# Contraceptive Use, and Childbearing, 2015–2019 by Joyce C. Abma, Ph.D., and Gladys M. Martinez, Ph.D.

**Teenagers in the United States: Sexual Activity,** 

National Health Statistics Reports

### Abstract

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*Objective*—This report presents national estimates of sexual activity and contraceptive use among males and females ages 15–19 in the United States, based on data from the National Survey of Family Growth (NSFG).

*Methods*—NSFG data were collected through in-person interviews with nationally representative samples of males and females ages 15–49 in the household population of the United States. NSFG 2015–2019 interviews were conducted between September 2015 and September 2019 with 21,441 males and females, including 3,812 teenagers (1,894 females and 1,918 males ages 15–19). Estimates include measures of sexual experience and contraceptive use as well as circumstances of first sexual intercourse (sex), attitudes, and probability of a birth during the teen years. Estimates are shown overall and by Hispanic origin and race, age group, parental living arrangements, and maternal characteristics. The report focuses on the period 2015–2019, with trends shown for selected measures for time points 2002, 2006–2010, 2011–2015, and 2015–2019.

*Results*—In 2015–2019, 40.5% of never-married female teenagers (3.8 million), and 38.7% of never-married male teenagers (3.8 million) had ever had vaginal intercourse with an opposite-sex partner. For females this percentage was stable across the four time points, but for males this percentage decreased from the 2002 (45.7%) and 2011–2015 (44.2%) time points. For teen males, use of any contraception at first sex increased across the four time points, from 82.0% in 2002 to 92.1% in 2015–2019, while no consistent trend was seen for teen females. Nearly four out of five female teenagers (77.3%) in 2015–2019 used a method of contraception at first sex. Among female teenagers, ever-use of long-acting reversible contraception, which includes intrauterine devices and contraceptive implants, increased from 5.8% to 19.2% from 2011–2015 to 2015–2019.

**Keywords:** adolescents • birth control • teen pregnancy • National Survey of Family Growth (NSFG)

### Introduction

Monitoring sexual activity and contraceptive use among teenagers is important because of the health, economic, and social costs of pregnancy and childbearing among the teen population (1-3). Teen pregnancy and birth rates have been declining since the early 1990s and have reached historic lows (4–6). However, the teen birth rate, 13.6 per 1,000 females ages 15-19 in 2022 (4), is still higher than that of other more-developed countries, such as 6.9 in Canada, 9.5 in France, and 7.5 in Germany in 2019 (7). While U.S. rates have declined for Hispanic, Black non-Hispanic (subsequently, Black), and White non-Hispanic (subsequently, White) teenagers, differences between groups have persisted (8), with birth rates more than twice as high for Black and Hispanic teenagers compared with White teenagers as of 2021 (5). As a result of the concern with these higher rates of teen pregnancy and births (4-6), as well as disparities by Hispanic origin and race and other socioeconomic characteristics (5), several federal, state, and local teen pregnancy prevention programs have been launched over the past few decades.

In addition, concern remains high over the incidence of HIV and other



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sexually transmitted infections (STIs) among young people. Sexually active adolescents and young adults (ages 15-24) are at higher risk of acquiring STIs than adults for reasons that include behavior, physiology, and factors related to healthcare access and services (9). Prevalence estimates suggest that one in four sexually active adolescent females has an STI, such as chlamydia or human papillomavirus (9). In 2018, the total direct medical cost of STIs in the United States, among all ages, was nearly \$16 billion (9,10). Females and males ages 15-24 account for a large portion of these costs because, while they account for about 25% of the sexually active population, they account for about one-half of all reported STIs annually (9).

This report presents recent data on the sexual activity and contraceptive use experience of males and females ages 15–19 in the United States, using the National Survey of Family Growth (NSFG) data collected in 2015–2019, with selected trends also presented using data collected in 2002, 2006–2010, and 2011–2015. This report updates previous similar reports, which included earlier years of data (11–15).

### **Methods**

### Data source

This report is focused on combined NSFG data from 2015-2017 and 2017–2019 file releases, representing 4 years of interviews during 2015–2019. The combined 2015–2019 data contain a total of 21,441 interviews conducted from September 2015 to September 2019: 11,695 with females and 9,746 with males ages 15–49, including 3,812 interviews conducted with teenagers: 1,894 with females and 1,918 with males ages 15-19. NSFG is administered through face-to-face interviews and represents males and females ages 15-49 in the household population of the United States, including people temporarily living away from the household in a college dormitory or other housing (16). Further details on the sample design, variance estimation, and fieldwork procedures for the most recent NSFG surveys were published

previously (16–18). Earlier NSFG surveys presented here include 2002, the last periodic survey, and the 2006–2010 and 2011–2015 surveys, which were conducted under a continuous design like the 2015–2019 survey (19).

All respondents were given written and oral information about the survey and informed that participation was voluntary. Adult respondents ages 18-49 (and those ages 18-44 before 2015, when the survey's age range was expanded to 15-49) gave written or verbal consent. For minors ages 15-17, signed permission was required first from a parent or guardian, and then signed assent was required from the minor. If either the parent or the minor declined to give written permission or assent, the minor did not participate in the survey. The overall response rate for the 2015–2019 NSFG was 64.3%. The response rate was 66.8% for female teenagers and 65.4% for male teenagers.

# Measurement of sexual activity, contraception, and related measures

The following list describes the sexual activity- and contraception-related indicators used in this report. With one exception (noted in the list that follows), the measures are based on questions asked in the NSFG's intervieweradministered portion of the survey, known as computer-assisted personal interviewing. While the questions are asked of respondents of all ages, the results are presented for teenagers (ages 15–19) unless indicated otherwise.

### Sexual activity

Ever had sex: Based on a yes or no question in the male and female questionnaires asking if the respondent has ever had vaginal intercourse with an opposite-sex partner (referred to as "had sex" in this report, and opposite-sex partner is referred to as "partner"). Female respondents who had ever been pregnant or had ever cohabited with or been married to a person of the opposite sex are not asked this question directly but are coded "yes." If a respondent has ever had vaginal intercourse with an oppositesex partner, they are referred to in this report as "sexually experienced" (Table 1).

- Had sex in the last 12 and last • 3 months: Based on questions in the male and female questionnaires asking each respondent for the date of last vaginal intercourse with their last sexual partner. How recently teenagers have had sex is useful for monitoring their risk of pregnancy and STIs. Having had sex in the past 3 months or the past year are commonly used indicators of "current" exposure, and having had sex in the past 3 months is commonly used to define the "sexually active" population at a given point in time (Table 2).
- Cumulative probability of first • sexual intercourse (first sex) by each age from 15 to 20: Age at first sex is based on the question in the female and male questionnaires asking respondents how old they were the first time they had sex with an opposite-sex partner. Age at first sex was then used to calculate the probability of having had sex by each age from 15 to 20 (Table 3). The analysis shown in Table 3 includes ages 15–24 at interview to provide a sample that includes enough cases who completed the teenage years.
- Feelings about first sex: Based on a question in the self-administered portion of the survey asking male and female respondents ages 18-49 which of three categories describes how much they wanted their first sex to happen: "I really didn't want it to happen at the time" (referred to as "was not wanted" or "did not want it to happen"), "I had mixed feelingspart of me wanted it to happen at the time and part of me didn't" (referred to as "mixed feelings"), and "I really wanted it to happen at the time" (referred to as "was wanted" or "wanted it to happen"). This measure is presented for ages 18-24 whose first sex was before age 20 (Table 4).
- Main reason for not having had sex: Based on a question asking male and female respondents who have never had sex, "What would you say is the most important reason why you

have not had sexual intercourse up to now?" and includes the response categories "against religion or morals," "don't want to get pregnant/ get a female pregnant," "don't want to get a sexually transmitted disease," "haven't found the right person yet," "in a relationship, but waiting for the right time," and "other." Data on their main reasons for not having had sex helps in understanding the context of teen decision-making about sexual activity (Table 5).

- Ever-use of contraceptive methods: Ascertained from a series of questions asking females, for each of several commonly used methods, whether she had ever used it for any reason. For methods not involving an act of vaginal intercourse, such as the oral contraceptive pill, all respondents were asked the questions, regardless of if they had ever had sex. For barrier methods and other methods involving acts of vaginal intercourse, only sexually experienced respondents were asked. For methods remaining after those asked about separately in the yes-or-no formatted question (less commonly used methods), respondents were presented a list from which they indicated the methods they had ever used. This ever-use measure is only available for females because questions on contraceptive use asked of males in NSFG refer to use on specific occasions or with certain partners, not lifetime use (Table 6).
- Use of contraception at first sex: Females were asked when their first contraceptive method use occurred in relation to first sex. The first contraceptive method ever used was also asked in a separate question. Males were asked if their first partner used a method at first sex and, if so, which method (Table 7). The categories presented in Table 7 reflect groupings based on the most common methods used by teenagers at first sex, as well as groups of methods not common enough to be shown separately but representing meaningful categories: "any method/no method," "pill," "other

hormonal," "condom," "all other methods," and "dual methods hormonal and condom." Intrauterine device (IUD) is not included in the "other hormonal" category because if IUD was hormonal or nonhormonal was not captured in the underlying questions.

- Contraceptive use at last sex: Females and males were asked if a contraceptive method was used at last sex with their last sexual partner, and, if so, which method (Table 8).
- The cumulative probability of a first birth by each age from 15 to 20: Females were asked to provide the dates when each of their pregnancies ended as well as the outcome of each pregnancy. Dates of first births were used to define their ages at first births and then to calculate the cumulative probability of having a first birth by each age from 15 to 20 (Table 9). The analysis shown in Table 9 includes ages 15–24 at interview to provide a sample that includes enough cases who completed the teenage years.
- Feelings about a hypothetical • pregnancy: Females were asked, "If you got pregnant now, how would you feel?" and males were asked, "If you got [your wife/your partner/a female] pregnant now, how would you feel?" Respondents chose from "very upset," "a little upset," "a little pleased," and "very pleased" (Table 10). This measure helps to describe teenagers' motivation to avoid pregnancy, an important factor influencing pregnancy risk behaviors. The results present this measure for never-married teenagers because their perspective on a hypothetical pregnancy would likely be different than that of married teenagers. Also, it is not possible to present married teenagers separately due to small sample size. More details on these measures can be found on the NSFG webpage (20).

# Measures of demographic characteristics and parental background

The data on teen sexual activity, contraceptive use, and childbearing presented in this report are shown with respect to several key demographic characteristics of the respondent.

Hispanic origin and race: All tables showing data by Hispanic origin and race classify respondents according to the 1997 OMB guidelines for the presentation of race and ethnicity data in federal statistics (21). The NSFG's race and Hispanic-origin questions are self-reported and allow the choice of more than 1 category from 14 detailed race categories. The categories presented in this report are Black non-Hispanic, single race (subsequently, Black); Hispanic; and White non-Hispanic, single race (subsequently, White). The categories presented here were chosen based on sample size and properties that, in most cases, meet the reliability thresholds required by the National Center for Health Statistics' standards of presenting statistics.

Three measures of teenagers' families of origin are included because they have well-documented associations with sexual activity and the use of contraception among teenagers, partly through their strong correlation with family socioeconomic status: mother's educational attainment, the age when the mother had her first child, and parental living arrangements (that is, parental presence or absence in the teenager's household) (22–24).

- Mother's educational attainment: Males and females were asked, referring to their mother or mother figure, "What is the highest level of education (your mother/she) completed?"
- Age of mother's first birth: Also referring to the respondent's mother or mother figure, males and females were asked, "How old was she when she had her first child who was born alive?"

- Parental living arrangements: Two measures are included and the choice between them is based on the nature of the outcome or indicator being shown.
  - Parental living arrangements at age 14 is derived from the responses to questions asking who was the female parent or parent figure and who was the male parent or parent figure, in response to the question, "Now, think about when you were 14 years old. Looking at Card 10, what female and male parents or parent figures were you living with at age 14?" The respondent could choose from seven relationship types for the female and male parent or parent figure. The options included "other female," "no female parent or parent figure present," "other male," and "no male parent or parent figure present."

This report uses a recoded variable combining the two questions and groups them into three categories: "both biological or adoptive parents," "biological mother and stepfather," and "other." This variable addresses the parental living arrangement during the beginning of the teen years, before many teenagers have had sex, and is used in tables presenting an event occurring at an undetermined time in the teenager's past (for example, "ever had sexual intercourse").

