

National Center for Health Statistics



# National Survey of Family Growth Update: Resur 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
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# NSFG Background

## NSFG Purpose and Uses

- Address Section 306 of the Public Health Service Act, stipulating shall collect statistics on... family formation, growth, and dissolution
- Help explain variations in birth rates using intermediate or “proximal” 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


# NSFG Background (1973-2019)

- Each survey provides a nationally representative, cross-sectional sample 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 1973-1995 (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 2019
    - [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
  
  - 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](#)
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# 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 pilot resume data collection with a multi-mode survey design in January 2021
- 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

# Instrument development work

- Producing programmer-ready full specifications based on “capi-lite” questionnaire
  - 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
- 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
  - RANDES panel (in progress) to do split-panel testing of specific questions or series
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# 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 2006-2010
  - Responsive survey design using paradata in real time with subsampling for nonresponse
  - 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

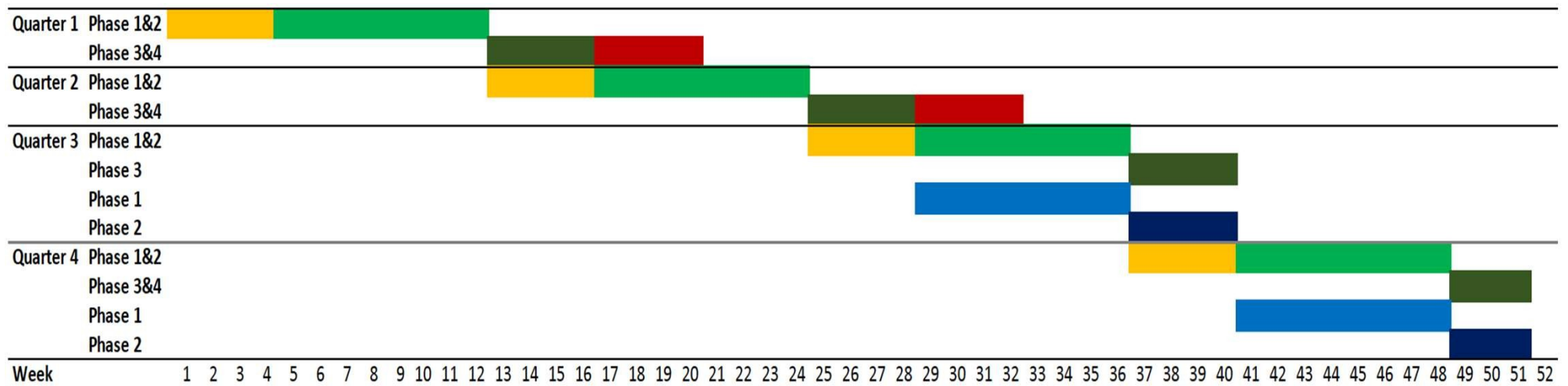
## Current Multi-mode design

- 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 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 compliance policy precluded FTF interviewing in most NSFG sample areas at the 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 on 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 screener stage. Even if FTF interviewing can resume to originally intended level, mailed screeners could reduce reliance on in-person follow-up.
  - Paper screener would be mailed around week 2 (or 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, & c indicators.
- Conducting telephone prompting calls to complete the web main

# 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 completion
  - Experimental condition would be assigned 50-50 at sample address level - half higher incentives at standard Phase 3 timing (weeks 13-16) and half receiving Phase 1.
  - Higher incentives have potential to increase response rates and decrease non-response bias
  - Incentivizing participation from the beginning could be cost-efficient overall:
    - In areas where FTF is not possible, can reduce # of mailings needed per address
    - In areas where FTF is possible, can reduce # of sample addresses needing follow-up
  - Some increased challenge for field staff juggling different incentive protocols

# Feedback and Discussion