

**OMB Attachment B2:**  
**JUSTIFICATION OF THE MALE QUESTIONNAIRE**

**ALPHABETICAL LIST OF ACRONYMS**

ACASI	Audio Computer-Assisted Self Interviewing (also Audio CASI)
ACF	Administration for Children and Families, DHHS
AIDS	Acquired Immune Deficiency Syndrome
ASPE	(Office of the) Assistant Secretary for Planning and Evaluation, DHHS
CAPI	Computer-Assisted Personal Interviewing
CDC	Centers for Disease Control and Prevention
CRQ	CAPI Reference Questionnaire
DHAP	Division of HIV/AIDS Prevention (of CDC/NCHHSTP)
DHHS	Department of Health and Human Services
DRH	Division of Reproductive Health (of CDC)
DSTDP	Division of STD Prevention (of CDC/NCHHSTP)
FIFCFS	Federal Interagency Forum on Child and Family Statistics
GSS	General Social Survey
HIV	Human Immunodeficiency Virus, the virus that causes AIDS\
NCHHSTP	National Center for HIV/AIDS, Viral Hepatitis, STD, and Tuberculosis Prevention
NCHS	National Center for Health Statistics (of CDC)
NICHD	Eunice Kennedy Shriver National Institute of Child Health and Human Development (of NIH)
NIH	National Institutes of Health, DHHS
NORC	National Opinion Research Center
NSAM	National Survey of Adolescent Males (conducted in 1988 and 1995)
NSFG	National Survey of Family Growth
NSFH	National Survey of Families and Households (conducted 1987 and 1993)
OPA	Office of Population Affairs, DHHS
PSU	Primary Sampling Unit
PRWORA	Personal Responsibility and Work Opportunity Reconciliation Act (of 1996)
STD or STI	Sexually Transmitted Disease(s) or Infection(s)

This attachment provides:

- 1) A brief background on the NSFG male questionnaire;
- 2) A brief outline of the male questionnaire; and
- 3) Justification for the topics covered in the male questionnaire and the relevance of the data to inform federal programs. This information is presented by section order. In a few cases, the rationale for a set of questions in the male questionnaire is the same as in the female questionnaire. In these cases, reference is made to the appropriate section in Attachment B1: Justification of the Female Questionnaire.

## 1) BRIEF BACKGROUND ON THE MALE QUESTIONNAIRE

The decision was made to include and interview men beginning with the 2002 NSFG, to document and monitor trends in:

- (a) the behavior of teenage males related to teen pregnancy, HIV, and other STD's,
- (b) the roles of men in forming marriages and families,
- (c) the roles of men as fathers—in supporting and raising children, and
- (d) the sexual and reproductive health of men, including those who have sex only with women, and those who have sex with men.

This task was defined, and will be continued and refined, by at least 4 major types of interests. **First:** The US Congress spelled out some of these concerns explicitly in the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA enacted in 1996 and renewed in 2006);

**Second:** the practical needs of existing DHHS programs require data on males;

**Third:** a growing social and political movement is stressing the importance of fathers in strengthening families and marriages (e.g., National Fatherhood Initiative, 2002, 2007); and

**Fourth:** a growing mass of academic research on the roles of men in the lives of children and families (Hofferth & Casper, editors, 2007; Marsiglio et al, 2000; Tamis-LeMonda & Cabrera, editors, 2002).

The primary concern of this justification is to show the immediate federal agency uses of these data on men and their roles in families and in reproductive health, but it is worth noting that all these developments continue to reinforce each other.

The federal uses of the NSFG data on males begin with the PRWORA of 1996, which states:

- (1) Marriage is the foundation of a successful society.
- (2) Marriage is an essential institution of a successful society which promotes the interests of children.
- (3) Promotion of responsible fatherhood and motherhood is integral to successful child rearing and the well-being of children...
- (7) An effective strategy to combat teenage pregnancy must address the issue of male responsibility...
- (8) The negative consequences of an out-of-wedlock birth on the mother, the child, the family, and society are well documented..."

Research based on the NSFG has addressed these questions (Graefe & Lichter, 2002, 2008; Lichter & Graefe, 2001, 2007; Nock, 2007). Beyond the PRWORA, the practical needs of existing federal programs require data on males. Briefly, these include the Healthy People 2010 Objectives (U.S. DHHS, 2006), but they also include providing data that will help programs serve the needs of males and their partners, for instance OPA and the Children's Bureau of the Administration for Children and Families (ACF), Department of Health and Human Services (DHHS) (see attachments A & E). In addition, those needs include the needs expressed in a variety of interagency efforts which are illustrated by 3 reports:

- Nurturing Fatherhood: Improving Data and Research on Male Fertility, Family Formation, and Fatherhood (FIFCFS, 1998);
- Charting Parenthood: A Statistical Portrait of Fathers and Mothers in America (Child Trends, 2002);
- Counting Couples: Improving Marriage, Divorce, Remarriage, and Cohabitation Data in the Federal Statistical System (FIFCFS, 2001).

Previously, programs were dependent on data collected only from women. However, as more of the population spends more of their lives unmarried, due to delayed marriage and increased separation and divorce, relying on women's reports is insufficient for learning about men's characteristics, behavior, and attitudes. Interviewing males allows the NSFG's sponsors and users—including the National Center for Health Statistics (NCHS), the NICHD, the OPA, OASPE, and the CDC's HIV Prevention program—to obtain reliable national data from men on their experiences and attitudes with regard to marriage, divorce, cohabitation, fatherhood, child support, contraceptive use, unintended pregnancy, and sexually transmitted infections (STI), including HIV.

In the 2002 NSFG and in the current continuous survey, independent samples of men and women are interviewed using separate questionnaires for men and women. Since only one member of a household may be interviewed, there are no data on couples. Based on advice from survey directors of other large national surveys of males before we conducted the 2002 survey, the NSFG has in some cases asked questions in a different way for men and for women. For example, men are asked about biological children they have fathered within the context of questions about their wives, cohabiting partners, and other sexual partners, rather than in the chronological fashion in which women are asked about children they have borne. Men are also asked to report fewer dates of events than are women, based on the experience of other surveys.

In sum, the male questionnaire provides information necessary for the programs that co-sponsor the NSFG. Some of this information, particularly the information collected in Audio CASI, is sensitive and personal, but important for a number of current federal programs. See **Attachments E1-E9** for statements from each of the NSFG's current sponsors on how they use NSFG data.

## 2) **BRIEF OUTLINE OF THE CYCLE 7 NSFG MALE QUESTIONNAIRE**

Following a brief outline of the NSFG male questionnaire, the remainder of this attachment discusses topics in the survey questionnaire in turn, emphasizing their policy and program uses. Where questions are comparable with the female survey, we refer to the comparable section of **Attachment B1: Justification of the Female Questionnaire**.

**Section A** collects basic demographics such as marital and cohabitation status, Hispanic origin and race, education, a household roster, and summary questions about whether he lived with both parents, one, or none, and characteristics of his parents or parent-figures. Male respondents

are also asked in this section for the number of times they have been married and times they have cohabited with a female outside of marriage.