Parental living arrangements at the time of the interview: Ascertained from a household roster identifying the relationship to the respondent of each member of the household at the time of the interview. Categories are based on the presence of both biological or adoptive parents, one biological parent and one step or adoptive parent, only one parent, and any other arrangement involving no parents or parent figures. This measure was used in Table 2, which presents sexual

activity close to the time of the interview, because the parental living arrangement would have been close in time to the event of interest.

### Statistical analysis

All estimates in this report are based on sampling weights designed to produce national estimates representative of the 144 million males and females ages 15–49 in the United States household population, including about 19.3 million teenagers ages 15–19, as of the midpoint of the range of years in the 2015–2019 data collection period. To account for NSFG's complex sampling design, most statistics for this report, including sampling error, were produced using the survey analysis procedures in SAS software Version 9.4 (https://www. sas.com). Tables in this report include standard errors for each point estimate as a measure of its precision.

In addition, PROC KAPLAN MEIER was used to calculate the probabilities of first sex and a first birth by each age up to 20, using life table or survival methodology. The Kaplan-Meier procedure fits its model, or product-limit estimator, to estimate the survival function for a given population (25,26). This method considers the censored data and NSFG's complex survey design. The age was expanded to increase the sample size for events that happened during their *entire teen years*. Even though the ages used in the analysis include those older than age 19, the data are presented only for first sex and first births that occurred to these respondents within ages 15-20 (to include data for the complete year of age 19 for all respondents). In this report, probabilities are described as percentages, such as the percentage of females who would have a first birth by age 18.

All tables and figures present statistics for teenagers of all marital statuses except for Table 1, which presents statistics for never-married teenagers. These statistics are comparable to those from previous reports in this series for teenagers ever having had sex. Previous reports were limited to never-married teenagers to allow consistency with data for males from 1988 from the National Survey of Adolescent Males, which included only never-married teen males (24). In 2015–2019, as in past NSFG survey years, very few teenagers had ever been married: 0.42% of females and 0.07% of males, so the estimates of teenagers who had ever had sex is expected to be very similar to an estimate that would include married teenagers.

The significance of differences between any two estimates was determined by standard two-tailed t tests at the 0.05 level using point estimates and their standard errors. No adjustments were made for multiple comparisons. Survey clusters minus strata were used as the degrees of freedom for significance testing of pairwise comparisons. A weighted least-squares regression method was used to test for linear trends across survey years using the number of survey periods (2002, 2006-2010, 2011-2015, and 2015-2019) minus two as the degrees of freedom. This report also includes tests of the comparison of two time points for some statistics. For example, some estimates for 2015–2019 are tested for significant differences from estimates from a previous survey, such as 2011–2015. Resulting statements describing an increase or decrease between two time points do not necessarily indicate a linear trend across the time periods. Results of tests of linear trends across the four time points are described as significant or nonsignificant trends.

Significant differences between probabilities were tested using the PROC SURVIVAL procedure in SUDAAN. Terms such as "increased" and "decreased" or "higher" and "lower" indicate a statistically significant difference was seen between the two estimates. When compared statistics did not demonstrate a statistically significant difference, where it aids in understanding patterns, this is pointed out with terms such as "not significant," "similar," or "no difference." Lack of comment regarding the difference between any two statistics does not mean that the difference was tested and found not to be significant.

Data presentation standards for proportions are based on a minimum denominator sample size and on the absolute and relative widths of a

confidence interval calculated using the Korn-Graubard approach (modified Clopper-Pearson) for complex surveys. SUDAAN PROC DESCRIPT was used to test the data suppression guidelines, and all estimates presented meet the National Center for Health Statistics guidelines for the presentation of proportions (27). When a percentage or other statistic is suppressed, the table contains an asterisk signifying that the statistic "does not meet National Center for Health Statistics standards of reliability." The results presented in this report are descriptive and do not attempt to demonstrate cause-and-effect relationships.

### Results

# Sexual activity among teenagers

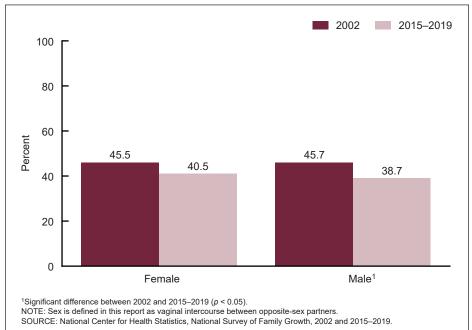
### Sexual experience

Table 1 and Figure 1 present the percentage of never-married female and male teenagers who had ever had vaginal intercourse with an opposite-sex partner (sexually experienced). Table 1 shows totals for four time points, 2002, 2006–2010, 2011–2015, and 2015–2019, and shows percentages by demographic

subgroup and family characteristics for 2015–2019. Figure 1 shows the totals for two time points: 2002 and 2015–2019.

- In 2015–2019, 40.5% of nevermarried teen females and 38.7% of never-married teen males had ever had sex (Table 1, Figure 1).
- The trend, accounting for all time points, for never-married female and male teenagers was not significant (Table 1); however, the percentage for never-married male teenagers in 2015–2019 (38.7%) was lower than in 2002 (45.7%) (Figure 1) and 2011–2015 (44.2%).
- For never-married female teenagers in 2015–2019, a greater percentage of Black teenagers (49.5%) had ever had sex compared with Hispanic (37.7%) and White (40.1%) teenagers; however, the observed difference between Black and White teenagers was not significant.
- For never-married male teenagers in 2015–2019, percentages were higher for both Hispanic (44.9%) and Black (46.4%) teenagers who had ever had sex compared with White teenagers (33.1%).
- Greater percentages of older nevermarried female (62.4%) and male (60.2%) teenagers ages 18–19 had ever had sex compared with their

Figure 1. Percentage of never-married females and males ages 15–19 who have ever had sex: United States, 2002 and 2015–2019



younger counterparts (25.0% among females and 23.2% among males ages 15–17).

- For both female and male teenagers, about one-third were sexually experienced if their mother's first birth was at age 20 or older (34.3% for females and 34.7% for males), compared with about one-half among those whose mothers were younger than age 20 at their first birth (54.0% for females and 50.3% for males).
- The percentages of never-married female and male teenagers who were sexually experienced were similar across mother's education levels.
- Lower percentages of both female (32.3%) and male (33.1%) teenagers were sexually experienced if they lived with both parents at age 14 compared with those who lived with a biological mother and stepfather (60.0% for females and 52.4% for males) or in any other type of parental living arrangement at that age (52.3% for females and 48.9% for males).

### Recent sexual activity

- In 2015–2019, 37.4% of female teenagers and 34.2% of male teenagers had sex in the past 12 months (Table 2).
- The percentage of teenagers who had sex in the past 3 months ("sexually active") in 2015–2019 was 29.8% among females and 24.9% among males.
- The trends in the percentages of teenagers who had sex in the past 12 months and in the past 3 months across 2002, 2006–2010, 2011–2015, and 2015–2019 were not significant.
- Among females, a higher percentage of Black teenagers (45.7%) had sex in the past 12 months compared with Hispanic (34.1%) and White (37.3%) teenagers. However, the observed difference between Black and White teenagers was not significant.
- The percentage of female teenagers who had sex in the past 3 months among Black teenagers (36.9%) compared with White (29.6%) and Hispanic (27.4%) teenagers was not significant.

- Among males, higher percentages of Black (43.4%) and Hispanic (38.9%) teenagers had sex in the past 12 months compared with White teenagers (29.5%). Also among males, a higher percentage of Black teenagers (31.9%) had sex in the past 3 months compared with White teenagers (22.3%).
- For both male and female teenagers, the percentages of older teenagers (ages 18–19) who had sex in the past 12 months were at least two times higher than the percentages of younger teenagers (ages 15–17). For example, 58.8% of older teen females had sex in the past 12 months compared with 22.1% among younger teen females.
- The same pattern was true for the percentages who had sex in the past 3 months. The largest difference was for male teenagers: 40.3% of older teenagers ages 18–19 had sex in the past 3 months compared with 13.7% among those ages 15–17.
- Among female teenagers living with both biological or adoptive parents at the time of interview, a smaller percentage had sex in the past 12 months and in the past 3 months compared with those with other types of parental living arrangements. The percentage who had sex in the past 12 months among those living with both biological or adoptive parents (23.9%) was about one-half that of those living with a biological and step or adoptive parent (44.7%) and those living with a single parent (44.5%).
- Mother's age at first birth was associated with both measures of recent sexual activity: 50.0% of female teenagers whose mothers were younger than age 20 at their first birth had sex in the past 12 months, compared with 31.6% of those whose mothers had their first birth at age 20 or older; 39.9% of female teenagers whose mothers were younger than age 20 at their first birth had sex in the past 3 months compared with 24.9% of those whose mothers had their first birth at age 20 or older.
- Similar to females, lower percentages of male teenagers living with both

biological or adoptive parents had sex in the past 12 months and 3 months compared with their counterparts with other parental living arrangements.

Also consistent with the association for female teenagers, a higher percentage of male teenagers whose mothers had their first birth before age 20 had sex in the past 12 months and in the past 3 months than those whose mothers had their first birth at age 20 or older. For example, 37.7% of male teenagers whose mothers had their first birth before age 20 had sex in the past 3 months compared with 20.7% among those whose mothers had their first birth at age 20 or older.

### Age at first sex: Cumulative probability of first sex by each age

In 2015–2019, the probability of having had sex in the teen years was similar for males and females ages 15–24 at the time of interview (Figure 2, Table 3).

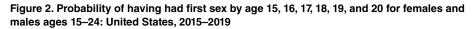
The probability of having had sex by age 17 was highest for Black males (57%), followed by Hispanic (56%) and White males (44%). Among females, the probability of having had sex by age 17 was highest for Black females (58%), followed by White (51%) and Hispanic females (47%).

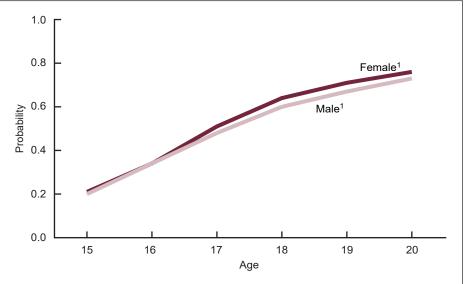
- Younger males and females whose mothers had some college education had a lower probability of having had sex in their teen years than those whose mothers did not attend college.
- The probability of having had sex by age 17 was lowest for females who lived with both biological or adoptive parents at age 14 (42%) compared with those who lived in other parental living arrangements (64%–67%). The same pattern held by parental living arrangement for males ages 15–24.

### Feelings about first sex

Table 4 shows the percentages of females and males ages 18–24 whose first sex was before age 20 reporting three different descriptions of how much their first sex was wanted.

- Overall, 7.6% of females "really did not want first sex to happen at the time," and the remainder had mixed feelings (46.5%) or "really wanted it to happen at the time" (45.9%) (Table 4).
- Among females, a lower percentage of Black teenagers felt their first sex was wanted (38.2%) compared with White teenagers (50.2%). The observed differences between Black and Hispanic (43.5%) female





<sup>1</sup>Cumulative probability was similar between females and males.

NOTES: Estimates are based on females and males ages 15–24 at the time of interview. Sex is defined in this report as vaginal intercourse between opposite-sex partners.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2015-2019.

teenagers, and White and Hispanic teenagers, were not significant.

- Younger age at first sex was associated with lower percentages of female teenagers whose first sex was wanted: Among those who were age 14 or younger at first sex, the percentage who wanted their first sex was 30.5%, compared with those who were ages 15–17 (47.5%) and 18–19 (51.3%) at first sex.
- A larger age gap between the female and the male partner was also associated with lower percentages of first sex that was wanted. Among females ages 18–24 whose first sex was before age 20 and whose male partner was 3 or more years older than they were, the first sex was wanted by 32.7%, compared with 47.9% being wanted among those whose partner was 1–2 years older and 52.0% among those whose partner was the same age as they were.
- Among males ages 18–24 who were younger than age 20 at first sex, the patterns in the wantedness of first sex were generally similar to those of females. Overall, 4.2% of males did not want it to happen, 27.2% had mixed feelings, and 68.6% wanted it to happen.
- Three-quarters of White male teenagers (75.3%) wanted first sex to happen, higher than the percentage among Hispanic (59.7%) and Black (63.3%) male teenagers.
- A higher percentage of males who were 14 years or younger at first sex did not want it to happen (8.3%) compared with those who were 15–17 at first sex (3.5%) and those who were 18–19 (2.7%).
- Similar to female teenagers, having an older opposite-sex partner was also associated with higher unwanted first sex among male teenagers. For example, a higher percentage of male teenagers whose female partner was 1–2 years older did not want first sex to happen (7.0%) compared with 1.5% of those with female partners who were younger than they were.

