

HIV Testing in the United States, 2002

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Abstract

Objective—This report presents national estimates of testing for Human immunodeficiency virus, or HIV, the virus that causes acquired immunodeficiency syndrome (AIDS). The objectives are to present nationally representative estimates of the degree of self-reported lifetime and recent HIV testing among persons 15–44 years of age in the United States. The report also contains data on sources of testing, reasons for tests, and whether HIV counseling was obtained.

Methods—Data from the 2002 NSFG, conducted by the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), are based on interviews with a national sample of the household population of the United States. In-person, face-to-face interviews were conducted in the homes of 12,571 males and females 15–44 years of age in 2002. Most of the data used for this report were collected by an interviewer who asked the questions and entered the answers into a laptop computer.

Results—One-half of men and women 15–44 years of age in 2002 reported that they had been tested at least once (other than through blood donation), and 15.1 percent had been tested in the past 12 months, which is equivalent to 17–20 million tests per year among 15–44 year olds. Testing is more common in some population subgroups than others, for example, among African Americans and persons with increased risk for HIV. Private physicians and HMOs were the largest provider of tests, accounting for 45 percent of recent tests. Public sources accounted for 22 percent of tests. A minority of recently tested respondents (29 percent) reported talking with a health professional about the HIV test after being tested. Among women who had recently been pregnant, 69 percent reported being tested for HIV during prenatal care. Persons 15–44 years of age with increased risk for HIV, defined by drug-related or sex-related behavior, had higher reported testing during their lifetime and in the past 12 months than those not at higher risk. However, one-third of this higher risk group reported that they had never had an HIV test, equivalent to 4.1–5.5 million untested, at-risk persons aged 15–44 years, and a majority of higher risk persons had not been tested in the past year.

Keywords: HIV • HIV testing • HIV risk behavior • National Survey of Family Growth

Introduction

Background

CDC has estimated that in the 20 years after 1981, when the first cases of acquired immunodeficiency syndrome (AIDS) were identified, at least 1.3–1.4 million persons in the United States were infected with human immunodeficiency virus (HIV), the virus that causes AIDS (1). At any point in time, some persons who have been infected with HIV will not have any symptoms, while others will have developed symptoms defining the disease AIDS as a result of their HIV infection. Through 2003 a cumulative total of 929,985 cases of AIDS were reported and 525,060 deaths (2). Following the introduction of effective combination antiretroviral drug therapy in the 1990s, HIV-related illness and death has declined and the number of persons living with HIV infection has increased. The most recent estimates indicate that 1.0–1.2 million HIV-infected persons are living in the United States (3). As many as one in four infected persons may be unaware of their infection status (1). Caring for persons with HIV and AIDS is costly and the average annual expenditure for each person being treated for HIV



infection in the United States has been estimated to be about \$18,300 (4).

The number of new HIV infections per year is believed to have been stable at around 40,000 per year since the early 1990s (1). In 2003, 45 percent of new cases of HIV and AIDS reported to CDC were to men who had sex with men, 19 percent to injecting drug users, and 34 percent were accounted for by heterosexual contact. Among new cases in 2003, 72 percent were to males and 28 percent to females. In recent years an increasing percentage of HIV and AIDS cases have been among racial and ethnic minorities (2,5). About 50 percent of new cases reported to CDC in 2003 were among non-Hispanic blacks (2).

Prevention of HIV infection and AIDS is a national health priority. Current prevention strategies emphasize testing for HIV to identify infected persons to ensure access to appropriate medical care, treatment, and prevention services (1). Information on HIV testing is important for prevention programs that seek to expand testing, making it a part of routine medical care, and to make testing more widely available outside of medical settings (1). Furthermore, reducing perinatal HIV transmission is a major priority and CDC recommends that HIV testing be routine for all pregnant women unless they decline, and recommends routine rapid testing at labor and delivery for women of unknown HIV status (6,7).

In addition to information on HIV testing, it has been recognized that accurate population-based measurement of behaviors that put persons at risk for HIV is an essential part of tracking the epidemic and developing successful prevention efforts (8). The 2002 National Survey of Family Growth (NSFG) provides measures of HIV testing experience for its respondents as well as detailed measurements of sexual and drug-related HIV risk behaviors. Further, because of the sensitive nature of HIV risk behaviors, the NSFG has collected this information using audio computer-assisted self-interview methods (ACASI). In the ACASI method of data collection, the respondent listens to the questions and enters the response directly into the computer, without giving their responses

to an interviewer—a method that affords the respondent greater privacy. This technique has been found to yield more complete reporting of sensitive and stigmatized behaviors, which some respondents might find difficult to report to an interviewer (9). ACASI also makes it possible for persons with lower literacy to complete the self-interview.

Self-reported information about HIV testing on national health surveys such as the NSFG is important because there are few other sources of data. Although some information is reported about Government-funded HIV tests in the United States (10), there are no data systems that collect information directly about tests obtained from all sources—including private doctors, Health Maintenance Organizations (HMOs), and hospitals, where most testing takes place. Instead, self-reported data from persons interviewed on health surveys, such as the NSFG, is the only information on the numbers and characteristics of persons who have been tested for HIV, regardless of where they were tested (11).

It is particularly important to be able to measure HIV testing behavior of persons who are at increased behavioral risk for acquiring or transmitting HIV infection. This report contains information on HIV testing and risk behavior obtained on the 2002 NSFG, a detailed reproductive health survey of males and females 15–44 years of age. The NSFG has a number of advantages for examining HIV testing. It has a long history of collecting sensitive reproductive-related information. In comparison to other national health surveys, it collects considerably more detailed information on risk behaviors related to HIV, and data collection methods have been used that enhance the degree of privacy for respondents in answering questions on these topics.

Topics covered in this report include:

- Measures of HIV testing history—including testing during a person's lifetime and during the 12 months before interview.
- Reasons for obtaining HIV tests.
- Source of tests and whether counseling was obtained.

- HIV testing during prenatal care for recently pregnant women.
- Testing measures for major population subgroups defined by major sociodemographic categories and for categories of HIV risk.
- Comparisons of 2002 NSFG results with data from the 1995 NSFG and from two other national surveys conducted in 2002 that obtain similar information.

Methods

Data

The NSFG has been conducted six times by NCHS: in 1973, 1976, 1982, 1988, 1995, and 2002. In 1973–95, the interviews were done with national samples of women 15–44 years of age. In 2002, the national sample included both women and men 15–44 years of age.

Each time, the interviews have been conducted in person by trained female interviewers in the selected persons' homes. The sample is a nationally representative multistage area probability sample drawn from 121 areas across the United States. Large areas (counties and cities) were chosen first; within each large area or "Primary Sampling Unit," groups of adjacent blocks, called segments, were chosen at random. Within segments, addresses were listed and some addresses were selected at random. The selected addresses were visited in person, and a short "screener" interview was conducted to see if anyone 15–44 lived there. If so, one person was chosen at random for the interview and was offered a chance to participate. To protect the respondent's privacy, only one person was interviewed in each selected household. In 2002, teenagers and black and Hispanic adults were sampled at higher rates than others.

All respondents were given written and oral information about the survey and were informed that participation was voluntary. Adult respondents 18–44 years of age were asked to sign a consent form but were not required to do so. For minors 15–17 years of age, signed consent was required first from a parent or guardian, and then signed

assent was required from the minor. Respondents were guaranteed that the confidentiality of their information would be protected. The response rate for the survey was 79 percent—80 percent for women and 78 percent for men.

Over 200 female interviewers were hired and trained by the survey contractor, the University of Michigan's Institute for Social Research, under the supervision of NCHS. Interviewing occurred from March 2002 until March 2003. Much of the data in this report were collected by CAPI, in which the questionnaire was stored on a laptop computer and administered by an interviewer. The rest of the data—the most sensitive items—were collected using audio ACASI, in which the respondent listened to the questions on headphones and entered the responses directly into the computer. Respondents in the 2002 survey were offered \$40 as a “token of appreciation” for their participation. The NSFG questionnaires and materials were reviewed and approved by both the CDC/NCHS Research Ethics Review Board and the University of Michigan Institutional Review Board. The female questionnaire lasted an average of about 85 minutes, and the male questionnaire an average of 60 minutes. More detailed information about the methods and procedures of the study is published in a separate report (12).

Measurement of HIV testing and HIV risk

Lifetime HIV testing status—Measurement of lifetime testing for HIV is based on a series of questions about testing history. Since 1985 all blood donations, such as those made to the Red Cross or other blood banks, have been tested for HIV. In measuring HIV testing it is important to distinguish between those tests that have occurred automatically as part of blood donation and those obtained mainly to find out infection status. Blood donors who test positive are notified and receive counseling. However, the purpose of blood donation is not to determine HIV infection status, and many blood donors may not be aware that the blood they

donate will be tested for HIV. Further, HIV testing (apart from blood donation) provides an opportunity for pre- and post-test counseling, which has been an important part of HIV prevention. For these reasons, questionnaires that ask about HIV testing make a distinction between blood donation and HIV testing for other reasons. The NSFG questions on HIV testing first determine whether the respondent has donated blood since 1985, and then asks if they have been tested for other reasons:

“(Apart from testing that may have been done with your blood donations,) have you ever had your blood tested for HIV, the virus that causes AIDS?”

Based on these questions, respondents were classified into those who were never tested, those who have been tested only through blood donation, and everyone else. Those who had been tested outside of blood donation were asked subsequent questions about those tests.

HIV test in the past 12 months—Testing in the 12-month period before the interview was measured using responses to a question that was asked of everyone who had obtained at least one HIV test (that was not connected with blood donation) in their lives. Respondents who had ever received an HIV test were asked:

“When did you have that test for HIV, the virus that causes AIDS? If you have had more than one test, please tell me the date of the most recent one.”

The month and year of the test in combination with month and year of interview were used to compute the interval in months since the most recent HIV test. This information was used to identify those reporting their most recent test in a 1-year period before interview. Interviewing for the NSFG took place throughout the period March 2002 through March 2003, and estimates on recent HIV testing in this report are for the full 1-year period before each respondent's interview. Therefore, the interval covered includes tests occurring as early as March 2001 and as late as February 2003. In this report, information about the most recent test is

limited to respondents who had a test in the 12 months before the interview (referred to as “testing in the past 12 months”). More detail on this estimation is found in the “Technical Notes.”

Reason for last HIV test—Respondents were asked the reason for the most recent HIV test and were allowed more than one response. They were shown a card with the possible responses:

“Please look at Card 73. Why did you have that HIV test?”

For a hospitalization or surgical procedure

To apply for health or life insurance

Just to find out if you were infected

Because of a referral by a doctor

Because you were pregnant or because it was part of prenatal care (females only)

To apply for a marriage license

Or for some other reason

Source of HIV test—Respondents selected one source from a list of possible sources for the most recent test:

“Please look at Card 72. Where did you have that blood test for HIV in (month/year)?”

In the tables presented here, the responses were shown in four categories:

- Private doctor/HMO
- Sources that are usually publicly funded (Community health clinic, community clinic, public health clinic, family planning or Planned Parenthood)
- Hospitals, including outpatient clinics and emergency rooms
- All other sources (including employer or company clinic; school or school-based clinic; urgent care or walk-in facility; at home, worksite, some other place).

Post-test counseling—Respondents who reported having been tested were asked if they received counseling with their results:

“Did a doctor or other medical care provider talk with you about AIDS after you had this HIV test?” Those who responded “yes” were asked what topics were discussed.

HIV testing during prenatal care—Women who reported a completed pregnancy in the 12 months before interview were asked:

“The last time you were pregnant (before you became pregnant this time), were you tested for the HIV virus when you visited the doctor for prenatal care?”

The table on HIV testing in prenatal care is limited to the 748 female respondents who had a pregnancy that ended in the 12 months before interview and were routed to this question. Women whose pregnancies ended in live births, stillbirths, miscarriages, or ectopic pregnancies were included; women whose pregnancy ended in an induced abortion were excluded.

Measures of HIV risk—The NSFG contains detailed behavioral information that can be used to define categories of higher HIV risk based on major transmission routes. In the tables that follow, these data are used to examine whether HIV testing behavior is different for those at higher risk for HIV than for those at lower risk.

Behaviors in the previous year reported in the ACASI part of the interview were used to classify those at increased risk of HIV transmission. Respondents were classified as at increased HIV risk through drug use if they reported illicit drug injection or crack cocaine use. Respondents were classified as at increased risk of HIV transmission through sexual behavior if they reported male-to-male sex, having an HIV-positive sex partner, sex with an injecting drug user, five or more sex partners, exchange of sex for drugs or money, or for females, sex with male partners who had sex with other males. An additional question measuring risk asked about treatment for sexually transmitted diseases (STDs) in the past year:

“In the last 12 months, have you been treated or received medication from a doctor or other medical care

provider for a sexually transmitted disease like gonorrhea, chlamydia, herpes, or syphilis?”

In the tables that follow, HIV testing variables measured in the 2002 NSFG are shown for the following categories: risk of HIV from drug use, risk of HIV from sexual behavior, risk of HIV from either drug use or sexual behavior, and risk of HIV from drug use, sexual behavior, or from having a sexually transmitted disease (STD) in the past year.

Additional terms used in this report are defined in the “Technical Notes.” Note that, when showing data only for 2002, the definition of Hispanic origin and race takes into account the reporting of more than one race, as stated in recent OMB guidelines and described in the “Technical Notes.”

Strengths and limitations of the data

The data in this report are primarily from Cycle 6 of the NSFG, which has a number of strengths for studying HIV testing in the U.S. population:

- The NSFG has a rigorous probability sampling design, and therefore is able to provide estimates that can be generalized to the national population.
- Response rates are high at 79 percent, indicating good data quality.
- Questions asked on the NSFG have undergone extensive testing and review to ensure that respondents understand them and can respond accurately.
- Sensitive questions associated with sexual behavior, reproductive health, or drug abuse—which are particularly important for studying HIV testing—were collected using ACASI methods, which have been found to yield more complete reporting of these types of measures (9).
- The NSFG has a long history going back to 1973 of collecting high-quality data on sexual behavior and reproduction.
- Data for females 15–44 years of age from NSFG Cycle 5, conducted in 1995, are available for comparison.
- Analysis of self-reported data such as those collected in the NSFG is the

only method of obtaining nationally representative information on the number and characteristics of persons obtaining HIV tests from all sources.

- The questionnaire was administered in both English and Spanish; Spanish-speaking respondents were interviewed by bilingual interviewers. The translation of the questionnaire into Spanish was done with particular attention to making it understandable to major Hispanic groups—including Mexicans, Puerto Ricans, and others, and also to recent immigrants and those with limited education (12).

The data included in this report have a number of limitations:

- As a household-based sample survey, the NSFG excludes from the sampling frame most military personnel, the homeless, and persons who are incarcerated or otherwise institutionalized. Those excluded from the sample may include a disproportionate number of persons at increased risk for HIV.
- Nonresponse error also could affect the results. The NSFG makes use of weighting factors to compensate for nonresponse and unequal selection probabilities.
- The results could be affected by underreporting of sensitive and stigmatized behaviors, although using ACASI, as used in the NSFG, has been found to yield more complete reporting of these items (9).
- Because risk behaviors affect a relatively small proportion of the population, the NSFG sample includes relatively few sampled persons at high risk for HIV. This limits the detail in which higher risk persons can be studied.
- The NSFG provides national estimates, but cannot provide State or local estimates of the degree of HIV testing, which are useful for program planning.