**Section B** determines whether respondents, who have never been married and never cohabited, have had sexual intercourse. Males aged 15-24 are asked about sex education. This brief section concludes with a few questions that route respondents to subsequent sections in the interview.

**Section C** collects contraceptive and reproductive information about the respondent's relationship with his current wife or cohabiting partner. This section asks for dates of marriage and cohabitation, demographic characteristics of the wife or cohabiting partner, and her experience with sterilization and infertility. Data are gathered about contraceptive use at their first and last intercourse, and biological and adopted children.

**Section D** is the second of the partner-based sections and collects contraceptive and reproductive information for up to 3 current and recent sexual partners (in the last 12 months), or the last partner ever, if he had no partners in the past 12 months. This section collects information similar to male Section C for these partners.

**Section E** is the last of the partner-based sections and collects information on former wives who have not yet been discussed in the interview. The respondent is also asked about his first cohabiting partner. This section collects information similar to male Sections C and D for these former wives and cohabiting partners

**Section F** asks questions about biological children that the respondent may have fathered with other sexual partners (if any) that were not covered by Sections C, D and E. Questions about these children are similar to those gathered in earlier sections. In addition, men are asked, in summary fashion, about any pregnancies they may have fathered that did not result in live birth.

**Section G** collects information about the man's current parenting behavior for all of his biological and adopted children under age 19, regardless of whether or not he lives with them. Questions are asked about both children he lives with and children he does not live with. Additional questions are asked on frequency of visitation and payment of child support for children he does not live with full-time.

**Section H** asks about birth expectations and desires.

**Section I** obtains information on health insurance coverage and the use of health services, particularly those received at family planning clinics. Men are asked about reproductive health, physical limitation or disability, infertility services, and HIV testing.

**Section J** obtains further background information including residence and place of birth, religion, military service, work status, and work status of the respondent's current wife or cohabiting partner. The section also includes a series of questions on attitudes about topics such

as contraception, gender roles, and parenthood. Teen males are asked about their attitudes about condom use.

**Section K (Audio CASI)** is self-administered. Male respondents are asked about pregnancies they have fathered, then about significant life events, including experience with prisons and homelessness. Questions on substance use in the last 12 months are followed by questions on sexual experience and STD/HIV risk behaviors with people of the opposite sex, and then people of the same sex. The section concludes with questions on individual and family earnings and sources of income, and receipt of public assistance.

### 3) JUSTIFICATION OF THE TOPICS IN THE MALE QUESTIONNAIRE

#### SECTION A

##### **Social, Economic, and Demographic Characteristics**

These questions in the male survey are comparable to those asked for women and have similar justifications. Where additional information focused on males is warranted, we provide it below.

**Hispanic Origin and Race** – see pages 6-7 of Attachment B1

**Education** – see page 8 of Attachment B1

**Household Roster** – see page 9 of Attachment B1

**Childhood Background** – see pages 9-10 of Attachment B1

**Marriage and Cohabitation** – see pages 15-17 of Attachment B1. In addition, remarriage and cohabitation are particularly important in men's and children's lives because they may put men in a "father-figure" or "social father" role with respect to his partner's children. Questions that appear early in Section A determine marital or cohabiting status, while questions that appear later in Section A ascertain the number of times the man has married and the number of women he ever lived with. These questions establish the initial information which will route men into relevant partnership sections. Questions in Section C ask about the marriage and cohabiting experience with the current partner, while questions in Section E ask for similar but less detailed information about former marital and cohabiting partners.

#### SECTION B

##### **Collecting data on the sexually active/sexually experienced population**

(also see pages 17-22 of Attachment B1)

The data on sexual activity and experience in the NSFG are used in NICHD's estimates of factors that affect the risk of pregnancy and the need for contraception, among both married and unmarried men and women. OPA's Office of Adolescent Family Life relies upon trends in

teenage sexual activity and use of contraception produced from NSFG data to assess needs for education, research, and service programs. Increasingly it is recognized that males should be fully included in efforts to prevent teen pregnancy. Data on sexual activity of males are used to evaluate the “Healthy People” national disease prevention objectives on STDs and HIV (U.S. DHHS, 2006). Data on sexual activity among females 15-44 is not sufficient for extrapolating to males 15-44, because there is not a one-to-one correspondence between sexually active female population and the sexually active male population. For example, females tend to have male sexual partners who are older than themselves. Furthermore, lower proportions of men in this age range are likely to be married or cohabiting, thus their behavior is not represented by the reports of married or cohabiting women in this age range.

Below are examples of topics for which it is necessary to have data on the sexually active male population, to get a complete picture:

- trends in teenage contraceptive use and birth and pregnancy rates (Abma et al., 2004; Abma & Sonenstein, 2001; Ventura et al., 2000, 2008);
- STD and HIV testing and risk behaviors (Anderson et al., 2000; Anderson et al., 2005, 2006; Manlove et al., 2008a,b; Mosher and Aral, 1991); and,
- contraceptive use (Abma et al., 2004; Abma & Sonenstein, 2001; Martinez et al, 2006; Manlove et al., 2008a,b).

To answer these data needs, the NSFG not only determines whether men are “sexually experienced” (i.e., ever had sexual intercourse), but also asks men directly about their current and recent sexual activity, including questions on numbers of partners in the past 12 months; dates of first and last sex with these partners; and use of contraception with these partners.

Concerns about the sexually active population of men overlap those for women to some degree, however, in many respects men face unique risks for adverse health consequences. Same-sex sexual activity for men, as well as their higher numbers of opposite-sex partners, on average, may place men at higher risk for STD and HIV (Anderson et al., 2006; Mosher et al., 2005). See section under Section K (ACASI) on “Sexual Activity, Nonvoluntary Sexual Intercourse, and STD/HIV Behaviors with Females” for more details.

### **Ever Had Intercourse**

Exposure to the risk of sexually transmitted disease, and to the risk of causing a pregnancy (with attendant negative consequences, for example, if it occurs outside marriage or is unplanned), begins when sexual activity is initiated. In Section B, men who have never married and never cohabited are asked whether they have ever had sexual intercourse with a woman. For males, as asked for females, those who have never had sexual intercourse are asked for their *main reason why* they have not had intercourse. See page 20 of Attachment B1 for further information on this question.

**Sex Communication/Education**

Studies have found that communication with parents and involvement in sex education programs have beneficial effects for young men's sexual and reproductive health and reduces risk-taking, similar to the benefits for women (Kohler et al., 2008; Lindberg et al., 2006; Mueller et al., 2008). Also see page 22 of Attachment B1 for further information on this series of questions that is identical for males and females.

**Men's Surgical Sterility**

The male survey asks most questions about contraceptive use within the context of current and recent sexual relationships, therefore most contraceptive use questions are asked primarily in Sections C and D. In Section B, all men are asked about surgical sterility, focusing on vasectomy, but including any other operation or medical procedure that may result in complete sterility. While the female NSFG survey has long asked married and cohabiting women about the sterilization experience of their husbands and partners, the male NSFG survey provides important data on the sterilization experience of all men in this age range, regardless of their partnership status. Data on surgical sterilizations help to measure the population at risk of pregnancy, the population using contraception, the population in need of family planning services, and changing preferences for sterilization versus other contraceptive methods (Bumpass et al., 2000; Chandra, 1998; Martinez et al., 2006; Mosher et al., 2004). The gender, race, and education differences in male and female sterilization are particularly important because they are related to unintended pregnancy, to health insurance coverage, and other policy issues (Bumpass et al., 1998; Forste et al., 1995).

