

2022-2023 National Survey of Family Growth (NSFG) Topic-Specific Notes

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This document provides notes for analysts for specific topics or variables in the NSFG, including notes on some questionnaire changes and disclosure risk reduction actions taken in 2022-2023.

ABORTION UNDER-REPORTING AMONG FEMALES

Abortions have always been under-reported in the NSFG and virtually all other demographic surveys. This has been determined by comparing NSFG weighted estimates of abortions with external data from abortion providers. The User's Guides of prior NSFG public-use file releases show the percentages of under-reporting based on these comparisons for past file releases. For the 2022-2023 NSFG, comparing pregnancies ending in abortion reported in 2016-2020 with the number of abortions in the Guttmacher Abortion Provider Census (<https://www.guttmacher.org/article/2022/11/abortion-incidence-and-service-availability-united-states-2020>) shows that approximately 37% of pregnancies ending in abortion were reported in the NSFG. The publication referenced above provides information on the completeness of the data from the Guttmacher Abortion Provider Census used for this comparison, however it is clear that under-reporting of abortion continues to be a significant factor in the representativeness of the abortions that are reported in the NSFG. Therefore, as in previous surveys, the NSFG staff advises NSFG data users that, generally speaking, NSFG data on abortion should **not** be used for substantive research focused on the determinants or consequences of abortion. The NSFG abortion data can be used for:

- (1) methodological studies of factors affecting abortion reporting.
- (2) studies of contraceptive efficacy, but only after the data are adjusted for the under-reporting of abortion.

BIRTH REPORTING AMONG FEMALES

This table shows a comparison of NSFG-based estimates of births occurring in 2017-2021, relative to births registered through the National Vital Statistics System (NVSS) in the United States for those same calendar years. These figures are based on births in those calendar years as reported by all female respondents in the 2022-2023 NSFG. The NSFG-based estimates are constructed from all births reported over a period of five years to increase the statistical reliability of the NSFG estimates. *(The number of births or pregnancies reported in any single*

calendar year by NSFG respondents would yield sampling errors too high to produce reliable estimates. Users are advised to combine multiple years when analyzing these data.) To make the NSFG estimates comparable to vital records, births are excluded if reported by non-U.S.-born NSFG respondents that occurred before they came to the U.S. to stay. Births reported in vital records are also limited to those occurring to women age 49 or younger, in order to be comparable to the NSFG age range.

Number of births estimated for 2017-2021, based on the 2022-2023 NSFG and Vital Records

	Number (in thousands) of births from NSFG	95% confidence interval	Number (in thousands) of births from Vital Records 1/	Ratio of NSFG/ Vital Records
Total, 2017-2021 2/	18,543	16,269-20,818	18,668	0.99
Year of delivery				
2021	3,505	2,919-4,092	3,663	0.96
2020	3,587	2,950-4,225	3,613	0.99
2019	4,205	3,445-4,965	3,746	1.12
2018	3,585	2,865-4,305	3,791	0.95
2017	3,660	2,971-4,349	3,855	0.95
Mother's Hispanic origin and race				
Hispanic or Latina	3,626	2,564-4,688	4,423	0.82
Not Hispanic or Latino				
White, single race	10,177	8,203-12,152	9,594	1.06
Black or African American, single race	2,700	1,905-3,494	2,708	1.00
Marital status at birth				
Married	12,591	10,724-14,458	9,826	1.28
Unmarried	5,952	4,677-7,228	6,625	0.90
Age at delivery				
15-19	732	453-1,012	851	0.86
20-24	3,615	2,625-4,606	3,509	1.03
25-49	14,196	12,355-16,036	14,298	0.99
25-29	4,847	3,985-5,710	5,350	0.91
30-39	8,564	7,221-9,906	8,307	1.03
40-49	785	474-1,096	641	1.22
Birth order				
1st	7,578	6,536-8,620	7,071	1.07
2nd	5,734	4,883-6,586	5,970	0.96
3rd or higher	5,231	4,230-6,232	5,578	0.94

1/ Vital Records data from CDC Wonder Database available here: <https://wonder.cdc.gov/> Limited to births occurring to women ages 49 and younger.