Statistical analysis

Tables included in this report contain the percentage tested for HIV for the entire sample and for major population subgroups, where the subgroups are defined by demographic

categories and by behaviors that increase the risk of HIV. Each percentage estimate is shown with the “width of the 95 percent confidence interval (+/-).” For example in [table 1](#), 50.7 percent of all persons 15–44 years of age have ever had an HIV test, with a 95 percent confidence interval of plus or minus 1.6 percentage points. The “width of the 95 percent confidence interval” means that if samples of the same size are drawn repeatedly from the same population, and a confidence interval is calculated from each sample, then 95 percent of the time, the percent of all persons with an HIV test will be 50.7 plus or minus 1.6—or at least 49.1 percent and no more than 52.3 percent.

The statistical significance of bivariate associations has been evaluated using Chi-Square tests, testing the null hypothesis that all categories are equal. These Chi-Square tests are based on the Wald statistic and take into account the complex design of the survey and the use of weighted data. Notes to some of the tables refer to the test as a “weighted” Chi-Square because it takes weights and sample clustering into account. The Chi-Square tests and other analyses were conducted in the software package SUDAAN, release 7 (13). Most of the tabulations are shown for both sexes combined, and then for males and for females separately. Finally, comparisons are made of self-reported testing between the 2002 NSFG and estimates from the previous round of NSFG in 1995 (females only), and with estimates from two other CDC surveys that make similar estimates of HIV-testing related items, the 2002 Behavioral Risk Factor Surveillance System (BRFSS), and the 2002 National Health Interview Survey (NHIS).

Results

HIV testing history

The NSFG data for 2002 indicate that 34.1 percent of persons 15–44 years of age had never been tested for HIV for any reason, while 15.2 percent had been tested only through automatic testing when they donated blood ([figure 1](#)). Another 32.6 percent had

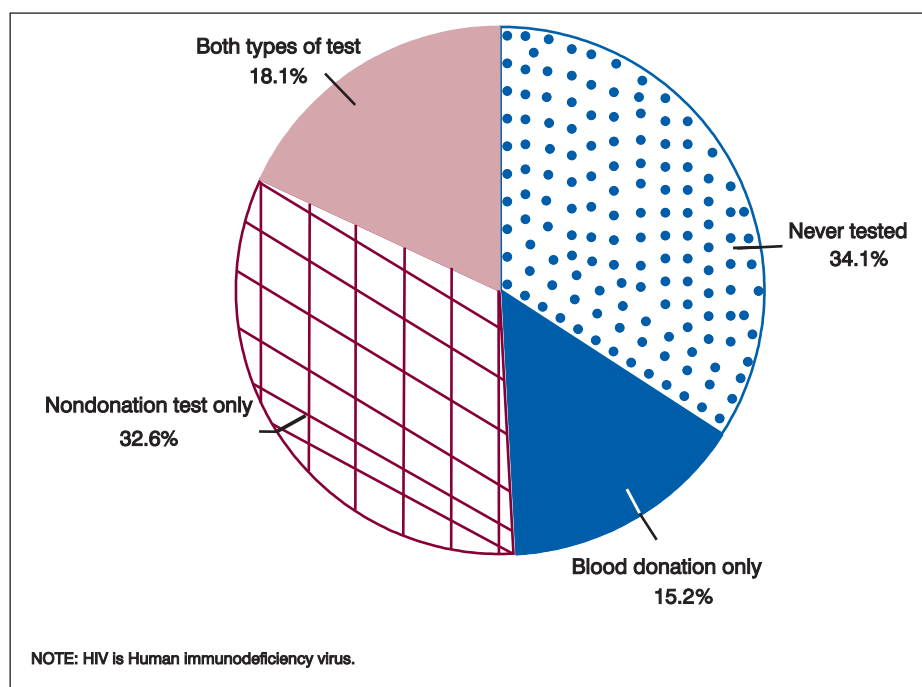


Figure 1. Percentage of men and women 15–44 years of age by lifetime HIV testing category: United States, 2002

been tested only outside of blood donation, and 18.1 percent had been tested both in and out of blood donation at some point in their lives. The sum of the 32.6 and 18.1 percent, or 50.7 percent is the proportion who had ever been tested outside of blood donation.

Comparisons with 1995 NSFG estimates for women

The estimates of HIV testing history from the 2002 NSFG can be compared with similar estimates from the 1995 NSFG ([table A](#)). This comparison is limited to females 15–44 years by age because the 1995 sample only contained females. These comparisons clearly indicate the increasing lifetime experience with HIV testing over the 7-year period from 1995 to 2002. The percentage reporting having ever had an HIV test (excluding blood donation) increased from 34.5 to 54.9 percent of women 15–44 years of age, a statistically significant difference. The pattern of testing by race or ethnic group remained the same during this period, with higher testing rates among black women—in 2002, 65.6 percent reported having been tested apart from

blood donation compared with 52.7 percent for whites. Women at increased risk for HIV had higher reported lifetime and past 12 months testing at both points in time. (In this table only, HIV risk is defined in the way it could be defined in both the 1995 and 2002 surveys: women were classified as “at risk of HIV” if they reported drug injection, six or more sex partners, or sex partners who were drug injectors or had sex with other men, all within the past year. All other tables use a definition that also includes exchanging sex for money or drugs, crack cocaine use, and those with five or more male sex partners as being at increased risk.)

The percentage of women who reported being tested in the past 12 months was 15.9 in 2002 compared with 14.8 in 1995, a difference that is not statistically significant. The 1995 and 2002 percentages are computed using similar methods based on the reported month and year of most recent HIV test and month and year of interview. These data are consistent with the pattern observed elsewhere of stable annual rates of HIV testing since the middle 1990s (14,15).

Table A. Number of women 15–44 years of age and percentage who ever had an HIV test, or had an HIV test in the past 12 months, by Hispanic origin and race and HIV risk status: United States, 1995 and 2002

Characteristic	1995 NSFG ¹			2002 NSFG ¹			Difference
	Number in thousands	Percent	Width of 95% confidence interval	Number in thousands	Percent	Width of 95% confidence interval	
Ever had HIV test excluding blood donation	60,201	34.5	1.2	61,561	54.9	1.7	*20.4
Hispanic origin and race							
Hispanic or Latino	6,702	38.8	3.5	9,107	56.3	3.4	*17.5
Not Hispanic or Latino:							
White, single race	42,522	31.9	1.4	40,420	52.7	2.1	*20.8
Black or African American, single race	8,210	45.3	2.6	8,587	65.6	3.2	*20.3
Other single race or multiple race	2,767	31.2	6.6	3,447	49.1	7.0	*17.9
HIV risk status							
Increased HIV risk	3,904	48.2	3.9	4,460	67.7	4.7	*19.5
Not at increased risk	56,297	33.5	1.3	56,825	53.9	1.8	*20.4
Had test in past 12 months	59,905	14.8	0.8	61,561	15.9	1.0	1.1
Hispanic origin and race							
Hispanic or Latino	6,661	17.0	2.2	9,107	20.8	1.9	*3.8
Not Hispanic or Latino:							
White, single race	42,348	12.6	0.9	40,420	12.8	1.1	0.2
Black or African American, single race	8,136	25.3	2.0	8,587	24.7	2.7	-0.6
Other single race or multiple race	2,761	12.5	3.5	3,447	17.1	5.1	4.6
HIV risk status							
Increased HIV risk	3,859	25.0	3.5	4,460	24.5	4.3	-0.5
Not at increased risk	56,045	14.1	0.8	56,825	15.3	1.0	1.2

* Indicates that the percent changed significantly ($p < .05$) between 1995 and 2002.

¹NSFG is the National Survey of Family Growth.

NOTES: Definition of increased risk: In this table only, a measure of increased risk is used that is available in both 1995 and 2002: the woman had injected drugs in the last year, had six or more male sex partners, had male sex partners who were drug injectors, or had male sex partners who had sex with other men. This definition differs from the definition of "increased HIV risk" in the rest of this report. For race or ethnicity in this table, a definition was used that allows for comparisons between 1995 and 2002: if respondents reported more than one race, they are coded in the one group that they said "best describes (their) racial background."

Detailed tabulations showing HIV testing categories by respondent characteristics are shown in [table 1](#) for both sexes, and separately for males and females in [tables 2](#) and [3](#). These results will be briefly summarized for the percentage who have ever been tested excluding blood donation (50.7 percent overall), and the percentage who had received a test in the 12 months before interview (15.1 percent).

Percent ever tested for HIV apart from blood donations

The percentage who have ever been tested is higher for females (54.9 percent) than males (46.6 percent) ([table 1](#) and [figure 2](#)). Lifetime testing increases with age and is about 60 percent at age 25 and over. HIV testing rates are higher among black persons compared with other racial and ethnic groups: 61.4 percent of black

persons 15–44 years of age had been tested in their lifetime compared with 49.2 percent for whites. Lifetime testing experience generally increased with age, and with the number of sexual partners in the year before the interview ([figure 3](#)).

Testing was lower in the Midwest region, which had a lifetime testing percentage of 46.6 percent compared with 51.3–52.4 for the other regions ([table 1](#)). In general, testing for HIV was very strongly associated with measures of sex- and drug-related HIV behavioral risk as shown in [table 1](#) and [figure 4](#). For example, 66.4 percent of persons who had risk of HIV from sexual behavior, or drug use, or had been treated for an STD in the past year had ever been tested, compared with 48.8 percent for respondents who were not at elevated risk of HIV ("other" respondents see [figure 4](#) and [table 1](#)).

Percent tested for HIV in the past 12 months

The data indicate that overall 15.1 percent reported a non-blood donation HIV test in the 12 months before interview ([table 1](#)). This is equivalent to 18.3 million persons per year 15–44 years of age being tested during this time period (95 percent confidence interval, 16.8–19.7 million). The difference between females and males in the percentage tested in the past 12 months is statistically significant (15.9 percent for females and 14.2 percent for males). Among non-Hispanic blacks, 24.2 percent of 15–44 year olds were tested in the past year compared with 12.5 percent for non-Hispanic white persons in this age range.

By age, the highest percent tested in the past year was 21.8 percent at age 25–29 ([figure 3](#)). By marital status, the

Reason for HIV test

Respondents in the NSFG who had an HIV test in the 12 months before the interview were asked their reasons for having an HIV test. The most frequently given specific reason for having the test was “*Just to find out if you were infected,*” given by 35.2 percent of respondents (table 4). Among female respondents, the second most frequent reason for the test was “*Because you were pregnant or because it was part of prenatal care,*” given by 30.9 percent of female respondents (figure 5). Insurance (7.7 percent of respondents), hospitalization or surgery (5.8 percent), referral by doctor (4.7 percent), and to apply for a marriage license (1.3 percent) were other responses given; 35.3 percent responded “*some other reason.*” This final category contained reasons such as for employment, military induction, immigration, or tests obtained as part of a routine doctor’s examination. These tabulations are shown separately for males and females in tables 5 and 6.

The reasons that were given for HIV testing varied by characteristics. As shown in table 4, some population subgroups were more likely than others to give the reason “*to find out if you were infected*”: males (39.6 percent), never married (53.0 percent), persons with three or more sex partners in the past year (58.9 percent), and persons with HIV risk or recent STD treatment (54.5 percent). The percentage giving the reason for their HIV test as “*for insurance*” (which was 7.7 percent overall) was 10.9 percent for those over age 30 and 12.1 percent for those with income 300 percent of the poverty level or higher. The percentage stating their test was for insurance was lower for those in the increased HIV risk category (2.4 percent) compared with those not at increased risk (9.3 percent). Among women, 30.9 percent stated that their recent test was for reasons of pregnancy, and comparatively fewer women than men stated that their tests were done because they were applying for insurance, or to find out if they were infected, or for other reasons.

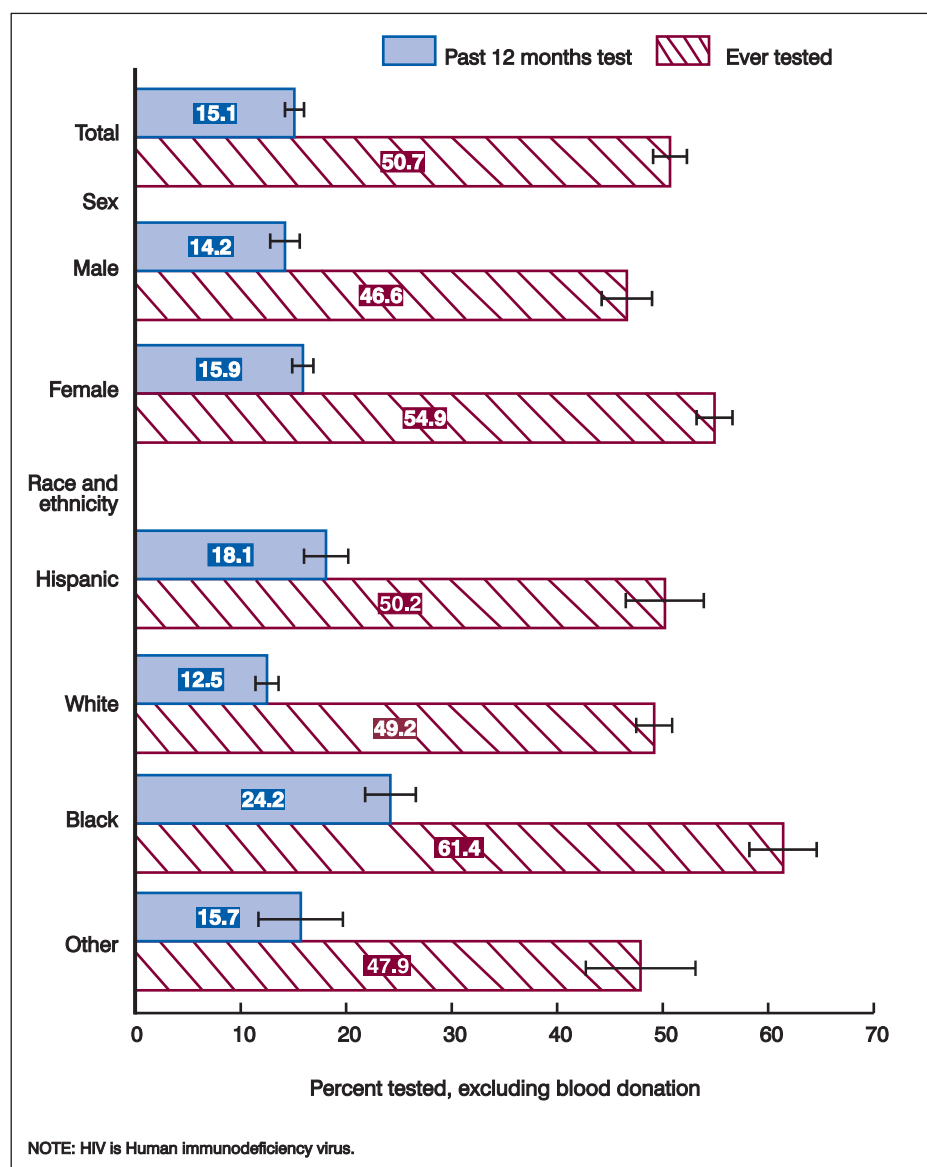


Figure 2. Percentage tested for HIV, ever and in the past 12 months, with 95% confidence intervals, by sex and race and ethnicity: males and females 15–44 years of age, United States, 2002

percent tested was lowest for the currently married group (12.8 percent tested in the past year) and highest for those in the separated, widowed, or divorced category (22.5 percent, table 1). Testing in the most recent 12-month interval was strongly related to the number of sexual partners in the last year, ranging from 8.5 percent for those with no partners in the last 12 months to 26.6 percent for those with three or more sexual partners in the past year. Recent testing was higher for those below 150 percent of the poverty level who had a past year testing rate of 18.9 percent compared with 14.6 percent

for those whose income was 300 percent of the poverty level or higher.

