BIRTHFIV=1

AGEPEG	WANTREC	Frequency	95% Confidence Limits for Percent		Row Percent	Std Err of Row Percent	95% Confidence Limits for Row Percent	
UNDER 20 YEARS	Intended	69	1.9595	4.3538	31.4327	4.4238	22.5636	40.3018
	TOO SOON, MISTIMED	143	4.1361	6.8114	54.5055	3.9174	46.6515	62.3595
	UNWANTED	42	0.7466	2.0777	14.0618	2.9194	8.2087	19.9149
20-24 YEARS	Intended	303	10.8519	15.5311	53.0120	3.0025	46.9924	59.0317
	TOO SOON, MISTIMED	203	6.5847	9.4590	32.2371	2.7602	26.7033	37.7709
	UNWANTED	104	2.6193	4.7219	14.7509	2.1162	10.5082	18.9935
25-44 YEARS	Intended	883	44.9825	53.4571	75.6373	2.0329	71.5615	79.7131
	TOO SOON, MISTIMED	173	6.3662	10.0240	12.5936	1.3637	9.8596	15.3276
	UNWANTED	161	5.8440	9.4732	11.7691	1.4153	8.9316	14.6067

# SAS Output: Percent of births that were intended at conception, by marital status at delivery

2011-2013: Live births within the past 5 years - intendedness of birth at conception by age at birth and union status at birth 6  
14:27 Friday, August 14, 2015

The SURVEYFREQ Procedure

Table of MARCOHAB by WANTREC  
Controlling for BIRTHFIV=1

MARCOHAB	WANTREC	Frequency	95% Confidence Limits for Percent		Row Percent	Std Err of Row Percent	95% Confidence Limits for Row Percent	
MARRIED	Intended	736	40.2688	49.9590	80.4069	1.7397	76.9191	83.8948
	TOO SOON, MISTIMED	143	5.6247	8.9331	12.9733	1.3733	10.2199	15.7266
	UNWANTED	71	2.3952	5.0331	6.6198	1.2180	4.1779	9.0617
COHABITING	Intended	326	11.8617	16.9464	55.5873	2.6630	50.2483	60.9263
	TOO SOON, MISTIMED	189	6.2345	9.1781	29.7397	2.1226	25.4841	33.9952
	UNWANTED	109	2.9336	4.6707	14.6730	1.7203	11.2240	18.1220
NOT MARRIED OR COHABITING	Intended	193	4.6275	7.4724	33.6474	3.2389	27.1538	40.1411
	TOO SOON, MISTIMED	187	5.2544	8.1566	37.2932	3.3626	30.5517	44.0347
	UNWANTED	127	3.6574	6.7926	29.0594	3.3913	22.2603	35.8584

# Stata Code (1): Percent of births that were intended at conception, by age and marital status at delivery

\*open dataset and keep specified variables

```
set more off
```

```
use "\\cdc\fempreg_2011_2013.dta", clear /* (replace with your PUF fem resp file filename) */
```

```
keep AGER WANTRESP OUTCOME DATEND RMAROUT6 AGEPEG CMINTVW WGT2011_2013 SECU SEST
```

\*divide weight by 1000 to get numbers in thousands – optional

```
gen wgt1000=WGT2011_2013 /1000
```

\* Create a new variable based on the wantedness recode (WANTRESP) to combine two categories to result in "intended" births

\* and assign 'didn't care' and 'don't know' to the category "intended" (individual analyst's decision)

\* all other codes will remain as they are on the recode. ;

```
gen wantrec=WANTRESP
```

```
replace wantrec=1 if WANTRESP==1 | WANTRESP==2 /* if pregnancy occurred at the right time or later than r wanted, we classify it as intended */
```

```
replace wantrec=1 if WANTRESP==4 | WANTRESP==6 /* if respondent didn't care/was indifferent, or didn't know, we coded as INTENDED */
```

/\* Create a new variable based on the "marital status at outcome" recode to combine the 4 "not currently married" categories into 1 \*/

```
gen marcohav=.
```

```
replace marcohav=1 if RMAROUT6==1 /*married at the birth*/
```

```
replace marcohav=2 if RMAROUT6==5 /*cohabiting at the birth*/
```

```
replace marcohav=3 if RMAROUT6==2 | RMAROUT6==3 | RMAROUT6==4 | RMAROUT6==6 /*no union (not married, not cohabiting) at the birth*/
```

\*create a subpopulation of births in last 5 years

```
gen birthfiv=.
```

```
replace birthfiv=1 if (OUTCOME==1) & (DATEND>=CMINTVW - 60)
```