2/ Includes births to persons of other race and origin groups, those of unknown or not stated birth order, and to women under 15 years of age, not shown separately.

NOTES: The NSFG Hispanic origin and race variable shown here (HISPRACE2) is based on the 1997 Office of Management and Budget standards. For persons born outside the U.S. (50 states and D.C.), this table is limited to births occurring after they came to the United States to stay.

RELIGION DATA

Respondents were allowed to enter verbatim responses for the religion in which they were raised (OTHRLRSD) and their current religious affiliation (OTHRLNOW) if they could not find the response category for their religion provided for RELRSD (religion in which respondent was raised) and RELNOW (current religion). Upon review, these verbatim responses were “back-coded” where appropriate onto existing categories -- verbatim responses for OTHRLRSD were back-coded onto RELRSD and those for OTHRLNOW were back-coded onto RELNOW. The back-coding of the other-specify religion verbatim responses into existing categories was done similarly for male and female respondents. The final, back-coded version of RELNOW was then used to create the recode RELIGION for the public-use file. The full detail of RELNOW and RELRSD is available through the NCHS Research Data Center (RDC).

Previous releases of NSFG have included the variable RELTRAD, constructed in post-processing, which categorized Protestant respondents into three groups: Evangelical Protestant, Mainline Protestant, and Black Protestant. (See 2017-2019 User’s Guide for further details.) Although not included on the 2022-2023 data files, users can create a roughly comparable version to the past RELTRAD variable by using the Protestant category present in the RELIGION recode, fundamentalist ideology captured in the FUNDAM1 variable, and race/ethnicity indicated in the HISPRACE2 recode. White Evangelical Protestants could be defined as those who identify as Protestant; consider themselves to be a born-again Christian, a charismatic, an evangelical, or fundamentalist; and self-identify as non-Hispanic White race/ethnicity. White Mainline Protestants could be defined as those who identify as Protestant, “none of the above” fundamentalist ideology or don’t know/refused on that question, and non-Hispanic White. Black Protestants could be defined as those who identify as Protestant and non-Hispanic Black.

BODY MASS INDEX (BMI)

Body Mass Index (BMI) is a commonly used measure for assessing overweight or underweight of men and non-pregnant women. BMI in more detailed form was provided for public use in NSFG releases prior to 2017-2019. The 2022-2023 release includes a categorical BMI variable for public use (BMICAT), similar to what was included for 2017-2019 NSFG.

BMICAT is based on a restricted-use BMI variable computed with 1 decimal place, computed using the raw height and weight variables from ACASI (female JA-2a/b RHEIGHT_FT/_IN & JA-3 RWEIGHT; male KA-2a/b RHEIGHT_FT/_IN & KA-3 RWEIGHT). As in 2017-2019, the BMI variables defined for 2022-2023 are limited** to adult men aged 20-49 and non-pregnant adult women aged 20-49. The construction of BMI was computed based on INCHES (respondent’s height converted to inches, based on the raw variables) and RWEIGHT, using this formula:

$$\text{BMI} = \text{ROUND} [(\text{RWEIGHT} / \text{INCHES}^2) * 703]$$

Then this continuous BMI variable with 1 decimal place was made categorical in the BMICAT variable for public use, as shown below:

- 1 = Underweight (BMI < 18.5)
- 2 = Normal weight (BMI 18.5-24.9)
- 3 = Overweight (BMI 25.0-29.9)
- 4 = Obese (BMI > 30.0)
- 5 = Undefined BMI

The continuous BMI variable, as well as the INCHES and RWEIGHT variables used to define BMI, are available through the NCHS RDC.