### Main reason for not having had sex

Teenagers who have not yet had sex make up more than one-half of the population of teenagers ages 15–19 (59.5% of females and 61.3% of males). Table 5 shows the responses of teenagers who have never had sex to a question asking them to choose their main reason for not having had sex yet.

- In 2015–2019, the main reason most commonly chosen by female teenagers for not having had sex, among the options provided, was "against religion or morals" (32.5%), followed by "haven't found the right person yet" (25.3%), "other reason" (16.2%), and "don't want to get pregnant" (15.9%) (Table 5).
- Among male teenagers, the most commonly chosen main reason for not having had sex was "haven't found the right person yet" (35.3%), followed by "against religion or morals" (26.2%), "other reason" (18.6%), and "don't want to get a female pregnant" (11.1%).
- Teenagers were least likely to choose "don't want to get a sexually transmitted disease" as their main reason for not having had sex (4.4% for females and 4.2% for males).
- In 2015–2019, White teenagers were more likely to choose "against religion or morals" (37.8% for females and 30.1% for males) as their main reason for not having had sex compared with Hispanic (23.7% for females and 19.5% for males) and Black teenagers (23.3% for females and 24.0% for males).
- Hispanic female teenagers were more likely to choose "don't want to get pregnant" (23.1%) as their main reason for not having had sex than White (12.7%) and Black (14.1%) female teenagers.
- Among males, Black teenagers were more likely to choose "don't want to get a female pregnant" (19.4%) as their main reason for not having had sex compared with Hispanic (17.3%) and White (8.2%) teenagers.
- Black teenagers were more likely to choose "Don't want to get a sexually transmitted disease" (10.6% for females and 10.7% for males) as their main reason for not having had

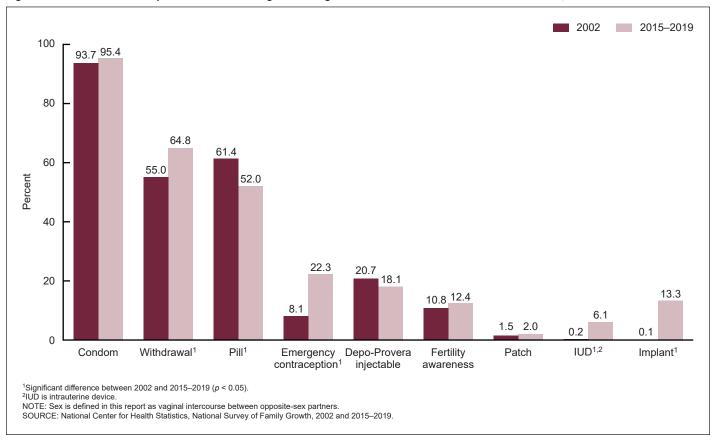
sex than White (2.6% for females and 2.0% for males) and Hispanic (4.8% for females and 5.4% for males) teenagers.

# Contraceptive use among teenagers

## Ever-use of a contraceptive method

Table 6 and Figure 3 show the percentage of sexually experienced females ages 15–19 who had ever used each of several methods of contraception.

- From 2002 through 2015–2019, nearly all sexually experienced female teenagers ever used some method of contraception, with 98.9% having used any method of contraception in 2015–2019 (Table 6).
- The most-used methods among female teenagers in 2015–2019, similar to previous survey periods, were the condom (95.4%), withdrawal (64.8%), and the pill (52.0%).
- Use of the pill decreased in 2015–2019 (52.0%) compared with 2002 (61.4%), and use of withdrawal increased in 2015–2019 (64.8%) compared with 2002 (55%).
- A significant trend was seen in the percentage of female teenagers ever using long-acting reversible contraceptives (LARCs): The percentage increased across the four time points from 2002 to 2015–2019, ranging from 0.4% to 19.2%. Within this group of methods among female teenagers, the trends in increased use of both the implant (from 0.1% to 13.3%) and the IUD (from 0.2% to 6.1%) were also significant.
- A significant trend was seen in the percentage of teenagers who ever used "other methods" (including vasectomy, female condom, foam, jelly or cream, suppository, and other methods), decreasing from 9.9% in 2002 to 2.2% in 2015–2019.
- Another significant trend over the four time periods involved emergency contraception: 8.1% of teen females had ever used this method in 2002, compared with 22.3% in 2015–2019.



### Figure 3. Methods of contraception ever used among females ages 15-19 who had ever had sex: United States, 2002 and 2015-2019

• Female teenagers' ever-use of all other methods shown did not change significantly from 2002 to 2015–2019, including the injectable (Depo-Provera), the contraceptive patch, the condom, and fertility awareness-based methods.

### Contraceptive use at first sex

- In 2015–2019, 77.3% of female teenagers used a method of contraception at first sex (Table 7).
- No significant trend in the use of a method at first sex among female teenagers across the four time points was seen.
- For all four time points, the most common contraceptive method used at first sex for female teenagers was the male partner's condom. The trend across time points was not significant, and the percentages were similar for 2002 (66.4%) and 2015–2019 (64.9%) (Figure 4). However, a significant increase was seen between 2006–2010 and 2011–2015, from 68.0% to 74.6%, and a decrease between 2011–2015

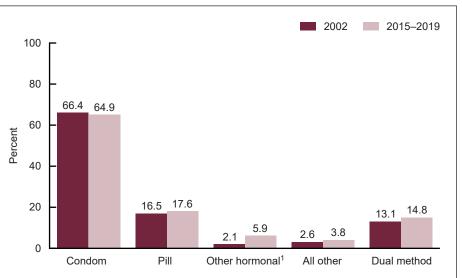


Figure 4. Methods of contraception used at first sex among females ages 15–19 who had ever had sex: United States, 2002 and 2015–2019

<sup>1</sup>Significant difference between 2002 and 2015–2019 (p < 0.05).

NOTES: Sex is defined in this report as vaginal intercourse between opposite-sex partners. Intrauterine device (IUD) is not included in "other hormonal" but is included in "all other" because if IUD was hormonal or nonhormonal was not captured in the data.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2002 and 2015-2019.

and 2015–2019, from 74.6% to 64.9% (Table 7).

• The percentage of teen females using other hormonal methods at first sex in 2015–2019 (5.9%) was higher

than the percentage in 2002 (2.1%) (Figure 4).

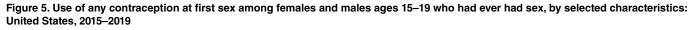
• The second most commonly used method among teen females at

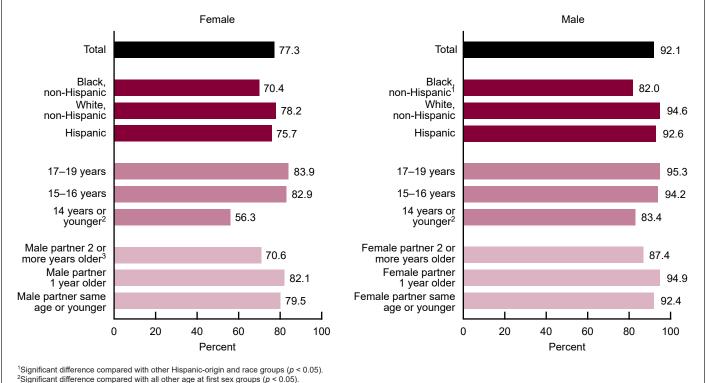
first sex was the pill, 17.6% in 2015–2019.

- The percentage of female teenagers who used both a hormonal method and a male partner's condom at first sex, that is, dual method use for prevention of pregnancy and STIs, was 14.8% in 2015–2019. This percentage reflects pill and condom use to a large extent, because those are the two most common methods used at first sex and the most commonly combined methods at first sex.
- Among teen females, the differences observed between Hispanic (75.7%) and White (78.2%) teenagers compared with Black (70.4%) teenagers in the use of any method of contraception at first sex were not significant (Figure 5).
- The use of any method of contraception at first sex was lower for female teenagers who had first sex at younger ages: 56.3% for females whose first sex was at age 14 or younger, 82.9% for those ages 15–17, and 83.9% for those ages 17–19.

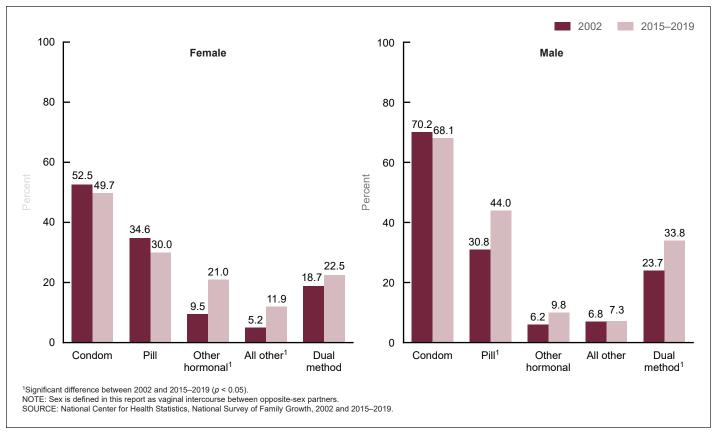
- The difference between a teenager's age and their partner's age at first sex was also associated with use of a contraceptive method. Use of a method by teen females whose first male partner was 2 or more years older than they were was 70.6% compared with 82.1% for those whose male partner was 1 year older than they were.
- Among sexually experienced teen males, a significant trend was seen in the percentage using contraception at first sex, increasing from 82.0% in 2002 to 92.1% in 2015–2019 (Table 7).
- Among teen males, the trend in condom use at first sex across the four time points was not significant. However, the percentage in 2015–2019 (84.5%) was higher than the percentage in 2002 (70.9%). The percentage in 2015–2019 was also higher than in 2011–2015 (76.8%).
- The percentage of teen males using dual methods at first sex was higher in 2015–2019 (19.7%) than 2002 (10.4%).

- The condom was the most-used method at first sex among male teenagers for each of the four time points, as was the case for females.
- A lower percentage of Black male teenagers used a method at first sex (82.0%) compared with Hispanic (92.6%) and White (94.6%) male teenagers (Figure 5).
- The association between age at first sex and method use at first sex seen for female teenagers was also seen for male teenagers. A lower percentage of male teenagers who had first sex at age 14 or younger used a method of contraception (83.4%), compared with those who first had sex at ages 15–16 (94.2%) and those who first had sex at ages 17–19 (95.3%).
- The use of a method at first sex for male teenagers was similar across categories of age difference between themselves and their female partners.





Significant difference compared with all other age at first sex groups ( $\rho < 0.05$ ). <sup>3</sup>Significant difference compared with male partner 1 year older at first sex ( $\rho < 0.05$ ). NOTE: Sexual intercourse in this report is defined as vaginal intercourse between opposite-sex partners. SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2015–2019.



## Figure 6. Methods of contraception used at last sex among females and males ages 15–19 who had sex in the past 3 months: United States, 2002 and 2015–2019

# Contraceptive use at last sex in the past 3 months

- Among sexually active female teenagers, the trend in using any contraceptive method at last sex was not significant across the four time points. However, the percentage in 2015–2019 (90.2%) was higher than the percentage in 2002 (82.9%) (Table 8).
- Similar to contraceptive use at first sex, the condom was the most commonly used method at last sex among sexually active female teenagers for all four time points. In 2015–2019, 49.7% of sexually active female teenagers reported their partners used a condom at last sex (Figure 6).
- While use of the pill at last sex remained relatively stable among females, the percentage using other hormonal methods at last sex was higher in 2015–2019 (21.0%) than in 2002 (9.5%), and also higher than in 2011–2015 (12.4%). Similarly, the percentage using all other methods was higher in 2015–2019 (11.9%)

than in 2002 (5.2%). The trend across the four time points in the use of other hormonal methods and all other methods was not significant.