Again, testing for HIV was very strongly associated with measures of risk of HIV because of sexual behavior and drug use (“HIV behavioral risk,” table 1 and figure 4). Persons who had an HIV risk because of sexual behavior or drug use, or who had been treated for an STD in the past year, were about twice as likely to be tested in the last 12 months (27.6 percent) as other persons (13.5 percent). Tables 2 and 3 show these tabulations separately for males and females, respectively.

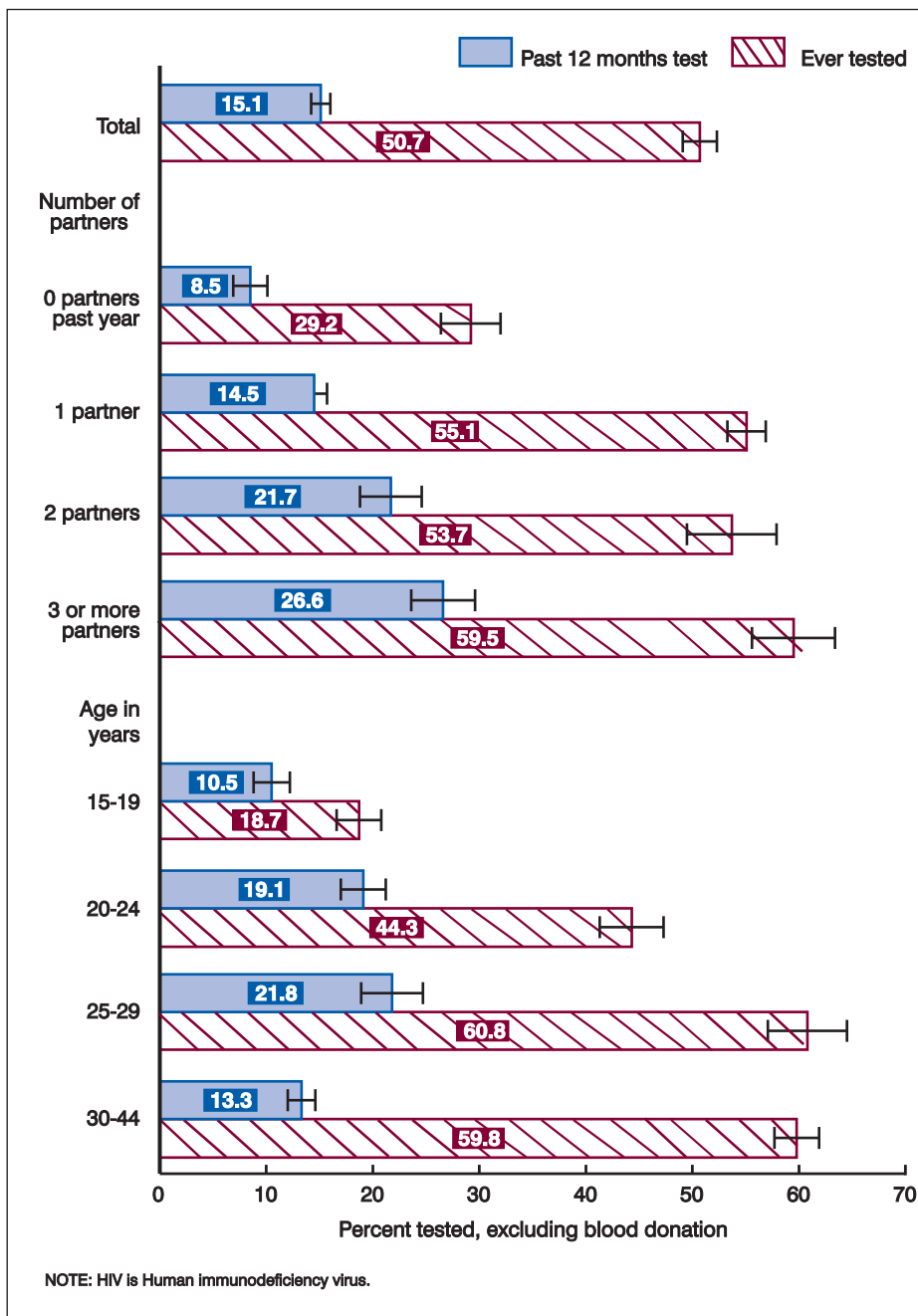


Figure 3. Percentage tested for HIV, ever and in the last year, with 95% confidence intervals, by number of sexual partners in the last year and age: males and females 15–44 years of age United States, 2002

Source of test

The NSFG used a detailed set of categories to collect data on where recent HIV tests were obtained; the complete set of categories, shown in table B, indicates that the most frequent response was “Private doctor’s office,” which accounted for 39.5 percent of tests. Second was “Community health clinic, community clinic, or public health clinic” with 17.3 percent of tests.

The more detailed codes shown in table B have been combined into four categories: 1) doctor or HMO, 2) public clinic (i.e., community clinics, family planning clinic, Planned Parenthood), 3) hospital settings, and 4) all other sources of testing (employer or company clinic, school or school-based clinic, urgent care/walk in facility, worksite, home, some other place). The data show that testing in public-type clinics as defined

here accounted for 21.5 percent of all tests (table 7). It is important to note that public clinics performed a higher percentage for: teenagers aged 15–19 (33.5 percent), those who were cohabiting (34.2 percent), Hispanics (33.5 percent), persons with less than a high school education (30.8 percent), those with income below 150 percent of the poverty level (31.4 percent), and those at increased risk for HIV (32.3 percent). The tabulations are shown separately for males and females in tables 8 and 9. Some caution is warranted in reading table 8, for males, as some of the subgroups have relatively large sampling errors and confidence intervals.

Counseling received with test

Among those with an HIV test in the 12 months before interview, 29.2 percent stated that a doctor or health professional talked with them about AIDS after their test (table C). The percentage was virtually the same for males (29.6 percent) and females (28.8 percent) but varied by risk status and source of HIV test. The percentage receiving counseling was higher for persons at increased risk for HIV (41.8 percent) and for those receiving their test from a public source (43.7 percent).

Table 10 shows that the most common topics covered during this counseling were HIV transmission, how to prevent HIV transmission, safe sex practices, and correct condom use. But 4 in 10 people recalled receiving counseling about abstinence (42.8 percent); that figure was 49.9 percent when the counseling was received at public clinics compared with 36.5 percent at private doctors and HMOs. Persons who received their test at a public clinic were more likely to have discussed preventing transmission, 86.4 percent compared with 73.9 percent who got their test at a private doctor or HMO. Tables 11 and 12 present similar data for males and females. Small differences in tables 11 and 12 should be interpreted with caution because these tables have relatively large sampling errors and confidence intervals.

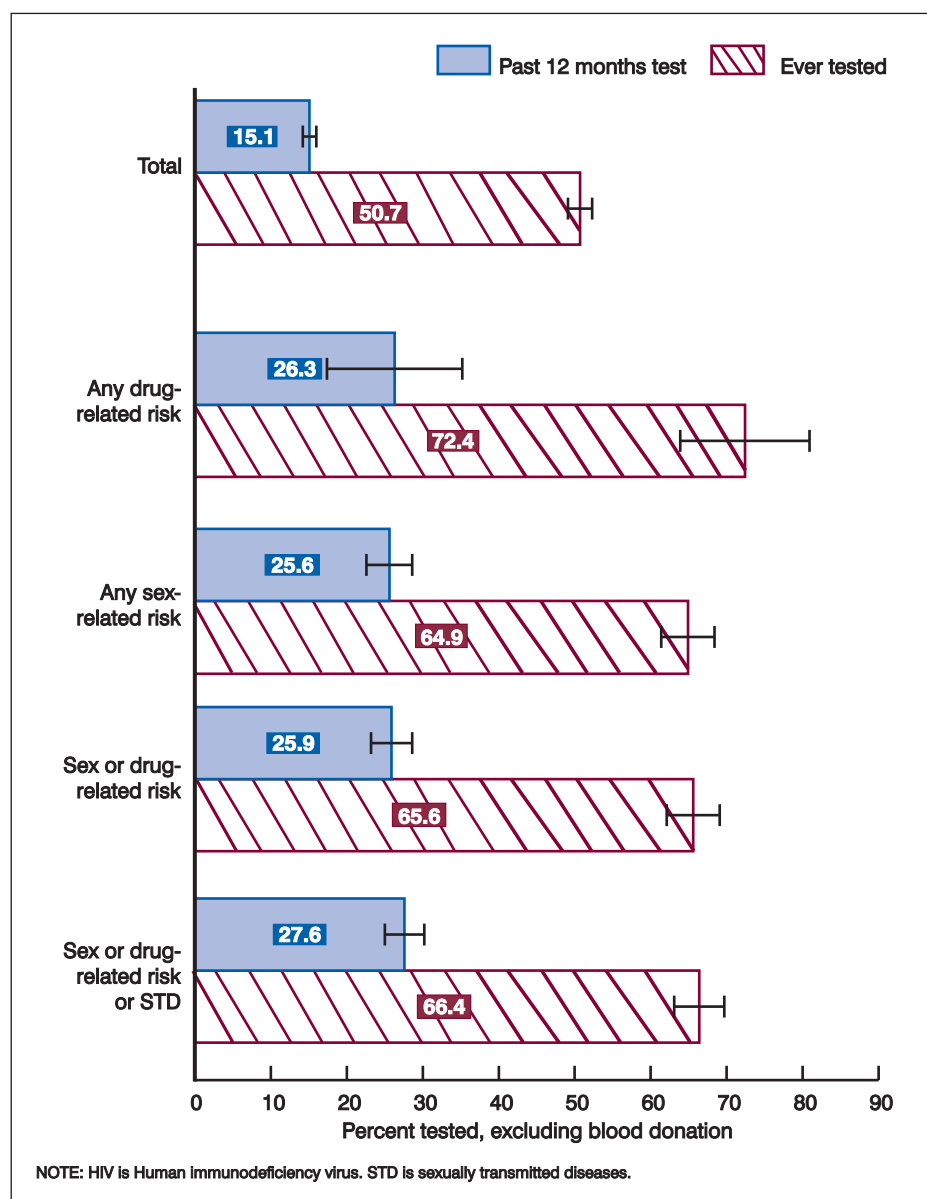


Figure 4. Percentage tested for HIV, ever and in past 12 months, with 95% confidence intervals, by HIV risk: males and females 15–44 years of age, United States, 2002

HIV testing during prenatal care

Effective interventions have reduced the incidence of perinatal HIV transmission in the United States to very low levels and further reduction is a key goal of CDC's HIV prevention strategies (1). It is recommended that pregnant women receive an HIV test as early as possible during prenatal care to allow HIV-infected women to begin receiving anti-retroviral drugs during pregnancy to most effectively prevent transmission, or at labor and delivery if her status is still unknown (6,7). The NSFG provides a

direct measure of the impact of this recommendation at the national level.

NSFG information on prenatal testing is based on 748 female respondents who had a completed pregnancy during the 12 months before interview (excluding those who reported that their pregnancy had ended in an induced abortion). Of these recently pregnant women, 69.2 percent reported that they had been tested during prenatal care, 30.1 percent said they had not been tested, while 0.8 percent reported that they had received no prenatal care (table D). College graduates were less likely than others to have prenatal tests

(53.9 percent compared with 65.7–76.8 percent for those with less education (table 13)) as were persons with incomes above 300 percent of the poverty level (55.2 percent compared with 75.1–77.5 percent of those with lower incomes). Awareness of effective treatments to help prevent mother-to-child transmission is associated with prenatal testing. Knowledge of perinatal prevention methods was based on providing the correct response (true) to the true or false question:

“There is a treatment available for pregnant women who are infected with the HIV virus to prevent passing the virus to their baby.”

Women responding definitely true and probably true were most likely to have had a prenatal test (74.6 and 73.8 percent in table 13), and those who believed that the existence of this treatment was definitely or probably false had a lower level of testing (59.2 percent). Those at increased risk for HIV (based on self-reported risk behaviors) were also more likely than others to have been prenatally tested (83.0 percent tested compared with 66.9 percent for other women).

Comparison with two other surveys in 2002

Estimates of HIV testing from the NSFG can be compared with results from two other large health surveys conducted in 2002. In Cycle 6 of the NSFG, there were 11,187 respondents 18–44 years of age. The National Health Interview Survey (NHIS) is conducted annually and had a sample of 31,044 adults aged 18 and over in 2002, of whom 15,722 were 18–44 years of age. The NHIS covers a range of general health topics using in-person, face-to-face household interviews, and uses a household-based nationally representative sample. This survey has gathered data about HIV testing continuously since 1987. In 2002, the overall response rate for the NHIS (combining household and sample adult) was 74.3 percent (16).

The Behavioral Risk Factor Surveillance System (BRFSS) is a series of State surveys conducted annually in all States using telephone

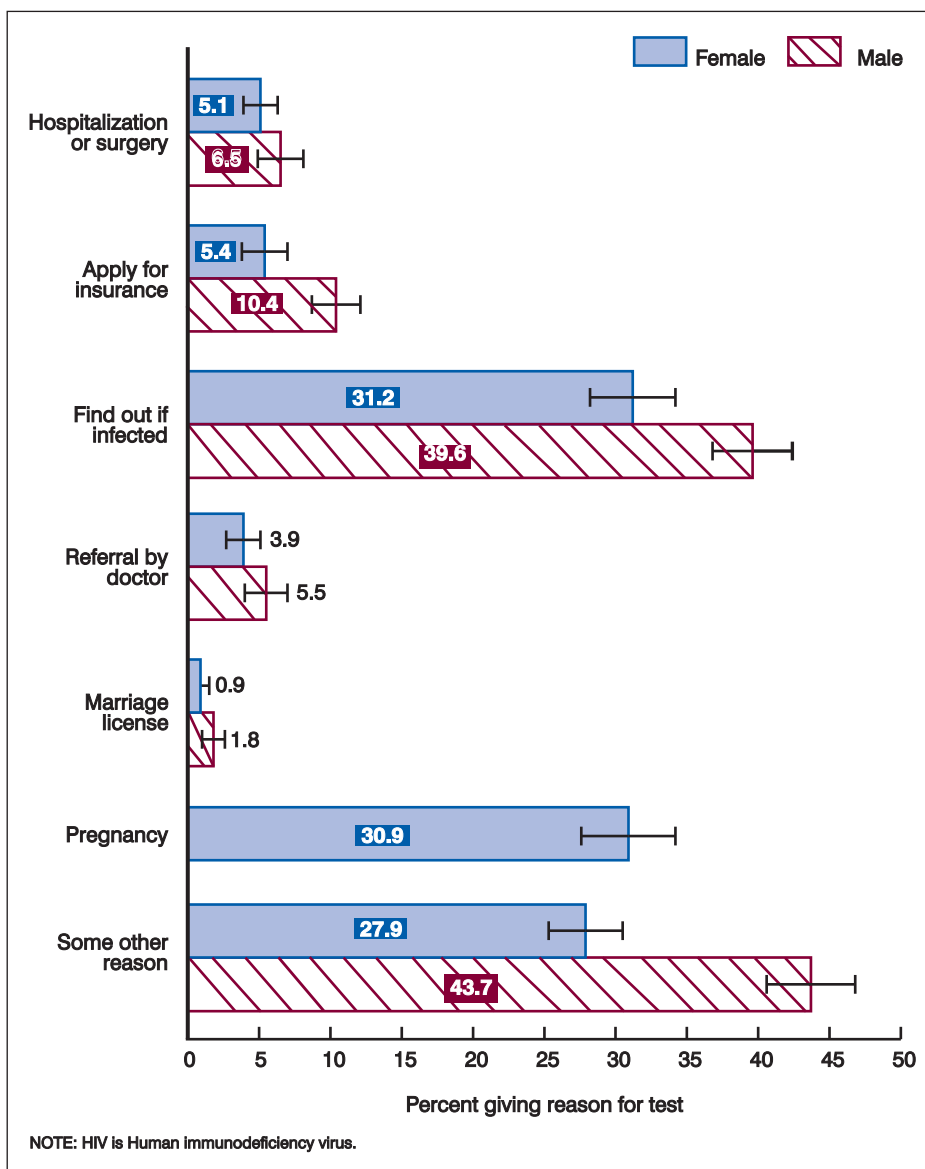


Figure 5. Percent distribution of persons 15–44 years of age tested for HIV in the past 12 months, by reason for the HIV test by sex, with 95% confidence intervals: United States, 2002

sampling based on random-digit-dialing methods, and conducts interviews with a sample of adults aged 18 and over on a variety of health topics over the telephone (17). In 2002, the individual State response rates for the BRFSS ranged from 42.2–82.6 percent (18). Across all States, 104,860 adults 18–44 years of age were asked questions about HIV testing in the BRFSS. These results are also shown in tables 14 and 15. All three surveys seek to distinguish HIV tests through blood donations from other types of tests, but the actual sequence and wording of questions is somewhat different, as shown in the “Technical Notes.” To compare the three surveys, it

is necessary to limit attention to the age group 18–44.

