

National Center for Health Statistics



# National Survey of Family Growth Update: Resuming Data Collection with a New Multi-mode Design

**Anjani Chandra, Ph.D.**

**NSFG Team Lead & Principal Investigator**

NCHS Board of Scientific Counselors Meeting

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# NSFG Team

## **At NCHS:**

### ***NSFG Team within Division of Vital Statistics/Reproductive Statistics Branch:***

*Anjani Chandra, Team Lead/Principal Investigator*

*Joyce Abma, Contract Officer's Representative*

*Gladys Martinez*

*Kim Daniels*

*Colleen Nugent*

*Jennifer Sayers*

*Hee-Choon Shin, Mathematical Statistician, Division of Research & Methodology*

## **At RTI:**

*Andy Peytchev, Principal Investigator*

*Susan Kinsey, Project Director*

*Emilia Peytcheva, Instrumentation and Methodology Reports Task Leader*

*Taylor Lewis, Sample Design, Weighting, and Imputation Task Leader*

*Lilia Filippenko, Systems Development, Data Processing, Documentation, and Delivery Task Leader*

*William Savage, Information Security and Confidentiality Task Leader*

*Milton Cahoon, Preparation for Data Collection and Data Collection Task Leader*


# Overview of presentation

- NSFG background
- Progress since last BSC presentation in January 2020
  - Closeout of previous contract and final data release (2017-2019 NSFG)
  - Award of new contract September 2020 and preparation for data collection launch
  - Instrument development work – including adaptations for online mode
  - Multi-mode survey design envisioned for Year 1 data collection
- Resumption of data collection in January 2022
  - Revisions made for Year 1, Quarter 1 due to COVID-19
  - Plans under review/consideration for Quarter 2+
- Feedback and discussion



# NSFG Background

## NSFG Purpose and Uses


- Address Section 306 of the Public Health Service Act, stipulating “NCHS shall collect statistics on... family formation, growth, and dissolution”
  - Help explain variations in birth rates using intermediate or “proximate” determinants of fertility
  - Assess factors that affect timing and consequences of sexual activity and pregnancy
  - Describe relationships and families
  - Measure receipt of family planning and other medical services
  - Monitor risk of HIV and STIs in general household population
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## NSFG Background (1973-2019)

- Each survey provides a nationally representative, cross-sectional snapshot of the U.S. household “reproductive-age” population
- Key changes since “Cycle 1” in 1973:
  - 1982 – Inclusion of never-married women
  - 1988 & 1995 - linked to NHIS sampling frame from several years prior
  - 1995 – Conversion to CAPI and ACASI and 1st use of incentives
  - 2002 – Inclusion of men (independent sample) & expansion of ACASI
  - 2006 – Transition to continuous fieldwork design
  - 2015 – Expansion of age range from 15-44 to 15-49
- Public-use files have been released with every periodic survey 1973-2002 (Cycles 1-6) and roughly every 2 years since 2006 (under continuous fieldwork design)

Year	Scope	N	Over Samples	Response Rates	Incentive	OMB Approved Intvw Length
1973	Ever-Married Women 15-44	9,797	Black women	90.2%	None	60 min
1976	Ever-Married Women 15-44	8,611	Black women	82.7%	None	60 min
1982	All Women 15-44	7,969	Black women & teens 15-19	79.4%	None	60 min
1988	All Women 15-44	8,450	Black women	82.5%	None	70 min
1995	All Women 15-44	10,847	Black & Hispanic women	78.7%	\$20	100 min
2002	All Women & Men	12,571 W = 7,643 M = 4,928	Black people, Hispanic people, People 15-19	All - 79% W - 80% M - 78%	\$40	W - 85 min M - 60 min
2006-2010	All Women & Men 15-44	22,682 W=12,279 M=10,403	Black people, Hispanic people, People 15-19	All - 77% W - 78% M - 75%	\$40	W - 85 min M - 60 min
2011-2013	All Women & Men 15-44	10,416 W=5,601 M=5,815	Black people, Hispanic people, People 15-19	All - 72.8% W - 73.4% M - 72.1%	\$40	W - 80 min M - 60 min
2013-2015	All Women & Men 15-44	10,205 W=5,699 M=4,506	Black people, Hispanic people, People 15-19	All - 69.3% W - 71.2% M - 67.1%	\$40	W - 80 min M - 60 min
2015-2017	All Women & Men now 15-49	10,094 W=5,554 M=4,540	Black people, Hispanic people, People 15-19	All - 65.3% W - 66.7% M - 63.6%	\$40	W - 80 min M - 60 min
2017-2019	All Women & Men 15-49	11,347 W=6,141 M=5,206	Black people, Hispanic people, People 15-19	All - 63.4% W - 65.2% M - 61.4%	\$40	W - 80 min M - 60 min