**Male Infertility** (see also page 23 of Attachment B1)

There has been intense public interest in infertility during the past two decades, and the female NSFG has been the major source of reliable national data on this topic. Data from the 2002 NSFG survey provide the first national estimates from a representative sample of men—not just teen males (Martinez et al., 2006). The continuous NSFG's male survey will continue this time series with larger sample sizes. Data on infertility can be used by NICHD, OPA and CDC's Division of Reproductive Health to plan research programs and to brief professional associations on infertility and infertility-related medical care.

The questions on infertility are adapted from the female survey and ask about a male's physical ability to father a child. Similar questions are asked about current female partners – her physical ability to have a child and her ability to get pregnant or carry a baby to term – and are included in the relevant partner-specific sections to assess the couple's ability to have children together.

**Number of Sexual Partners**

(see also pages 20-22 of Attachment B1)

Studies have shown that having multiple sexual partners increases the risk of a wide range of diseases, including chlamydia, genital herpes and HIV/AIDS. The male survey asks about the number of sexual partners a man has had in his entire lifetime, as well as his number of sexual partners in the 12 months before the survey (recent partners). For recent partners, he is asked for date of last sex with each (and for last one if none in the past 12 months), and whether they were the current or former wife or cohabiting partner. This is used for routing through the subsequent sections of the questionnaire (see Sections C and D).

In the interviewer-administered portion of the interview (CAPI), men were asked to report only female partners with whom they have had had vaginal intercourse. These data have been published as part of the picture of men's sexual and reproductive health (Martinez et al., 2006). In ACASI, men can report both female and male sexual partners, and report other forms of sexual contact, including oral and anal sex, as well as vaginal intercourse. These questions will be described further below under Section K (ACASI).

## **SECTION C**

This section asks about many topics within the context of a man's current marriage or cohabiting relationship. These topics include:

- beginning and ending dates of their marriage and cohabitation,
- plans for marriage at start of cohabitation, if applicable
- likelihood that current cohabitation will lead to marriage,
- social and demographic characteristics of his current wife or cohabiting partner,
- sterilization and impaired fecundity of current wife/partner,
- date of, relationship at, and contraception at first sex with her,
- date of and contraception at last sex with her,
- contraceptive use and consistency in the last 12 months,
- biological children with current wife/partner, and
- adopted and other non-biological children he has raised with her.

### **Social and Demographic Characteristics of Spouses, Cohabiting Partners, and Other Sexual Partners**

The NSFG obtains selected characteristics of spouses and other sexual partners to provide information about the context in which sexual and reproductive behaviors and decisions occur. Partner characteristics are especially important to assess the changing patterns of condom use – trends central to the prevention of unintended pregnancy, STD and HIV. In addition, men are asked about the nature of their relationship at the time of first sexual intercourse with current or recent partners because this can have major effects on contraceptive use, in general, and condom use, in particular.

### **Men's Use of Contraceptive Methods**



Use of contraceptive methods is a key topic for the research programs of NICHD, OPA, and the CDC's DRH, among others. The NSFG and its predecessor surveys have measured and reported on trends in contraceptive practice among women since 1955. In addition, the NSFG and the National Survey of Adolescent Males (NSAM) have been the principal sources of data to measure DHHS Healthy People 2010 "Risk Reduction Objectives" on condom use.

Even though research and public health efforts are usually focused on contraceptive use among unmarried men, unintended pregnancy and STD and HIV are concerns among married and cohabiting men as well. Therefore contraceptive use questions are asked of men with regard to wives and cohabiting partners, in the same detail and format as they are asked with regard to nonmarital, noncohabiting partners (Section D). For married and cohabiting men, then, Section C is where they first encounter the detailed questions on his and his partner's contraceptive use at first and last sex.

Data on condom use are needed to understand and control the spread of STDs and HIV. Researchers have documented the past decade's increase in condom use, especially among teenagers, as well as the attitudinal and behavioral correlates of condom use (Abma et al., 2004; CDC, 2002; Manlove et al, 2008a; Mosher et al., 2005; Murphy and Boggess, 1998; Pesa et al., 2001; Sonenstein et al., 1998).

The male NSFG necessarily focuses more attention on the "male methods" of contraception – condoms, vasectomy, and withdrawal –because a man may not know if or how well his partner is protected by "female methods," especially hormonal methods such as the birth control pill or the injectable, Depo-Provera™. (These female methods are included in the male contraceptive use response choices, however, because data on his *knowledge* of what his partner is using is important. In the continuous NSFG, a "don't know" in response to the partner's contraceptive use is designed to be a legitimate answer, as this provides important data about males' risk-taking). In Section B men are asked whether they have ever had a vasectomy, and additional details are asked for vasectomies within the last 5 years. It should be noted, however, that even if a man indicates that he has had a vasectomy, he will be asked about condom use to prevent disease.

Other measures of contraceptive use are obtained throughout the survey. Contraceptive use at first intercourse and at last intercourse are two such measures used across many national surveys. Contraceptive use at first intercourse is particularly important for research focused on adolescents, where its use may help determine subsequent contraceptive use as well as exposure to pregnancy and disease. Contraceptive use at last intercourse is useful as a recent "snapshot" indicator of protection among the sexually active, and can also be used to analyze the association of partner characteristics with contraceptive use.

## **Biological Children**

Among policymakers, the courts, and government agencies, out-of-wedlock childbearing, marriage, cohabitation, divorce, paternity establishment and child support are important issues. The male questionnaire collects information on all these concerns.

For decades, the female NSFG has obtained a complete birth and pregnancy history – that is, each pregnancy a woman has ever had up to the survey date, and how many more births she expects. In contrast, based on the experience of previous surveys and the strong suggestion of the experts we consulted, the male survey asks about live births separately from pregnancies which did not result in live birth, and asks about all live births in the context of the relationships in which they occur. In all relevant sections, basic information is collected for all children, including the date of birth, the age of the child at interview, a couple's marital and cohabiting status at time of birth, and where the child lives at the time of the interview.

**Paternity** - The process of paternity establishment for the growing number of births that occur outside marriage is a critical link between biological fathering and legally recognized fatherhood (FIFCFS, 1998). Indeed, one of the four domains in the conceptualization of responsible fatherhood – developed at the request of ASPE – is the establishment of legal paternity for out-of-wedlock births (Doherty et al., 1998). Further, the PRWORA of 1996 (and renewed in 2006) calls for, among other things, an increase in the required level of paternity establishment. Information gathered in the male survey will aid federal agencies in measuring these goals. In this section as well as in Sections D, E, and F information is gathered on nonmarital births, and a series of questions about paternity establishment is asked of men who father these births.

