



National Health and Nutrition Examination Survey (NHANES) 2019 – 2020

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September 18, 2020
NCHS Board of Scientific Counselors Meeting

- BSC Workgroup Meeting June 26th
- Discussed completing NHANES 2019-2020 data collection and implications for starting NHANES 2021-2022

BSC Workgroup Meeting June 26th Tentative Opinions

- NHANES should not complete additional sampling for the 2019-2020 data.
- NHANES 2017-2018 and 2019-2020 data should be combined to generate a larger dataset supporting better estimates.
- Weight the combined 2017-2020 data using the 2017-2018 strata as a starting point and evaluate against historically-based expectations.

After the BSC Workgroup meeting

- No further consideration for completing the 2019-2020 sample
- Began planning for 2021-2022 NHANES data collection
- Began QC and editing of collected 2019-2020 data for combining with 2017-2018 data

NHANES Data
2017 – 2018 and 2019 – 2020



NHANES 2017 – 2018 Data Release

- First set of 2017–2018 data released in February 2020.
- As of September 1, nearly two-thirds of all 2017-18 data files have been released.

Percent of 2017-18 NHANES Data Files Released, In Process, or Not Yet Ready (n=152)



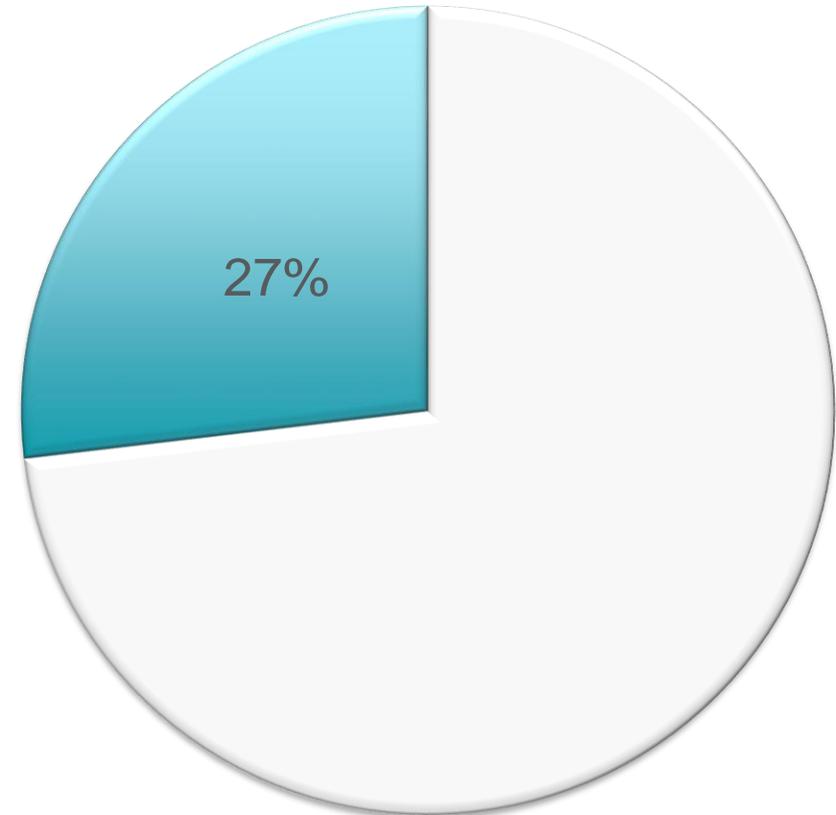
■ # Not Ready ■ # In Process ■ # Released

NHANES 2019 – 2020

Data in process

- Over one-quarter of the 2019-2020 data have begun or completed internal QC review and editing.

Percent of 2019-20 NHANES Data Files In Process (n=160)



■ # Not Ready ■ # In Process

NHANES 2017 – 2020 Survey Weights



NHANES 2017 – 2020 Survey Weights

- NCHS received draft weights September 2nd
- Weight creation: Combined 2017-20 PSUs together, applied factors to account for not having a full sample, and then went through the same weighting process that was done for the final 2017-18 weights (V14).