- Across the four time periods from 2002 to 2015–2019, sexually active male teenagers' use of any method of contraception at last sex remained relatively stable, with 93.7% of male teenagers using, or reporting their female partner's use of, a method of contraception at last sex.
- A higher percentage (44.0%) of sexually active teen males in 2015–2019 had female partners using the pill compared with those in 2002 (30.8%).
- The use of dual methods, that is, use of the condom in combination with the pill or other hormonal method, was also higher among males in 2015–2019 (33.8%) than in 2002 (23.7%), reflecting primarily the increase in the percentage using partner's pill, because it is a major contributor to the estimate of dual use.
- Male teenagers' use of the condom stayed relatively stable, remaining

the most-used method at last sex for males: 68.1% of teen males used the condom at last sex in 2015–2019.

# Age at first birth: Probability of first birth by each age

Table 9 shows the cumulative probability of having a first birth by selected ages in the teen years among females ages 15–24. In 2015–2019, the probability of females ages 15–24 having a birth by age 15 was 1% and rose to 16% by age 20.

White females ages 15–24 had a lower probability of having a birth at each age compared with Hispanic and Black females. For example, the probability of having a first birth by age 18 was 4% for White females compared with 9% for Hispanic females and 8% for Black females. No differences were seen between Hispanic and Black females' probability of having had a first birth at each age between the ages of 15 and 19 (Table 9).

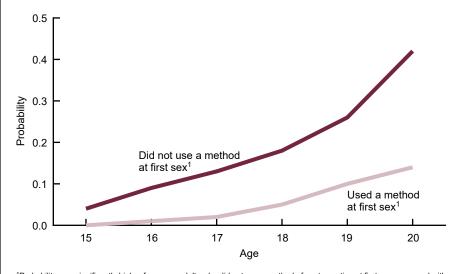
- Females ages 15–24 who used a method of contraception at first sex had lower probability of having a birth in their teen years (Figure 7).
- Females ages 15–24 whose mothers had a first birth before age 20 had a higher probability of having their own first birth by age 18 (8%), compared with 5% of those whose mothers had a first birth after age 20.
- The probability of having a birth in the teen years was higher for females whose mothers had lower levels of education. For example, among females ages 15–24 whose mothers did not have a high school diploma or GED, the probability of a first birth by age 18 was 13%, compared with 6% among those whose mother had a high school diploma or GED, and 3% among those whose mother had some college or higher level of education.
- Females ages 15–24 who lived with both biological or adoptive parents at age 14 were less likely to have a birth by age 18 (4%) compared with those who lived with a biological mother and stepfather or had another type of living arrangement (8%–9%).

# Feelings about a hypothetical pregnancy

Table 10 depicts female and male teenagers' reactions to a hypothetical pregnancy "now" (at the time of interview)

- Among never-married female teenagers ages 15–19 in 2015–2019, 57.9% would be "very upset" and 29.8% "a little upset," while 9.0% would be "a little pleased" and 3.1% "very pleased" if they became pregnant now.
- Among never-married male teenagers in 2015–2019, 44.3% would be "very upset" and 36.0% "a little upset," while 13.3% would be "a little pleased" and 5.1% "very pleased" if they got a female pregnant now.
- White female teenagers were more likely to be "very upset" if they were to get pregnant now (60.3%) compared with Hispanic female teenagers (50.1%); the observed difference between White and Black (53.7%) females was not significant.
- Among males, White teenagers were more likely to be "very upset" (51.1%) about a pregnancy now compared with Hispanic (33.1%) or Black (33.1%) teenagers.
- Female teenagers ages 15–17 were more likely to be "very upset" if they

Figure 7. Probability of having had a first birth by age 15, 16, 17, 18, 19, and 20 for females and males ages 15–24, by use of method at first sex: United States, 2015–2019



<sup>1</sup>Probability was significantly higher for young adults who did not use a method of contraception at first sex compared with those who used a method at first sex. NOTES: Estimates are based on females and males ages 15–24 at the time of interview. Sex is defined in this report

as vaginal intercourse between opposite-sex partners.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2015–2019.

were to get pregnant now (66.0%) than those ages 18–19 (46.2%). The same pattern held for male teenagers.

- Female teenagers who had never had sex were more likely to be "very upset" (68.2%) compared with teenagers who ever had sex (42.3%) and less likely to be "a little upset" (24.6%) or "a little pleased" (4.3%) if they became pregnant now. Male teenagers who had never had sex were more likely to be "very upset" (52.0%) if they were to get a female pregnant now compared with those who had ever had sex (32.1%).
- Female teenagers who lived with both biological or adoptive parents at age 14 were more likely to be "very upset" if they became pregnant now (63.5%) compared with those living with a biological mother and stepfather (47.2%) or in other parental living arrangements (48.7%) and were less likely to be "a little pleased" (5.8%) compared with teenagers in other parental living arrangements (10.2% for those living with a biological mother and stepfather and 15.6% for those in other living arrangements).
- Among male teenagers, those who lived with both biological parents at age 14 were more likely to be "very upset" if they got a female pregnant now (48.7%) compared with those living in the two other types of parental living arrangements (36.6% for those living with a biological mother and stepfather and 35.2% for those living in other living arrangements).

### Summary

Using data from the 2015–2019 NSFG and earlier NSFG surveys, this report provides an update on the sexual activity, contraception, and childbearing experience of U.S. teenagers, helping to understand their risk of pregnancy and STIs. NSFG is the primary source of national data on sexual activity and contraceptive use for the total U.S. household-based population of females and males ages 15–19. Another source of data on teenagers in the United States, covering a slightly different population, is the Youth Risk Behavior Surveillance System, a biennial survey of high school students (males and females enrolled in school in grades 9–12), conducted by the Centers for Disease Control and Prevention's Division of Adolescent and School Health (28). This survey also provides data on teen sexual activity and contraceptive use, in addition to other measures of the experiences of high school students in the United States.

Among female teenagers in 2015–2019, 40.5% had ever had sex. Among male teenagers, this percentage decreased 5.5 percentage points, from 44.2% in 2011-2015 to 38.7% in 2015–2019. Family and demographic characteristics of teenagers were associated with differences in the measures of sexual activity included in this report. For example, the percentages of male and female teenagers who had ever had sex and who had sex within the past 12 months and past 3 months were higher for teenagers who did not live with both biological or adoptive parents, or whose mothers had their first births before age 20. The same patterns generally held for the probability of young adults ages 15-24 having first sex in the teen years, and, in addition, those with mothers who had higher levels of education were more likely to have their first sex at older ages. Some changes were seen in the differences between Hispanic-origin and race subgroups in the percentages who ever had sex from 2011-2015 to 2015-2019. For females, no significant differences existed in 2011–2015 (24), but in 2015–2019, Black teenagers had higher percentages who had ever had sex than Hispanic teenagers. For males in 2011–2015, Black teenagers had higher percentages who had ever had sex than Hispanic and White teenagers, but in 2015–2019, both Black and Hispanic teenagers had higher percentages than White teenagers.

Understanding the circumstances under which first sex happens can advance the understanding of early versus later first sex, as well as teenagers' use of methods to prevent pregnancy or STIs. Among young adults ages 18–24 who had their first sex before age 20, 7.6% of females and 4.2% of males "really didn't want it to happen at the time." In addition, both male and female teenagers who were younger at first sex and those who had opposite-sex partners who were older than they were by 3 or more years were more likely to have had an unwanted first sex.

For teenagers who have not had sex with an opposite-sex partner, their main reasons for not having done so contribute to understanding the transition to sexual experience. The most common reason was "against religion or morals" among females and "haven't found the right person yet" among males.

Contraceptive use among sexually experienced teenagers remains common. The 2015–2019 data showed that 98.9% of female teenagers had ever used a method of contraception, similar to the percentage in 2002 (97.7%). About three out of four female teenagers (77.3%)and 92.1% of male teenagers used contraception at first sex, and 90.2% of female teenagers and 93.7% of male teenagers used a method of contraception at last sex in the past 3 months. The use of LARC among female teenagers rose by 13 percentage points from 2011–2015, with nearly one in five having ever used the IUD or contraceptive implant by 2015-2019. Between 2011-2015 and 2015–2019, changes in the differences between Hispanic-origin and race subgroups were observed in use of any method at first sex for females: In 2011–2015, White teenagers had a higher percentage using a method at first sex than Black and Hispanic teenagers. By 2015–2019, no significant differences were seen between the three groups. For male teenagers in both 2011-2015 and 2015–2019, White teenagers had higher percentages who used, or had a partner who used, a method at first sex, than Black teenagers.

Younger age at first sex is associated with a greater likelihood that first sex was unwanted at the time. Previous analyses with NSFG and other data have documented that unwanted sex, particularly unwanted first sex, is associated with higher risk of unintended pregnancy (29). In addition, unwanted sex is associated with higher incidence of STIs among adolescents and is related to intimate partner violence (29,30). Underscoring the importance of the topic for reproductive well being, findings from data from the Centers for Disease Control and Prevention's National Intimate Partner and Sexual Violence Survey also demonstrate similar links: Intimate partner violence and reproductive coercion are associated with STIs, including HIV infection and unintended pregnancy (31).

A direct consequence of sexual activity in the teen years is risk of teen pregnancy. Differences in the probability of a birth during the teen years by demographic and family characteristics are consistent with the differences in sexual activity and contraceptive use by those characteristics. In addition, those who did not use a method of contraception at *first* sex were more likely to have a birth at each of the teen years from 15-20. However, consistent with the high percentage of pregnancies among females ages 15-19 that are unintended-70.8% in 2019 (6)—most teenagers are motivated to avoid a pregnancy: 87.7% of female teenagers and 80.3% of male teenagers would be "very upset" or "a little upset" if they became pregnant or caused a pregnancy now.

Certain trends described in this report, such as a decrease in the percentage of teenagers who had ever had sex, an increase in contraceptive method use at first sex among teen males, and increased use of highly effective LARC among teen females, suggest reduced risk of STIs and pregnancy, and, in the case of pregnancies, parallel actual declines in those rates (6). However, risk of pregnancy and STIs still remains. For example, about 874,000 female teenagers used no method of contraception at first sex in 2015–2019.

This report focused on vaginal intercourse, but NSFG also contains data on other types of sexual activities that also carry STI risks, which have been documented in other reports (32). The information that is the focus of this report represents the primary behavioral determinants of pregnancy and STIs among teenagers. It provides insights into the ways those determinants are changing with time, how they differ by sociodemographic groups, and the circumstances associated with them. This information can be used to monitor and understand trends and differentials in teenagers' sexual behavior and use of contraception.

### References

- Diaz CJ, Fiel JE. The effect(s) of teen pregnancy: Reconciling theory, methods, and findings. Demography 53(1):85–116. 2016. DOI: https:// doi.org/10.1007/s13524-015-0446-6.
- Kane JB, Morgan SP, Harris KM, Guilkey DK. The educational consequences of teen childbearing. Demography 50(6):2129–50. 2013. DOI: https://doi.org/10.1007/ s13524-013-0238-9.
- Coyne CA, D'Onofrio BM. Some (but not much) progress toward understanding teenage childbearing: A review of research from the past decade. Adv Child Dev Behav 42:113–52. 2012. DOI: https:// doi.org/10.1016/B978-0-12-394388-0.00004-6.
- Martin JA, Hamilton BE, Osterman MJK. Births in the United States, 2022. NCHS Data Brief, no 477. Hyattsville, MD: National Center for Health Statistics. 2023. DOI: https://dx.doi.org/ 10.15620/cdc:131354.
- Osterman MJK, Hamilton BE, Martin JA, Driscoll AK, Valenzuela CP. Births: Final data for 2021. National Vital Statistics Reports; vol 72 no 1. Hyattsville, MD: National Center for Health Statistics. 2023. DOI: https://dx.doi. org/10.15620/cdc:122047.
- Rossen LM, Hamilton BE, Abma JC, Gregory ECW, Beresovsky V, Resendez AV, et al. Updated methodology to estimate overall and unintended pregnancy rates in the United States. National Center for Health Statistics. Vital Health Stat 2(201). 2023. Available from: https:// www.cdc.gov/nchs/data/series/sr\_02/ sr02-201.pdf.
- The World Bank. World development indicators: Reproductive health. Available from: https://wdi.worldbank. org/table/2.14.
- Hamilton BE, Mathews TJ. Continued declines in teen births in the United States, 2015. NCHS Data Brief, no 259. Hyattsville, MD: National Center for Health Statistics. 2016. Available from: https:// www.cdc.gov/nchs/data/databriefs/ db259.pdf.