**Intended and Unintended Pregnancy** - The NSFG has been the only source of national data on how well American women in the 15-44 age range plan their pregnancies. Planning is determined in several ways. One way is by asking about effective contraceptive method use surrounding pregnancy; another is by asking whether the pregnancy was intended. Since 1965, a series of questions has been integrated into the contraception questions in the female survey to measure the proportion of pregnancies that were intended, mistimed, or unwanted by the woman and her husband at the time she became pregnant. Using NSFG data from several cycles as well as supplemental data on abortions, Finer and Henshaw (2006) estimated that in 2001 half of all pregnancies were unintended, and about half of unintended pregnancies ended in abortion. The Institute of Medicine (1995) has recommended a national goal that all pregnancies be planned.

Intendedness of pregnancies from a man's perspective is important because it may affect the pregnancy resolution (e.g. whether a woman has an abortion, whether it is placed for adoption), the man's involvement during pregnancy and childbirth, and his subsequent fathering behavior. In particular, a man may not feel responsible for the child if he believed his partner was using contraception, if he did not want the pregnancy to continue, or if he did not know about the pregnancy at all. Among unmarried couples, the association of the intendedness of the pregnancy is of particular interest with regard to subsequent establishment of paternity and continued financial and emotional support of the child.

In the male survey, men are asked several items that measure the planning status of recent births (those occurring within 5 years of interview) and his feelings about the pregnancy. The items include wantedness and timing of the pregnancy, and an item asking how happy/unhappy he felt upon learning about the pregnancy. Prior studies have relied on women's reports of men's attitudes toward pregnancies, but with these questions in the male NSFG, direct studies of men's attitudes towards pregnancies they have fathered are possible (Martinez et al., 2006).

### **Social Fatherhood and Adoption**

Given the increases in divorce, cohabitation and births to unmarried mothers, social fatherhood (including step-fatherhood) has become an increasingly important focus of policymakers and family researchers. Social fatherhood includes all the child rearing roles, activities, duties and responsibilities that fathers are expected to perform and fulfill with respect to children whom they did not biologically father (FIFCFS, 1998). A man who marries or lives with a woman who is a mother may become a social father to her children - through formal adoption or through informal adoption of a father-like role – and exert influence in the lives of her children. Men may also become social fathers by formally adopting other related or unrelated children or by becoming a foster parent – either with a partner or on his own.

Data on adoption have become increasingly important to policy makers in recent years because of the concern about the numbers of children in the child welfare system, particularly older and special-needs children. The data on adoption in the Female survey are collected for the Children's Bureau of the Administration for Children and Families and are designed to give estimates on the number and characteristics of women who have adopted or been foster parents to children as well as characteristics about the children they adopted or fostered.

The questions asked in the male survey will provide estimates from men about adopting, step-parenting, and raising other nonbiological children. These data are important to collect because trends in marriage dissolution and nonmarital cohabitation in recent years have led to an increase in the proportion of children living in households with nonbiological fathers (Bumpass et al., 1995; Fields, 2003; Kreider & Fields, 2005). In 2002, approximately 11% of children under age 15 years old who lived with only their biological mothers (and not biological fathers) also lived with their mother's unmarried partner (Fields, 2003).

In 2007 (the second year of continuous interviewing), the collection of detailed information on men's nonbiological children was expanded beyond children whom the man had legally adopted to include all such children with whom he ever lived. This expansion was motivated when analysis of Cycle 6 data revealed that men adopted fewer than 10% of the nonbiological children with whom they ever lived (Jones, 2008). In addition, the expansion provided a fuller understanding of a family-formation process from the male perspective – a goal of several federal statistical initiatives (FIFCFS, 1998, 2001).

The male survey seeks to describe a man's residence with children throughout his life course and his current involvement with those children around the time of the interview. The

male survey first asks - in the context of relationships – whether a man’s partner had children before the relationship began and whether he ever lived with any of these children. The male survey then asks about a man’s experience of adoption or foster-parenting jointly with his partner of children who were brought into the relationship after it began. In all of these subsections, basic demographic data and current living arrangements are collected for each child who lived with the man, not just children he adopted.

## **SECTION D**

Male Section D asks questions similar to those asked in Male Section C for the current wife or cohabiting partner, but here the focus is on men’s recent sexual partners, up to 3 women with whom he has had sexual intercourse in the last year. If he has not had intercourse in the last year, he is asked about the woman he had intercourse with most recently. The topics include:

- beginning and ending dates of marriage and cohabitation, if applicable
- likelihood of marrying a current (nonmarital, non-cohabiting) partner
- social and demographic characteristics of each recent partner, with greater detail if she is a “current” partner
- date of, relationship at, and contraception at first and last sex with each recent partner
- sterilization and impaired fecundity
- contraceptive use and consistency in the last 12 months
- biological children with each recent partner
- adopted and other non-biological children he has raised with each recent partner

The justifications for most of these questions were provided above in Section C since that is where the above topics first appear in the questionnaire.

### **First Sexual Intercourse Ever**

(Also see “Ever Had Intercourse” section under Section B.) The Healthy People 2010 objectives include a goal to reduce the percent of teens engaging in sex at early ages. In addition, the PRWORA (1996; renewed 2006) includes a program to encourage teens to postpone intercourse until marriage (Sec. 912). Collecting information on the age of first sexual intercourse, and the circumstances surrounding first intercourse, has long been an important task in surveys of sexual and reproductive behavior. First sexual intercourse marks entry into exposure to pregnancy (fatherhood) risk, as well as the risks of STDs and HIV. Use or nonuse of contraception at first sex has important implications for the risk of pregnancy and disease transmission. Findings from the NSFG indicate that the percentage of *women* using a method at first intercourse varied markedly by individual demographic characteristics, religion and religiosity, and neighborhood characteristics (Abma et al., 2004; Hogan et al., 2000; Kahn et al., 1990; Mosher et al., 2003, 2004; Mosher & Bachrach, 1987; Singh & Darroch, 1999).

Analysis from the 1995 National Survey of Adolescent Males (NSAM) and analysis of the 2002 NSFG found similar variations among males, with contraceptive use associated with age at first intercourse, female partner's age, formal instruction on birth control, and other factors

(Abma et al., 2004; Abma & Sonenstein, 2001; Ku et al., 1992, 1993; Sonenstein et al., 1998). An example illustrating the importance of collecting this data for males in addition to for females is: as adolescent males age, their using a condom becomes less likely, and this is opposite the pattern for females, for whom it becomes more likely.

For those male respondents whose first sexual partner was not already covered in Section C (for the current wife or cohabiting partner) or in Section D (for recent sexual partners in past year or last partner outside past year), the last part of Section D asks the date and age of first sex and basic demographic characteristics of first sexual partner including age, nature of relationship, and contraceptive use at first intercourse. The wantedness and voluntariness of first sexual intercourse are asked in ACASI and will be addressed in Section K.

### **SECTION E**

This section asks about the respondent's former wives and his first cohabiting partner. Questions are similar to those asked in Sections C and D, though no questions are asked about contraceptive use with these women because they are neither current nor recent (within past year) sexual partners. To further reduce respondent burden, the NSFG male questionnaire asks only for key marriage or cohabitation dates and basic demographic information for these former wives and partners.

