



Changes in Federal Surveys Due to and During COVID-19

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SUMMARY

This brief provides an overview of changes made to annual federal surveys due to the disruption of the coronavirus pandemic. Such changes included adapting, changing, and/or delaying survey field operations; adding questions to and/or modifying existing survey questionnaires; and understanding and addressing falling survey response rates. The brief examines four major surveys—the American Community Survey (ACS), Current Population Survey (CPS), Medical Expenditure Panel Survey (MEPS), and the National Health Interview Survey (NHIS)—in order to understand the breadth of COVID’s impact on 2020 federal survey data.

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[*American Community Survey ↗*](#)

[*Current Population Survey ↗*](#)

[*Medical Expenditure Panel Survey ↗*](#)

[*National Health Interview Survey ↗*](#)

Introduction

While we already know that the COVID-19 pandemic has been the cause of major disruptions to the daily lives, work, education, and health among the United States and world populations, we may never fully understand the depths of its impact due to another major ramification of the coronavirus—the interruption of data collection processes and falling response rates for annual federal surveys, which under normal circumstances are ideally suited to measure such changes.

Some of the disruptions have been so significant that certain surveys were forced to suspend operations entirely, as with the [National Health and Nutrition Examination Survey \(NHANES\)](#) from the Centers for Disease Control and Prevention (CDC). As a result, the CDC will not broadly release estimates from this survey, feeling that they are not accurately representative of the population, and have instead combined estimates from 2017-March 2020 specifically, to create a “pre-pandemic” data cohort.

Similarly, on a recent webinar, the U.S. Census Bureau made the major announcement that they will not be releasing 2020 American Community Survey 1-year estimates nor any related products as usual in September. Instead, due to the impact of the pandemic on response rates, nonresponse bias, and data quality, only “experimental” 1-year estimates for 2020 for a limited set of geographies will be available in November, along with a version of the 2020 1-year Public Use Microdata files with experimental survey weights in December.

Other surveys have made attempts to push forward and adapt to COVID-era challenges by shifting in-person collection methods to phone and email, adding COVID-related questions to their questionnaire, or even creating an entirely new survey, as the U.S. Census Bureau did in launching the Household Pulse Survey (HPS), a rapid-collection survey designed to provide near-real-time information about the effect of the pandemic on the U.S. population.¹

This brief provides a summary of some of these changes and challenges for major federal surveys with health-related content—the American Community Survey, Current Population Survey Annual Social and Economic Supplement, Medical Expenditure Panel Survey, and National Health Interview Survey—and explain what effects these adaptations may have for understanding 2020 data as it becomes available.

Methodological Changes

Survey Operations

All federal surveys included in this brief made major changes to their data collection timeframes and methodologies in 2020, some of which have continued into 2021. Summarized below are some of the challenges organizations conducting such surveys faced (suspension, survey mode changes, limited staffing, etc.) and strategies they implemented to adapt and overcome.

American Community Survey²

Mailing. Stay-at-home orders disrupted the Census Bureau's ability to mail out American Community Survey (ACS) questionnaires from their mail processing facility in Indiana because workers could not physically come in to assemble the forms, receive the responses, nor could they provide telephone support to survey respondents with questions about how to complete the survey. This disruption caused the Census Bureau to suspend all ACS mail operations in 2020 from mid-March until June, when limited mailings were able to resume with select staff members.

The initial disruptions to the ACS meant that Census Bureau workers shifted their data collection strategies in two phases to address the challenge: first, during the months of March, April, and May 2020, where possible, Census Bureau workers shifted to calling households that were selected to participate in the survey, rather than send out mailings. Second, as mail operations resumed in a limited capacity in July, Census Bureau workers sent out full questionnaire packets and response reminders to areas with traditionally low internet connectivity and response rates while other households with higher connectivity and response rates received information regarding online survey response options. Normal survey operations were able to resume in part in October 2020, as more staff returned to the office, and resumed in full in April 2021.

In-person. The Census Bureau typically uses in-person data collection methods to both follow up with nonresponding households and also to collect information from group quarters (such as assisted living facilities, prisons, and college dorms) and residents of tribal lands. Much like mail operations, in-person data collection was halted from March to June 2020, resumed in a limited capacity in July, supplemented by phone follow-ups, and resumed fully for all areas without stay-at-home orders in September 2020.

Current Population Survey Annual Social and Economic Supplement³

As with the ACS, the Census Bureau's efforts at data collection for the main Current Population Survey (CPS) and the CPS Annual Social and Economic Supplement (ASEC) were interrupted by the arrival of COVID-19. In-person data collection for the 2020 ASEC, which began a mere four days before the first stay-at-home orders were issued (March 15 and March 19, respectively), was quickly suspended and a reduced number of workers quickly switched to telephone methods by the end of the month. Telephone-only data collection methods for the CPS and CPS ASEC continued in April through June 2020 to all households. Again, like the ACS, in-person efforts resumed in a limited capacity in July 2020 and were fully operational by September 2020, while still being supplemented by phone interviews. The Census Bureau has not indicated that the 2021 CPS ASEC, collected in February–April 2021 and due to be released fall 2021, will be majorly impacted by pandemic-related disruptions to data collection.

