CDC Centers for Disease Control and Prevention

Anxiety and Depression

Household Pulse Survey

To rapidly monitor recent changes in mental health, the National Center for Health Statistics (NCHS) partnered with the Census Bureau on an experimental data system called the Household Pulse Survey. This 20-minute online survey was designed to complement the ability of the federal statistical system to rapidly respond and provide relevant information about the impact of the coronavirus pandemic in the U.S. The data collection period for Phase 1 of the Household Pulse Survey occurred between April 23, 2020 and July 21, 2020. Phase 2 data collection occurred between August 19, 2020 and October 26, 2020. Phase 3 data collection occurred between October 28, 2020 and March 29, 2021. Phase 3.1 data collection occurred between April 14, 2021 and July 5, 2021. Phase 3.2 data collection occurred between July 21, 2021 and October 11, 2021. Data collection for Phase 3.3 began on December 1, 2021 and will continue through February 7, 2022. Data collection for Phase 3.4 is scheduled to begin on February 23, 2022 and will continue through May 2, 2022.

NCHS included questions to obtain information on the frequency of anxiety and depression symptoms. The questions are a modified version of the two-item Patient Health Questionnaire (PHQ-2) and the two-item Generalized Anxiety Disorder (GAD-2) scale on the Household Pulse Survey, collecting information on symptoms over the last 7 days (rather than the typical 14 days). Beginning in Phase 3.2 (July 21, 2021) of data collection and reporting, the question reference period changed from the 'last 7 days' to the 'last two weeks', as typical for this scale.

Estimates on this page are derived from the Household Pulse Survey and show the percentage of adults who report symptoms of anxiety or depression that have been shown to be associated with diagnoses of generalized anxiety disorder or major depressive disorder. These symptoms generally occur more than half the days or nearly every day. See the technical notes for more information on these measures.

Estimates of mental health based on the 2019 NHIS 📕 may be useful benchmarks for comparison with estimates from the Household Pulse Survey. In 2019, 8.1% of adults aged 18 and over had symptoms of anxiety disorder, 6.5% had symptoms of depressive disorder, and 10.8% had symptoms of anxiety disorder or depressive disorder.

Use the drop-down menus to show data for selected indicators or categories. Select the buttons at the bottom of the dashboard to view national and state estimates. The data table may be scrolled horizontally and vertically to view additional estimates.

Pulse Survey Topics

Anxiety and Depression

Mental Health Care

Health Insurance Coverage

Reduced Access to Care

Telemedicine Use

Functioning and Disability

Access Dataset on Data.CDC.gov (Export to CSV, JSON, XLS, XML)[?]

Technical Notes

Survey Questions

> ℹ️ **Note**
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> Beginning in Phase 3.2 (July 21, 2021) of data collection and reporting, the question reference period changed from the 'last 7 days' to the 'last two weeks'.

Adapted PHQ-2 questions:

Over the **last 7 days**, how often have you been bothered by ... having little interest or pleasure in doing things? Would you say not at all, several days, more than half the days, or nearly every day? *Select only one answer.*

Over the **last 7 days**, how often have you been bothered by ... feeling down, depressed, or hopeless? Would you say not at all, several days, more than half the days, or nearly every day? *Select only one answer.*

Adapted GAD-2 questions:

Over the **last 7 days**, how often have you been bothered by the following problems ... Feeling nervous, anxious, or on edge? Would you say not at all, several days, more than half the days, or nearly every day? *Select only one answer.*

Over the **last 7 days**, how often have you been bothered by the following problems ... Not being able to stop or control worrying? Would you say not at all, several days, more than half the days, or nearly every day? *Select only one answer.*

Scoring and Estimation

For each scale, the answers are assigned a numerical value: not at all = 0, several days = 1, more than half the days = 2, and nearly every day = 3. The two responses for each scale are added together. A sum equal to three or greater on the PHQ-2 has been shown to be associated with diagnoses of major depressive disorder. A sum equal to three or greater on the GAD-2 has been shown to be associated with diagnoses of generalized anxiety disorder. For adults with scores of 3 or greater, further evaluation by a clinician or other health professional is generally recommended.

Estimates on this page are based on these composite scores. Answers to both questions in the scale were required to calculate the scores. Adults with missing responses to one or both questions are not shown separately in the tables and are not included in the calculation of percentages.

Information about individual item responses are available from the Census Bureau website: https://www.census.gov/householdpulsedata [↗] .

Data Source

The U.S. Census Bureau, in collaboration with five federal agencies, launched the Household Pulse Survey to produce data on the social and economic impacts of Covid-19 on American households. The Household Pulse Survey was designed to gauge the impact of the pandemic on employment status, consumer spending, food security, housing, education disruptions, and dimensions of physical and mental wellness.