### **SECTION F**

This section completes the male respondent's fertility history.

- Sections C, D, and E collected data on biological and adopted children with current and former wives or cohabiting partners – women that the man was married to or lived with. Section F collects information on all other births and pregnancies. The questions about children are identical to those found in earlier sections.
- Section F also asks about pregnancies that did not result in live birth, that is, pregnancies that ended in miscarriage, stillbirth, or abortion.

Men who reported “7 or more partners” in their lifetimes or in the last 12 months are also asked to report the precise number of female sexual partners they have had.

### **SECTION G**

Section G includes questions about the ways in which men help to raise their children. Researchers recognize that fathers make a range of contributions to their children's well-being

and development (reviewed in Nurturing Fatherhood, FIFCFS, 1998, pages 99-174 & 400-430; Yeung et al., 2001). Among these are providing economic support, and a safe and nurturing environment to help their children grow into healthy adults (Bernard, 1998). In addition to financial support of children, continuing emotional and physical care has been emphasized as essential elements of responsible fatherhood (Carlson, 2005; Doherty et al., 1998; Levine & Pitt, 1995). This section of the interview collects information on some of these central aspects of fathering for biological and adopted children that the man lives with (“coresidential”) and those he does not live with (“non-coresidential”).

In the GA series, men are asked about time spent in activities with children with whom they currently live – regardless of his relationship to them. Men are also asked about how well they feel they do as fathers. Data from this series as well as the series on non-coresidential children (in the GB series) were published in a comprehensive report (Martinez et al., 2006).

### **Non-Custodial Fathers and Child Support**

Child support has long been an important policy issue (FIFCFS, 1998). The PRWORA of 1996 (renewed in 2006) calls for an increased level of child support enforcement and the development of access and visitation programs to increase the involvement of noncustodial/nonresident parents in the lives of their children. These legislative efforts are supported by the findings of social scientists, who have found that whether or not a father lives in the home, when fathers provide for their children economically and are regularly and positively connected to them, children do better emotionally, developmentally, and scholastically. There is also an association between the father paying child support and the frequency with which he visits his children, but the causal connections need further research. (Graham & Beller, in Tamis-LeMonda & Cabrera (eds), 2002.)

In the GB series, respondents are asked questions about visitation of children they do not live with and their satisfaction with this level of visitation. They are also asked questions which parallel those in the preceding subsection regarding time spent in activities with children, and how good a father he feels he is. In addition, to allow fathers who live far away an opportunity to report contact with their children, we ask about contact with non-coresidential children by e-mail or phone in the last 12 months.

In the GC series, fathers who do not live with their children are asked about child support-- including whether they pay, how frequently they pay, and how much they paid in the last 12 months.

## **SECTION H**

**Intentions about Children** (see also pages 28-29 of Attachment B1)

Questions on desired and intended births are relevant to short-term birth projections and indicate probable differences in completed family size among various socioeconomic groups. Examples of use of NSFG data on cumulative (total) family size is in the study of the changing relationship of religious affiliation and religious participation to family size over time (Hayford & Morgan, 2008; Mosher et al., 1992; Zhang, 2008). These patterns cannot be studied with Census or Vital Statistics data, because these sources do not collect data on religion or many other relevant social and demographic variables. All men are asked about their individual desires to have a (or another) child in the future. Unmarried, non-cohabiting men are asked about their individual *intentions* to have a (or another) child in the future. If a man is married or cohabiting, he is asked about his and his wife/partner's joint intentions to have children together in the future.

## **SECTION I**

This section collects information on men's access to health care, use of reproductive health services, and health status.

**Access to Health Care and Health Insurance Coverage** (see page 31 of Attachment B1)

### **Use of Family Planning Clinics; Receipt of Reproductive Health Services**

Many policymakers and program managers have advocated tailoring or redesigning reproductive health programs to include men (Levine & Pitt, 1995; Sonenstein, et al., 1997; Schulte & Sonenstein, 1995). Because the OPA-administered Title X and Title XX programs both now include efforts to reach males with reproductive health services, the OPA has specifically requested that the Male survey capture information about men's use of family planning clinics, their receipt of reproductive health services, and their participation in pregnancy prevention programs. Eugenia Eckard of OPA wrote (see **Attachment E3** for full letter):

“In addition, the issue of male sexual responsibility and fertility-related behavior has long been of concern to both the Title X and Title XX programs. Efforts are currently underway

within OPA to test a variety of approaches that would encourage responsible family planning/reproductive health decision-making among males. Information provided by the NSFG on the characteristics and motivations of males will help family planning and pregnancy prevention programs better understand how to provide effective services to men and thereby substantially help to improve policy and program initiatives that are intended to reach males.” (Eckard, 2008, **Attachment E3**)

Further information on these programs and research efforts is on the OPA website ([www.hhs.gov/opa/familyplanning](http://www.hhs.gov/opa/familyplanning)). The questions in this section, therefore, ask young men (15-24 years of age) about use of family planning clinics – either for him or accompanying a female partner – and the services he received at the last visit. Men are asked about specific

medical services that they may have received in the 12 months preceding the survey, including a routine physical exam, counseling about contraception, counseling about STDs or HIV, and screening for testicular cancer. At least one analysis of these data has been published (Kalmuss & Tatum, 2007). If any of these services were received in the last 12 months, young men (15-24 years old) are asked questions about the type(s) of health care facility where the services were received and method(s) of payment.

### **Receipt of Infertility Services**

As stated in Section B above, there has been intense public interest in infertility during the past two decades and the female NSFG has been the major source of reliable national data on infertility and the use of medical care for infertility. The 2002 NSFG, and now the continuous survey, provide the first national trend information on these topics, directly asked of men rather than indirectly obtained from women (Anderson et al., 2008; Martinez et al., 2006).

Specifically, the questions in the male survey ask whether men have ever received medical help to have a baby with any partner in his life. If he has ever received this kind of help, follow-up questions are asked concerning the specific services he received and any male infertility problems he may have had.

The NSFG is unique in that no other single data source has information on both HIV testing and HIV-risk-related behaviors among the general population. Data on HIV testing among men and women in the primary reproductive age range of 15-44 years are an important component guiding prevention programs for HIV and other sexually transmitted diseases. Information on HIV-related behavior, condom use and HIV testing is also useful to evaluate some of the Health Promotion and Disease Prevention Objectives for the Year 2010. A detailed analysis of the HIV testing data for men and women has been published (Anderson et al., 2005). For further details, see page 30 of Attachment B1.

## **SECTION J**

(Also see "Social, Economic, and Demographic Characteristics", on page 5 of this attachment.)

**Residence and Place of Birth** (See page 32 in Attachment B1.)

**Religion** (See pages 32-34 in Attachment B1.)

### **Military Service**

A short series on military service is included in the male questionnaire, capturing the beginning and ending dates of active duty in the Armed Forces, if any. If the man is currently on active duty in the military, this is also recorded. A respondent can qualify for this household sample if he is active in the military but lives off-base.