Medical Expenditure Panel Survey^{4,5}

Household Component. In May of 2020, the Agency for Healthcare Research and Quality (AHRQ) published an announcement in the Federal Register proposing a shift toward dual-mode (web and paper) data collection methods for the Medical Expenditure Panel Survey Household Component (MEPS-HC). As two responses were recorded within the 60-day public comment window, AHRQ published a follow-up announcement in August 2020.

As a part of this announcement of survey methodology changes, AHRQ revealed that due to COVID-19, the MEPS-HC moved to telephone interviewing as of March 2020 for all panels and rounds currently in the field with increased use of the web to facilitate respondent reporting and will continue to rely on web response until the fall, when a limited set of in-person interviewing rounds was planned to resume.

Insurance Component. The AHRQ recently released a methods report in August 2021 detailing adaptations and changes made to the Medical Expenditure Panel Survey Insurance Component (MEPS-IC). Like the Household Component, the MEPS-IC shifted to a telephone and online survey methodology beginning in April 2020, and all in-person data collection was suspended entirely for the year. Instead of mailing paper survey forms to employers in June through October, a letter was sent encouraging employers to respond via the online survey portal. Email reminders were sent to nonresponding employers, and email and secure messaging were used to supplement typical phone-based problem resolution and telephone follow-up activities. Mailing operations were able to be resumed in a limited capacity, and only upon request, in late summer.

National Health Interview Survey⁶

Data collection for the National Health Interview Survey (NHIS), typically conducted by making personal visits to respondents' homes, was significantly impacted by the COVID-19 pandemic beginning in the second quarter (April to June) of 2020. The National Center for Health Statistics (NCHS) suspended all in-person visits starting March 19, 2020, and data was instead collected exclusively via telephone interviews through July 2020. A limited number of household visits resumed in selected areas in July and in all areas of the country in September, though protocols to attempt contact via telephone first remained in place.

Additionally, starting in August and continuing through the end of December 2020, NCHS chose to simultaneously field the 2020 NHIS with a parallel subsample of about 20,000 adult respondents who completed the NHIS in 2019 and were re-contacted by telephone and asked to participate again. The completion rate for this follow-up survey was between 50 and 60 percent.

Survey Questionnaire

In light of the disruptions of the COVID-19 pandemic on the lives of Americans, as well as the disparate burdens placed on different subpopulations from the coronavirus, many of these federal surveys either added or modified existing questions to attempt to measure the impacts of the pandemic on topics like health behaviors, access to and utilization of health care, and COVID cases and testing, among others.

American Community Survey

The Census Bureau did not add any new questions to the ACS in response to COVID-19, preferring to leave the questionnaire as-is. Instead, the Census Bureau created the Household Pulse Survey, a biweekly survey specifically designed to collect information on the impact of the coronavirus pandemic on the United States adult population in near real time.

Current Population Survey Annual Social and Economic Supplement

In response to the pandemic, the CPS not only added [five new questions](#)—four regarding work or employment status and one about access to and affordability of medical care in direct response to COVID—to the basic monthly questionnaire beginning in May 2020, but also asked survey workers to add follow-up questions to their telephone interviews with respondents in order to differentiate the pandemic's effect on job and employment status as opposed to more standard reasons (e.g., seasonal employment, job change, employment loss, etc.).

At this time there is no publicly available documentation suggesting that any changes were made to the CPS ASEC questionnaire in response to COVID.

Medical Expenditure Panel Survey

Household Component. As part of the Federal Register announcement of changes to the 2020 MEPS-HC, AHRQ also published an intent to add new computer-assisted personal interviewing (CAPI) questions collecting information about COVID-19, including telehealth, into the already existing questionnaire form, as well as an entirely new, self-administered questionnaire (SAQ) entitled, "Social and Health Experiences," which captures information on any delay in care due to COVID-19. Both surveys are primarily available as web-based questionnaires, with in-person follow up as needed.

Insurance Component. AHRQ did not report adding any new questions or modifying any existing questions for the MEPS-IC in 2020.