The survey was designed to meet the goal of accurate and timely weekly estimates. It was conducted by an internet questionnaire, with invitations to participate sent by email and text message. The sample frame is the Census Bureau Master Address File Data. Housing units linked to one or more email addresses or cell phone numbers were randomly selected to participate, and one respondent from each housing unit was selected to respond for him or herself. Estimates are weighted to adjust for nonresponse and to match Census Bureau estimates of the population by age, sex, race and ethnicity, and educational attainment. All estimates shown meet the NCHS Data Presentation Standards for Proportions [📕] .

Week	Weighted Response Rate	Sample Size
April 23-May 5, 2020	3.8%	69,316
May 7-12, 2020	1.3%	39,447
May 14-19, 2020	2.3%	118,897
May 21-26, 2020	3.1%	90,798
May 28-June 2, 2020	3.5%	94,329
June 4-9, 2020	3.1%	75,292
June 11-16, 2020	2.3%	68,322
June 18-23, 2020	2.9%	99.918
June 25-30, 2020	3.3%	91,272
July 2-7, 2020	3.2%	83,960
July 9-14, 2020	3.1%	84,492
July 16-21, 2020	2.9%	79,776
August 19-31, 2020	10.3%	93,136
September 2-14, 2020	10.3%	94,739
September 16-28, 2020	9.2%	85,555
September 30-October 12, 2020	8.8%	82.192

Week	Weighted Response Rate	Sample Size
October 14-26, 2020	8.1%	76,034
October 28-November 9, 2020	5.3%	49,931
November 11-23, 2020	6.6%	61,254
November 25-December 7, 2020	6.7%	62,234
December 9-21, 2020	6.5%	60,063
January 6-18, 2021	6.4%	57,042
January 20-February 1, 2021	7.5%	68,453
February 3-15, 2021	7.3%	65,163
February 17-March 1, 2021	7.3%	65,691
March 3-15, 2021	7.4%	65,494
March 17-29, 2021	7.2%	64,443
April 14-26, 2021	6.6%	57,038
April 28-May 10, 2021	7.4%	65,513
May 12-24, 2021	6.8%	60,695
May 26-June 7, 2021	6.7%	58,766
June 9-21, 2021	6.4%	56,549
June 23-July 5, 2021	6.3%	55,046
July 21-Aug 2, 2021	6.1%	57,559
Aug 4-16, 2021	6.5%	61,243
Aug 18-30, 2021	6.5%	61,644
Sep 1-13, 2021	6.0%	56,739
Sept 15-27, 2021	5.6%	53,355
Sept 29-Oct 11, 2021	5.4%	50,849
Dec 1-13, 2021	5.8%	54,663
Dec 29, 2021-Jan 10, 2022	7.2%	68,782

Limitations

The Household Pulse Survey is different from other surveys. NCHS, the Census Bureau, and other federal statistical agencies are considered the preeminent source of the nation's most important benchmark surveys. Many of these surveys have been in production for decades and provide valuable insight on health, social, and economic trends. However, the production of benchmark data requires a relatively long lead time, and personal interviews (face-to-face or telephone) require additional time. While efforts are underway to introduce COVID-19 questions into these surveys, that process can take months, sometimes years, before data are made available.

The Household Pulse Survey is different: It was designed to go into the field quickly, to be administered via the web, and to disseminate data in near real-time, providing data users with information they can use now to help ease the burden on American households and expedite post-pandemic recovery. The Census Bureau is fielding the Household Pulse Survey as a demonstration project, with data released as part of its Experimental Statistical Products Series.

Confidence intervals included in the tables on this page only reflect the potential for sampling error. Nonsampling errors can also occur and are more likely for surveys that are implemented quickly, achieve low response rates, and rely on online response. Nonsampling errors for the Household Pulse Survey may include:

- Measurement error: The respondent provides incorrect information, or an unclear survey question is misunderstood by the respondent. The Household Pulse Survey schedule offered only limited time for testing questions.
- Coverage error: Individuals who otherwise would have been included in the survey frame were missed. The Household Pulse Survey only recruited households for which an email address or cell phone number could be identified.
- Nonresponse error: Responses are not collected from all those in the sample or the respondent is unwilling to provide information. The response rate for the Household Pulse Survey was substantially lower than most federally sponsored

surveys.

- Processing error: Forms may be lost, data may be incorrectly keyed, coded, or recoded. The real-time dissemination of the Household Pulse Survey provided limited time to identify and fix processing errors.

For more information on nonresponse bias for the 2020 Household Pulse Survey, please visit https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/2020_HPS_NR_Bias_Report-final.pdf 🗎 ⧉ .

For more information on the Household Pulse Survey, please visit https://www.census.gov/householdpulsedata ⧉ .

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