Military service is an important component of adult experiences for many men. Being in the military may present the opportunity for men to have an increased number of sexual partners (Mosher et al., 2005) and its timing is likely to strongly influence marriage and cohabitation, pregnancies, and family formation. Together with education and employment, it helps to provide a more complete accounting of adult role involvement for men, as well as providing another avenue for their use of health care.

## **Employment**

Along with education, employment determines men's access to material and social resources and influences his orientation toward health, reproduction, fathering and the family. In addition, the effect of male joblessness on family formation and dissolution may be stronger in some population subgroups than in others (Sampson & Oliver, 1995; Testa et al., 1995; Wilson, 1987).

**Respondent's and Wife/Partner's Current/Last Job Information** (See page 34 in Attachment B1.)

**Attitudes** (See pages 34-35 in Attachment B1.)

## **SECTION K: Audio Computer-Assisted Self-Interview (Audio CASI)**

The use of Audio CASI has been found to improve reporting of sensitive or stigmatizing behaviors and experiences, including pregnancies, abortions, and same-sex sexual behavior (Fu et al., 1998; Turner et al. 1998). As in Cycle 6, some of the most sensitive topics in the survey, as requested by the CDC's Division of HIV/AIDS Prevention (DHAP), have been included in the Cycle 7 male ACASI.

**School Suspension and Expulsion** (see pages 36-37 of Attachment B1)

## **Significant Events**

This section asks about 2 key life events that may greatly change a person's social network or environment or may constitute a stressful life event that affects attitudes or behaviors:

- being homeless in the last 12 months
- spending time in jail, prison, or detention center (in last 12 months and in lifetime)

Homelessness and incarceration are important in the context of the NSFG because these behaviors may be accompanied by lifestyles that include risk-taking and substance use among individuals in need of greater intervention. Also, these questions, along with questions on military service from the main interview, will help to provide a rough estimate of the percentage of men who may be missed in a household-based sample of males aged 15-44. In the Cycle 6

NSFG sample, 2% of men reported being homeless in the past 12 months, and 26% of men reported spending time in a jail, prison, or detention center at some point in their lives.

**Substance Use** (see page 36 of Attachment B1)

### **Pregnancy and Abortion**

The pregnancy and abortion questions are asked again in abbreviated form in the Audio CASI. If the respondent is younger than 25 years, he is also asked whether he was ever told that he made a female pregnant and what happened the last time that occurred.

### **Sexual Activity, Nonvoluntary Sexual Intercourse, and STD/HIV Risk Behaviors with Females (opposite-sex partners)**

The large number of heterosexual men and women infected with HIV, and the cost to themselves and to the government of medical care for them, makes it important to update frequently the information on men and women of reproductive age who are exposed to the risk of HIV infection (Mosher et al., 2005; Campbell & Baldwin, 1991; Finer et al., 1999; Holmes et al., 1990; MacDonald et al., 1990; McNally & Mosher, 1991; Stanton et al., 1990; Wendell et al., 1992). In the 1988 NSFG (which was restricted to females), questions on behavior that affect the risk of contracting STDs, including AIDS virus were asked at the request of the NICHD and the CDC's Division of STD/HIV Prevention. In the 1990 Telephone Reinterview of the Female survey, additional AIDS-related questions were asked on condom use for disease prevention and contraception. The current (continuous interviewing) series of questions measures behaviors that pose very high risk for the transmission of STDs, including HIV. Risky practices include sex with multiple partners, sex while using drugs or alcohol, sex in exchange for money or drugs (with a distinction made when the respondent is the donor or the recipient of the drugs/money), and sex with an HIV-infected person.

Male respondents are asked whether they have engaged in a range of sexual behaviors with females and whether condoms were used at the last time some of these behaviors occurred. They are asked about nonvoluntary sexual intercourse with females and about types of force that may have been used (see pages 37-38 in Attachment B1 for further information on the nonvoluntary intercourse questions).

Thinking of all types of sexual contact with females, including vaginal intercourse, oral sex, and anal sex, they are asked to report the total number of female sexual partners they have had in their lifetime and in the last 12 months. For the last 12 months, men (as were women) are asked to report numbers of sexual partners by type of sexual contact, with the goal of refining measures of current HIV/STD risk level. Those men who have reported at least one female partner in the last 12 months are asked about specific STD/HIV-risking behaviors they may have engaged in with females.

### **Sexual Activity, Nonvoluntary Sexual Intercourse, and STD/HIV Risk Behaviors with Males (same-sex partners)**

Because of the disease risk associated with male-male sexual behavior, and because exclusive male-male sexual orientation may influence fertility rates and heterosexual family formation patterns, men are asked in ACASI about male-male sexual experience. Similar to the series about sex with females, men are asked whether they have engaged in specific sexual behaviors with another male and whether they used a condom at the last occurrence of these activities. Also similar to the series about sex with females, men are asked whether they had ever experienced nonvoluntary sexual activity with a male and whether various types of force, if any, were used. Finally, men are asked about STD/HIV risk behaviors which involve sexual activity with another male.

### **Sexually Transmitted Diseases (STD)**

In 2000, about 19 million new cases of STDs occurred, nearly half of which occurred among people aged 15-24 (Weinstock et al., 2004). STDs among men may place them at higher risk of infection or transmission of HIV, with both female and male partners. In addition, there are numerous adverse consequences for men's female partners and their children. Women may experience pelvic inflammatory disease (PID), sterility, and increased risk for ectopic pregnancy and human papilloma virus-related cancers. Children born to STD- or HIV-infected mothers face higher risks of fetal and infant death, birth defects, and mental retardation.

After a few questions concerning sexual orientation and attraction, men are asked about their experience with STDs in the last 12 months. Specifically, they are asked about gonorrhea, chlamydia, genital herpes, genital warts, and syphilis. STDs may be underreported and STDs may be asymptomatic (though less of a problem in men than in women), but these questions have been used in other national surveys such as the NSAM and found to be associated with STD prevalence and health service utilization.

Several reports have presented information on these ACASI topics in the 2002 NSFG (Abma et al., 2004; Anderson et al., 2005, 2006; Chandra, et al., 2005; Martinez et al., 2006; Mosher et al., 2005).

