



Long COVID Content in the National Health Interview Survey & the Household Pulse Survey

Anjel Vahratian, Ph.D., M.P.H.

Associate Director for Science, Division of Health Interview Statistics

NCHS Board of Scientific Counselors

October 24, 2022

National Health Interview Survey



- **Purpose:** To monitor the health of the US population through the collection and analysis of data on a broad range of health topics
- **Sample:** Address-based, clustered sample of housing units from every state, to be representative of the civilian noninstitutionalized US population
- **Mode:** In-person interviews by Census interviewers, with follow-up by telephone if needed
- **Questionnaire:** Includes sample adult and sample child sections
- **Data collection:** Continuous, with quarterly and annual data files
- **Sample size:** Complete interviews for 27,000+ sample adults and 9,000+ sample children annually

National Health Interview Survey

Long COVID Questions



Beginning in **January 2022**, the following questions were asked of both the sample adult and the sample child respondent:

- Did [you/child's name] have any symptoms lasting 3 months or longer that you did not have prior to having coronavirus or COVID-19?
Read if necessary: Long term symptoms may include tiredness or fatigue, difficulty thinking, concentrating, forgetfulness or memory problems, sometimes referred to as "brain fog," difficulty breathing or shortness of breath, joint or muscle pain, fast-beating or pounding heart (also known as heart palpitations), chest pain, dizziness on standing, depression, anxiety or mood changes.
- Do [you/child's name] have symptoms now?

National Health Interview Survey

Long COVID Questions



Beginning in **January 2023**, the following question will be added to this series (barring last-minute edits):

- Do these long-term symptoms reduce your ability to carry out day-to-day activities compared with the time before you had COVID-19?
 - Answer Choices: Yes, a lot; Yes, a little; Not at all

Long COVID estimates based on data from the 2022 NHIS will be available in 2023.

Household Pulse Survey

Census Bureau



- **Purpose:** To monitor how the coronavirus pandemic is impacting households across the country from a social and economic perspective.
- **Sample:** Email and cell-phone contact frames matched to Census Bureau's Master Address File (MAF) records
- **Mode:** Online
- **Questionnaire:** Adults only
- **Data collection:** Began April 23, 2020, and is ongoing (currently two weeks on / two weeks off)
- **Sample size:** 50,000+

Household Pulse Survey

Long COVID Questions



- The NHIS questions on long COVID were added to the Household Pulse Survey at the start of Phase 3.5 (on June 1, 2022).

- Beginning in Phase 3.6 (September 14, 2022), the following question was added to the survey:
 - Do these long-term symptoms reduce your ability to carry out day-to-day activities compared with the time before you had COVID-19?
 - Answer Choices: Yes, a lot; Yes, a little; Not at all

Household Pulse Survey

Long COVID Estimates



September 14-26, 2022 (Week 49)

- Sample size: 50,258
- Response rate: 4.7%

Estimates:

- Ever/current long COVID
- Any/significant activity limitation from long COVID

Universe:

- All adults in the U.S.
- Among adults who had COVID

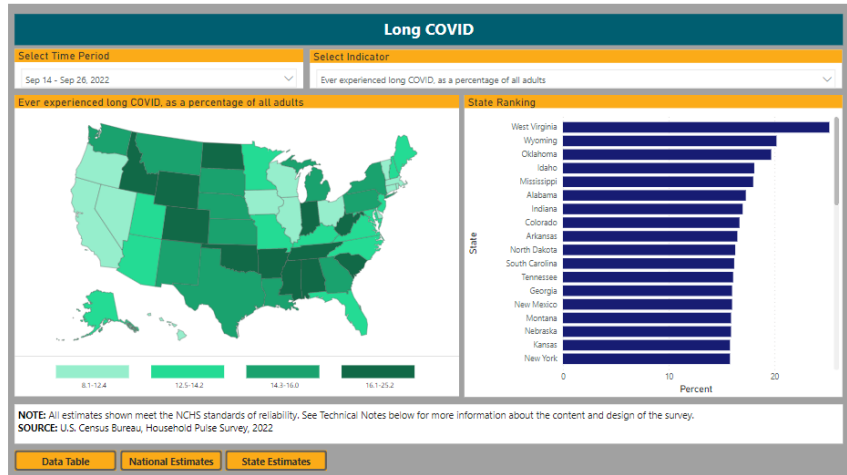
Household Pulse Survey

Long COVID Estimates



Long COVID										
Select Indicator										
Ever experienced long COVID, as a percentage of all adults										
Ever experienced long COVID, as a percentage of all adults										
Phase Time Period Group	Phase 3.6		Break 8		Phase 3.5					
	Sep 14 - Sep 26, 2022	95% CI	Aug 24 - Sep 13, 2022	95% CI	Jul 27 - Aug 8, 2022	95% CI	Jun 29 - Jul 11, 2022	95% CI	Jun 1 - Jun 13, 2022	95% CI
National Estimate										
United States	14.2	13.6 - 14.7			14.8	14.2 - 15.4	14.7	14.1 - 15.3	14.0	13.5 - 14.5
By Age										
18 - 29 years	14.9	13.0 - 16.9			15.9	14.2 - 17.7	15.5	13.9 - 17.2	17.8	15.9 - 19.8
30 - 39 years	16.0	14.8 - 17.2			17.3	15.6 - 19.0	17.3	15.8 - 18.9	15.2	14.1 - 16.2
40 - 49 years	17.6	16.0 - 19.3			18.8	17.3 - 20.4	17.6	16.2 - 19.0	16.9	15.7 - 18.3
50 - 59 years	16.0	14.5 - 17.5			17.1	15.4 - 19.0	15.4	14.1 - 16.9	15.3	14.1 - 16.7
60 - 69 years	11.4	10.3 - 12.6			10.9	9.5 - 12.4	11.5	10.4 - 12.8	10.9	9.8 - 12.0
70 - 79 years	8.1	6.9 - 9.4			6.8	5.7 - 8.1	10.3	8.5 - 12.3	7.1	5.9 - 8.5
80 years and above	6.4	4.1 - 9.4			6.0	3.7 - 9.2	7.3	5.1 - 10.1	4.2	3.4 - 5.3
By Sex										
Female	17.3	16.5 - 18.0			18.2	17.2 - 19.2	17.5	16.7 - 18.3	17.3	16.5 - 18.1
Male	10.9	10.1 - 11.8			11.3	10.5 - 12.2	11.7	10.8 - 12.7	10.5	9.8 - 11.2
By Gender identity										
Cisgender male	10.8	9.9 - 11.7			11.1	10.2 - 12.0	11.5	10.6 - 12.5	10.2	9.6 - 10.9

<https://www.cdc.gov/nchs/covid19/pulse/long-covid.htm>



Household Pulse Survey

Long COVID Estimates



- **Among all U.S. adults**

- Percentage who ever had COVID: 48.2%
- Percentage who ever had long COVID: 14.2%
- Percentage who currently have long COVID: 7.2%

- **Among adults who have had COVID**

- Percentage who ever had long COVID: 29.6%
- Percentage who currently have long COVID: 15.0%

Household Pulse Survey

Long COVID Estimates



Among all U.S. adults

- Percentage who have long COVID that impacts their day-to-day activities
 - at least a little (any) 5.9%
 - a lot (significant) 1.8%

Among adults who currently have long COVID

- Percentage who have long COVID that impacts their day-to-day activities
 - at least a little (any) 81.4%
 - a lot (significant) 25.1%

Household Pulse Survey

Long COVID Estimates



- Our dashboards include estimates by the following covariates:
 - Age
 - Sex
 - Sexual orientation
 - Gender identity
 - Race and Hispanic origin
 - Educational attainment
 - Disability status
 - State

Upcoming Household Pulse Survey Releases

- Week 50: October 26
- Week 51: November 29

NCHS:

<https://www.cdc.gov/nchs/covid19/health-care-access-and-mental-health.htm>

Census:

<https://www.census.gov/data/experimental-data-products/household-pulse-survey.html>



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