\* create an age category variable

```
gen agecat=.
```

```
replace agecat=1 if (AGEPEG>=0000) & (AGEPEG<=1999)
```

```
replace agecat=2 if (AGEPEG>=2000) & (AGEPEG<=2499)
```

```
replace agecat=3 if (AGEPEG>=2500) & (AGEPEG<=4499)
```

# Stata Code (2): Percent of births that were intended at conception, by age and marital status at delivery

## \*create and assign value labels

```
label define wantf 1 "intended" 3 "too soon, mistimed" 4 "didnt care, indifferent" 5 "unwanted"  
label define marcohf 1 "married" 2 "cohabiting" 3 "not married or cohabiting"  
label define agef 1 "under 20 years" 2 "20-24 years" 3 "25-44 years"
```

```
label values agecat agef  
label values marcohab marcohf  
label values wantrec wantf
```

## \*set survey info

```
svyset [pweight=WGT2011_2013], strata(SEST) psu(SECU)
```

## \*run cross tabulation of intendedness and maternal age

```
tab agecat wantrec, subpop(birthfiv) row /* unweighted frequencies */  
svy: tab agecat wantrec, subpop(birthfiv) count format(%13.2fc) /*weighted counts*/  
svy: tab agecat wantrec, subpop(birthfiv) se row percent ci /* weighted frequencies, se, 95%CI */
```

## \*run cross tabulation of intendedness and marital status

```
tab marcohab wantrec, subpop(birthfiv) row /* unweighted frequencies */  
svy: tab marcohab wantrec, subpop(birthfiv) count format(%13.2fc) /*weighted counts*/  
svy: tab marcohab wantrec, subpop(birthfiv) se row percent ci /* weighted frequencies, se, 95%CI */
```

# Stata Output: Percent of births that were intended at conception, by age at delivery

```
. svy: tab agecat wantrec, subpop(birthfiv) se row percent ci /* weighted frequencies, se, 95%CI */
(running tabulate on estimation sample)
```

```
Number of strata = 18
Number of PSUs = 72
Number of obs = 2081
Population size = 19895071
Subpop. no. of obs = 2081
Subpop. size = 19895071
Design df = 54
```

agecat	wantrec			Total
	intended	too soon	unwanted	
under 20	31.43 (4.424) [23.3,40.89]	54.51 (3.917) [46.6,62.19]	14.06 (2.919) [9.158,20.99]	100
20-24 ye	53.01 (3.003) [46.98,58.96]	32.24 (2.76) [26.97,38]	14.75 (2.116) [10.99,19.51]	100
25-44 ye	75.64 (2.033) [71.34,79.48]	12.59 (1.364) [10.1,15.59]	11.77 (1.415) [9.214,14.92]	100
Total	65.57 (1.676) [62.13,68.85]	21.69 (1.262) [19.27,24.33]	12.74 (1.175) [10.57,15.29]	100

Key: row percentages  
(linearized standard errors of row percentages)  
[95% confidence intervals for row percentages]

```
Pearson:
Uncorrected chi2(4) = 255.4315
Design-based F(3.53, 190.87) = 36.1633 P = 0.0000
```

# Stata Output: Percent of births that were intended at conception, by marital status at delivery

```
. svy: tab marcohab wantrec, subpop(birthfiv) se row percent ci /* weighted frequencies, se, 95%CI */
(running tabulate on estimation sample)
```

```
Number of strata   =      18          Number of obs       =      2081
Number of PSUs    =      72          Population size     = 19895071
                                          Subpop. no. of obs =      2081
                                          Subpop. size       = 19895071
                                          Design df          =       54
```

marcohab	wantrec			Total
	intended	too soon	unwanted	
married	80.41 (1.74) [76.68,83.66]	12.97 (1.373) [10.46,15.98]	6.62 (1.218) [4.558,9.521]	100
cohabiti	55.59 (2.663) [50.2,60.84]	29.74 (2.123) [25.67,34.16]	14.67 (1.72) [11.55,18.47]	100
not marr	33.65 (3.239) [27.49,40.42]	37.29 (3.363) [30.83,44.24]	29.06 (3.391) [22.75,36.29]	100
Total	65.57 (1.676) [62.13,68.85]	21.69 (1.262) [19.27,24.33]	12.74 (1.175) [10.57,15.29]	100

Key: **row percentages**  
 (linearized standard errors of row percentages)  
 [95% confidence intervals for row percentages]

```
Pearson:
Uncorrected chi2(4) = 318.6721
Design-based F(3.74, 201.82) = 45.8088 P = 0.0000
```

end of do-file