Approach to creating the 2017 – 2020 sampling weights

	GREG-Adjusted Weights													
	V2	V3	V5	V6	V7	V8	V7 _b	V9	V10	V11	V12	V13	V14	2017–2020
Added 18 PSUs from 2019-20 to the 2017-18 data collection														X
Created factors to adjust base weights for 48 completed PSUs in a 60-PSU sample design														X
GREG adjustment to income and population age 20+					X	X	X	X	X	X	X	X		
GREG adjustment to NCHS urbanicity											X	X		
GREG adjustment to education										X	X			
NR adjustment using same variables as in 2015-16 to create cells	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Adding variables to include in NR adjustment		X	X	X	X	X	X	X	X	X	X	X	X	X
Adjusting NR separately within each PSU				X		X								
Raking to 74 race/ethnicity/sex/age group cells	X	X	X	X	X	X		X	X	X	X	X	X	X
Raking to 32 race/ethnicity/sex/education cells		X	X	X	X	X		X				X	X	X
Raking to 16 race/ethnicity/PSU size cells			X	X	X	X		X						
Raking to 47 race/ethnicity/sex/age group cells							X							
Raking to 28 race/ethnicity/sex/education cells							X							
Raking to 10 tract-level household income cells													X	X

Approach to creating the 2017 – 2020 sampling weights

	GREG-Adjusted Weights													2017–2020	
	V2	V3	V5	V6	V7	V8	V7 _b	V9	V10	V11	V12	V13	V14		
Added 18 PSUs from 2019-20 to the 2017-18 data collection															X
Created factors to adjust base weights for 48 completed PSUs in a 60-PSU sample design															X
GREG adjustment to income and population age 20+					X	X	X	X	X	X	X	X			
GREG adjustment to NCHS urbanicity												X	X		
GREG adjustment to education										X	X				
NR adjustment using same variables as in 2015-16 to create cells	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Adding variables to include in NR adjustment		X	X	X	X	X	X	X	X	X	X	X	X	X	X
Adjusting NR separately within each PSU				X		X									
Raking to 74 race/ethnicity/sex/age group cells	X	X	X	X	X	X		X	X	X	X	X	X	X	X
Raking to 32 race/ethnicity/sex/education cells		X	X	X	X	X	X	X				X	X	X	X
Raking to 16 race/ethnicity/PSU size cells			X	X	X	X		X							
Raking to 47 race/ethnicity/sex/age group cells							X								
Raking to 28 race/ethnicity/sex/education cells							X								
Raking to 10 tract-level household income cells													X		X

Approach to creating the 2017 – 2020 sampling weights

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Added 18 PSUs from 2019-20 to the 2017-18 data collection														X
Created factors to adjust base weights for 48 completed PSUs in a 60-PSU sample design														X
GREG adjustment to income and population age 20+					X	X	X	X	X	X	X	X		
GREG adjustment to NCHS urbanicity											X	X		
GREG adjustment to education										X	X			
NR adjustment using same variables as in 2015-16 to create cells	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Adding variables to include in NR adjustment		X	X	X	X	X	X	X	X	X	X	X	X	X
Adjusting NR separately within each PSU				X		X								
Raking to 74 race/ethnicity/sex/age group cells	X	X	X	X	X	X		X	X	X	X	X	X	X
Raking to 32 race/ethnicity/sex/education cells		X	X	X	X	X		X				X	X	X
Raking to 16 race/ethnicity/PSU size cells			X	X		X		X						
Raking to 47 race/ethnicity/sex/age group cells							X							
Raking to 28 race/ethnicity/sex/education cells							X							
Raking to 10 tract-level household income cells													X	X