**BMI is not computed for pregnant women because their weights at the time of interview do not reflect their usual or “normal” weight. For teenage respondents (males and non-pregnant females 15-19 years of age), BMI computed by the above formula is also not considered an appropriate assessment tool for overweight or underweight. It is more appropriate to assess weight for height, relative to standardized growth curves by age. For more information on the latest growth curves estimated by the Centers for Disease Control and Prevention, please visit <http://www.cdc.gov/nchs/data/nhanes/databriefs/growthch.pdf>

FEMALE RESPONDENT FILE NOTES

Section C: CE-1 EVERSEX, CE-3m/y WNFSTSEX_M/Y, and recode VRY1STSX

Question CE-1 EVERSEX (whether the respondent has ever had sexual intercourse with a male) is not asked of respondents who have already reported that they have ever been married to or cohabited with a male or ever been pregnant. For those respondents it is assumed they have had sexual intercourse with a male and asking CE-1 EVERSEX is not needed – instead they are skipped to the question asking for month and year of first sex (CE-3m WNFSTSEX_M, CE-3y WNFSTSEX_Y). The first question asking for month allows a response of “never had sex” (96). In each past data file, there are some cases where respondents who were assumed to have had sex with a male (skipped CE-1 EVERSEX) choose this option (CE-3m WNFSTSEX_M = 96) instead of providing a date. This reflects accurate reporting sometimes, for example, when a female respondent who is assumed to have had sexual intercourse with a male partner because she previously reported a pregnancy indicates she never had sex. She may have had a pregnancy using donor insemination or assisted reproductive technology. She may also say she never had sex if pregnancy resulted from nonvoluntary intercourse.

The number of instances in the 2022-2023 file appear higher than in past data releases and unlikely to all be accurate given other information reported in the survey. This may be related to the addition of web data collection and difficulty reporting date of first sex. For example, some respondents may have chosen “never had sexual intercourse (96)” when trying to enter “don’t know” or “prefer not to answer,” when they actually had ever had sex, but they did not remember or did not want to report the date of first sex. Asked variables CE-3m/y are not

included on the file, but the recode VRY1STSX has values of 9996 for respondents who reported that they “never had sexual intercourse (96)” when asked about the date in CE-3m/y. This higher than usual occurrence was noted during data collection and additional instructional notes for all respondents regardless of survey mode were added to question CE-3m to reduce this possible confusion. (see Year 1 quarter 3 changes noted in the female CRQ questionnaire). Data users may wish to recode 9996 values on VRY1STSX depending on the goals of their specific analysis. Additional questionnaire revisions were made at the start of data collection in 2024 to reduce or resolve this issue in future file releases.

Section E: ED Series, monthly contraceptive method history variables, METHX1-METHX192

As in past data collection, the ED series captures contraceptive method(s) the respondent used each month, for the time period from January, three years prior to the interview date, through interview date. For example, for interviews conducted in December 2022, the series collects method use information from January 2019 through December 2022. Variables for up to 4 methods for each month are saved on the data file. Therefore, variables containing these contraceptive methods range from “METHX1 through METHX192” (4 variables/methods per month, for up to 4 years, or 48 months.). With continuous interviewing, the number of calendar years spanned by the method calendar continues to increase. The output from this series was designed to remain the same number of month/year “cells,” despite this accumulation of actual calendar years. Each respondent’s particular window of 3+ years depends on the date they were interviewed. The following table displays the correspondence between calendar month and year and the ED contraceptive variable names and how this depends on date of interview, or cmintvw.

For convenience, two sets of frequently used computed variables based on the method calendar are included in the female respondent data file. The **User’s Guide** for the 2022-2023 NSFG includes an image of the Life History Calendar used in the FTF female interview (as used in interviews conducted in 2022) as well as an image of the electronic version of this calendar used in web surveys.

currmeth1 - currmeth4: the method(s) the respondent used in the month of interview.

lstmonmeth1 - lstmonmeth4: the method(s) the respondent used in the month before interview.

If interview year is **2022** (cmintvw=**1465** through **1476**), the variable names correspond to months/years as below:

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2019	METHX1-4	METHX5-8	METHX9-12	METHX13-16	METHX17-20	METHX21-24	METHX25-28	METHX29-32	METHX33-36	METHX37-40	METHX41-44	METHX45-48
2020	METHX49-52	METHX53-56	METHX57-60	METHX61-64	METHX65-68	METHX69-72	METHX73-76	METHX77-80	METHX81-84	METHX85-88	METHX89-92	METHX93-96
2021	METHX97-100	METHX101-104	METHX105-108	METHX109-112	METHX113-116	METHX117-120	METHX121-124	METHX125-128	METHX129-132	METHX133-136	METHX137-140	METHX141-144
2022	METHX145-148	METHX149-152	METHX153-156	METHX157-160	METHX161-164	METHX165-168	METHX169-172	METHX173-176	METHX177-180	METHX181-184	METHX185-188	METHX189-192