Regarding reported levels of HIV testing for the total population 18–44 years of age, the results for the three surveys are comparable considering the differences in the procedures and precise timing of the surveys, and the wording and placement of the questions on HIV testing. The percentages for the NHIS are somewhat lower than for the other two surveys; for example, the percentage of persons 18–44 reporting that they had ever been tested excluding blood donations was 54.5 percent for the NSFG, 51.7 percent for the BRFSS, and 44.7 percent for the NHIS (table 14).

The overall differences among surveys are statistically significant, in part because of the very large sample sizes in these three surveys. The percentages reporting a past-year test were 15.8 percent for the NSFG, 15.6 percent for the BRFSS, and 12.3 percent for the NHIS (table 15). Differences in past-year testing are statistically significant between the NHIS and each of the other two surveys, but not between the NSFG and the BRFSS. The patterns of difference among major population subgroups in HIV testing are the same for all three surveys. Testing was higher for females than males. In all three surveys, black respondents reported higher testing than other groups; those 25–34 years of age were tested to a greater degree than those younger or older; and the Midwest region had a lower testing rate.

Unlike the NSFG, the BRFSS and the NHIS did not ask respondents about specific risk behaviors, but rather presented them with a list of risk categories and asked if any of them applied without naming the risk. The actual question wording is shown in the “Technical Notes,” and indicates that the categories listed by the BRFSS and the NHIS are quite different from each other. Nevertheless, the results are similar to what was found with the NSFG risk measure based on a series of direct questions about risk behavior: HIV testing is strongly associated with measures of increased HIV risk. All three surveys report about the same level of recent testing, and the patterns of differences among major population groups are the same in all three surveys. Each, however, has different strengths and limitations. Given differences in question wording, mode of interview, and context, it is not surprising that there is some variability among surveys, but taken together they support each other.

Discussion

The HIV testing experience reported by the 2002 NSFG respondents indicate that HIV testing has become widespread but not universal in the United States. One-half of respondents reported obtaining at least one test other than

Table B. Number of persons 15–44 years of age who were tested for HIV in the past 12 months and percent distribution by the type of place at which the test was done, with 95 percent confidence intervals, according to sex: United States, 2002

Type of place at which test was done	Total	Male	Female
Number in thousands	18,252	8,580	9,672
Percent distribution (Width of 95% confidence interval)			
Total	100.0 (. . .)	100.0 (. . .)	100.0 (. . .)
Private doctor's office	39.5 (3.1)	33.6 (5.4)	44.7 (3.3)
HMO facility ¹	5.2 (1.6)	5.6 (3.1)	4.9 (1.4)
Community public health clinic	17.3 (2.2)	16.1 (3.8)	18.4 (2.5)
Family planning clinic or Planned Parenthood clinic	4.2 (1.2)	3.3 (2.1)	5.0 (1.5)
Employer or company clinic	4.4 (1.2)	6.9 (2.3)	2.2 (0.9)
School or school-based clinic	1.8 (0.7)	2.2 (1.3)	1.6 (0.8)
Hospital outpatient clinic	6.3 (1.3)	6.2 (2.4)	6.4 (1.4)
Hospital emergency room	1.5 (0.6)	0.9 (0.7)	1.9 (0.9)
Hospital regular room	4.1 (1.0)	4.3 (1.8)	3.9 (1.1)
Urgent care or walk-in facility	1.2 (0.7)	1.8 (1.5)	0.6 (0.4)
Your worksite	2.4 (1.0)	2.2 (1.2)	2.6 (1.5)
Your home	4.2 (1.3)	5.5 (2.5)	3.1 (1.1)
Some other place	7.9 (1.8)	11.3 (3.4)	4.8 (1.5)

. . . Category not applicable.

¹HMO is Health Maintenance Organization.

NOTES: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 39.5 percent tested at a private doctor's office is 39.5 plus or minus 3.1 percent, or 36.4–42.6 percent. The difference between males and females in source of test is significant at the .05 (5 percent) level using a Chi-Square test.

Table C. Number of persons 15–44 years of age who were tested for HIV in the past 12 months and percentage who were counseled about HIV, according to risk status and source of test: United States, 2002

Characteristic	Number in thousands	Percent receiving counseling among those tested	Width of 95% confidence interval
Both sexes			
Risk status:			
Total	18,258	29.2	2.7
Sex or drug risk or STD ¹	3,932	*41.8	5.1
Other	14,160	25.5	2.9
Source of test:			
Private doctor or HMO ¹	8,160	*25.9	4.3
Public clinic	3,926	43.7	5.5
Hospital	2,175	22.5	5.8
Other	3,990	25.2	5.1
Male			
Risk status:			
Total	8,580	29.6	4.3
Sex or drug risk or STD ¹	2,117	*47.6	7.4
Other	6,385	23.5	4.8
Source of test:			
Private doctor or HMO ¹	3,366	*29.1	8.3
Public clinic	1,664	43.1	10.1
Hospital	988	22.5	9.5
Other	2,562	24.1	6.9
Female			
Risk status:			
Total	9,679	28.8	3.0
Sex or drug risk or STD ¹	1,815	*35.0	6.1
Other	7,775	27.1	3.6
Source of test:			
Private doctor or HMO ¹	4,795	*23.6	4.2
Public clinic	2,263	44.1	7.0
Hospital	1,187	22.6	6.7
Other	1,428	27.0	8.3

* Indicates that the difference between categories of risk status, or source of test categories, is significant at the .05 (5 percent) level or better.

¹STD is sexually transmitted disease and HMO is Health Maintenance Organization.

NOTE: Based on question: "Did a doctor or other medical care provider talk with you about AIDS after you had this HIV test?"

those conducted automatically as part of blood donation. From the survey data, the estimated number of men and women 15–44 years of age being tested is 17–19 million per year.

The results indicate that testing is more common in some population subgroups than others, for example, among African-American persons, a group that has been affected by the HIV epidemic to a greater extent than others (19). In common with data from other surveys, persons who reported behavior that increases HIV risk had higher percentages who had an HIV test ever, and in the last year (11). The results suggest that about one-third of persons who report behaviors that put them at increased risk for HIV had never been tested.

Most testing was obtained from private physicians, HMOs, and hospitals. However, various public programs and clinics accounted for about 1 in 5 of recent HIV tests (15). Guidelines developed by CDC state that all persons seeking or obtaining HIV tests should be provided with information about the testing process, as well as prevention counseling and referral services (20). Among recently tested NSFG respondents, 29 percent reported talking with a health professional at the time of their HIV test. This percentage was higher among those with increased risk, and those tested in public programs compared with private providers. The percentage reporting that they received counseling after their test was the same as reported on surveys in the mid-1990s (11).

The NSFG provides the first nationally representative estimate of reported HIV testing during prenatal care. The overall percentage of women who had been pregnant in the past year who reported an HIV test during prenatal care (69.2 percent) is consistent with the range of values found in a number of State and local studies, including follow-back surveys of recent mothers and chart review studies (7,14). Awareness of methods to prevent mother-to-child HIV transmission was associated with a higher percentage reporting prenatal HIV testing. Women with some degree of increased risk were

Table D. Number of women 15–44 years of age with a completed pregnancy in the past year (excluding induced abortions), and percent distribution (with 95 percent confidence intervals) by whether they received an HIV test during their prenatal care: United States, 2002

HIV test	Percent	Width of 95% confidence interval
Number of women in thousands	5,537	...
Total	100.0	...
Tested during prenatal care	69.2	4.2
Not tested during prenatal care	30.1	4.2
No prenatal care	0.8	0.6

... Category not applicable.

Table E. Number of persons 15–44 years of age, and percentage and number never tested for HIV, according to HIV risk status: United States, 2002

HIV risk status	Number in thousands	Percent never tested	Width of 95% confidence interval	Number never tested (thousands)	Width of 95% confidence interval
Total	122,708	49.3	1.6	59,917	3,868
HIV risk from drug use	1,843	27.6	8.5	508	163
HIV risk from sexual behavior	10,734	35.1	3.5	3,741	595
HIV risk from drug use or sexual behavior	12,015	34.4	3.5	4,106	621
HIV risk from sexual behavior, drug use, or sexually transmitted diseases	14,358	33.6	3.3	4,797	681

NOTES: Blood donations are not included in the HIV tests shown here. Increased risk of HIV is defined in the “Technical Notes” and on page 4 of the text.

more likely than others to be tested, but the results indicate that about 1 in 5 of these at-risk mothers did not get tested during prenatal care.

Results of the NSFG illustrate the increasing degree of HIV testing experience in the U.S. population found in other survey evidence (14,15). In comparison with the 1995 NSFG, the percentage of women who had **ever** been tested (excluding blood donation) increased from 34.5 percent to 54.9 percent. The results for the NSFG are consistent with trends observed from other surveys including the NHIS that overall history of testing is increasing in the population, and the percentage tested per year is holding steady (15).

The results regarding HIV testing from the 2002 NSFG are comparable to those from the NHIS and the BRFSS, in regard to the general level of testing and the pattern of differences observed.

These general health surveys are conducted annually and provide the ability to measure trends in HIV testing, but they are limited in the amount of information they collect on specific HIV risk behaviors. The NSFG, which is conducted less often than the BRFSS

and the NHIS, can provide more detail on HIV risk behaviors and their correlates. Given the NSFG’s history of collecting very sensitive data related to reproductive health and sexuality, including the use of ACASI data collection, it is possible to measure drug and sex-related risk behaviors directly and specifically, and to identify the groups of greatest interest to HIV prevention programs.

HIV prevention strategies emphasize HIV testing because studies have shown that many infected persons are unaware of their infection status, or have become aware late in the infection (21,22). The data reported here from the NSFG indicate the extent of HIV testing experience in the U.S. population of reproductive age. Those who are at high priority for HIV testing—persons who reported behaviors that put them at increased behavioral risk for HIV reported testing at rates higher than the general population, but the data indicate that even for this group many had never been tested. As summarized in [table E](#), about one-third of the at-risk group that was identified in this analysis of the 2002 NSFG data had never been tested

for HIV, an estimate equivalent to 4.8 million (+/- 681,000) never-tested, at-risk persons. Further analysis of the NSFG data can help describe the characteristics of this priority group.

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Table 1. Number and percentage of persons 15–44 years of age who had an HIV test (excluding tests done as part of blood donation) ever in their lives or in the past 12 months, with 95 percent confidence intervals, by selected characteristics: United States, 2002

Characteristic	Number in thousands	Ever had HIV test		Had HIV test in past 12 months	
		Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
Total, both sexes	122,708	50.7	1.6	15.1	0.9
Sex					
Male	61,147	*46.6	2.4	*14.2	1.4
Female	61,561	54.9	1.7	15.9	1.0
Age					
15–19 years	20,042	*18.7	2.1	*10.5	1.7
20–24 years	19,723	44.3	3.0	19.1	2.1
25–29 years	18,475	60.8	3.7	21.8	2.9
30–44 years	64,467	59.8	2.1	13.3	1.3
Marital or cohabitation status					
Never married, not cohabiting	46,981	*36.8	2.0	*15.1	1.2
Currently married	54,134	57.4	2.1	12.8	1.5
Currently cohabiting	11,223	62.2	3.9	18.9	3.5
Formerly married, not cohabiting	10,370	67.3	3.9	22.5	3.7
Hispanic origin and race					
Hispanic or Latino	19,295	*50.2	3.7	*18.1	2.1
Not Hispanic or Latino:					
White, single race	78,237	49.2	1.7	12.5	1.1
Black or African American, single race	15,190	61.4	3.2	24.2	2.4
Other single race or multiple race	9,986	47.9	5.2	15.7	4.0
Education ¹					
Bachelor's degree or higher	25,452	57.1	3.1	*12.9	1.6
Some college, no bachelor's degree	27,382	61.6	3.0	17.4	1.9
High school diploma or GED ²	29,923	58.8	2.6	16.4	1.9
No high school diploma or GED ²	11,982	55.7	4.2	16.1	2.9
Poverty level income ³					
0–149 percent	25,614	57.7	3.2	*18.9	1.8
150–299 percent	28,952	55.1	2.8	15.7	1.8
300 percent or more	48,099	57.8	2.1	14.6	1.4
Region					
Northeast	18,065	*51.6	3.2	*14.5	2.3
Midwest	26,866	46.6	2.9	12.5	2.2
South	47,481	52.4	2.7	16.5	1.5
West	30,295	51.3	3.7	15.5	1.4
Metropolitan residence					
Metropolitan, suburban	59,537	*51.4	2.4	*14.4	1.4
Metropolitan, central city	40,907	53.3	2.4	17.9	1.3
Nonmetropolitan	22,264	44.2	3.6	11.8	2.3
Number of sexual partners in the last year ⁴					
None	21,638	*29.2	2.8	*8.5	1.6
1 partner	80,274	55.1	1.8	14.5	1.2
2 partners	9,581	53.7	4.2	21.7	2.9
3 or more partners	10,514	59.5	3.9	26.6	3.0
Treatment for STD in the last year ⁵					
Yes, treated in the last year	3,650	*74.1	5.9	*38.5	6.6
No, not treated in the last year	118,549	50.0	1.6	14.4	0.9
HIV risk status					
HIV risk from drug use	1,843	*72.4	8.5	*26.3	8.9
All others	120,491	50.4	1.6	14.9	0.9
HIV risk from sexual behavior	10,734	*64.9	3.5	*25.6	3.0
All others	110,197	49.5	1.6	14.1	1.0
HIV risk from drug use or sexual behavior	12,015	*65.6	3.5	*25.9	2.7
All others	108,848	49.2	1.6	13.9	0.9
HIV risk from drug use, sexual behavior, or STD ⁵	14,358	*66.4	3.3	*27.6	2.6
All others	106,580	48.8	1.6	13.5	1.0

* Indicates that differences in the percent tested are significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹Limited to persons 22–44 years of age at time of interview.²GED is General Educational Development High School Equivalency diploma.³Limited to persons 20–44 years of age at time of interview.⁴Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.⁵STD is sexually transmitted disease.

NOTE: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 15.1 percent tested in the past 12 months is 15.1 plus or minus 0.9 percent, or 14.2–16.0 percent.