Approach to creating the 2017 – 2020 sampling weights

	GREG-Adjusted Weights													2017–2020	
	V2	V3	V5	V6	V7	V8	V7 _b	V9	V10	V11	V12	V13	V14		
Added 18 PSUs from 2019-20 to the 2017-18 data collection															X
Created factors to adjust base weights for 48 completed PSUs in a 60-PSU sample design															X
GREG adjustment to income and population age 20+					X	X	X	X	X	X	X	X			
GREG adjustment to NCHS urbanicity												X	X		
GREG adjustment to education										X	X				
NR adjustment using same variables as in 2015-16 to create cells	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Adding variables to include in NR adjustment		X	X	X	X	X	X	X	X	X	X	X	X	X	X
Adjusting NR separately within each PSU				X		X									
Raking to 74 race/ethnicity/sex/age group cells	X	X	X	X	X	X		X	X	X	X	X	X	X	X
Raking to 32 race/ethnicity/sex/education cells		X	X	X	X	X		X					X	X	X
Raking to 16 race/ethnicity/PSU size cells			X	X	X	X		X							
Raking to 47 race/ethnicity/sex/age group cells								X							
Raking to 28 race/ethnicity/sex/education cells								X							
Raking to 10 tract-level household income cells													X		X

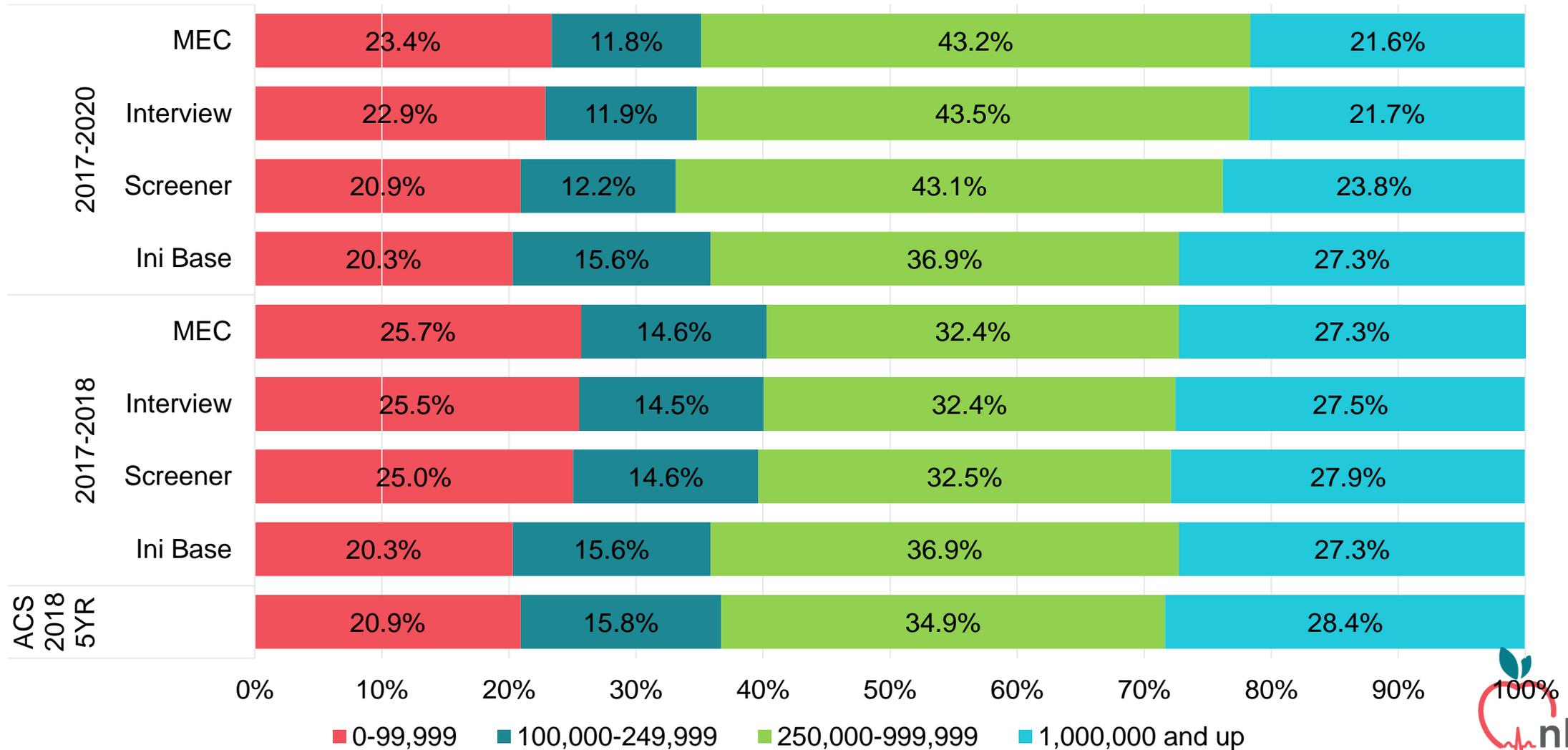
How were these factors created?