If interview year is **2023** (cmintvw=**1477** through **1488**), the variable names correspond to months/years as below:

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2020	METHX1-4	METHX5-8	METHX9-12	METHX13-16	METHX17-20	METHX21-24	METHX25-28	METHX29-32	METHX33-36	METHX37-40	METHX41-44	METHX45-48
2021	METHX49-52	METHX53-56	METHX57-60	METHX61-64	METHX65-68	METHX69-72	METHX73-76	METHX77-80	METHX81-84	METHX85-88	METHX89-92	METHX93-96
2022	METHX97-100	METHX101-104	METHX105-108	METHX109-112	METHX113-116	METHX117-120	METHX121-124	METHX125-128	METHX129-132	METHX133-136	METHX137-140	METHX141-144
2023	METHX145-148	METHX149-152	METHX153-156	METHX157-160	METHX161-164	METHX165-168	METHX169-172	METHX173-176	METHX177-180	METHX181-184	METHX185-188	METHX189-192

Section F: Mapping of family planning variables

In female Section F, women are asked about a set of 14 different possible family planning services they could have received in the past 12 months. For each service received, the following information is collected: type of provider, whether that provider is the regular source of care, source of payment, etc. This table shows how the different variables are mapped by the type of service received.

Mapping of Family Planning Service Variables in 2022-2023 NSFG Female Respondent File						
Service received in last 12 months	Question number	Service variable name	Recodes	Provider	Regular source of care	Source of payment
Method Birth Control/Prescription	FA-1b	BTHCON12	FPTITBC	BC12PLCX_02	REGCAR12_F_02	BC12PAY_02_1-3
Checkup for Birth Control	FA-1c	MEDTST12	FPTITCHK	BC12PLCX_03	REGCAR12_F_03	BC12PAY_03_1-3
Counseling About Birth Control	FA-1d	BCCNS12	FPTITCBC	BC12PLCX_04	REGCAR12_F_04	BC12PAY_04_1-3
Sterilizing operation	FA-1e	STEROP12	FPTITSTE	BC12PLCX_05	REGCAR2_F_05	BC12PAY_05_1-3
Counseling re Getting Sterilized	FA-1f	STCNS12	FPTITCST	BC12PLCX_06	REGCAR12_F_06	BC12PAY_06_1-3
Emergency Contraception/Prescription	FA-1g	EMCON12	FPTITEC	BC12PLCX_07	REGCAR12_F_07	BC12PAY_07_1-3
Counseling re Emergency Contraception	FA-1h	ECCNS12	FPTITCEC	BC12PLCX_08	REGCAR12_F_08	BC12PAY_08_1-3
Pregnancy Test	FA-3a	PRGTST12	FPTITPRE	BC12PLCX_09	REGCAR12_F_09	BC12PAY_09_1-3
Pap Smear	FA-3c	PAP12	FPTITPAP	BC12PLCX_10	REGCAR12_F_10	BC12PAY_10_1-3
Pelvic Exam	FA-3d	PELVIC12	FPTITPEL	BC12PLCX_11	REGCAR'2_F_11	BC12PAY_11_1-3
Prenatal Care	FA-3e	PRENAT12	FPTITPRN	BC12PLCX_12	REGCAR12_F_12	BC12PAY_12_1-3
Post-Pregnancy Care	FA-3f	PARTUM12	FPTITPPR	BC12PLCX_13	REGCAR12_F_13	BC12PAY_13_1-3
Counsel/test/treatment for STD	FA-3g	STDSVC12	FPTITSTD	BC12PLCX_14	REGCAR12_F_14	BC12PAY_14_1-3
All services in one visit:	FA-4	NUMBCVIS=1 all in one visit	-	BC12PLCX_01	REGCAR12_F_01	BC12PAY_01_1- BC12PAY_01_3

FEMALE PREGNANCY (INTERVAL) FILE NOTES

Section B: GEST_LB and GEST_OTH (gestational length)