Table 2. Number and percentage of males 15–44 years of age who had an HIV test (excluding tests done as part of blood donation) ever in their lives or in the past 12 months, with 95 percent confidence intervals, by selected characteristics: United States, 2002

Characteristic	Number in thousands	Ever had HIV test		Had HIV test in past 12 months	
		Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
Total	61,147	46.6	2.4	14.2	1.4
Age					
15–19 years	10,208	*15.7	2.6	*9.5	2.2
20–24 years	9,883	39.2	4.0	17.2	3.0
25–29 years	9,226	53.4	5.1	19.5	4.6
30–44 years	31,830	56.8	3.5	13.3	2.3
Marital or cohabitation status					
Never married, not cohabiting.	25,412	*36.1	2.6	*15.4	1.9
Currently married	25,808	51.8	3.8	11.4	2.4
Currently cohabiting	5,653	58.0	5.8	15.9	5.2
Formerly married, not cohabiting.	4,274	62.4	7.0	22.2	7.7
Hispanic origin and race					
Hispanic or Latino	10,188	*44.7	5.1	*15.6	3.4
Not Hispanic or Latino:					
White, single race	38,738	45.8	3.0	12.4	2.1
Black or African American, single race	6,940	56.5	5.6	23.7	4.2
Other single race or multiple race	5,280	43.2	7.4	12.3	5.3
Education ¹					
Bachelor's degree or higher.	11,901	*54.0	5.0	*11.2	2.1
Some college, no bachelor's degree	13,104	59.2	4.2	17.7	3.5
High school diploma or GED ²	15,659	54.2	4.2	16.5	3.3
No high school diploma or GED ²	6,355	47.4	5.7	11.9	4.1
Poverty level income ³					
0–149 percent	11,032	*49.1	5.2	*15.5	3.5
150–299 percent.	14,451	50.7	4.3	13.8	2.7
300 percent or more	25,457	55.5	3.2	15.9	2.2
Region					
Northeast	8,361	47.2	6.1	13.2	3.2
Midwest	12,766	44.6	4.8	13.1	4.1
South	24,543	46.3	3.7	14.8	2.2
West	15,477	48.5	5.5	14.9	2.2
Metropolitan residence					
Metropolitan, suburban	29,364	46.7	3.3	13.9	2.3
Metropolitan, central city	20,399	49.3	3.7	16.1	1.9
Nonmetropolitan	11,384	41.6	5.3	11.7	3.9
Number of sexual partners in the last year ⁴					
None	11,180	*31.2	4.4	*10.1	3.0
1 partner	38,318	49.3	2.9	12.8	1.9
2 partners	4,894	46.3	5.5	19.6	4.3
3 or more partners	6,333	57.9	5.3	25.8	4.6
Treatment for STD in the last year ⁵					
Yes, treated in the last year	1,575	*76.1	10.4	*44.3	12.7
No, not treated in the last year	59,303	45.8	2.4	13.4	1.4
HIV risk status					
HIV risk from drug use	1,233	*69.9	10.9	23.9	12.3
All others	59,694	46.0	2.4	14.0	1.4
HIV risk from sexual behavior.	6,106	*62.3	4.7	*25.5	4.6
All others	53,974	45.1	2.7	13.1	1.5
HIV risk from drug use or sexual behavior ⁴	6,953	*63.2	4.8	*25.6	4.2
All others	53,124	44.7	2.6	12.8	1.5
HIV risk from drug use, sexual behavior, or STD ⁵	7,809	*64.0	4.6	*27.4	4.2
All others	52,282	44.3	2.7	12.4	1.5

* Indicates that the differences in the percent tested are significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹Limited to persons 22–44 years of age at time of interview.²GED is General Educational Development High School Equivalency diploma.³Limited to persons 20–44 years of age at time of interview.⁴Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.⁵STD is sexually transmitted disease.

NOTE: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 14.2 percent tested in the past 12 months is 14.2 plus or minus 1.4 percent, or 12.8–15.6 percent.

Table 3. Number and percentage of females 15–44 years of age who had an HIV test (excluding tests done as part of blood donation) ever in their lives or in the past 12 months, with 95 percent confidence intervals, by selected characteristics: United States, 2002

Characteristic	Number in thousands	Ever had HIV test		Had HIV test in past 12 months	
		Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
Total	61,561	54.9	1.7	15.9	1.0
Age					
15–19 years	9,834	*21.8	2.9	*11.6	2.2
20–24 years	9,840	49.4	4.3	21.0	2.6
25–29 years	9,249	68.1	4.2	24.1	2.9
30–44 years	32,638	62.8	2.3	13.4	1.3
Marital or cohabitation status					
Never married, not cohabiting	21,568	*37.6	2.4	*14.8	1.4
Currently married	28,327	62.5	2.4	14.2	1.5
Currently cohabiting	5,570	66.4	4.8	21.9	3.5
Formerly married, not cohabiting	6,096	70.8	3.8	22.6	3.8
Hispanic origin and race					
Hispanic or Latina	9,107	*56.3	3.4	*20.8	1.9
Not Hispanic or Latina:					
White, single race	39,498	52.5	2.1	12.5	1.1
Black or African American, single race	8,250	65.4	3.2	24.6	2.8
Other single race or multiple race	4,706	53.2	5.9	19.6	4.5
Education ¹					
Bachelor's degree or higher	13,551	59.8	3.3	*14.4	1.8
Some college, no bachelor's degree	14,279	63.8	3.8	17.0	1.9
High school diploma or GED ²	14,264	64.0	3.1	16.4	1.9
No high school diploma or GED ²	5,627	65.0	4.9	20.7	3.4
Poverty level income ³					
0–149 percent	14,582	64.2	3.2	*21.4	2.1
150–299 percent	14,502	59.3	3.6	17.5	2.1
300 percent or more	22,643	60.4	2.2	13.3	1.4
Region					
Northeast	9,704	*55.3	2.9	*15.6	2.4
Midwest	14,100	48.4	4.0	12.0	2.4
South	22,939	58.9	3.0	18.2	1.5
West	14,818	54.3	3.6	16.2	1.5
Metropolitan residence					
Metropolitan, suburban	30,172	*56.1	2.6	*14.8	1.4
Metropolitan, central city	20,508	57.2	2.5	19.7	1.6
Nonmetropolitan	10,880	47.0	4.5	11.8	2.1
Number of sexual partners in the last year ⁴					
None	10,459	*27.0	3.0	*6.8	1.5
1 partner	41,956	60.4	2.1	16.1	1.1
2 partners	4,687	61.6	4.9	23.9	4.2
3 or more partners	4,181	61.9	5.1	27.9	3.7
Treatment for STD in the last year ⁵					
Yes, treated in the last year	2,075	*72.6	7.2	*34.1	6.5
No, not treated in the last year	59,246	54.2	1.7	15.3	1.0
HIV risk status					
HIV risk from drug use	610	*77.6	11.8	*31.1	12.6
All others	60,798	54.6	1.7	15.8	0.9
HIV risk from sexual behavior	4,629	*68.4	4.9	*25.7	3.7
All others	56,222	53.7	1.7	15.1	1.0
HIV risk from drug use or sexual behavior	5,063	*68.9	4.6	*26.2	3.6
All others	55,724	53.6	1.7	15.0	1.0
HIV risk from drug use, sexual behavior, or STD ⁵	6,549	*69.3	4.1	*27.9	3.1
All others	54,297	53.2	1.7	14.5	1.0

* Indicates that the difference in the percent tested is statistically significant at the .05 level using a weighted Chi-Square test.

¹Limited to persons 22–44 years of age at time of interview.

²GED is General Educational Development High School Equivalency diploma.

³Limited to persons 20–44 years of age at time of interview.

⁴Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.

⁵STD is sexually transmitted disease.

NOTE: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 15.9 percent tested in the past 12 months is 15.9 plus or minus 1.0 percent, or 14.9–16.9 percent.

Table 4. Number of persons 15–44 years of age who were tested for HIV in the past 12 months (excluding tests done as part of blood donation), and percentage who cited the specified reasons for the HIV test, by selected characteristics: United States, 2002

Characteristic	Number in thousands	Hospitalization or surgery	To apply for insurance	To find out if infected	Referral by doctor	Apply for marriage license	For pregnancy	Some other reason
Total, both sexes	18,258	5.8	7.7	35.2	4.7	1.3	16.4	35.3
Sex								
Male	8,580	6.5	*10.4	*39.6	5.5	1.8	...	*43.7
Female	9,679	5.1	5.4	31.2	3.9	0.9	30.9	27.9
Age								
15–19 years	2,088	3.4	*0.9	*45.2	*9.3	*0.0	*10.0	38.3
20–24 years	3,726	3.1	3.7	46.2	4.0	3.0	19.9	29.1
25–29 years	3,991	4.8	8.3	30.6	1.9	3.2	22.8	35.3
30–44 years	8,453	8.0	10.9	30.0	5.1	0.1	13.4	37.3
Marital or cohabitation status								
Never married, not cohabiting	7,027	*5.0	*3.6	*53.0	*5.6	*0.1	*6.4	*34.9
Currently married	6,850	8.1	13.8	15.8	5.0	3.2	27.7	31.6
Currently cohabiting	2,106	2.1	3.2	37.7	3.7	0.7	23.8	34.3
Formerly married, not cohabiting	2,276	4.7	6.4	36.2	1.7	0.4	6.3	48.7
Hispanic origin and race								
Hispanic or Latino	3,439	6.1	*5.1	37.8	8.0	2.9	*19.3	28.1
Not Hispanic or Latino:								
White, single race	9,628	6.5	10.1	33.2	3.7	0.9	15.7	36.0
Black or African American, single race	3,645	3.6	6.3	39.8	4.4	0.9	12.7	38.3
Other single race or multiple race	1,546	5.1	2.4	30.9	3.5	2.2	23.0	40.4
Education ¹								
Bachelor's degree or higher	3,228	4.1	11.9	29.3	3.2	0.5	22.3	34.2
Some college, no bachelor's degree	4,686	8.3	11.1	32.7	2.6	2.5	15.1	36.2
High school diploma or GED ²	4,854	5.4	6.4	30.5	5.0	0.5	14.6	40.9
No high school diploma or GED ²	1,895	7.2	8.6	39.4	5.1	3.6	17.9	26.5
Poverty level income ³								
0–149 percent	4,757	6.1	*5.9	*41.0	3.1	*2.0	*20.3	*26.4
150–299 percent	4,487	5.8	6.0	31.0	3.7	2.9	20.6	37.4
300 percent or more	6,926	6.2	12.1	30.9	4.9	0.3	12.9	39.3
Region								
Northeast	2,591	8.6	6.5	36.0	5.6	1.6	13.8	32.1
Midwest	3,297	4.2	10.4	32.1	4.6	1.4	15.7	35.4
South	7,718	5.7	7.2	32.2	4.2	1.2	17.7	38.4
West	4,652	5.4	7.5	41.9	4.8	1.4	16.1	32.0
Metropolitan residence								
Metropolitan, suburban	8,433	7.2	8.0	*31.1	5.0	1.1	17.0	36.0
Metropolitan, central city	7,239	4.0	6.0	43.6	4.7	1.6	16.8	32.5
Nonmetropolitan	2,586	6.2	11.9	25.0	3.5	1.6	13.1	41.1
Number of sexual partners in the last year ⁴								
None	1,814	*10.0	4.9	*41.9	5.6	0.2	*2.3	43.5
1 partner	11,507	6.6	9.3	25.4	5.1	1.8	23.1	34.9
2 partners	2,061	2.6	5.6	51.9	3.4	0.4	6.9	34.2
3 or more partners	2,772	1.6	5.0	58.9	3.2	0.9	5.1	32.5
HIV risk status								
HIV risk from drug use, sexual behavior, or STD ⁵	3,932	3.6	*2.4	*54.5	5.4	2.0	*10.7	*28.4
All others	14,160	6.4	9.3	29.6	4.5	1.2	18.0	37.3

* Indicates that the differences in the percents between the categories of that variable are significant at the .05 (5 percent) level using a weighted Chi-Square test.

... Category not applicable.

¹Limited to persons 22–44 years of age at time of interview.²GED is General Educational Development High School Equivalency diploma.³Limited to persons 20–44 years of age at time of interview.⁴Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.⁵STD is sexually transmitted disease.

NOTE: Percents do not add to the overall percentage tested in the last year (from table 1) because respondents may have given more than one reason for the test.

Table 5. Number of males 15–44 years of age who were tested for HIV in the past year (excluding tests done as part of blood donation), and percentage who cited the specified reasons for the HIV test, by selected characteristics: United States, 2002

Characteristic	Number in thousands	Hospitalization or surgery	To apply for insurance	To find out if infected	Referral by doctor	Apply for marriage license	Some other reason
Total ¹	8,580	6.5	10.4	39.6	5.5	1.8	43.7
Age							
15–19 years	955	6.3	*0.4	*38.3	*9.9	0.0	50.8
20–24 years	1,669	2.6	6.3	61.5	4.3	4.3	34.8
25–29 years	1,778	4.5	14.0	34.3	0.8	4.7	50.7
30–44 years	4,178	8.9	12.8	33.5	7.0	0.0	42.7
Marital or cohabitation status							
Never married, not cohabiting	3,864	*5.4	*4.8	*53.0	6.3	0.1	39.9
Currently married	2,898	10.1	21.9	22.3	5.8	4.7	41.0
Hispanic origin and race							
Hispanic or Latino	1,565	9.6	5.5	49.0	8.7	5.7	29.7
Not Hispanic or Latino:							
White, single race	4,750	6.7	12.8	36.5	5.9	1.4	45.1
Black or African American, single race	1,628	3.0	10.6	41.6	2.5	0.1	47.5
Education ²							
Bachelor's degree or higher	1,319	1.8	18.9	36.1	5.4	0.6	42.9
Some college, no bachelor's degree	2,281	9.8	14.6	40.8	1.9	3.9	40.5
High school diploma or GED ³	2,552	6.1	7.5	31.9	6.7	0.0	51.6
No high school diploma or GED ³	738	7.9	14.3	40.8	7.4	7.7	34.1
Poverty level income ⁴							
0–149 percent	1,674	7.4	12.8	*54.6	2.5	3.6	*24.2
150–299 percent	1,963	6.3	8.3	36.2	4.5	4.0	51.5
300 percent or more	3,986	6.3	12.8	35.4	6.3	0.5	46.4
Region							
Northeast	1,086	15.7	5.0	41.6	6.8	2.1	33.6
Midwest	1,636	3.8	12.8	36.3	6.1	2.4	43.9
South	3,575	3.8	11.0	35.3	5.5	1.1	50.2
West	2,283	8.2	10.4	48.0	4.6	2.4	38.3
Metropolitan residence							
Metropolitan, suburban	4,015	9.0	10.5	*35.7	7.2	1.4	42.4
Metropolitan, central city	3,249	4.0	8.4	52.0	4.4	2.8	40.1
Nonmetropolitan	1,315	4.9	14.9	21.3	3.4	0.6	56.7
Number of sexual partners in the last year ⁵							
None	1,107	*11.3	*2.9	*48.6	7.4	0.4	38.3
1 partner	4,841	7.5	14.0	28.5	6.5	2.6	48.5
2 partners	952	3.5	7.2	50.1	3.6	0.8	39.8
3 or more partners	1,615	1.5	7.1	60.0	2.9	1.1	36.3
HIV risk status							
HIV risk from drug use, sexual behavior, or STD ⁶	2,117	3.4	*3.7	*62.0	6.2	2.9	*29.5
All others	6,385	7.6	12.7	32.0	5.4	1.5	48.5

* Indicates that the differences in the percents between the categories of that variable are statistically significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹Total includes cohabitating and formerly married males, and males of other races, not shown separately because of limitations of sample size.

²Limited to persons 22–44 years of age at time of interview.

³GED is General Educational Development High School Equivalency diploma.