- Normally, a 4-year sample would have 60 PSUs divided evenly into 15 strata, with 4 PSUs in every stratum
 - But, because the 18 PSUs completed in 2019–2020 came from a different sample design, some of the 2017–2018 strata did not have any additional PSUs, and some had as many as 4 additional PSUs
- As a result, the 48 total PSUs are divided into 15 strata, where the strata contain between 2 and 6 PSUs.
 - As a result, the factors were created as 4 divided by the number of PSUs in the stratum. For strata with only 2 PSUs, the factor would be 2. For strata with 6 PSUs, the factor would be 0.67.

QC of the 2017 – 2020 Sampling Weights

- A similar approach to that used for the 2017–2018 NHANES non-response bias and sampling variability assessments:
 - Comparisons to ACS
 - Benchmarking to NHIS
 - Examinations of temporal trends in key health outcomes
 - Comparison of response rates across subgroups; R-indicator analyses; and level of effort analyses, etc.

Balanced on education and income, as expected, but off on population size



NHANES Data Release 2017 – 2020



About NHANES +

What's New +

Questionnaires, Datasets, and Related Documentation -

Survey Methods and Analytic Guidelines

Search Variables

Frequently Asked Questions

All Continuous NHANES +

NHANES 2019-2020 +

NHANES 2017-2018 -

Demographics Data

Dietary Data

Examination Data

Laboratory Data

Questionnaire Data

Limited Access Data

Questionnaire Instruments



NHANES 2017-2018

Data, Documentation, Codebooks, SAS Code

Demographics Data

Dietary Data

Examination Data

Laboratory Data

Questionnaire Data

Limited Access Data

Contents in Detail

Questionnaire Instruments

Laboratory Methods

Procedure Manuals

Brochures and Consent Documents

Using the Data

Overview

Release Notes

Laboratory Data Overview

Questionnaire Data Overview

Examination Data Overview

Survey Methods and Analytic Guidelines

Response Rates and Population Totals

NHANES Web Tutorial

Contents at a Glance

What's New

Survey Content Brochure [PDF - 568 KB]

Frequently Asked Questions (FAQs)

General Information about NHANES Documentation Files

About NHANES +

What's New +

Questionnaires, Datasets, and Related Documentation +

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Related Sites

[NHANES Longitudinal Study](#)

[NHANES National Youth Fitness Survey](#)

[Growth Charts](#)

[Surveys and Data Collection Systems](#)

[NCHS Data Linkage Activities](#)

[Research Data Center](#)

NHANES 2017–2018 Limited Access Data

These datasets are not released to the public. However, secure, on-site access is granted through [NCHS's Research Data Center \(RDC\)](#) to guarantee the confidentiality of the survey participants. The documents below are provided to help analysts determine if these NHANES datasets contain variables relevant to their analyses before submitting an application to use the RDC.