The PRGLNGTH recode indicating gestational length in weeks was again suppressed for the 2022-2023 public-use pregnancy file, as it was in 2017-2019 NSFG. Due to this suppression of PRGLNGTH, the following two categorical variables for gestational length were again created for public use:

- For pregnancies ending in live birth, GEST_LB categorizes gestational length into 4 groups: 1) Early Preterm (< 34 weeks); 2) Preterm (34-36 weeks); 3) Term (37-40 weeks); and 4) Post-term (> 40 weeks).
- For pregnancies not ending in live birth, GEST_OTH categorizes gestational length by trimester: 1) 1st Trimester (0-13 weeks); 2) 2nd Trimester (14-26 weeks); and 3) 3rd Trimester (> 26 weeks).

The full detail PRGLNGTH recode is available through the NCHS RDC.

Section B: Pregnancy History

In the 2022-2023 NSFG, as in past NSFG surveys, all female respondents were asked some questions about each of the pregnancies they have had, whether current or completed (i.e., they have ended in live birth, induced abortion, or spontaneous pregnancy loss). They were asked to report these pregnancies in chronological order, starting with the first pregnancy, as this ordering is critical for later questions in the interview. In 2022-2023, respondents were shown a summary screen of their reported pregnancies and given the opportunity to correct their dates (reported as month/year only) and their outcomes as necessary. Pregnancies were sorted by their end dates if they remained out of chronological order at this point, before further pregnancy questions were asked in Section B and later in Section E. As noted in the **Summary of Questionnaire Changes Since 2017-2019** and shown in full detail in the **Questionnaires** (posted on the NSFG webpage), the 2022-2023 NSFG female questionnaire included revisions to the pregnancy-specific questions asked in Sections B and E. In brief, pregnancy-specific questions were asked for all live births, all 1st and 2nd pregnancies, and any pregnancies that ended in the past 5 years (including any current pregnancies). Please consult the **Codebooks** to see information on all pregnancy-specific variables on the Public-Use files, including their applicable specifications. The table below summarizes key pregnancy-related variables available for public use versus restricted-use. The **Public-Use File Indexes** and the **Lists of Restricted-Use Analytic Variables** provide fuller listings. For example, years when pregnancies ended or began (recodes DATEND and DATECON, respectively) are available for public use, and the analogous century month dates (recodes INDATEND and INDATECON) are available through the NCHS RDC. **Recode specifications** are also provided on the NSFG webpage.

File	Short Description	Public Use	RDC
Resp	Number of pregnancies	recode PREGNUM	n/a
Resp	Number of completed pregnancies (not including current)	Recode COMPREG	n/a
Resp	Number of liveborn babies	recode PARITY	n/a
Preg	Outcome of pregnancy	recode OUTCOME	n/a
Preg	When pregnancy ended	recode DATEND (year)	INDATEND (CM date)
Preg	When pregnancy began	recode DATECON (year)	INDATECON (CM date)
Preg	Number of babies born alive from this pregnancy	bornaliv (FC B-9)	n/a
Preg	Gestational length	GEST_LB & GEST_OTH (categorical)	recode PRGLNGTH (in weeks)
Preg	Duration of breastfeeding	recode BFEEWKS (categorical)	INBFEEWKS (in weeks)

Section E (EG series) Notes

The EG Series recodes RMARCON3, RMAROUT3, NEWWANTR, and WANTPART, and WANTRESP were imputed on cases due to factors including the following: values of “don’t know” or “refused” on the variables used to create the recodes, a subset of pregnancies for which the respondent was skipped past the EG series due to reporting she had never had sex (See Female Respondent File Notes, Section C) and had never used a method of contraception, and a small number due to missing data on the variables from Section B used to determine the universe of pregnancies qualifying for the EG series (See notes above Section B, describing these criteria), for which imputed values were assigned.