- National Academies of Sciences, Engineering, and Medicine. 2021. Sexually transmitted infections: Adopting a sexual health paradigm. Washington, DC: The National Academies Press. DOI: https:// doi.org/10.17226/25955.
- Chesson HW, Spicknall IH, Bingham A, Brisson M, Eppink ST, Farnham PG, et al. The estimated direct lifetime medical costs of sexually transmitted infections acquired in the United States in 2018. Sex Transm Dis 48(4):215–21. 2021. DOI: https://doi.org/10.1097/ OLQ.000000000001380.
- Abma JC, Martinez GM, Mosher WD, Dawson BS. Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2002. National Center for Health Statistics. Vital Health Stat 23(24). 2004. Available from: https:// www.cdc.gov/nchs/data/series/sr\_23/ sr23\_024.pdf.
- Abma JC, Sonenstein FL. Sexual activity and contraceptive practices among teenagers in the United States, 1988 and 1995. National Center for Health Statistics. Vital Health Stat 23(21). 2001. Available from: https://www.cdc.gov/ nchs/data/series/sr\_23/sr23\_021.pdf.
- Martinez GM, Copen CE, Abma JC. Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2006–2010 National Survey of Family Growth. National Center for Health Statistics. Vital Health Stat 23(31). 2011. Available from: https://www.cdc.gov/ nchs/data/series/sr 23/sr23 031.pdf.
- Martinez GM, Abma JC. Sexual activity, contraceptive use, and childbearing of teenagers aged 15–19 in the United States. NCHS Data Brief, no 209. Hyattsville, MD: National Center for Health Statistics. 2015.
- Martinez GM, Abma JC. Sexual activity and contraceptive use among teenagers aged 15–19 in the United States, 2015–2017. NCHS Data Brief, no 366. Hyattsville, MD: National Center for Health Statistics. 2020.

- 16. Lepkowski JM, Mosher WD, Davis KE, Groves RM, Van Hoewyk J. The 2006–2010 National Survey of Family Growth: Sample design and analysis of a continuous survey. National Center for Health Statistics. Vital Health Stat 2(150). 2010. Available from: https://www.cdc.gov/ nchs/data/series/sr\_02/sr02\_150.pdf.
- Groves RM, Mosher WD, Lepkowski JM, Kirgis NG. Planning and development of the continuous National Survey of Family Growth. National Center for Health Statistics. Vital Health Stat 1(48). 2009. Available from: https://www.cdc.gov/ nchs/data/series/sr\_01/sr01\_048.pdf.
- National Center for Health Statistics. 2017–2019 National Survey of Family Growth (NSFG): Summary of design and data collection methods. Available from: https://www.cdc.gov/nchs/nsfg/ nsfg 2017 2019 puf.htm#design.
- National Center for Health Statistics. 2017–2019 National Survey of Family Growth: User's guide. 2020. Available from: https://www.cdc.gov/ nchs/data/nsfg/NSFG-2017-2019-UG-MainText-508.pdf.
- National Center for Health Statistics. 2017–2019 NSFG: Public-use data files, codebooks, and documentation. Questionnaires. Available from: https://www.cdc.gov/nchs/nsfg/ nsfg 2017 2019 puf.htm.
- 21. Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. Fed Regist 62(210):58782–90. 1997.
- Maness SB, Thompson EL, Lu Y. Associations between social determinants of health and adolescent contraceptive use: An analysis from the National Survey of Family Growth. Fam Community Health 45(2):91–102. 2022. DOI: https://doi.org/10.1097/ FCH.000000000000316.
- Lindberg LD, Maddow-Zimet I, Marcell AV. Prevalence of sexual initiation before age 13 years among male adolescents and young adults in the United States. JAMA Pediatr 173(6):553–60. 2019. DOI: https://doi.org/10.1001/ jamapediatrics.2019.0458.

- Abma JC, Martinez GM. Sexual activity and contraceptive use among teenagers in the United States, 2011–2015. National Health Statistics Reports; no 104. Hyattsville, MD: National Center for Health Statistics. 2017.
- Allison PD. Survival analysis using SAS: A practical guide. Cary, NC: SAS Institute, Inc. 1995.
- Kaplan EL, Meier P. Nonparametric estimation from incomplete observations. J Am Stat Assoc 53(282):457–81. 1958.
- 27. Parker JD, Talih M, Malec DJ, Beresovsky V, Carroll M, Gonzalez JF Jr, et al. National Center for Health Statistics data presentation standards for proportions. National Center for Health Statistics. Vital Health Stat 2(175). 2017. Available from: https://www.cdc.gov/nchs/ data/series/sr\_02/sr02\_175.pdf.
- Mpofu JJ, Underwood JM, Thornton JE, Brener ND, Rico A, Kilmer G, et al. Overview and methods for the Youth Risk Behavior Surveillance System—United States, 2021. MMWR Suppl 72(1):1–12.
   2023. DOI: https://dx.doi.org/ 10.15585/mmwr.su7201a1.
- 29. Williams CM, Brett KM, Abma JC. Coercive first intercourse and unintended first births. Violence Vict 24(3):351–63. 2009. DOI: https://doi.org/10.1891/0886-6708.24.3.351.
- Williams CM, Clear ER, Coker AL. Sexual coercion and sexual violence at first intercourse associated with sexually transmitted infections. Sex Transm Dis 40(10):771–5. 2013. DOI: https://doi.org/10.1097/ OLQ.000000000000011.
- Basile KC, Smith SG, Lui Y, Miller E, Kresnow M. Prevalence of intimate partner reproductive coercion in the United States: Racial and ethnic differences. J Interpers Violence 36(21–22):NP12324–41. 2019. DOI: https://doi.org/ 10.1177/0886260519888205.
- Copen CE, Chandra A, Martinez GM. Prevalence and timing of oral sex with opposite-sex partners among females and males aged 15–24 years: United States, 2007–2010. National Health

Statistics Reports; no 56. Hyattsville, MD: National Center for Health Statistics. 2012.

#### Table 1. Never-married females and males ages 15-19 who have ever had sex: United States, 2002, 2006–2010, 2011–2015, and 2015–2019

| Characteristic                                    | Number<br>(thousands) | Percent      | Standard error |
|---------------------------------------------------|-----------------------|--------------|----------------|
| Female                                            |                       |              |                |
| Total, 2002 <sup>1</sup>                          | 9,598                 | 45.5         | 1.85           |
| Total, 2006–2010 <sup>1</sup>                     | 10,361                | 42.6         | 1.73           |
| Total, 2011–2015 <sup>1</sup>                     | 9,385                 | 42.4         | 1.86           |
| Total, 2015–2019 <sup>1</sup>                     | 9,398                 | 40.5         | 1.93           |
| Hispanic origin and race:                         |                       |              |                |
| Black, non-Hispanic                               | 1,313                 | 49.5         | 4.22           |
| White, non-Hispanic                               | 4,867                 | 40.1         | 2.71           |
| Hispanic <sup>2</sup>                             | 2,303                 | 37.7         | 3.21           |
| Age:                                              | ,                     |              |                |
| 15–17                                             | 5.494                 | 25.0         | 2.20           |
| 18–19                                             | 3,904                 | 62.4         | 3.22           |
| Respondent's mother's age at first child's birth: | - ,                   |              |                |
| Younger than 20                                   | 2,664                 | 54.0         | 3.27           |
| 20 and older                                      | 6,506                 | 34.3         | 1.87           |
| Respondent's mother's education:                  | - ,                   |              |                |
| No high school diploma or GED                     | 1,328                 | 43.0         | 3.64           |
| High school diploma or GED                        | 2,301                 | 44.6         | 3.68           |
| Some college or higher                            | 5,713                 | 38.3         | 2.44           |
| Parental living arrangement at age 14:            | -,                    |              |                |
| Both biological or adoptive parents               | 5,867                 | 32.3         | 2.22           |
| Biological mother and stepfather                  | 861                   | 60.0         | 4.61           |
| Other <sup>3</sup>                                | 2,670                 | 52.3         | 3.43           |
| Male                                              | ,                     |              |                |
| Total, 2002 <sup>1</sup>                          | 10,139                | 45.7         | 2.09           |
| Total, 2006–2010 <sup>1</sup>                     | 10,766                | 41.8         | 1.56           |
| Total, 2011–2015 <sup>1</sup>                     | 9,963                 | 44.2         | 1.46           |
| Total, 2015–2019 <sup>1</sup>                     | 9,803                 | 38.7         | 1.40           |
| Hispanic origin and race:                         | 9,077                 | 50.7         | 1.00           |
| Black, non-Hispanic                               | 1,383                 | 46.4         | 3.62           |
| White, non-Hispanic                               |                       | 40.4<br>33.1 | 2.65           |
|                                                   | 5,052                 |              |                |
| Hispanic <sup>2</sup>                             | 2,397                 | 44.9         | 2.84           |
| Age:<br>15–17                                     | 5.748                 | 23.2         | 1.88           |
|                                                   | - / -                 | 60.2         | 2.79           |
| 18–19                                             | 4,129                 | 60.2         | 2.79           |
| Respondent's mother's age at first child's birth: | 2,534                 | 50.3         | 3.38           |
| Younger than 20                                   | ,                     |              | 3.38<br>1.95   |
| 20 and older                                      | 7,228                 | 34.7         | 1.95           |
| Respondent's mother's education:                  | 1 100                 | 43.2         | 4.26           |
| No high school diploma or GED                     | 1,166                 |              |                |
| High school diploma or GED                        | 2,473                 | 40.7         | 3.43<br>2.18   |
| Some college or higher                            | 6,204                 | 37.0         | 2.18           |
| Parental living arrangement at age 14:            | 6 600                 | 00.1         | 0.10           |
| Both biological or adoptive parents               | 6,602                 | 33.1         | 2.16           |
| Biological mother and stepfather                  | 968                   | 52.4         | 5.58           |
| Other <sup>3</sup>                                | 2,307                 | 48.9         | 3.03           |

<sup>1</sup>Total includes people of other or multiple Hispanic-origin and race groups, those whose mother figure had no births, and those who reported no mother or mother figure. <sup>2</sup>People of Hispanic origin may be of any race. <sup>3</sup>Other parental living arrangements at age 14 years refers to anything other than two biological or adoptive parents or biological mother and stepfather, including one biological parent and no other parent(s) or parent figures or no parent(s) or parent figures.

NOTE: Sex is defined in this report as vaginal intercourse between opposite-sex partners.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2002, 2006–2010, 2011–2015, and 2015–2019.

# Table 2. Females and males ages 15–19 who had sex in the past 12 months and in the past3 months: United States, 2002, 2006–2010, 2011–2015, and 2015–2019