- [NHANES 2017-2018 Limited Access Variable List](#)
- [Questionnaire Instruments](#)
- [Laboratory Methods](#)
- [SAS Universal Viewer](#)

Data File Name	Doc File	Data File	Date Published
Chlamydia - Urine - Adult	CHLA_I_R.Doc	RDC Only	May 2020
Chlamydia - Urine - Youth	CHLM_I_R.Doc	RDC Only	May 2020
Drug Use - Youth	DUQY_I_R.Doc	RDC Only	February 2020
Herpes Simplex Virus Type-1 and Type-2	HSVA_I_R.Doc	RDC Only	May 2020
Herpes Simplex Virus Type-2 - Youth	HSV_I_R.Doc	RDC Only	May 2020
Lead - Blood - Youth	PBY_I_R.Doc	RDC Only	June 2020
Mental Health - Depression Screener - Youth	DPQY_I_R.Doc	RDC Only	February 2020
Mycoplasma genitalium - Urine - Adult	MGEA_I_R.Doc	RDC Only	July 2020
Mycoplasma genitalium - Urine - Youth	MGEN_I_R.Doc	RDC Only	July 2020
Reproductive Health - Women 12 Years and Older	RHQ_I_R.Doc	RDC Only	February 2020
Sexual Behavior - Adult	SXQ_I_R.Doc	RDC Only	July 2020
Sexual Behavior - Youth	SXQY_I_R.Doc	RDC Only	July 2020
Trichomonas - Urine - Adult	TRIA_I_R.Doc	RDC Only	May 2020
Trichomonas - Urine - Youth	TRIC_I_R.Doc	RDC Only	May 2020

<https://www.cdc.gov/rdc/>

🏠 RDC

Restricted Data +

Location of Access +

Proposal Process +

Confidentiality

Accessing Restricted Data

Preparing for proposal
Submission

Providing the Public Use Data

Output

Fees and Invoicing

Publishing Guidelines +

Reference Materials

Directions

FAQs

Attention:



All National Center for Health Statistics RDCs are closed.

NCHS researchers may not enter any NCHS or FSRDC facility until they are informed that the facility has reopened. We will continue to accept and review new proposals and amendments. Please direct all RDC related questions to rdca@cdc.gov.

Research Data Center (RDC)

The National Center for Health Statistics (NCHS) operates the Research Data Center (RDC) to allow researchers access to restricted-use data. The RDC is responsible for protecting the confidentiality of survey respondents, study subjects, or institutions while providing access to the restricted-use data for statistical purposes. For access to the restricted-use data, researchers must submit a research proposal outlining the need for restricted-use data. The proposal provides a framework for NCHS to identify potential disclosure risks and how the data will be used.



1. [Preparing for Proposal Submission](#)

1. [Restricted Data](#)
2. [Access Modes](#)
3. [The Proposal Process](#)

2. [Accessing Restricted Data](#)

1. [Confidentiality](#)
2. [Approved Projects: Next Steps](#)
3. [Publishing Guidelines](#)

NHANES 2017 – 2020

Next Steps



NHANES next steps

- Continue with the data QC and editing of 2017-18 and 2019-20 data
- Continue with the evaluation of the 2017-20 survey weights
- Develop a plan for data release through the RDC

NHANES 2021–2022





NHANES 2021-2022: Various Restart Options

Start Date (for interviewing)	#PSUs	Target # examined	End Date (last exam)
April 1, 2021	30	10,000	April 2023
May 14, 2021	30	10,000	June 2023
July 2021	30	10,000	July 2023
	28	10,000	June 2023
	26	10,000	April 2023

NHANES 2021-2022 : Various Restart Options

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April 1, 2021	30	10,000	April 2023
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July 2021	30	10,000	July 2023
	28	10,000	June 2023
	26	10,000	April 2023
December 2021 /January 2022	15	5000 or more	January 2023 or later

Questions?

<https://www.cdc.gov/nchs>

<https://www.cdc.gov/nchs/nhanes>