MALE FILE NOTES

Section F: Biological children men have fathered

In the male questionnaire for 2022-2023, respondents were asked about their biological children in a single section (Section F), unlike in prior surveys when they were asked within the context of questions about their relationship with the mothers of these children. Men were asked to report their children in chronological order, that is, starting with their oldest child. Space was allowed for up to 10 biological children to be reported, and no respondent in 2022-2023 reported more than 10. The following information is provided for each child reported:

- YRBIOCHILD_nn - Year of nth child’s birth (CM date available only in NCHS RDC)
- BCMOMWHO_nn - FA-6 Who is this child’s biological mother (from among reported partners)
- BCMOMAGE_nn - FA-6a How old was bio mom when this child was born

- BCSEX_nn -FA-7 Sex of this bio child
- BCAGE_nn - Age of bio child (Computed in Flow Check F-5)
- BCAGEGRP_nn -FA-8C Bio child's age group
- MULTBIRT_nn -FA-9 Verifying if this bio child was part of a multiple birth
- BCMARLIV_nn - FA-10 Marital/cohabiting status w/child's mother when this child was born
- BCLRNPRG_nn-FA-11 When R found out wife/partner was pregnant with this child
- LIVEHERE_nn - FA-12a Did this bio child live with R at least half the time
- ALIVENOW_nn -FA-12b Is this bio child still living
- BCNOWLIV_nn -FA-12c Who does this bio child live with
- BCRES_nn -Where this bio child usually lives (Computed in Flow Check F-8)
- BCSIGNBC_nn -FA-13 R signed birth certificate or other legal doc as father of this child
- BCCOURT_nn -FA-14 R went to court to establish legal paternity of this child
- BCGENTST_nn -FA-15 R legally established paternity of this child by blood or genetic test
- LIVCHEVR_nn -FA-16 Did R ever live with this bio child
- BCWANT_nn -FA-17 R wanted a child before mother got pregnant
- BCTIMING_nn -FA-18 Pregnancy timing of child
- BCSEONN_nn -FA-19a How much sooner than wanted was pregnancy w/ child - Number
- BCSEONNMY_nn -FA-19b How much sooner than wanted was pregnancy w/ child - Unit (mo/yr)
- BCHPY_nn -FA-20 R's happiness when finding out about this pregnancy

Section F: FA-10 BCMARLIV[X]

In Year 1 (2022) of data collection some cases were improperly skipped past the question FA-10 BCMARLIV[x] because Flow Check F-6 was routing cases based on rmarit=1 or 2 (current marital or cohabiting status) instead of EVRMARRY=1 or EVRCOHAB=1 (which indicate any prior marriage or cohabitation). This issue was corrected at the beginning of Year 2 (2023). (See **Questionnaires** posted on the NSFG webpage for further details.)

[Y2 Q1+: Flow check revised as shown in red]

**FLOW CHECK F-6: IF FA-9 MULTBIRT[X]=1, GO TO FA-12C BCNOWLIV[X].
ELSE IF EVRMARRY=1 OR EVRCOHAB=1 (EVER MARRIED OR COHABITING), ASK FA-10 BCMARLIV[X].
ELSE ASK FA-11 BCLRNPRG[X].**

Section F: Nonbiological children (FB series):

Similarly with the revisions made for the questions about biological children, the questions about men's nonbiological children were also streamlined and contained within male Section F, rather than being asked within the context of their relationships with wives or cohabiting partners in sections C, D, and E.

- NBPARENT - FB-1 How many nonbio children R has parental responsibility
- NBKDLEGSTAT - FB-2 Adopted or legal guardian for any of nonbio children
- NBKADOPI - FB-3a Legally adopt this nonbio children
- NBKADOP2 - FB-1 How many nonbio children R legally adopted
- NBKGUARD - FB-3c How many nonbio children R are now legal guardian
- EVERADOPT - FB-4 R ever legally adopted a child

Section F: FA-18 BCTIMING[X]

In Year 1 (2022) of data collection, some cases were improperly skipped past the question FA-18 BCTIMING[X] asking about the timing of the pregnancy. Cases who had responded “Probably yes” or “definitely yes” to FA-17 BCWANT were erroneously skipped past BCTIMING, and cases who had responded “Probably no” or “Definitely no,” who should have skipped BCTIMING, were asked this question erroneously. This routing error was corrected in the middle of Quarter 4. (See **Questionnaires** posted on the NSFG webpage for further details.) The male recode WANTB1, indicating wantedness of the respondent’s first biological child, had values imputed as applicable, based on this erroneous routing for BCTIMING[X], as well as the routing issue with BCMARLIV[X] described above.