**Sexual Orientation, Attraction, and Behavior** (see pages 40-41 of Attachment B1)

**Income** (see page 41 of Attachment B1)

## REFERENCES

- Abma J, Martinez G, Mosher W, Dawson B. 2004. Teenagers in the United States: Sexual Activity, Contraceptive Use, and Childbearing, 2002. *Vital and Health Statistics* 23(24). Hyattsville, MD: National Center for Health Statistics.
- Abma J, Sonenstein F. 2001. Sexual Activity and Contraceptive Practices among Teenagers in the United States, 1988 and 1995. Hyattsville, MD: National Center for Health Statistics. *Vital and Health Statistics Series* 23(21).
- Anderson J, J Carey & S Taveras. 2000. HIV Testing among the General US Population and Persons at Increased Risk: Information from National Surveys, 1987-1996. *American Journal of Public Health* 90(7):1089-1095.
- Anderson JE, Chandra A, Mosher WD. 2005. HIV Testing in the United States, 2002. Advance Data Number 363. Hyattsville, MD: National Center for Health Statistics.
- Anderson JE, Farr SL, Jamieson DJ, Warner L, Macaluso M. 2008. Infertility services reported by men in the United States: national survey data. Fertility and Sterility 2008. April 24 epub ahead of print.
- Anderson JE, Mosher WD, Chandra A. 2006. Measuring HIV Risk in the US Population aged 15-44: Results of the 2002 NSFG. Advance Data No. 377. Hyattsville, MD: National Center for Health Statistics.
- Bernard S. 1998. Responsible Fatherhood and Welfare: How States Can use the New Law to Help Children. Children and Welfare Reform: Issue Brief 4. New York, NY: National Center for Children in Poverty.
- Bumpass L, Thomson E, Godecker A. 2000. Women, Men, and Contraceptive Sterilization. *Fertility and Sterility* 73(5):937-946.
- Bumpass LL, Thomson E, Godecker AL. 1998. Couple and Gender Issues in Sterilization Decision-making. Presented to the NIH Conference on Male and Female Sterilization: Medical Effects and Behavioral Issues, June 11-12, 1998.
- Bumpass LL, RK Raley, & JA Sweet. 1995. The Changing Character of Stepfamilies: Implications of Cohabitation And Nonmarital Childbearing. *Demography* 32(3): 425-436.
- Campbell A & W Baldwin. 1991. The Response of American Women to the Threat of AIDS and Other Sexually Transmitted Diseases. *Journal of Acquired Immune Deficiency Syndromes* 4(11): 1133-1140.
- Carlson, M. 2005. Family Structure, Father Involvement, and Adolescent Behavioral Outcomes. Center for Research on Child Wellbeing Working Paper #05-10.
- Chandra A. 1998. Surgical Sterilization in the United States: Prevalence and Characteristics, 1965-1995. *Vital and Health Statistics* 23(20). Washington, D.C.: National Center for Health Statistics.
- Chandra A, GM Martinez, WD Mosher, JC Abma & J Jones. 2005. Fertility, Family Planning, and Reproductive Health of U.S. Women: Data from the 2002 National Survey of Family Growth. *Vital and Health Statistics* 23(25). Hyattsville, MD: National Center for Health Statistics.
- Child Trends, Inc., 2002. Charting Parenthood. Child Trends, Inc., Washington, DC.
- Doherty WJ, EF Kouneski & MF Erickson. 1998. Responsible Fathering: An Overview and Conceptual Framework. *Journal of Marriage and the Family* 60:277-292.
- Eckard E. 1998. Statement from the Office of Population Affairs prepared for the National Survey of Family Growth. August 12, 1998.

Federal Interagency Forum on Child and Family Statistics. 1998. *Nurturing Fatherhood: Improving Data and Research on Male Fertility, Family Formation and Fatherhood*. Washington, D.C.: Federal Interagency Forum on Child and Family Statistics.

Federal Interagency Forum on Child and Family Statistics. 2001. *Counting Couples: Improving Marriage, Divorce, Remarriage, and Cohabitation Data in the Federal Statistical System*. Washington, D.C.: Federal Interagency Forum on Child and Family Statistics.

Fields J. 2003. *Children's Living Arrangements and Characteristics: March 2002*. Current Population Reports, P20-547. US Census Bureau, Washington, D.C.

Finer, L, J Darroch & S Singh. 1999. Sexual Partnership Patterns as a Behavioral Risk Factor for Sexually Transmitted Diseases. *Family Planning Perspectives* 31(1):4-9, 23.

Finer LB, Henshaw SK. 2006. Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001. *Perspectives on Sexual and Reproductive Health* 38(2): 90-96, June 2006.

Forste R, K Tanfer & L Tedrow. 1995. Sterilization among Currently Married Men in the United States, 1991. *Family Planning Perspectives* 27:100-107, 122.

Fu H, JE Darroch, SK Henshaw & E Kolb. 1998. Measuring the Extent of Abortion Underreporting in the 1995 NSFG. *Family Planning Perspectives* 30(3):128-33,8.

Graefe DR & DT Lichter. 2002. Marriage among Unwed Mothers: Whites, Blacks and Hispanics Compared. *Perspectives on Sexual and Reproductive Health* 34(6): 286-293.

Graefe DR, Lichter DT. 2008. Marriage patterns among unwed mothers: Before and after PRWORA. *Journal of Policy Analysis and Management* 27(3): 479-97.

Hayford SR, Morgan SP. 2008. Religiosity and fertility in the United States: The role of fertility intentions. *Social Forces* 86(3):1163-1188.

Hofferth SL, Casper LM (editors). 2007. *Handbook of measurement issues in family research*. Mahwah, N.J.: Lawrence Erlbaum Associates.

Hogan D, R Sun & G Cornwell. 2000. Sexual and Fertility Behaviors of American Females Aged 15-19 Years: 1985, 1990, and 1995. *American Journal of Public Health* 90(9):1421-1425.

Holmes K, et al. 1990. The Increasing Frequency of Heterosexually Acquired AIDS in the United States, 1983-1988. *American Journal of Public Health* 80(7):858-862.

Institute of Medicine. 1995. *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*. Washington, DC: National Academy Press.

Jones J. 2008. Adoption experiences of women and men and demand for children to adopt by women 18-44 years of age in the United States, 2002. National Center for Health Statistics. *Vital Health Stat* 23(27). Hyattsville, MD: National Center for Health Statistics.

Kahn J, R Rindfuss & D Guilkey. 1990. Adolescent Contraceptive Method Choices. *Demography* 27(3):323-336.

Kalmuss D, Tatum C. 2007. Patterns of Men's Use of Sexual and Reproductive Health Services. *Perspectives on Sexual and Reproductive Health* 39(2): 74-81.

Kohler PK, Manhart LE, Lafferty WE. 2008. Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy. *Journal of Adolescent Health*. 42(4):344-351.

Kreider RM & J Fields. 2005. Living Arrangements of Children: 2001. Current Population Reports, P70-104. US Census Bureau, Washington, D.C.

Ku L, FL Sonenstein & JH Pleck. 1992. The Association of AIDS Education and Sex Education with Sexual Behavior and Condom Use among Teenage Men. *Family Planning Perspectives* 24:100-106.

Ku L, FL Sonenstein & JH Pleck. 1993. Factors Influencing First Intercourse for Teenage Men. *Public Health Reports* 106(6):680-684.

Levine JA & EW Pitt. 1995. *New Expectations: Community Strategies for Responsible Fatherhood*. New York: Families and Work Institute.

Lichter DT, Graefe DR. 2001. Finding a Mate? The Marital and Cohabitation Histories of Unwed Mothers. Pages 317-342 in L Wu and B Wolfe (editors), *Out of Wedlock: Causes and Consequences of Nonmarital Fertility*. New York: Russell Sage Foundation.

Lichter DT, Graefe DR. 2007. Men and Marriage Promotion: Who Marries Unwed Mothers? *Social Service Review* 81(3): 397-421, September 2007.

Lindberg LD, Santelli JS, Singh S. 2006. Changes in Formal Sex Education: 1995-2002. *Perspectives on Sexual and Reproductive Health* 38 (4): 182-189.