|                                             |                       |              | sex in<br>months  |         | sex in<br>months  |
|---------------------------------------------|-----------------------|--------------|-------------------|---------|-------------------|
| Characteristic                              | Number<br>(thousands) | Percent      | Standard<br>error | Percent | Standard<br>error |
| Female                                      |                       |              |                   |         |                   |
| Total, 2002 <sup>1</sup>                    | 9,834                 | 42.5         | 1.85              | 35.7    | 1.74              |
| Total, 2006–2010 <sup>1</sup>               | 10,478                | 39.7         | 1.67              | 31.3    | 1.43              |
| Total, 2011–2015 <sup>1</sup>               | 9,482                 | 38.9         | 1.83              | 30.2    | 1.67              |
| Total, 2015–2019 <sup>1</sup>               | 9,439                 | 37.4         | 1.91              | 29.8    | 1.88              |
| Hispanic origin and race:                   | -,                    |              |                   |         |                   |
| Black, non-Hispanic.                        | 1,313                 | 45.7         | 4.03              | 36.9    | 3.92              |
| White, non-Hispanic                         | 4,889                 | 37.5         | 2.72              | 29.6    | 2.50              |
| Hispanic <sup>2</sup>                       | 2,320                 | 34.1         | 2.92              | 27.4    | 2.98              |
| Age:                                        | 2,020                 | 04.1         | 2.52              | 27.4    | 2.30              |
| 5                                           | E 404                 | 22.1         | 2.13              | 10 5    | 1.93              |
| 15–17                                       | 5,494                 |              |                   | 16.5    |                   |
| 18–19                                       | 3,946                 | 58.8         | 3.22              | 48.3    | 3.00              |
| Parental living arrangement (at interview): |                       |              |                   |         |                   |
| Both biological or adoptive parents         | 4,361                 | 23.9         | 2.38              | 18.3    | 2.26              |
| Biological and step or adoptive parent      | 1,352                 | 44.7         | 5.21              | 30.3    | 4.99              |
| Single parent (biological, adoptive, or     |                       |              |                   |         |                   |
| step parent)                                | 2,733                 | 44.5         | 3.29              | 37.4    | 3.08              |
| Mother's age at first birth:                |                       |              |                   |         |                   |
| Younger than 20                             | 2,681                 | 50.0         | 3.26              | 39.9    | 3.39              |
| 20 or older                                 | 6,530                 | 31.6         | 1.82              | 24.9    | 1.88              |
| Male                                        |                       |              |                   |         |                   |
| Total, 2002 <sup>1</sup>                    | 10,208                | 39.8         | 2.06              | 31.7    | 1.82              |
| Total, 2006–2010 <sup>1</sup>               | 10,817                | 37.6         | 1.44              | 27.9    | 1.50              |
| Total, 2011–2015 <sup>1</sup>               | 9,997                 | 39.5         | 1.41              | 28.7    | 1.39              |
| Total, 2015–2019 <sup>1</sup>               | 9,902                 | 34.2         | 1.81              | 24.9    | 1.64              |
| Hispanic origin and race:                   | 0,002                 | 02           |                   | 2.110   |                   |
| Black, non-Hispanic.                        | 1.383                 | 43.4         | 3.67              | 31.9    | 3.22              |
| White, non-Hispanic                         | 5,070                 | 29.5         | 2.48              | 22.3    | 2.38              |
| Hispanic <sup>2</sup>                       | 2.404                 | 29.5<br>38.9 | 2.40              | 22.3    | 2.30              |
| •                                           | 2,404                 | 30.9         | 2.71              | 20.0    | 2.01              |
| Age:                                        | = = 40                | 04 5         | 4 70              | 10 7    |                   |
| 15–17                                       | 5,748                 | 21.5         | 1.78              | 13.7    | 1.41              |
| 18–19                                       | 4,153                 | 51.8         | 3.01              | 40.3    | 2.83              |
| Parental living arrangement (at interview): |                       |              |                   |         |                   |
| Both biological or adoptive parents         | 4,820                 | 27.8         | 2.27              | 18.7    | 1.85              |
| Biological and step or adoptive parent      | 1,508                 | 42.3         | 4.77              | 33.9    | 4.72              |
| Single parent (biological, adoptive, or     |                       |              |                   |         |                   |
| step parent)                                | 2,871                 | 37.6         | 2.76              | 28.2    | 2.53              |
| Mother's age at first birth:                |                       |              |                   |         |                   |
| Younger than 20                             | 2,538                 | 44.8         | 3.50              | 37.7    | 3.60              |
| 20 or older                                 | 7,248                 | 30.6         | 1.90              | 20.7    | 1.51              |

<sup>1</sup>Includes people of other or multiple Hispanic-origin and race groups, those in living arrangements that did not include parents or parent figures, those with a mother figure who had no births, and those who reported no mother or mother figure, not shown

separately. <sup>2</sup>People of Hispanic origin may be of any race.

NOTE: Sex is defined in this report as vaginal intercourse between opposite-sex partners.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2002, 2006–2010, 2011–2015, and 2015–2019.

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#### Table 3. Cumulative probability of having had first sex by age 15, 16, 17, 18, 19, and 20 for females and males ages 15–24: United States, 2011-2015 and 2015-2019

|                                                         |      | Female, | probability | of first se | x by age: |      | Male, probability of first sex by age: |      |      |      |      |      |  |  |
|---------------------------------------------------------|------|---------|-------------|-------------|-----------|------|----------------------------------------|------|------|------|------|------|--|--|
| Characteristic                                          | 15   | 16      | 17          | 18          | 19        | 20   | 15                                     | 16   | 17   | 18   | 19   | 20   |  |  |
|                                                         | 0.11 | 0.25    | 0.42        | 0.55        | 0.69      | 0.75 | 0.16                                   | 0.27 | 0.41 | 0.55 | 0.68 | 0.75 |  |  |
| Total, 2015–2019 <sup>1</sup> Hispanic origin and race: | 0.21 | 0.34    | 0.51        | 0.64        | 0.71      | 0.76 | 0.20                                   | 0.34 | 0.48 | 0.60 | 0.67 | 0.73 |  |  |
| Black, non-Hispanic                                     | 0.26 | 0.39    | 0.58        | 0.75        | 0.82      | 0.85 | 0.30                                   | 0.43 | 0.57 | 0.66 | 0.76 | 0.82 |  |  |
| White, non-Hispanic                                     | 0.21 | 0.34    | 0.51        | 0.64        | 0.71      | 0.77 | 0.15                                   | 0.30 | 0.44 | 0.57 | 0.65 | 0.73 |  |  |
| Hispanic <sup>2</sup>                                   | 0.18 | 0.32    | 0.47        | 0.58        | 0.71      | 0.75 | 0.25                                   | 0.39 | 0.56 | 0.65 | 0.72 | 0.74 |  |  |
| Mother's education:                                     |      |         |             |             |           |      |                                        |      |      |      |      |      |  |  |
| No high school diploma or GED                           | 0.26 | 0.37    | 0.51        | 0.65        | 0.74      | 0.77 | 0.24                                   | 0.39 | 0.54 | 0.62 | 0.68 | 0.73 |  |  |
| High school diploma or GED                              | 0.25 | 0.39    | 0.58        | 0.69        | 0.75      | 0.80 | 0.25                                   | 0.39 | 0.52 | 0.65 | 0.76 | 0.81 |  |  |
| Some college or higher                                  | 0.18 | 0.31    | 0.48        | 0.61        | 0.69      | 0.73 | 0.16                                   | 0.30 | 0.45 | 0.57 | 0.64 | 0.70 |  |  |
| Parental living arrangement at age 14:                  |      |         |             |             |           |      |                                        |      |      |      |      |      |  |  |
| Both biological or adoptive parents                     | 0.16 | 0.27    | 0.42        | 0.55        | 0.64      | 0.69 | 0.15                                   | 0.28 | 0.43 | 0.55 | 0.63 | 0.69 |  |  |
| Biological mother and stepfather                        | 0.30 | 0.45    | 0.64        | 0.80        | 0.83      | 0.84 | 0.26                                   | 0.48 | 0.61 | 0.68 | 0.79 | 0.87 |  |  |
| Other <sup>3</sup>                                      | 0.29 | 0.47    | 0.67        | 0.79        | 0.85      | 0.88 | 0.30                                   | 0.47 | 0.58 | 0.70 | 0.78 | 0.81 |  |  |

<sup>1</sup>Includes people of other or multiple Hispanic-origin and race groups, not shown separately.

<sup>3</sup>Other parental living arrangement refers to anything other than two biological or adoptive parents or biological mother and stepfather, including one biological parent and no other parent(s) or parent figures or no parent(s) or parent figures.

NOTE: Sex is defined in this report as vaginal intercourse between opposite-sex partners.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2011-2015 and 2015-2019.

### Table 4. Feelings about first sex for females and males ages 18-24 at interview who had first sex before age 20: United States, 2015-2019

|                                                 |                       |       |                         |                              | How much first | sex was wanted <sup>1</sup>                           |         |                            |
|-------------------------------------------------|-----------------------|-------|-------------------------|------------------------------|----------------|-------------------------------------------------------|---------|----------------------------|
|                                                 |                       |       | Really didr<br>happen a | i't want it to<br>t the time | me wanted it t | eelings—part of<br>o happen at the<br>rt of me didn't |         | anted it to<br>at the time |
| Characteristic                                  | Number<br>(thousands) | Total | Percent                 | Standard<br>error            | Percent        | Standard<br>error                                     | Percent | Standard<br>error          |
| Female                                          |                       |       |                         |                              |                |                                                       |         |                            |
| Total <sup>2</sup><br>Hispanic origin and race: | 9,965                 | 100.0 | 7.6                     | 0.89                         | 46.5           | 1.89                                                  | 45.9    | 1.86                       |
| Black, non-Hispanic                             | 1,638                 | 100.0 | 10.7                    | 2.84                         | 51.1           | 4.15                                                  | 38.2    | 3.85                       |
| White, non-Hispanic                             | 5,162                 | 100.0 | 7.5                     | 1.30                         | 42.2           | 2.70                                                  | 50.2    | 2.84                       |
| Hispanic <sup>3</sup>                           | 2,237                 | 100.0 | 6.6                     | 1.62                         | 49.9           | 4.03                                                  | 43.5    | 3.85                       |
| Age at first sex:                               |                       |       |                         |                              |                |                                                       |         |                            |
| 14 or younger                                   | 1,477                 | 100.0 | 19.3                    | 4.00                         | 50.2           | 5.15                                                  | 30.5    | 4.73                       |
| 15–17                                           | 6,063                 | 100.0 | 6.0                     | 0.95                         | 46.5           | 2.15                                                  | 47.5    | 2.06                       |
| 18–19                                           | 2,426                 | 100.0 | 4.6                     | 1.25                         | 44.1           | 4.00                                                  | 51.3    | 4.01                       |
| Age of male partner:                            |                       |       |                         |                              |                |                                                       |         |                            |
| Younger                                         | 647                   | 100.0 | *                       | *                            | 51.1           | 6.75                                                  | 44.8    | 6.52                       |
| Same age                                        | 3,128                 | 100.0 | 5.2                     | 1.54                         | 42.8           | 3.06                                                  | 52.0    | 3.16                       |
| 1–2 years older                                 | 4,159                 | 100.0 | 5.6                     | 1.16                         | 46.5           | 2.64                                                  | 47.9    | 2.62                       |
| 3 or more years older                           | 2,032                 | 100.0 | 16.8                    | 2.88                         | 50.6           | 3.56                                                  | 32.7    | 3.51                       |
| Male                                            |                       |       |                         |                              |                |                                                       |         |                            |
| Total <sup>2</sup><br>Hispanic origin and race: | 9,588                 | 100.0 | 4.2                     | 0.75                         | 27.2           | 1.70                                                  | 68.6    | 1.91                       |
| Black, non-Hispanic                             | 1,514                 | 100.0 | 5.2                     | 1.38                         | 31.5           | 3.77                                                  | 63.3    | 4.10                       |
| White, non-Hispanic                             | 4,843                 | 100.0 | 2.5                     | 0.83                         | 22.3           | 2.28                                                  | 75.3    | 2.32                       |
| Hispanic <sup>3</sup>                           | 2,410                 | 100.0 | 6.6                     | 1.93                         | 33.7           | 3.55                                                  | 59.7    | 4.28                       |
| Age at first sex:                               |                       |       |                         |                              |                |                                                       |         |                            |
| 14 or younger                                   | 1,818                 | 100.0 | 8.3                     | 2.21                         | 27.6           | 4.62                                                  | 64.1    | 4.64                       |
| 15–17                                           | 5,462                 | 100.0 | 3.5                     | 0.96                         | 28.0           | 2.48                                                  | 68.6    | 2.87                       |
| 18–19                                           | 2,308                 | 100.0 | 2.7                     | 0.82                         | 25.1           | 3.48                                                  | 72.2    | 3.41                       |
| Age of female partner:                          |                       |       |                         |                              |                |                                                       |         |                            |
| Younger                                         | 1,932                 | 100.0 | 1.5                     | 0.61                         | 25.8           | 3.26                                                  | 72.6    | 3.27                       |
| Same age                                        | 4,622                 | 100.0 | 3.4                     | 1.13                         | 24.1           | 2.74                                                  | 72.6    | 2.88                       |
| 1–2 years older                                 | 2,386                 | 100.0 | 7.0                     | 1.79                         | 33.6           | 4.05                                                  | 59.4    | 4.06                       |
| 3 or more years older                           | 648                   | 100.0 | *                       | *                            | 30.3           | 5.34                                                  | 62.2    | 6.24                       |

\* Estimate does not meet National Center for Health Statistics standards of reliability.
 <sup>1</sup>Based on a response to a question in the self-administered portion of the questionnaire (only asked for respondents age 18 and older) asking which of the three reponses comes closest to describing how much the respondent wanted their first sex to happen when it did.
 <sup>2</sup>Includes people of other or multiple Hispanic-origin and race groups, not shown separately.
 <sup>3</sup>Hispanic people may be of any race.

NOTE: Sex is defined in this report as vaginal intercourse between opposite-sex partners.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2015-2019.