## Current NSFG Cosponsors (all within DHHS)

- National Center for Health Statistics (NCHS)
  - Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
  - Office of Population Affairs (OPA)
  - Administration for Children & Families (ACF)/ Children's Bureau
  - Administration for Children & Families (ACF)/ Office of Planning, Research, & Evaluation (OPRE)
  - Office on Women's Health
  - CDC/NCHHSTP/Division of HIV Prevention
  - CDC/NCHHSTP/Division of STD Prevention
  - CDC/NCHHSTP/Division of Adolescent & School Health
  - CDC/NCCDPHP/Division of Reproductive Health
  - CDC/NCCDPHP/Division of Cancer Prevention & Control
  - CDC/NCIPC/Division of Violence Prevention
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**Progress since last BSC update  
in January 2020**

# Closeout of previous contract and final data release (2017-2019 NSFG)

- Previous 10-year contract with University of Michigan ended Dec 2020
  - [Final public-use files for 2017-2019 NSFG](#) released in October 2020
  - Restricted-use files made available through Research Data Center (RDC):
    - Contextual, interviewer observations, and paradata files
    - Additional data, formerly included on PUF, but now only available in RDC due to disclosure risk
  
- Analyses with latest NSFG data:
  - [Data Brief on current contraceptive status](#) released with 2017-2019 PUF in October 2020
  - [NSFG Key Statistics](#) page updated with 2017-2019 data in November 2021
  - Several QuickStats with 2017-2019 data published in 2021, but most other analyses delayed due to staff size and competing demands of new contract and 3 staff COVID deployments
    - [Teen report using data for 2015-2017](#)
    - [Menarche report using data through 2017](#)

# Award of new contract to RTI and preparations for Year 1 (2022) data collection

- New 10-year contract awarded to RTI in September 2020, with plans to resume data collection with a multi-mode survey design in January 2022
  - Oversight, review, and collaboration with contractor on:
    - Sample design and establishing quarterly sample areas
    - Interviewer training materials and other preparation for multi-mode data collection
    - Onboarding of contractor staff, hiring interviewers
    - Establishing IT systems that meet CDC security requirements
    - Modification of contract to move web survey mode earlier (to 1st year of data collection) due to COVID
    - Obtaining clearances for OMB and ERB
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# Instrument development work

- Producing programmer-ready full specifications based on “capi-lite” questionnaires in RFP
  - Streamlining and restructuring of content to reduce complexity and respondent burden
  - Improvements to accommodate respondents in same-sex marriages and cohabitations
  - Incorporation of new items from cosponsors and revisions prompted by CCQDER work\*\*\*
  - Adapting survey instruments and interview aids to work for both FTF and online modes
  - Translating new or revised items into Spanish
- Developing web screener to manage multiple survey tasks accomplished in FTF mode
- Developing an electronic life history calendar for female survey
- Extensive instrument testing in English and Spanish

\*\*\*Collaboration with CCQDER on selected instrument issues:

- Cognitive interviews to assess Life History Calendar, as well as selected question series
- RANDS panel (in progress) to do split-panel testing of specific questions or series

# Survey design envisioned for Year 1

- Continuing to interview 1 person aged 15-49 per sample household
- Building off success of continuous FTF survey design used 2006-2019:
  - Responsive survey design using paradata in real time with subsampling for nonresponse allowed for nonresponse bias mitigation with cost control

## Prior FTF design

- Fieldwork organized into 4 12-week quarters/year
- 2-Phase design:
  - Phase 1 (weeks 1-10):
    - All sample worked
    - \$0 screener, \$40 main incentive
  - Phase 2 (weeks 11-12):
    - 30% subsample of non-respondents
    - \$5 prepaid screener; \$40 prepaid for main, and \$40 at end for main