⁴Limited to persons 20–44 years of age at time of interview.

⁵Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.

⁶STD is sexually transmitted disease.

NOTE: Percents do not add to the overall percentage tested in the last year (from table 1) because respondents may have given more than one reason for the test.

Table 6. Number of females 15–44 years of age who were tested for HIV in the past 12 months (excluding tests done as part of blood donation), and percentage who cited the specified reasons for the HIV test, by selected characteristics: United States, 2002

Characteristic	Number in thousands	Hospitalization or surgery	To apply for insurance	To find out if infected	Referral by doctor	Apply for marriage license	For pregnancy	Some other reason
Total	9,679	5.1	5.4	31.2	3.9	0.9	30.9	27.9
Age								
15–19 years	1,133	*1.0	*1.4	*51.0	8.8	*0.0	*18.5	27.8
20–24 years	2,058	3.6	1.5	33.7	3.7	2.0	36.0	24.4
25–29 years	2,213	4.9	3.7	27.7	2.7	2.1	41.2	23.1
30–44 years	4,275	7.1	9.1	26.6	3.2	0.1	26.5	32.1
Marital or cohabitation status								
Never married, not cohabiting	3,163	4.5	*2.0	*52.9	*4.8	*0.0	*14.2	28.9
Currently married	3,952	6.6	7.9	11.1	4.4	2.1	48.1	24.8
Currently cohabiting	1,214	3.0	4.2	28.5	3.2	0.0	41.3	23.6
Formerly married, not cohabiting	1,350	4.2	6.7	41.9	0.9	0.5	10.6	38.6
Hispanic origin and race								
Hispanic or Latina	1,874	3.2	*4.8	*28.5	*7.4	0.5	*35.5	26.7
Not Hispanic or Latina:								
White, single race	4,877	6.4	7.4	29.9	1.6	0.3	30.9	27.1
Black or African American, single race	2,017	4.2	2.8	38.3	6.0	1.5	23.0	30.9
Other single race or multiple race	910	4.1	1.1	28.3	3.8	3.7	39.1	27.8
Education ¹								
Bachelor's degree or higher	1,909	5.7	7.0	*24.7	1.7	0.5	37.6	28.1
Some college, no bachelor's degree	2,405	6.8	7.8	25.1	3.3	1.1	29.3	32.0
High school diploma or GED ²	2,302	4.7	5.2	28.8	3.0	1.0	30.8	29.0
No high school diploma or GED ²	1,157	6.8	5.0	38.4	3.6	0.9	29.4	21.6
Poverty level income ³								
0–149 percent	3,083	5.4	*2.1	33.6	3.5	*1.1	31.3	*27.6
150–299 percent	2,523	5.5	4.3	27.0	3.0	2.0	36.6	26.4
300 percent or more	2,940	6.2	11.2	24.8	3.1	0.1	30.5	29.6
Region								
Northeast	1,505	*3.6	7.5	32.0	4.8	1.2	23.8	31.0
Midwest	1,661	4.5	8.0	28.1	3.3	0.4	31.1	27.0
South	4,144	7.3	3.9	29.5	3.1	1.2	33.1	28.2
West	2,369	2.8	4.7	36.0	5.0	0.6	31.6	26.1
Metropolitan residence								
Metropolitan, suburban	8,433	7.2	8.0	*31.1	5.0	1.1	17.0	36.0
Metropolitan, central city	3,990	3.9	4.0	36.7	4.9	0.5	30.5	26.2
Nonmetropolitan	1,271	7.5	8.8	28.9	3.5	2.6	26.6	25.0
Number of sexual partners in the last year ⁴								
None	707	*7.9	8.1	*31.3	2.8	*0.0	*6.0	*51.8
1 partner	6,666	6.0	5.9	23.1	4.1	1.2	39.9	25.1
2 partners	1,109	1.9	4.1	53.4	3.2	0.0	12.9	29.4
3 or more partners	1,157	1.8	2.1	57.4	3.6	0.7	12.2	27.2
HIV risk status								
HIV risk from drug use, sexual behavior, or STD ⁵	1,815	3.9	*1.0	*45.7	4.4	1.0	*23.2	27.2
All others	7,775	5.4	6.5	27.7	3.8	0.9	32.9	28.1

* Indicates that the differences in the percents between the categories of that variable are significant at the .05 (5 percent) level using a weighted Chi-Square test.
0.0 Quality greater than zero but less than 0.05.

¹Limited to persons 22–44 years of age at time of interview.

²GED is General Educational Development High School Equivalency diploma.

³Limited to persons 20–44 years of age at time of interview.

⁴Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.

⁵STD is sexually transmitted disease.

NOTE: Percents do not add to the overall percentage tested in the last year (from table 1) because respondents may have given more than one reason for the test.

Table 7. Number of persons 15–44 years of age who were tested for HIV in the past 12 months (excluding blood donation), and percent distribution with 95% confidence intervals by type of place at which the test was done, according to selected characteristics: United States, 2002

Characteristic	Number in thousands	Type of place at which HIV tests was done								
		Total	Private doctor or HMO ¹		Public clinic		Hospital		Other	
			Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
Percent distribution										
Total, both sexes	18,258	100.0	44.7	3.0	21.5	2.6	11.9	1.8	21.9	3.1
Sex										
Male	8,580	100.0	*39.2	5.2	19.4	4.6	11.5	2.9	29.9	5.8
Female	9,679	100.0	49.6	3.3	23.4	2.7	12.3	2.1	14.8	2.3
Age										
15–19 years	2,088	100.0	*36.5	7.0	33.5	7.3	12.9	4.9	17.1	5.2
20–24 years	3,726	100.0	44.1	5.7	27.3	5.8	11.6	3.5	17.0	4.3
25–29 years	3,991	100.0	44.5	5.7	20.6	5.3	10.6	3.3	24.4	6.7
30–44 years	8,453	100.0	47.1	4.6	16.4	3.3	12.5	2.8	24.0	4.1
Marital or cohabitation status										
Never married, not cohabiting	7,027	100.0	*41.2	3.9	26.2	4.2	12.3	2.6	20.3	3.6
Currently married	6,850	100.0	50.5	5.8	11.8	3.1	12.9	3.3	24.8	5.7
Currently cohabiting	2,106	100.0	37.1	8.6	34.2	10.1	10.9	5.3	17.9	7.0
Formerly married, not cohabiting	2,276	100.0	45.3	10.7	24.6	7.1	8.8	3.7	21.4	7.5
Hispanic origin and race										
Hispanic or Latino	3,439	100.0	*37.7	4.7	33.5	5.0	13.4	4.1	15.5	4.5
Not Hispanic or Latino:										
White, single race	9,628	100.0	47.2	4.6	16.7	3.6	11.9	2.5	24.2	4.5
Black or African American, single race	3,645	100.0	46.5	6.1	21.9	4.5	11.1	3.4	20.4	5.4
Other single race or multiple race	1,546	100.0	40.9	11.4	23.9	8.5	10.5	5.5	24.7	9.5
Education ²										
Bachelor's degree or higher	3,228	100.0	52.1	6.0	11.6	3.3	8.3	2.9	28.0	5.9
Some college, no bachelor's degree	4,686	100.0	45.4	5.9	17.4	4.8	11.6	3.2	25.7	5.7
High school diploma or GED ³	4,854	100.0	47.3	6.6	20.2	4.5	13.7	4.3	18.9	5.7
No high school diploma or GED ³	1,895	100.0	35.9	8.4	30.8	8.1	16.1	5.7	17.2	7.2
Poverty level income ⁴										
0–149 percent	4,757	100.0	*40.6	6.6	31.4	5.8	12.8	3.1	15.2	4.2
150–299 percent	4,487	100.0	43.5	5.4	20.3	4.4	13.7	4.2	22.5	5.5
300 percent or more	6,926	100.0	50.7	5.4	11.9	3.2	9.9	2.3	27.5	5.1
Region										
Northeast	2,591	100.0	46.6	7.6	18.3	5.0	15.4	6.4	19.7	5.7
Midwest	3,297	100.0	43.0	6.7	21.2	4.3	12.8	3.6	23.0	7.5
South	7,718	100.0	49.0	5.0	18.6	2.9	10.6	2.6	21.8	4.7
West	4,652	100.0	37.8	5.1	28.4	7.6	11.5	3.2	22.2	6.8
Metropolitan residence										
Metropolitan, suburban	8,433	100.0	*49.2	4.6	19.7	3.6	10.3	2.2	20.8	4.5
Metropolitan, central city	7,239	100.0	44.6	5.1	23.2	4.4	11.7	2.9	20.5	4.7
Nonmetropolitan	2,586	100.0	30.3	7.7	22.8	4.8	17.7	6.4	29.2	9.7
Number of sexual partners in the last year ⁵										
None	1,814	100.0	*35.3	8.5	22.2	8.5	19.3	6.8	23.3	8.9
1 partner	11,507	100.0	48.6	3.9	18.3	2.8	11.7	2.1	21.4	4.1
2 partners	2,061	100.0	36.2	6.4	30.9	6.9	10.0	4.2	22.9	7.0
3 or more partners	2,772	100.0	41.8	7.7	26.8	7.1	8.5	3.5	22.9	6.1
HIV risk status										
HIV risk from drug use, sexual behavior, or STD ⁶	3,932	100.0	*39.7	6.4	32.3	6.8	11.5	3.4	16.5	4.5
All others	14,160	100.0	46.2	3.8	18.4	2.4	11.9	2.1	23.5	3.7

* Indicates that the differences for that variable are significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹HMO is Health Maintenance Organization.

²Limited to persons 22–44 years of age at time of interview.

³GED is General Educational Development High School Equivalency diploma.

⁴Limited to persons 20–44 years of age at time of interview.

⁵Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.

⁶STD is sexually transmitted disease.

NOTES: Categories of "Type of place at which HIV test was done" are defined in the text under "Measurement of HIV testing and risk." Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 21.5 percent tested at a public clinic is 21.5 percent plus or minus 2.6 percent, or 19.9–24.1 percent.

Table 8. Number of males 15–44 years of age who were tested for HIV in the past 12 months (excluding blood donation), and percent distribution with the width of the 95% confidence intervals by type of place at which the test was done, according to selected characteristics: United States, 2002

Characteristic	Number in thousands	Type of place at which HIV tests was done								
		Private doctor or HMO ¹			Public clinic		Hospital		Other	
		Total	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
		Percent distribution								
Total ²	8,580	100.0	39.2	5.2	19.4	4.6	11.5	2.9	29.9	5.8
Age										
15–19 years	955	100.0	*29.6	10.7	29.9	11.7	14.9	8.1	25.7	8.4
20–24 years	1,669	100.0	35.4	10.0	28.7	10.4	10.9	5.2	25.0	8.5
25–29 years	1,778	100.0	31.9	10.2	20.0	10.0	10.0	6.6	38.1	14.0
30–44 years	4,178	100.0	46.1	7.7	13.0	5.1	11.6	4.5	29.2	7.2
Marital or cohabitation status										
Never married, not cohabiting	3,864	100.0	*35.7	5.9	23.9	7.4	13.7	3.7	26.6	5.9
Currently married	2,898	100.0	42.9	11.0	8.7	5.7	10.7	6.0	37.6	11.3
Hispanic origin and race										
Hispanic or Latino	1,565	100.0	36.5	9.1	28.9	8.0	14.2	8.2	20.4	8.3
Not Hispanic or Latino:										
White, single race	4,750	100.0	40.8	8.2	16.0	6.8	11.0	4.1	32.3	8.4
Black or African American, single race	1,628	100.0	42.7	9.6	17.9	7.8	9.9	4.1	29.5	9.8
Education ³										
Bachelor's degree or higher	1,319	100.0	42.2	9.8	10.6	5.9	7.5	4.6	39.7	11.6
Some college, no bachelor's degree	2,281	100.0	35.9	10.3	19.6	9.2	9.9	5.5	34.6	10.8
High school diploma or GED ⁴	2,552	100.0	46.9	11.2	16.6	6.7	13.7	6.6	22.8	8.7
No high school diploma or GED ⁴	738	100.0	40.1	15.1	17.0	10.5	13.7	8.8	29.2	15.0
Poverty level income ⁵										
0–149 percent	1,674	100.0	*34.9	14.2	29.9	12.3	13.1	6.1	22.1	11.1
150–299 percent	1,963	100.0	30.4	8.8	20.6	7.3	15.1	8.2	33.9	9.9
300 percent or more	3,986	100.0	47.7	8.6	11.8	4.8	8.3	3.1	32.1	7.8
Region										
Northeast	1,086	100.0	45.2	19.6	13.1	7.0	14.3	9.0	27.4	13.9
Midwest	1,636	100.0	41.6	10.3	22.8	9.7	9.1	4.8	26.6	13.7
South	3,575	100.0	42.2	8.4	15.5	5.2	10.7	4.7	31.7	9.1
West	2,283	100.0	30.1	7.5	26.1	12.2	13.3	5.7	30.5	11.0
Metropolitan residence										
Metropolitan, suburban	4,015	100.0	44.6	8.3	19.9	6.2	8.7	3.4	26.8	8.4
Metropolitan, central city	3,249	100.0	37.1	7.4	20.7	6.8	13.3	4.9	29.0	8.4
Nonmetropolitan	1,315	100.0	28.3	14.2	14.6	6.7	15.8	10.0	41.4	17.9
Number of sexual partners in the last year ⁶										
None	1,107	100.0	*41.3	11.6	22.9	12.8	16.5	9.5	19.3	11.2
1 partner	4,841	100.0	40.7	7.8	15.9	5.1	11.0	4.0	32.4	8.6
2 partners	952	100.0	28.1	9.5	26.9	10.1	14.5	8.9	30.6	10.5
3 or more partners	1,615	100.0	40.5	10.2	22.2	10.1	7.1	3.6	30.2	9.0
HIV risk status										
HIV risk from drug use, sexual behavior, or STD ⁷	2,117	100.0	35.9	9.2	31.1	11.0	10.6	4.9	22.5	7.2
All others	6,385	100.0	40.5	6.8	15.3	4.0	11.7	3.7	32.6	7.1

* Indicates that the differences for that variable are significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹HMO is Health Maintenance Organization.

²Total includes cohabiting and formerly married males, and males of other races, not shown separately because of limitations of sample size.

³Limited to persons 22–44 years of age at time of interview.

⁴GED is General Educational Development High School Equivalency diploma.

⁵Limited to persons 20–44 years of age at time of interview.

⁶Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.

⁷STD is sexually transmitted disease.

NOTES: Categories of "Type of place at which HIV test was done" are defined under "Measurement of HIV testing and HIV risk." Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 19.4 percent tested at a public clinic is 19.4 percent plus or minus 4.6 percent, or 14.8–24.0 percent.