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#### Table 5. Main reason for never having had sex for females and males ages 15–19: United States, 2015–2019

|                                                   |         |                   |            |                   | Hispanic ori | gin and race <sup>1</sup> |                       |                   |
|---------------------------------------------------|---------|-------------------|------------|-------------------|--------------|---------------------------|-----------------------|-------------------|
|                                                   | Тс      | otal              | Black, nor | n-Hispanic        | White, no    | n-Hispanic                | Hispanic <sup>2</sup> |                   |
| Main reason                                       | Percent | Standard<br>error | Percent    | Standard<br>error | Percent      | Standard<br>error         | Percent               | Standard<br>error |
| Female                                            |         |                   |            |                   |              |                           |                       |                   |
| Total (number in thousands) <sup>1</sup>          | 5,      | 581               | ç          | 973               | 4,6          | 642                       | 2,0                   | )54               |
| Total <sup>1</sup>                                | 100.0   |                   | 100.0      |                   | 100.0        |                           | 100.0                 |                   |
| Main reason:                                      |         |                   |            |                   |              |                           |                       |                   |
| Against religion or morals                        | 32.5    | 2.61              | 23.3       | 3.95              | 37.8         | 3.43                      | 23.7                  | 3.25              |
| Don't want to get pregnant.                       | 15.9    | 1.49              | 14.1       | 2.29              | 12.7         | 2.01                      | 23.1                  | 3.31              |
| Don't want to get a sexually transmitted disease  | 4.4     | 0.67              | 10.6       | 2.24              | 2.6          | 0.73                      | 4.8                   | 1.25              |
| Haven't found the right person yet                | 25.3    | 1.89              | 28.1       | 6.02              | 24.6         | 2.44                      | 26.3                  | 3.03              |
| In a relationship, but waiting for the right time | 5.6     | 0.88              | *          | *                 | 4.8          | 1.16                      | 8.2                   | 1.92              |
| Other reason                                      | 16.2    | 1.57              | 19.2       | 3.54              | 17.4         | 2.16                      | 13.8                  | 2.30              |
| Male                                              |         |                   |            |                   |              |                           |                       |                   |
| Total (number in thousands) <sup>1</sup>          | 9,      | 724               | 1,0        | 015               | 5,3          | 389                       | 1,9                   | 992               |
| Total <sup>1</sup>                                | 100.0   |                   | 100.0      |                   | 100.0        |                           | 100.0                 |                   |
| Main reason:                                      |         |                   |            |                   |              |                           |                       |                   |
| Against religion or morals                        | 26.2    | 2.35              | 24.0       | 4.62              | 30.1         | 3.21                      | 19.5                  | 3.00              |
| Don't want to get a female pregnant               | 11.1    | 1.07              | 19.4       | 3.34              | 8.2          | 1.43                      | 17.3                  | 2.65              |
| Don't want to get a sexually transmitted disease  | 4.2     | 0.61              | 10.7       | 2.68              | 2.0          | 0.54                      | 5.4                   | 1.55              |
| Haven't found the right person yet                | 35.3    | 1.75              | 24.4       | 4.29              | 38.5         | 2.72                      | 31.6                  | 3.02              |
| In a relationship, but waiting for the right time | 4.7     | 0.61              | 6.9        | 1.28              | 2.8          | 0.63                      | 6.9                   | 1.88              |
| Other reason                                      | 18.6    | 1.56              | 14.6       | 3.34              | 18.3         | 2.27                      | 19.3                  | 3.64              |

. Category not applicable.

Estimate does not meet National Center for Health Statistics standards of reliability.

<sup>1</sup>Includes people of other or multiple Hispanic-origin and race groups, not shown separately. <sup>2</sup>Hispanic people may be of any race.

NOTE: Sex is defined in this report as vaginal intercourse between opposite-sex partners.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2015-2019.

#### Table 6. Ever use of contraception among females ages 15–19 who have ever had sex, by method of contraception: United States, 2002, 2006-2010, 2011-2015, and 2015-2019

|                                                          | 20      | 002               | 2006    | -2010             | 2011    | -2015             | 2015–2019 |                   |  |
|----------------------------------------------------------|---------|-------------------|---------|-------------------|---------|-------------------|-----------|-------------------|--|
| Method                                                   | Percent | Standard<br>error | Percent | Standard<br>error | Percent | Standard<br>error | Percent   | Standard<br>error |  |
| Total (number in thousands)                              | 4,5     | 598               | 4,      | 531               | 4,0     | 079               | 3,        | 849               |  |
| Any method                                               | 97.7    | 0.51              | 98.9    | 0.53              | 99.4    | 0.24              | 98.9      | 0.44              |  |
| Pill                                                     | 61.4    | 2.81              | 55.6    | 2.37              | 55.5    | 2.52              | 52.0      | 2.76              |  |
| njectable                                                | 20.7    | 2.55              | 20.3    | 1.48              | 17.3    | 1.60              | 18.1      | 2.13              |  |
| Long-acting reversible contraception (LARC) <sup>1</sup> | 0.4     | 0.26              | 3.1     | 0.72              | 5.8     | 1.13              | 19.2      | 2.50              |  |
| Intrauterine device (IUD)                                | 0.2     | 0.19              | 2.5     | 0.66              | 2.8     | 0.79              | 6.1       | 1.28              |  |
| Implant                                                  | 0.1     | 0.12              | 0.6     | 0.27              | 3.0     | 0.74              | 13.3      | 1.94              |  |
| Emergency contraception                                  | 8.1     | 1.68              | 13.7    | 1.34              | 22.9    | 2.17              | 22.3      | 2.22              |  |
| Contraceptive patch                                      | 1.5     | 1.07              | 10.3    | 1.27              | 1.8     | 0.39              | 2.0       | 0.91              |  |
| Contraceptive ring                                       |         |                   | 5.2     | 0.95              | 5.3     | 1.41              | *         | *                 |  |
| Condom                                                   | 93.7    | 1.02              | 95.9    | 0.86              | 97.4    | 0.55              | 95.4      | 0.80              |  |
| Fertility awareness methods <sup>2</sup>                 | 10.8    | 1.73              | 15.0    | 1.34              | 12.1    | 1.13              | 12.4      | 1.83              |  |
| Vithdrawal                                               | 55.0    | 2.30              | 57.3    | 2.26              | 59.7    | 2.58              | 64.8      | 2.76              |  |
| Other methods <sup>3</sup>                               | 9.9     | 1.63              | 7.1     | 0.85              | 2.5     | 0.58              | 2.2       | 0.60              |  |

.. Category not applicable because method was not available at the time of survey.

\* Estimate does not meet National Center for Health Statistics standards of reliability.

<sup>1</sup>Includes intrauterine device (IUD) and contraceptive implant. <sup>2</sup>Includes calendar rhythm, Standard Days, or CycleBeads, or safe period by temperature or cervical mucus test. <sup>3</sup>Other methods include vasectomy, female condom, foam, jelly or cream, suppository, and others.

NOTE: Sex is defined in this report as vaginal intercourse between opposite-sex partners.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2002, 2006–2010, 2011–2015, and 2015–2019.

Table 7. Use of contraception at first sex among females and males ages 15–19 who had ever had sex, by method used: United States, 2002, 2006–2010, 2011–2015, and 2015–2019

|                  |                       | Any n   | nethod            | No m    | nethod            | F       | Pill              | Other h | ormonal <sup>1</sup> | Cor     | ıdom              | All other | methods <sup>2</sup> |         | nethods<br>and condom) |
|------------------|-----------------------|---------|-------------------|---------|-------------------|---------|-------------------|---------|----------------------|---------|-------------------|-----------|----------------------|---------|------------------------|
| Characteristic   | Number<br>(thousands) | Percent | Standard<br>error | Percent | Standard<br>error | Percent | Standard<br>error | Percent | Standard<br>error    | Percent | Standard<br>error | Percent   | Standard<br>error    | Percent | Standard<br>error      |
| Female           |                       |         |                   |         |                   |         |                   |         |                      |         |                   |           |                      |         |                        |
| Total, 2002      | 4,598                 | 74.5    | 2.00              | 25.5    | 2.00              | 16.5    | 1.94              | 2.1     | 0.70                 | 66.4    | 2.01              | 2.6       | 0.84                 | 13.1    | 1.87                   |
| Total, 2006–2010 |                       | 78.3    | 1.93              | 21.7    | 1.93              | 15.7    | 1.63              | 6.1     | 1.14                 | 68.0    | 2.00              | 3.4       | 0.81                 | 14.8    | 1.46                   |
| Total, 2011–2015 | 4,079                 | 81.0    | 1.77              | 19.0    | 1.77              | 19.5    | 1.95              | 3.1     | 0.60                 | 74.6    | 1.88              | 2.3       | 0.54                 | 18.5    | 1.89                   |
| Total, 2015–2019 | 3,849                 | 77.3    | 2.91              | 22.7    | 2.91              | 17.6    | 2.47              | 5.9     | 1.49                 | 64.9    | 2.93              | 3.8       | 1.21                 | 14.8    | 1.85                   |
| Male             |                       |         |                   |         |                   |         |                   |         |                      |         |                   |           |                      |         |                        |
| Total, 2002      | 4,697                 | 82.0    | 2.21              | 18.0    | 2.21              | 14.9    | 1.93              | 2.1     | 0.71                 | 70.9    | 2.44              | 4.7       | 1.15                 | 10.4    | 1.40                   |
| Total, 2006–2010 | 4,551                 | 85.4    | 1.60              | 14.6    | 1.60              | 17.9    | 1.97              | 1.4     | 0.60                 | 79.6    | 1.96              | 2.7       | 0.72                 | 16.2    | 1.78                   |
| Total, 2011–2015 | 4,437                 | 83.6    | 1.71              | 16.4    | 1.71              | 20.0    | 2.10              | 1.8     | 0.40                 | 76.8    | 1.94              | 3.9       | 0.74                 | 18.8    | 1.97                   |
| Total, 2015–2019 | 3,843                 | 92.1    | 1.15              | 7.9     | 1.15              | 21.4    | 2.33              | 2.2     | 0.42                 | 84.5    | 1.61              | 3.8       | 0.86                 | 19.7    | 2.36                   |

<sup>1</sup>Includes Depo-Provera injectable and Norplant implant in all time periods; adds Lunelle injectable, emergency contraception, and contraceptive patch in 2002; adds contraceptive ring (Nuva-Ring) and Implanon implant in 2006–2010; and adds Nexplanon implant in 2011–2015. Intrauterine device (IUD) is not included, but is included in "other methods" because if IUD was hormonal or nonhormonal was not captured in the data.

<sup>2</sup>Includes withdrawal, sterilization, IUD, female condom, diaphragm, cervical cap, spermicidal foam, jelly, cream or suppository, sponge, calendar rhythm method, and other methods. Excludes condom and hormonal methods, so if another method was combined with condom or hormonal method, it is not included here.

NOTES: Sex is defined in this report as vaginal intercourse between opposite-sex partners. Data for "condom," "pill," and "other hormonal" reflect use of that method regardless of if it was used alone or in combination with another method.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2002, 2006–2010, 2011–2015, and 2015–2019.