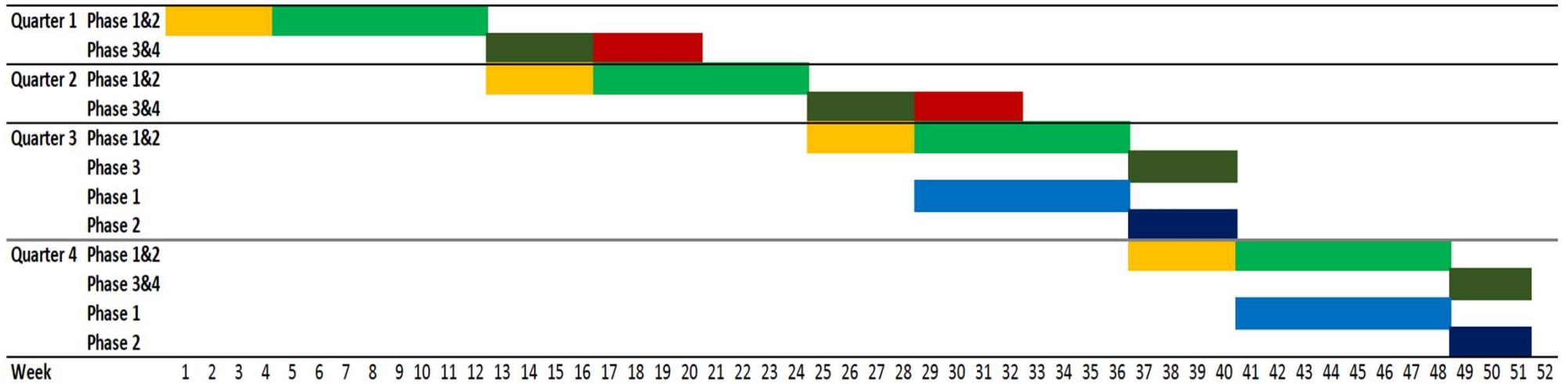
## Current Multi-mode design

- Fieldwork organized into 4 16-week quarters/year
- 3-Phase design:
  - Phase 1 (weeks 1-4): Web
    - \$2 screener, \$40 main incentive
  - Phase 2 (weeks 5-12): Web & FTF
    - No change in incentive
  - Phase 3 (weeks 13-16): Web & FTF
    - Up to 50% subsample of non-respondents
    - \$5 prepaid screener; \$40 prepaid for main, and \$40 at end for main

# Multi-mode, multi-phase survey design for Year 1: 4 overlapping quarters

Quarter 1	Phase 1&2	Online only				In-person and Online								Additional Follow-up (subsample)			
	Phase 3																
Week		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Quarter 2	Phase 1&2	Online only				In-person and Online								Additional Follow-up (subsample)			
	Phase 3																
Week		13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Quarter 3	Phase 1&2	Online only				In-person and Online								Additional Follow-up (subsample)			
	Phase 3																
Week		25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Quarter 4	Phase 1&2	Online only				In-person and Online								Additional Follow-up (subsample)			
	Phase 3																
Week		37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52

# Multi-mode Comparison Study (originally planned for Q1/2, but shifted to Q3/4)



## New Multi-mode Design:

- Web (CAWI) (Phase 1)
- Face to Face (and Web continued) (Phase 2)
- Face to Face, increased incentives (Phase 3)
- Mail eligibility or NRFU survey (Phase 4)

## Face to Face, as used 2006-2019:

- Face to Face (Phase 1)
- Face to Face, increased incentives (Phase 2)


**Resumption of data collection  
in January 2022**



# Quarter 1 changes and challenges

- The surge in COVID-19 rates, national staffing shortages, and contractor policy precluded FTF interviewing in most NSFG sample areas at start of Q1; policy changed as of 2/3/22 to allow some FTF during Q1.
- As a result, for Quarter 1:
  - Only CAWI data collection in Phases 1 and 2
  - Field staff will conduct Phase 3 interviews with higher incentives, for a subsample of non-respondents from Phases 1 & 2, as originally planned, and will follow up 100% of breakoffs.
  - Seeking OMB and ERB approval for further changes in Quarter 2

## Changes being considered for Quarter 2+ (1 of 2)

- Mailed paper screener to augment CAWI screener
    - Most nonresponse in HH surveys relying on mailed invitations to a web survey is at screener stage. Even if FTF interviewing can resume to originally intended levels in Q2, mailed screeners could reduce reliance on in-person follow-up.
    - Paper screener would be mailed around week 2 (on 3<sup>rd</sup> mailing, approx. 1 week after 1<sup>st</sup> mailing)
    - Would only be used to select adult respondents, given complexity of parental permission and minor assent process for teens 15-17
    - We would evaluate impact on response rates, demographic composition, & cost indicators.
  - Conducting telephone prompting calls to complete the web main survey
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## Changes being considered for Quarter 2+ (2 of 2)

- Experiment to test accelerated delivery of Phase 3's higher incentives
  - Phase 3 protocol already approved by OMB & ERB:
    - \$5 prepaid incentive for screener; \$40 prepaid incentive before main and \$40 upon completion
  - Experimental condition would be assigned 50-50 at sample address level – half receiving higher incentives at standard Phase 3 timing (weeks 13-16) and half receiving up front in Phase 1.
  - Higher incentives have potential to increase response rates and decrease nonresponse bias
  - Incentivizing participation from the beginning could be cost-efficient overall:
    - In areas where FTF is not possible, can reduce # of mailings needed per case
    - In areas where FTF is possible, can reduce # of sample addresses needing FTF
  - Some increased challenge for field staff juggling different incentive protocols

# Feedback and Discussion