Table 9. Number of females 15–44 years of age who were tested for HIV in the past 12 months (excluding blood donation), and percent distribution with the width of the 95% confidence interval, by type of place at which the test was done, according to selected characteristics: United States, 2002

Characteristic	Number in thousands	Type of place at which HIV tests was done								
		Private doctor or HMO ¹			Public clinic		Hospital		Other	
		Total	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
Percent distribution										
Total	9,679	100.0	49.6	3.3	23.4	2.7	12.3	2.1	14.8	2.3
Age										
15–19 years	1,133	100.0	*42.4	9.1	36.5	8.5	11.2	6.6	9.9	5.9
20–24 years	2,058	100.0	51.1	6.0	26.3	5.7	12.1	4.0	10.6	3.3
25–29 years	2,213	100.0	54.6	6.9	21.1	6.4	11.0	3.7	13.3	4.0
30–44 years	4,275	100.0	48.1	5.2	19.7	3.4	13.3	2.8	18.8	4.4
Marital or cohabitation status										
Never married, not cohabiting	3,163	100.0	*47.8	4.9	29.0	4.5	10.5	3.6	12.7	3.4
Currently married	3,952	100.0	56.0	6.2	14.0	3.8	14.5	3.3	15.4	3.7
Currently cohabiting	1,214	100.0	45.8	8.9	32.2	9.8	12.0	5.7	10.0	5.3
Formerly married, not cohabiting	1,350	100.0	38.0	7.7	29.9	7.4	10.0	4.1	22.1	9.7
Hispanic origin and race										
Hispanic or Latina	1,874	100.0	*38.6	5.6	37.3	6.4	12.7	4.4	11.3	4.0
Not Hispanic or Latina:										
White, single race	4,877	100.0	53.4	5.2	17.4	3.2	12.9	2.9	16.4	3.7
Black or African American, single race	2,017	100.0	49.6	6.1	25.2	5.3	12.1	4.7	13.1	4.2
Other single race or multiple race	910	100.0	51.7	12.2	22.8	9.9	8.7	5.5	16.7	8.8
Education ²										
Bachelor's degree or higher	1,909	100.0	*58.9	7.7	12.4	4.3	8.8	3.4	19.9	5.8
Some college, no bachelor's degree	2,405	100.0	54.4	7.4	15.3	4.3	13.1	4.5	17.2	6.4
High school diploma or GED ³	2,302	100.0	47.7	5.2	24.2	5.8	13.6	3.9	14.5	5.1
No high school diploma or GED ³	1,157	100.0	33.2	9.1	39.5	10.3	17.7	7.0	9.5	5.9
Poverty level income ⁴										
0–149 percent	3,083	100.0	*43.7	6.1	32.2	5.7	12.7	3.2	11.5	3.4
150–299 percent	2,523	100.0	53.8	6.0	20.1	5.1	12.6	3.3	13.5	4.7
300 percent or more	2,940	100.0	54.8	6.5	12.0	3.4	12.0	3.5	21.1	5.7
Region										
Northeast	1,505	100.0	*47.7	7.6	22.0	7.8	16.2	6.8	14.2	6.4
Midwest	1,661	100.0	44.4	8.2	19.6	5.8	16.4	5.1	19.6	7.9
South	4,144	100.0	54.9	5.3	21.3	3.7	10.6	2.8	13.3	2.9
West	2,369	100.0	45.1	5.7	30.7	6.1	9.9	4.0	14.3	4.5
Metropolitan residence										
Metropolitan, suburban	4,418	100.0	*53.3	5.0	19.5	3.7	11.8	2.9	15.3	3.9
Metropolitan, central city	3,990	100.0	50.8	6.1	25.2	4.9	10.4	3.6	13.6	3.5
Nonmetropolitan	1,271	100.0	32.5	4.4	31.4	5.7	19.6	5.1	16.5	5.1
Number of sexual partners in the last year ⁵										
None	707	100.0	*25.8	10.5	21.0	8.4	23.6	9.9	29.6	14.7
1 partner	6,666	100.0	54.4	4.1	20.1	3.4	12.2	2.3	13.3	2.4
2 partners	1,109	100.0	43.1	8.8	34.4	8.4	6.1	3.3	16.3	8.4
3 or more partners	1,157	100.0	43.6	9.1	33.2	8.0	10.5	5.6	12.7	6.2
HIV risk status										
HIV risk from drug use, sexual behavior, or STD ⁶	1,815	100.0	*44.2	8.3	33.7	6.9	12.5	4.7	9.5	4.2
All others	7,775	100.0	50.9	4.0	20.9	3.0	12.0	2.3	16.1	2.8

* Indicates that the differences for that variable are significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹HMO is Health Maintenance Organization.

²Limited to persons 22–44 years of age at time of interview.

³GED is General Educational Development High School Equivalency diploma.

⁴Limited to persons 20–44 years of age at time of interview.

⁵Based on opposite-sex partners with whom respondent had any sexual contact—oral, anal, or vaginal—as reported in Audio Computer-Assisted Self-Interview.

⁶STD is sexually transmitted disease.

NOTES: Categories of "Type of place at which HIV test was done" are defined in the text under "Measurement of HIV testing and risk." Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 23.4 percent tested at a public clinic is 23.4 percent plus or minus 2.7 percent, or 20.7–26.1 percent.

Table 10. Number of persons 15–44 years of age tested for HIV in the past 12 months (excluding blood donation) and reported receiving counseling with their test results, and percentage who received counseling on the specified topics and the width of the 95 percent confidence interval, by HIV risk status and source of test: United States, 2002

Topics covered	Risk status						Source of test			
	Total		HIV risk ¹		All others		Private doctor		Public clinic	
	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
Number in thousands	5,237	...	1,644	...	3,612	...	2,109	...	1,716	...
Percent receiving specified counseling										
HIV transmission	79.8	4.0	76.9	7.0	81.3	4.8	78.5	5.1	85.0	6.7
Preventing transmission	79.7	4.0	81.3	7.0	79.3	5.3	*73.9	6.8	86.4	5.3
Other STDs ³	61.7	4.4	67.4	8.1	59.6	5.4	59.6	7.8	68.3	7.1
Correct condom use	51.6	4.9	53.0	8.8	51.3	6.2	51.2	6.9	57.7	8.8
Needle cleaning	32.2	4.2	29.5	7.6	33.6	5.3	30.3	7.2	32.8	9.2
Needle sharing	35.1	4.0	30.3	7.5	37.0	4.5	32.8	7.1	40.7	8.9
Abstinence	42.8	4.9	*35.0	8.7	46.3	5.7	*36.5	8.2	49.9	9.0
Birth control	44.7	4.6	39.8	7.5	46.8	6.2	40.2	6.7	50.5	8.4
Safe sex practices	64.8	5.1	65.0	8.5	65.1	6.4	63.6	7.0	68.6	8.1
Other topics	13.8	3.2	15.5	5.7	13.0	3.7	13.5	4.9	9.1	4.5
Sample numbers	688	...	224	...	451	...	269	...	234	...

... Category not applicable.

* Indicates that the differences by risk status or source of test in the percent citing this topic are significant at .05 (5 percent) level using a weighted Chi-Square test.

¹HIV risk from drug use, sexual behavior, or sexually transmitted diseases.

²STD is sexually transmitted disease.

NOTES: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 79.8 percent counseled about HIV transmission is 79.8 plus or minus 4.0 percent, or 75.8–83.8 percent. Counseling at hospitals and other places is not shown separately because of sample size limitations.

Table 11. Number of males 15–44 years of age tested for HIV in the past 12 months (excluding blood donation) and reported receiving counseling with their test results, percentage who received counseling on the specified topics, and the width of the 95 percent confidence interval, by HIV risk status and source of test: United States, 2002

Topics covered	Risk status						Source of test			
	Total		HIV risk ¹		All others		Private doctor		Public clinic	
	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
Number in thousands	2,537	...	1,008	...	1,504	...	979	...	718	...
Percent receiving specified counseling										
HIV transmission	75.3	6.4	71.8	10.8	78.1	8.6	73.8	9.0	81.0	9.6
Preventing transmission	78.6	5.8	78.5	9.7	79.3	8.1	72.6	9.9	84.3	9.1
Other STDs ²	62.5	7.5	68.3	10.9	59.2	9.3	58.6	13.6	64.6	13.2
Correct condom use	54.9	7.9	52.5	11.7	57.2	10.1	56.1	10.2	58.7	15.4
Needle cleaning	31.7	6.7	28.1	10.1	34.5	9.0	35.4	11.6	31.6	14.3
Needle sharing	34.5	6.8	27.5	10.1	39.6	8.4	36.7	13.0	38.5	14.2
Abstinence	39.1	8.5	*30.2	10.7	45.5	11.0	35.9	13.9	42.2	15.6
Birth control	43.4	6.8	34.9	10.3	49.6	9.3	38.9	10.5	46.3	13.8
Safe sex practices	68.6	7.3	69.8	12.4	68.8	8.2	70.8	9.3	69.6	13.2
Other topics	14.7	6.2	16.1	9.2	14.0	7.0	15.6	8.8	8.4	7.4
Sample numbers	273	...	119	...	148	...	102	...	82	...

... Category not applicable.

* Indicates that the differences by risk status or source of test in the percent citing this topic are significant at .05 (5 percent) level using a weighted Chi-Square test.

¹HIV risk from drug use, sexual behavior, or sexually transmitted diseases.

²STD is sexually transmitted disease.

NOTES: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 75.3 percent counseled about HIV transmission is 75.3 percent plus or minus 6.4 percent, or 68.9–81.7 percent. Counseling at hospitals and other places is not shown separately because of sample size limitations.

Table 12. Number of females 15–44 years of age tested for HIV in the past 12 months (excluding blood donation) and reported receiving counseling with their test results, and percentage who received counseling on the specified topics with the width of the 95 percent confidence interval), by HIV risk status and source of test: United States, 2002

Topics covered	Risk status									
	Total		HIV risk ¹				All others			
	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval	Percent	Width of 95% confidence interval
Number in thousands	2,789	...	636	...	2,109	...	131	...	998	...
	Percent receiving specified counseling									
HIV transmission	84.0	5.2	84.6	8.4	83.6	6.0	82.5	6.9	87.8	8.4
Preventing transmission	80.8	5.3	85.9	8.2	79.4	6.8	75.0	9.3	87.8	6.4
Other STDs ²	61.0	6.8	66.0	10.7	60.0	8.5	60.4	10.8	70.9	8.8
Correct condom use	48.6	5.6	53.9	11.2	47.0	6.8	47.1	9.0	57.0	10.9
Needle cleaning	32.7	5.6	31.7	10.9	32.9	7.2	25.9	9.3	33.7	9.7
Needle sharing	35.6	5.3	34.9	10.6	35.1	5.9	29.5	7.5	42.3	10.1
Abstinence	46.3	6.8	42.7	11.5	46.9	8.6	*37.0	11.2	55.4	10.1
Birth control	45.8	7.2	47.6	10.1	44.7	8.8	41.4	11.7	53.5	10.1
Safe sex practices	61.4	7.0	57.4	11.4	62.4	8.6	57.4	10.5	67.9	9.6
Other topics	13.0	3.6	14.5	6.4	12.2	4.3	11.7	6.7	9.7	4.9
Sample numbers	415	...	105	...	303	...	167	...	152	...

... Category not applicable.

* Indicates that the differences by risk status or source of test in the percent citing this topic are significant at .05 (5 percent) level using a weighted Chi-Square test.

¹HIV risk from drug use, sexual behavior, or sexually transmitted diseases.

²STD is sexually transmitted disease.

NOTES: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 84.0 percent counseled about HIV transmission is 84.0 plus or minus 5.2 percent, or 78.8–89.2 percent. Counseling at hospitals and other places is not shown separately because of sample size limitations.

Table 13. Number of women who completed a pregnancy in the past 12 months that ended in live birth or spontaneous loss, percentage reporting an HIV test during their prenatal care, and the width of the 95 percent confidence interval of the percent: United States, 2002

Characteristic	Number in thousands	Percent	Width of 95% confidence interval
Total	5,537	69.2	4.2
Age			
15–19 years	451	*76.0	12.3
20–24 years	1,268	72.6	8.6
25–29 years	1,456	77.1	6.3
30–44 years	2,363	61.2	7.4
Marital or cohabitation status			
Never married, not cohabiting	881	*67.3	8.0
Currently married	3,549	68.4	5.4
Currently cohabiting	747	85.4	7.0
Formerly married, not cohabiting	360	47.9	19.4
Hispanic origin and race			
Hispanic or Latina	1,104	*79.3	7.5
Not Hispanic or Latina:			
White, single race	3,223	64.6	6.0
Black or African American, single race	656	70.9	8.5
Other single race or multiple race	554	73.8	11.4
Education ¹			
Bachelor's degree or higher	1,420	*53.9	8.4
Some college, no bachelor's degree	1,276	76.8	8.0
High school diploma or GED ²	1,205	76.7	7.2
No high school diploma or GED ²	787	65.7	14.1
Poverty level income ³			
0–149 percent	1,843	*75.1	6.7
150–299 percent	1,405	77.5	6.7
300 percent or more	1,839	55.2	8.2
Region			
Northeast	739	*70.4	8.7
Midwest	1,079	49.7	9.5
South	2,241	77.3	6.1
West	1,479	70.5	7.0
Metropolitan residence			
Metropolitan, suburban	2,702	68.0	4.5
Metropolitan, central city	1,853	73.3	7.8
Nonmetropolitan	982	64.7	11.6
HIV risk status			
HIV risk from drug use, sexual behavior, or STD ⁴	743	*83.0	7.4
All others	4,729	66.9	4.8
Awareness of methods to prevent mother-to-child HIV transmission ⁵			
Methods definitely true	1,122	*74.6	7.4
Methods probably true	1,624	73.8	6.2
Probably or definitely false	1,417	59.2	9.8
Don't know	1,347	70.7	9.7
Insurance coverage status			
Not covered	724	75.2	9.0
Private insurance	3,102	67.6	5.8
Medicaid	1,305	65.7	9.1
Government or military insurance	407	81.5	11.7

* Indicates that the difference in the percent tested by this variable is significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹Limited to persons 22–44 years of age at time of interview.

²GED is General Educational Development High School Equivalency diploma.

³Limited to persons 20–44 years of age at time of interview.

⁴STD is sexually transmitted disease.

⁵Based on a question, "There is a treatment available for pregnant women who are infected with the HIV virus to prevent passing the virus to their baby."

NOTE: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 69.2 percent tested during prenatal care in the past 12 months is 69.2 plus or minus 4.2 percent, or 65.0–73.4 percent.

Table 14. Percentage of persons 18–44 years of age who had ever been tested for HIV, excluding tests during blood donation, with 95 percent confidence intervals for the percentages and the unweighted sample sizes, in the National Survey of Family Growth, the National Health Interview Survey, and the Behavioral Risk Factor Surveillance System: United States, 2002

Characteristic	NSFG ¹			NHIS ²			BRFSS ³		
	Percent	Width of 95% confidence interval	Sample number	Percent	Width of 95% confidence interval	Sample number	Percent	Width of 95% confidence interval	Sample number
Total	54.5	1.6	11,187	44.7	1.0	15,722	51.7	0.6	104,860
Sex									
Male	*50.0	2.5	4,261	*37.6	1.4	7,042	*47.0	0.8	43,414
Female	59.0	1.8	6,926	51.6	1.4	8,680	56.5	0.7	61,446
Race or ethnicity									
White	*53.1	1.9	5,979	*42.3	1.3	9,209	*49.8	0.6	79,383
Black	66.2	3.1	2,195	60.2	2.6	2,300	70.2	1.5	9,599
Hispanic or Latino	53.5	3.7	2,428	43.3	2.1	3,495	50.1	1.9	8,604
Other races	47.6	6.1	585	41.0	4.1	718	43.3	2.5	6,722
Age									
18–24 years	*38.2	2.5	3,245	*31.5	2.1	3,360	*41.8	1.3	17,996
25–34 years	62.8	2.4	4,069	54.6	1.5	5,872	60.4	0.9	38,402
35–44 years	57.6	2.5	3,869	44.6	1.6	6,490	50.3	0.8	48,462
Region									
Northeast	*56.0	3.5	1,789	*46.2	2.3	2,719	*52.5	1.2	23,095
Midwest	50.3	3.1	2,141	38.5	2.2	3,543	46.5	0.9	24,087
South	56.0	2.9	4,382	47.8	1.7	5,817	55.3	0.8	34,440
West	54.8	3.7	2,875	45.1	1.9	3,643	50.6	1.5	23,238
Education (age 22–44 years)									
College graduate	57.1	3.1	2,371	*49.4	1.9	3,747	*53.2	0.9	33,977
Some college	61.6	3.0	2,726	51.8	1.9	4,230	58.4	1.1	27,216
High school graduate	58.8	2.6	2,899	46.2	1.9	3,652	53.1	1.0	27,620
Less than high school graduate	55.7	4.2	1,339	44.3	2.6	2,124	52.7	2.2	6,845
HIV risk status ⁴									
Increased risk	*68.5	3.3	1,623	*72.5	4.4	538	*69.2	2.5	4,179
Others	52.8	1.7	9,395	43.8	1.0	15,184	50.9	0.6	99,261

* Indicates that the difference in the percent tested within surveys is statistically significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹NSFG is the National Survey of Family Growth.