MacDonald N, et al. 1990. High-Risk STD/HIV Behavior among College Students. *Journal of the American Medical Association* 263(23):3115-3159.

Manlove J, E Ikramulla, & E Terry-Humen. 2008a. Condom use and consistency among male adolescents in the United States. *Journal of Adolescent Health* 43(4): 325-33, Oct 2008

Manlove J, Terry-Humen E, Ikramullah E, Holcombe E. 2008b. Sexual and reproductive health behaviors among teen and young adult men: A descriptive portrait. *Research Brief*. Washington, DC: Child Trends, Inc.

Marsiglio W, P Amato, R Day & M Lamb. 2001. Scholarship on Fatherhood in the 1990s and Beyond. *Journal of Marriage and the Family* 62(4): 1173-1191.

Martinez GM, Chandra, A, Abma JC, Jones J, Mosher WD. 2006. Fertility, Contraception, and Fatherhood: Data on Men and Women from the 2002 National Survey of Family Growth. *Vital and Health Statistics*, Series 23, Number 26. Hyattsville, MD: National Center for Health Statistics.

McNally JW & WD Mosher. 1991. AIDS-Related Knowledge and Behavior among Women 15-44 Years of Age: United States, 1988. *Advance Data from Vital and Health Statistics*, No. 200. Hyattsville, MD: National Center for Health Statistics.

Mosher W & S Aral. 1991. Testing for Sexually Transmitted Diseases among Women of Reproductive Age: United States, 1988. *Family Planning Perspectives* 23(5):216-221.

Mosher W & C Bachrach. 1987. First Premarital Contraceptive Use: United States, 1960-82. *Studies in Family Planning* 18(2):83-95.

Mosher W, A Chandra & J Jones. 2005. Sexual Behavior and Selected Health Measures: Men and Women 15-44 Years of Age, United States, 2002. *Advance Data from Vital and Health Statistics*, No. 362.

WD Mosher, LP Deang & MD Bramlett. 2003. *Community Environment and Women's Health Outcomes: Contextual Data*. *Vital and Health Statistics*, Series 23, No. 23. Hyattsville, MD: National Center for Health Statistics.

- Mosher W, G Martinez, A Chandra, J Abma & S Willson. 2004. Use of Contraception and Use of Family Planning Services in the United States, 1982-2002. Advance Data from Vital and Health Statistics, No. 350. Hyattsville, MD: National Center for Health Statistics.
- Mosher W, L Williams & D Johnson. 1992. Religion and Fertility in the United States: New Patterns. *Demography* 29(2):199-214.
- Mueller T, Gavin L, Kulkarni, A. 2008. The Association between Sex Education and Youth's Engagement in Sexual Intercourse, Age at first Sex and Birth Control Use. *Journal of Adolescent Health* 42: 89-96.
- Murphy J & S Boggess. 1998. Increased Condom Use among Teenage Males, 1988-1995: The Role of Attitudes. *Family Planning Perspectives* 30(6):276-280.
- National Fatherhood Initiative. 2002. Father Facts, 4th Edition.
- National Fatherhood Initiative. 2007. Father Facts, 5th Edition.
- Nock SL. 2007. Marital and Unmarried Births to Men: Complex Patterns of Fatherhood, Evidence from the National Survey of Family Growth, 2002. ASPE Research Brief, April 2007. Washington DC: Office of the Assistant Secretary for Planning and Evaluation, U.S Department of Health and Human Services. 12 pages. Available at: <http://aspe.hhs.gov/hsp/07/births-to-men/rb.htm>
- Pesa JA, LW Turner & J Mathews. 2001. Sex Differences in Barriers to Contraceptive Use among Adolescents. *The Journal of Pediatrics* 139(5):689-693.
- Sampson RJ & ML Oliver. 1995. Unemployment and Imbalanced Sex Ratios: Race-Specific Consequences for Family Structure and Crime. In MB Tucker & C Mitchell-Kernan (eds.) *The Decline in Marriage among African Americans: Causes, Consequences and Policy Implications*. New York, NY: Russell Sage Foundation (pp. 229-254).
- Schulte MM & FL Sonenstein. 1995. Men at Family Planning Clinics: The New Patients? *Family Planning Perspectives* 27(5):212-216, 225.
- Singh S & J Darroch. 1999. Trends in Sexual Activity among Adolescent American Women: 1982-1995. *Family Planning Perspectives* 31(5):212-219.
- Sonenstein FL, L Ku, LD Lindberg, CF Turner & JH Pleck. 1998. Changes in Sexual Behavior and Condom Use among Teenaged Males: 1988 to 1995. *American Journal of Public Health* 88(6):956-59.
- Sonenstein FL, K Stewart, LD Lindberg, M Pernas & S Williams. 1997. *Involving Males in Preventing Teen Pregnancy: A Guide for Program Planners*. Washington, D.C.: The Urban Institute.
- Stanton B, et al. 1990. HIV Risk Behaviors in Young People: Can We Benefit from 30 Years of Research Experience? *AIDS and Public Policy Journal* 5(1):17-21.
- Tamis-LeMonda, C & N Cabrera. (Editors). 2002. *Handbook of Father Involvement: Multidisciplinary Perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Testa M, M Krogh & S Danzinger. 1995. The Effects of Employment on Marriage among Black Males in Inner-City Chicago. In MB Tucker & C Mitchell-Kernan (Eds.) *The Decline in Marriage among African Americans: Causes, Consequences, and Policy Implications*. New York, NY: Russell Sage Foundation (pp 59-95).
- Turner C, L Ku, S Rogers, L Lindberg, JH Pleck & FL Sonenstein. 1998. Adolescent Sexual Behavior, Drug Use and Violence: New Survey Technology Detects Elevated Prevalence among U.S. Males. *Science* 280:867-73.

U.S. Department of Health and Human Services. *Healthy People 2010 Midcourse Review*. Washington, DC: U.S. Government Printing Office, December 2006.

Ventura SJ, Abma JC, Mosher WD, Henshaw SK. 2008. Estimated Pregnancy Rates by Outcome for the United States, 1990-2004. *National Vital Statistics Reports* 56(15):1-28. Hyattsville, MD: National Center for Health Statistics. April 14, 2008. Available at: [http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\\_15.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_15.pdf).

Ventura, SJ, WD Mosher, SC Curtin, JC Abma & S Henshaw. 2000. Trends in Pregnancies and Pregnancy Rates by Outcome: Estimates for the United States, 1976-96. Hyattsville, MD: National Center for Health Statistics. *Vital and Health Statistics* 21(56).

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

Wendell D, et al. 1992. Youth at Risk: Sex, Drugs, and Human Immunodeficiency Virus. *American Journal of Diseases in Children* 146:76-81.

Wilson WJ. 1987. *The Truly Disadvantaged: The Inner City, the Underclass and Public Policy*. Chicago, IL: University of Chicago Press.

Yeung WJ, JF Sandberg, P Davis-Kean & SL Hofferth. 2001. Children's Time with Fathers in Intact Families. *Journal of Marriage and the Family* 63(1):136-154.

Zhang L. 2008. Religious affiliation, religiosity, and male and female fertility. *Demographic Research* 18(8):233-262.