#### Table 8. Use of contraception at last sex in the past 3 months among females and males ages 15–19, by method used: United States, 2002, 2006–2010, 2011–2015, and 2015–2019

|                               |                       | Any n   | nethod            | No m    | ethod             | Con     | ıdom              | F       | Pill              | Other h | ormonal <sup>1</sup> | All other | methods <sup>2</sup> |         | nethods<br>and condom) |
|-------------------------------|-----------------------|---------|-------------------|---------|-------------------|---------|-------------------|---------|-------------------|---------|----------------------|-----------|----------------------|---------|------------------------|
| Characteristic                | Number<br>(thousands) | Percent | Standard<br>error    | Percent   | Standard<br>error    | Percent | Standard<br>error      |
| Female                        |                       |         |                   |         |                   |         |                   |         |                   |         |                      |           |                      |         |                        |
| Total, 2002 <sup>1</sup>      | 3,512                 | 82.9    | 2.22              | 17.1    | 2.22              | 52.5    | 3.11              | 34.6    | 3.03              | 9.5     | 1.77                 | 5.2       | 1.19                 | 18.7    | 2.43                   |
| Total, 2006–2010 <sup>1</sup> | 3,282                 | 85.2    | 1.86              | 14.8    | 1.86              | 50.8    | 2.80              | 29.7    | 2.21              | 12.5    | 1.59                 | 11.7      | 1.78                 | 19.5    | 2.15                   |
| Total, 2011–2015 <sup>1</sup> | 2,866                 | 88.8    | 1.56              | 11.2    | 1.56              | 56.1    | 2.97              | 30.9    | 2.66              | 12.4    | 2.03                 | 9.6       | 1.55                 | 21.2    | 2.58                   |
| Total, 2015–2019 <sup>1</sup> | 2,814                 | 90.2    | 1.88              | 9.8     | 1.88              | 49.7    | 3.36              | 30.0    | 3.24              | 21.0    | 3.08                 | 11.9      | 2.26                 | 22.5    | 2.99                   |
| Male                          |                       |         |                   |         |                   |         |                   |         |                   |         |                      |           |                      |         |                        |
| Total, 2002 <sup>1</sup>      | 3,233                 | 90.0    | 2.38              | 10.0    | 2.38              | 70.2    | 2.92              | 30.8    | 2.72              | 6.2     | 1.43                 | 6.8       | 1.67                 | 23.7    | 2.30                   |
| Total, 2006–2010 <sup>1</sup> |                       | 92.5    | 1.24              | 7.5     | 1.24              | 74.1    | 2.26              | 38.5    | 2.53              | 9.2     | 1.55                 | 4.0       | 0.79                 | 33.3    | 2.78                   |
| Total, 2011–2015 <sup>1</sup> | 2,866                 | 94.5    | 1.15              | 5.5     | 1.15              | 74.7    | 2.16              | 39.5    | 2.76              | 10.1    | 1.52                 | 6.0       | 1.02                 | 34.6    | 2.97                   |
| Total, 2015–2019 <sup>1</sup> | 2,463                 | 93.7    | 1.29              | 6.3     | 1.29              | 68.1    | 3.16              | 44.0    | 3.21              | 9.8     | 1.56                 | 7.3       | 1.91                 | 33.8    | 3.73                   |

<sup>1</sup>Includes Depo-Provera injectable and Norplant implant in all time periods; adds Lunelle injectable, emergency contraception, and contraceptive patch in 2002; adds contraceptive ring (Nuva-Ring) and Implanon implant in 2006–2010; and adds Nexplanon implant in 2011–2015. Intrauterine device (IUD) is not included, but is included in "other methods" because if IUD was hormonal or nonhormonal was not captured in the data.

<sup>2</sup>Includes withdrawal, sterilization, IUD, female condom, diaphragm, cervical cap, spermicidal foam, jelly, cream or suppository, sponge, calendar rhythm method, and other methods. Excludes condom and hormonal methods, so if another method was combined with condom or hormonal method, it is not included here.

NOTES: Sex is defined in this report as vaginal intercourse between opposite-sex partners. Data for "condom," "pill," and "other hormonal" reflect use of that method regardless of if it was used alone or in combination with another method.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2002, 2006-2010, 2011-2015, and 2015-2019.

#### Table 9. Cumulative probability of having had a first birth by age 15, 16, 17, 18, 19, and 20 for females ages 15-24: United States, 2011-2015 and 2015-2019

|                                        |      | Proba | bility of fi | rst birth b | y age: |      |
|----------------------------------------|------|-------|--------------|-------------|--------|------|
| Characteristic                         | 15   | 16    | 17           | 18          | 19     | 20   |
| Total, 2011–2015 <sup>1</sup>          | 0.00 | 0.01  | 0.03         | 0.05        | 0.10   | 0.15 |
| Total, 2015–2019 <sup>1</sup>          | 0.01 | 0.02  | 0.03         | 0.06        | 0.10   | 0.16 |
| Hispanic origin and race:              |      |       |              |             |        |      |
| Black, non-Hispanic                    | 0.01 | 0.03  | 0.05         | 0.08        | 0.11   | 0.22 |
| White, non-Hispanic                    | 0.01 | 0.01  | 0.02         | 0.04        | 0.09   | 0.14 |
| Hispanic <sup>2</sup>                  | 0.01 | 0.03  | 0.05         | 0.09        | 0.14   | 0.19 |
| Contraceptive use at first sex3:       |      |       |              |             |        |      |
| Used contraception                     | 0.00 | 0.01  | 0.02         | 0.05        | 0.10   | 0.14 |
| Did not use contraception              | 0.04 | 0.09  | 0.13         | 0.18        | 0.26   | 0.42 |
| Mother's age at first birth:           |      |       |              |             |        |      |
| Younger than 20                        | 0.01 | 0.03  | 0.05         | 0.08        | 0.17   | 0.29 |
| 20 or older                            | 0.01 | 0.01  | 0.03         | 0.05        | 0.09   | 0.12 |
| Mother's education:                    |      |       |              |             |        |      |
| No high school diploma or GED          | 0.02 | 0.05  | 0.08         | 0.13        | 0.24   | 0.36 |
| High school diploma or GED             | 0.01 | 0.02  | 0.03         | 0.06        | 0.12   | 0.19 |
| Some college or higher                 | 0.00 | 0.01  | 0.02         | 0.03        | 0.06   | 0.09 |
| Parental living arrangement at age 14: |      |       |              |             |        |      |
| Both biological or adoptive parents    | 0.00 | 0.01  | 0.02         | 0.04        | 0.07   | 0.11 |
| Biological mother and stepfather       | 0.02 | 0.04  | 0.05         | 0.08        | 0.15   | 0.26 |
| Other <sup>4</sup>                     | 0.02 | 0.03  | 0.05         | 0.09        | 0.15   | 0.24 |

<sup>1</sup>Includes people of other or multiple Hispanic-origin and race groups, not shown separately.
<sup>2</sup>People of Hispanic origin may be of any race.
<sup>3</sup>Sex is defined in this report as vaginal intercourse between opposite-sex partners.
<sup>4</sup>Other parental living arrangement refers to anything other than two biological or adoptive parents or biological mother and stepfather, including one biological parent and no other parent(s) or parent figures or no parent(s) or parent figures.

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2011-2015 and 2015-2019.

#### Table 10. Percent distribution of feelings towards a hypothetical pregnancy among never-marrried females and males ages 15–19: United States, 2011-2015 and 2015-2019

|                                        |                       |       | Very    | upset             | A little | e upset           | A little | pleased           | Very p  | oleased           |
|----------------------------------------|-----------------------|-------|---------|-------------------|----------|-------------------|----------|-------------------|---------|-------------------|
| Characteristic                         | Number<br>(thousands) | Total | Percent | Standard<br>error | Percent  | Standard<br>error | Percent  | Standard<br>error | Percent | Standard<br>error |
| Female                                 |                       |       |         |                   |          |                   |          |                   |         |                   |
| Total 2011–2015 <sup>1</sup>           | 9,128                 | 100.0 | 60.5    | 1.80              | 28.0     | 1.50              | 7.3      | 0.79              | 4.0     | 0.80              |
| Total 2015–2019 <sup>1</sup>           | 9,227                 | 100.0 | 57.9    | 1.84              | 29.8     | 1.61              | 9.0      | 1.09              | 3.1     | 0.48              |
| Hispanic origin and race:              |                       |       |         |                   |          |                   |          |                   |         |                   |
| Black, non-Hispanic                    | 1,257                 | 100.0 | 53.7    | 4.07              | 31.5     | 3.54              | 10.4     | 3.02              | *       | *                 |
| White, non-Hispanic                    | 4,803                 | 100.0 | 60.3    | 2.26              | 28.8     | 2.27              | 8.4      | 1.57              | 2.2     | 0.55              |
| Hispanic <sup>2</sup>                  | 2,267                 | 100.0 | 50.1    | 3.57              | 33.8     | 2.92              | 11.4     | 2.28              | 4.3     | 1.08              |
| Age:                                   |                       |       |         |                   |          |                   |          |                   |         |                   |
| 15–17                                  | 5,439                 | 100.0 | 66.0    | 2.26              | 27.1     | 2.01              | 4.6      | 0.72              | 2.1     | 0.55              |
| 18–19                                  | 3,788                 | 100.0 | 46.2    | 2.87              | 33.7     | 2.48              | 15.3     | 2.34              | 4.5     | 0.92              |
| Ever had sex <sup>3</sup> :            |                       |       |         |                   |          |                   |          |                   |         |                   |
| Yes                                    | 3,684                 | 100.0 | 42.3    | 3.00              | 37.6     | 2.77              | 16.1     | 2.27              | 3.9     | 0.88              |
| No                                     | 5,543                 | 100.0 | 68.2    | 2.07              | 24.6     | 1.93              | 4.3      | 0.77              | 2.5     | 0.61              |
| Parental living arrangement at age 14: |                       |       |         |                   |          |                   |          |                   |         |                   |
| Both biological or adoptive parents    | 5,771                 | 100.0 | 63.5    | 2.34              | 28.1     | 2.11              | 5.8      | 1.06              | 2.4     | 0.53              |
| Biological mother and stepfather       |                       | 100.0 | 47.2    | 4.88              | 38.7     | 4.84              | 10.2     | 2.96              | *       | *                 |
| Other <sup>4</sup>                     | 2,606                 | 100.0 | 48.7    | 3.16              | 30.7     | 2.65              | 15.6     | 3.11              | 4.4     | 1.01              |
| Male                                   |                       |       |         |                   |          |                   |          |                   |         |                   |
| Total 2011–2015 <sup>1</sup>           | 9.644                 | 100.0 | 46.1    | 1.70              | 33.7     | 1.50              | 13.6     | 0.90              | 6.0     | 0.80              |
| Total 2015–2019 <sup>1</sup>           | 9,438                 | 100.0 | 44.3    | 1.76              | 36.0     | 1.48              | 13.3     | 1.09              | 5.1     | 0.88              |
| Hispanic origin and race:              | ,                     |       |         |                   |          |                   |          |                   |         |                   |
| Black, non-Hispanic.                   | 1,319                 | 100.0 | 33.1    | 3.89              | 41.6     | 4.49              | 17.5     | 3.01              | 6.7     | 1.49              |
| White, non-Hispanic                    | 4,871                 | 100.0 | 51.1    | 2.41              | 36.8     | 2.14              | 9.2      | 1.37              | 1.7     | 0.49              |
| Hispanic <sup>2</sup>                  | 2,291                 | 100.0 | 33.1    | 2.72              | 32.3     | 2.11              | 21.9     | 2.38              | 11.7    | 2.74              |
| Age:                                   | ,                     |       |         |                   |          |                   |          |                   |         |                   |
| 15–17                                  | 5,558                 | 100.0 | 50.7    | 2.20              | 35.4     | 1.96              | 10.5     | 1.36              | 2.7     | 0.67              |
| 18–19                                  | 3,879                 | 100.0 | 35.2    | 2.43              | 36.9     | 2.70              | 17.2     | 2.02              | 8.6     | 1.62              |
| Ever had sex <sup>3</sup> :            | -,                    |       |         |                   |          |                   |          |                   |         |                   |
| Yes                                    | 3.652                 | 100.0 | 32.1    | 2.61              | 40.3     | 2.74              | 16.2     | 1.98              | 10.2    | 1.81              |
| No                                     | - /                   | 100.0 | 52.0    | 2.16              | 33.4     | 1.70              | 11.4     | 1.32              | 2.1     | 0.47              |
| Parental living arrangement at age 14: | -,                    |       |         |                   |          |                   |          |                   |         |                   |
| Both biological or adoptive parents    | 6,282                 | 100.0 | 48.7    | 2.10              | 34.4     | 1.75              | 11.5     | 1.36              | 4.2     | 0.83              |
| Biological mother and stepfather       | ,                     | 100.0 | 36.6    | 5.53              | 36.3     | 5.01              | 18.3     | 4.38              | *       | *                 |
| Other <sup>4</sup>                     | 2.237                 | 100.0 | 35.2    | 3.22              | 40.4     | 3.11              | 16.0     | 2.01              | 6.6     | 1.15              |

\* Estimate does not meet National Center for Health Statistics standards of reliability.

<sup>1</sup>Includes people of other or multiple Hispanic-origin and race groups, not shown separately. <sup>2</sup>People of Hispanic origin may be of any race. <sup>3</sup>Sex is defined in this report as vaginal intercourse between opposite-sex partners.

<sup>4</sup>Other parental living arrangements refer to anything other than two biological or adoptive parents or biological mother and stepfather, including one biological parent and no other parent(s) or parent figures or no parent(s) or parent figures.

NOTES: Percentages may not add to 100 because responses of "would not care" (coded only if respondent insisted), are not shown separately. Females were asked, "If you got pregnant now, how would you feel?" Males were asked, "If you got a female pregnant now, how would you feel?"

SOURCE: National Center for Health Statistics, National Survey of Family Growth, 2011-2015 and 2015-2019.

### U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

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