²NHIS is the National Health Interview Survey.

³BRFSS is the Behavioral Risk Factor Surveillance System.

⁴Definition of increased HIV risk differs in each survey; definitions and question wording are described in the "Technical Notes."

NOTE: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 54.5 percent tested in the NSFG is 54.5 plus or minus 1.6 percent, or 52.9–56.1 percent.

Table 15. Percentage of persons 18–44 years of age who were tested for HIV in the past 12 months, excluding tests during blood donation, with 95 percent confidence intervals for the percentages and the unweighted sample sizes, in the National Survey of Family Growth, the National Health Interview Survey, and the Behavioral Risk Factor Surveillance System: United States, 2002

Characteristic	NSFG ¹			NHIS ²			BRFSS ³		
	Percent	Width of 95% confidence interval	Sample number	Percent	Width of 95% confidence interval	Sample number	Percent	Width of 95% confidence interval	Sample number
Total	15.8	0.9	11,122	12.3	0.6	15,722	15.6	0.4	105,891
Sex									
Male	*15.0	1.5	4,234	*9.3	0.8	7,042	*14.6	0.6	43,867
Female	16.7	1.0	6,888	15.3	0.9	8,680	16.6	0.5	62,024
Race or ethnicity									
White.	*13.2	1.2	5,943	*10.2	0.7	9,209	*12.7	0.4	80,031
Black.	26.1	2.6	2,184	21.6	1.8	2,300	29.8	1.5	9,753
Hispanic or Latino	19.1	2.2	2,416	13.8	1.4	3,495	18.1	1.4	8,729
Other.	13.7	4.4	579	13.3	3.3	718	14.1	1.6	6,804
Age									
18–24 years	*17.6	1.6	3,236	*13.2	1.3	3,360	*20.7	1.0	18,210
25–34 years	18.6	1.6	4,047	15.3	1.0	5,872	17.4	0.6	38,750
35–44 years	12.3	1.7	3,835	9.3	0.8	6,490	10.8	0.5	48,931
Region									
Northeast	15.7	2.5	1,780	*12.0	1.3	2,719	*15.2	0.9	23,288
Midwest	13.2	2.2	2,130	9.7	1.0	3,543	13.0	0.6	24,319
South	17.2	1.6	4,350	14.3	1.0	5,817	17.8	0.6	34,852
West	16.0	1.5	2,862	12.3	1.3	3,643	15.0	1.1	23,432
Education (age 22–44 years)									
College graduate	*12.9	1.6	2,363	12.4	1.2	3,747	*13.3	0.6	34,198
Some college.	16.9	1.7	3,391	13.1	1.2	4,230	16.8	0.8	27,416
High school graduate	16.3	1.7	3,597	12.1	1.2	3,652	15.2	0.8	27,979
Less than high school graduate	17.1	2.5	1,771	13.2	1.7	2,124	15.2	1.5	6,953
HIV risk status ⁴									
Increased HIV risk.	*27.4	2.6	1,612	*25.7	4.1	538	*29.4	2.6	4,179
Others	14.3	1.0	9,345	11.9	0.6	15,184	15.1	0.4	99,261

* Indicates that the difference in the percent tested between categories is statistically significant at the .05 (5 percent) level using a weighted Chi-Square test.

¹NSFG is the National Survey of Family Growth.

²NHIS is the National Health Interview Survey.

³BRFSS is the Behavioral Risk Factor Surveillance System.

⁴Definition of increased HIV risk differs in each survey; definitions and question wording are described in the "Technical Notes."

NOTE: Width of 95% confidence interval means that the confidence interval is plus or minus that number. For example, the confidence interval for 15.8 percent tested in the past 12 months is 15.8 plus or minus 0.9 percent, or 14.9–16.7 percent.

Technical Notes

Sample design and fieldwork procedures

The 2002 National Survey of Family Growth, or NSFG, was based on 12,571 interviews with men and women 15–44 years of age in the household population of the United States. The interviews were administered in person by trained female interviewers in the selected persons' homes. The 2002 sample is a nationally representative multistage area probability sample drawn from 121 areas across the country. The sample is designed to produce national, not State, estimates.

Persons were selected for the NSFG in five major steps:

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

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

The NSFG questionnaires and materials were reviewed and approved by the CDC Research Ethics Review Board (formerly known as an Institutional Review Board or IRB), and by a similar board at the University of Michigan. The female questionnaire lasted an average of about 85 minutes, while the male questionnaire lasted an average of 60 minutes. All respondents were given written and oral information about the survey and were informed that participation was voluntary. Adult respondents 18–44 years of age were asked to sign a consent form but were

not required to do so. For minors 15–17 years of age, signed consent was required first from a parent or guardian, and then signed assent was required from the minor. The response rate for the survey was about 79 percent—about 80 percent for women and 78 percent for men.

Over 200 female interviewers were hired and trained by the survey contractor, the University of Michigan's Institute for Social Research, under the supervision of NCHS. Interviewing occurred from March 2002 through March 2003. All of the data in this report were collected by Computer-Assisted Personal Interviewing, or CAPI. The questionnaires were programmed into laptop computers and administered by an interviewer. Respondents in the 2002 survey were offered \$40 as a "token of appreciation" for their participation. More detailed information about the methods and procedures of the study will be published in a forthcoming report (12).

Definitions of terms

HIV testing in the past 12 months—The reported month and year of the most recent HIV test in combination with month and year of interview were used to compute the interval in months since the most recent HIV test. Persons whose tests occurred 1–12 months prior to the month of interview were classified as having been "tested in the past 12 months." The use of a 1–12 month interval provides exactly 12 months of observation, and is consistent with earlier survey estimates of 12-month HIV testing rates (11,14,15); persons whose tests occurred in the same month as they were interviewed are not included in this category to avoid creating an interval of varying lengths (between 12 and 13 months). Interviewing for the NSFG took place throughout the period March 2002 through March 2003. Therefore, the interval covered for HIV testing in the past 12 months includes tests occurring as early as March 2001 and as late as February 2003.

Age—In this report, "age" (recode=AGER) is classified based on

the respondent's age as of the date of the interview. Sampled persons were eligible for the 2002 NSFG if they were 15–44 years of age.

Education: highest grade or degree (recode=HIEDUC)—This is based on a series of questions that measure the highest degree received as well as the highest grade or year of school completed. The categories of HIEDUC were defined as follows:

- No high school diploma or general equivalency diploma (GED): The person interviewed has not received a high school degree, GED, or college diploma.
- High school diploma or GED: The highest degree obtained is a high school diploma or GED, and his or her highest completed grade of school is 12 or lower.
- Some college, no bachelor's degree: The highest degree the man or woman obtained is a high school diploma or GED, but the highest grade of school completed is higher than 12, or the highest degree is an Associate's degree.
- Bachelor's degree or higher: The person reported having a college or university degree at the bachelor's level or higher, regardless of highest grade completed.

The tables in this report show data by education only for those 22–44 years of age, because large percentages of those 15–21 years of age are still attending school. Using the full age range of 15–44 years of age would understate the eventual educational attainment of those 15–21 years of age.

Hispanic origin and race—In this report, values on the recode HISPRACE and the raw variable NUMRACE were used to classify respondents by Hispanic origin and race. All respondents who answered "yes" to the following question were classified as "Hispanic": "Are you of Hispanic or Latino, or of Spanish origin?"

Non-Hispanic respondents were coded based on their answers to the following question:

“Which of the groups (below) describe your racial background? Please select one or more groups.”

The racial groups shown were:

- American Indian or Alaska Native
- Asian
- Native Hawaiian or other Pacific Islander
- Black or African American
- White

If the respondent gave only “White,” then he or she was classified in this report as “Non-Hispanic white, single race.” If the respondent gave only “Black or African American,” then he or she was classified as “Non-Hispanic Black or African American, single race.”

If the respondent answered that he or she was American Indian or Alaskan Native, or Asian, or Native Hawaiian or other Pacific Islander, or gave two or more races, he or she was included in the total but not shown in a separate racial category because the sample sizes of these groups were too small to show reliable estimates. New OMB guidelines recommend that multiple-race respondents be shown separately when possible, but the NSFG’s sample size of 12,571 interviews cannot produce reliable statistics for very small subgroups such as mixed-race respondents.

The categories shown in this report are as follows:

- Hispanic or Latino
- Not Hispanic or Latino
- White, single race
- Black or African American, single race

In a few tables, trends are shown comparing data from 2002 with data from previous surveys. In those tables only, respondents may be classified by race or origin without accounting for multiple-race reporting.

Interpretation of data by race and Hispanic origin—Race is associated with a number of indicators of social and economic status. Measures of socioeconomic status (e.g., education and income) are not always available for the point in time when the event being studied occurred. Differences among white, black, and Hispanic men and women in the tables may be related to

the lower income and educational levels of black and Hispanic persons (23), their limited access to health care and health insurance (23), the communities in which they live (24), and other factors.

Marital status at interview (Recode=RMARITAL)—This variable is based on the following question in the interview:

“Now I’d like to ask about your marital status. Please look at Card 1. What is your current marital status?”

- “Married
- Not married but living together with a partner of the opposite sex
- Widowed
- Divorced
- Separated because you and your spouse are not getting along
- Never been married.”

In this report, the categories widowed, divorced, and separated were not shown separately because of limitations of sample size. These categories were combined and labeled as “formerly married.”

Metropolitan residence (at interview)—The METRO recode is the respondent’s address at the time of interview, classified according to year 2000 Census Bureau population counts and definitions of metropolitan statistical areas set forth by the U.S. Office of Management and Budget. The code categories are:

- 1= in a metropolitan area, but not the central city (suburbs)
- 2= the central city of a metropolitan area
- 3= not in a metropolitan area

Number of partners in the past 12 months—For both males and females, this measure was based on the ACASI questions that asked about numbers of opposite-sex partners with whom the respondent had any sexual contact, not limited to vaginal intercourse. The questions below followed a series of questions asking about types of sexual activity.

For females, number of partners in the last 12 months comes from the ACASI (self-administered) file variable PARTS12M_1, which was based on question JF-2:

“During the last 12 months, that is, since (month/year), how many male sex partners have you had? Please count every male sexual partner, even those you had sex with only once.”

For males, it comes from the ACASI file variable PARTS12_1, which was based on question KG-2:

“Thinking about the last 12 months, that is, since (month/year), how many female sex partners have you had? Please count every partner, even those you had sex with only once.”

Poverty level income at interview (recode=POVERTY)—The poverty level index was calculated by dividing the total family income by the weighted average threshold income of families whose head of household was under 65 years of age, based on the 2001 poverty levels defined by the U.S. Census Bureau. This definition of poverty status takes into account the number of persons in the family. Total family income includes income from all sources for all members of the respondent’s family. For example, for a family of four in 2001, the poverty level was \$18,104. So, if a family of four had an income of \$40,000, their poverty level income would be

$(\$40,000/18,104) \times 100$, or 220 percent.

This respondent would be classified in the category “150–299 percent.”

The tables in this report show data by poverty-level income only for those 20–44 years of age at interview. This is because reports of income by teenagers are likely to be less accurate. Teenagers may, for example be trying to report the income of their family, but they may not be contributors to family income themselves. For 1,044 of the 12,571 respondents, or 8.3 percent, total family income at the date of the NSFG interview in 2002 was not ascertained, and was imputed.

Region (of residence at interview)—The REGION recode classifies region of residence at the time of the interview into the four major census regions: Northeast, Midwest, South, and West. These regions are as follows:

Region	States included	your blood tested for HIV, the virus that causes AIDS? (Asked if R reported an HIV test apart from blood donation)	ADS.060.010 DURING THE PAST 12 MONTHS, how many times have you been tested for HIV, including times you did not get your results?
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania	IF-3. When, in what month and year, did you have your test for HIV? If you have had more than one test, please tell me the date of the most recent one.	
Midwest	Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas		
South	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas		
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.		

Question wording on HIV testing and HIV risk in three CDC surveys conducted in 2002

Question wording on HIV testing

2002 National Survey of Family Growth

- IF-0. Now I would like to ask you about blood tests for HIV, the virus that causes AIDS.
- IF-1. First, I'll ask you about blood donations you may have made to the Red Cross or other blood banks because all blood donated since March 1985 has been routinely tested for HIV before it can be used. (Since March 1985, have you/Have you ever) donated blood at the Red Cross, at a bloodmobile, at a blood drive, or at other blood banks?
- IF-2. (Apart from testing that may have been done with your blood donations,) have you ever had

2002 National Health Interview Survey

- ADS.010 Now, I am going to ask about giving blood donations to a blood bank such as the American Red Cross. Have you donated blood since March 1985?
- ADS.020 During the PAST 12 MONTHS, that is, since {12-month ref. date}, have you donated blood?
- ADS.040 The next questions are about the test for HIV (the virus that causes AIDS). Except for tests you may have had as part of blood donations, have you ever been tested for HIV? Have you ever been tested for HIV?
- ADS.060 If ADS.020 equals <1> read: Not including blood donations, in what month and year was your last test for HIV (the virus that causes AIDS)?
- Else read:
In what month and year was your last test for HIV (the virus that causes AIDS)?
(if date not known:)
- ADS.061 Was it: >TIMETST<(1) 6 months or less (2) More than 6 months but not more than 1 year ago (3) More than 1 year, but not more than 2 years ago (4) More than 2 years, but not more than 5 years ago (5) More than 5 years ago (6) Refused (9) Don't know

2002 BRFSS

- 17.4. Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation.
- 17.5. Not including blood donations, in what month and year was your last HIV test?

Question wording on HIV risk in the three surveys:

National Survey of Family Growth:

Persons who reported the following behaviors in the past year were classified as at risk: Injected drugs in the past year, used crack cocaine, had a sex partner who injected drugs, exchanged sex for drugs or money, had an HIV positive partner, had five or more sexual partners, had male-to-male sex, or were treated for sexually transmitted diseases. (For further details, see text.)

National Health Interview Survey:

Based on the following question:
Tell me if ANY of these statements is true for YOU. Do NOT tell me WHICH statement or statements are true for you. Just IF ANY of them are.

- You have hemophilia and have received clotting factor concentrations.
- You are a man who has had sex with other men, even just one time.
- You have taken street drugs by needle, even just one time.
- You have traded sex for money or drugs, even just one time.
- You have tested positive for HIV, the virus that causes AIDS.
- You have had sex (even just one time) with someone who would answer yes to any of these statements.

BRFSS:

I'm going to read you a list. When I'm done, please tell me if any of the

situations apply to you. You don't need to tell me which one.

(a) You have used intravenous drugs in the past year.

(b) You have been treated for a sexually transmitted or venereal disease in the past year.

(c) You have given or received money or drugs in exchange for sex in the past year.

(d) You had anal sex without a condom in the past year.

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- the CDC's Division of Reproductive Health; the CDC's Office of Women's Health;
- the Office of Planning, Research, and Evaluation of the Administration for Children and Families (ACF);
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