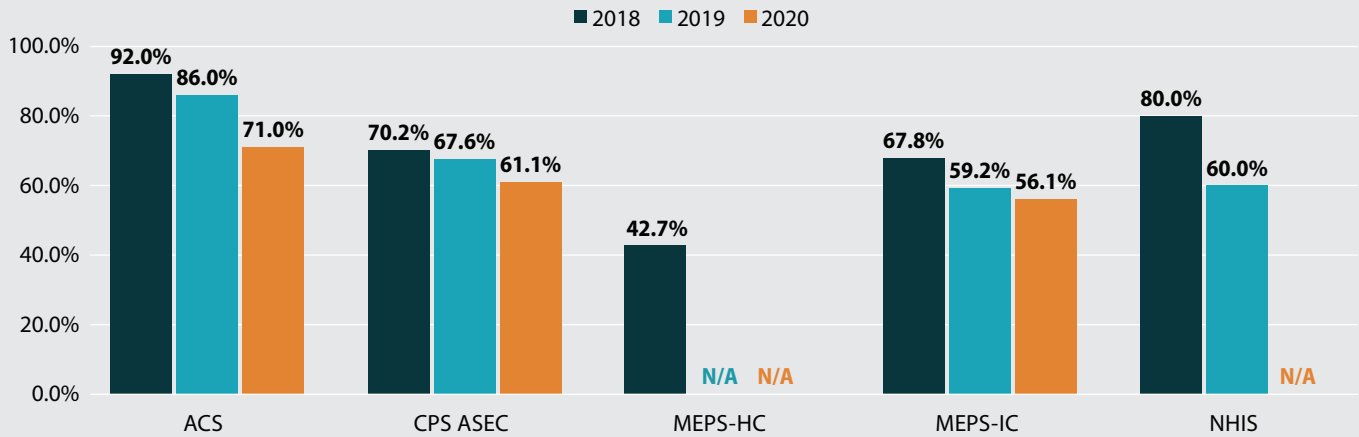
National Health Interview Survey

NCHS added several COVID-related questions during the second half of 2020. Added to the quarter three and quarter four questionnaires were questions regarding respondents' rates of COVID diagnoses, COVID symptoms, testing, measures to address the spread of virus (e.g., social distancing, masking), if their appointments for other medical treatments were canceled due to COVID, and if they knew anyone who had contracted the virus.

Response Rates

One of the biggest impacts of the COVID-19 pandemic on federal survey has been on response rates. While rates have been declining overall in recent years, significant drops were seen in 2020 for each survey that has so far released response rates.

Federal Survey Response Rates, 2018-2020



American Community Survey

Disruptions to both mailing and in-person follow-ups, as well as operation suspension for the months of March, April, and May while responses were only able to be collected by phone (where a telephone number was available) meant that only about two-thirds of the normal number of responses in a survey year were able to be collected for the ACS. On a recent [special webinar](#), the Census Bureau reported more exact figures for declining ACS response rates: 71 percent in 2020, down from 86 percent in 2019 and 92 percent in 2018.

Additionally, while the drop in response rates was cited by the Census Bureau as one factor in their decision to not release regular 2020 ACS data, another issue cited by the Bureau was the fact that the responses that were received for the ACS were not entirely representative of the of the U.S. population, but rather overrepresented certain groups and underrepresented certain others.

Current Population Survey Annual Social and Economic Supplement ⁷

The effects of the COVID-19 pandemic on response rates were felt across the board for the Census Bureau. While the organization made every effort to complete interviews by telephone, the response rate for the CPS ASEC was 61.1 percent in 2020, roughly six percentage-points lower than in 2019 (67.6 percent). In the case of both the CPS and CPS ASEC, computer-assisted telephone interview (CATI) contact centers used for respondent follow-up were closed on March 20, 2020, and no CATI follow-up occurred after that date, resulting in higher nonresponse for both the basic CPS and the ASEC.

Medical Expenditure Panel Survey ⁸

Household Component. While impacts to the release date for 2020 MEPS-HC data are currently unknown, AHRQ has been proactive in their attempts to deal with potential survey response rate drops. Extensions for data collection panels already in the field and the creation of additional new interview panels have been implemented for 2020 as well as for 2021 with a goal to offset any impact on response rates due to the pandemic or changes in primary mode for data collection.

Insurance Component. Like the ACS and CPS, the MEPS-IC saw a decrease in response rates for 2020, through the drop was smaller than for the other two surveys. Last year, the MEPS-IC response rate was 56.1 percent, compared to 59.6 percent in 2019. AHRQ did also acknowledge that employer-sponsored insurance data, as well as data for insurance coverage by firm size, for 2020 may have been affected by the unprecedented changes in employment during the pandemic. An investigation is currently underway to determine how much of a factor survey response timing was in affecting data (e.g., openings and closures of establishments or openings and closures in multi-establishment firms during the survey period).

National Health Interview Survey

Though the full year of estimates from the NHIS have yet to be released, the National Center for Health Statistics has already reported seeing effects of the pandemic on response rates for the 2020 survey. As a result of the NHIS's shift to telephone-only interviewing, the sample household response rate declined from 60 percent in the first quarter (January–March) to 42.7 percent in the second quarter (April to June). More specifically, the adult response rate fell from 57.9 percent to 41.1 percent; and the child response rate dropped from 57.6 to 40.1 percent. Full details on response rate breakdowns for the third and fourth quarters of the year are likewise not yet available, but NCHS has released overall response rates, which recovered somewhat from the previous quarter at approximately 49 percent (Q3) and 54 percent (Q4).

Behavior Risk Factor Surveillance System (BRFSS)

While the U.S. Centers for Disease Control and Prevention (CDC) has not yet released any announcements regarding changes to another major federal survey, the Behavior Risk Factor Surveillance System (BRFSS), individual states (e.g., [Connecticut](#), [Florida](#), [Missouri](#)) have chosen to add COVID-related questions to their 2021 survey questionnaire forms, aimed at understanding how the pandemic has affected health behaviors, health care access, and employment, as well as COVID cases, testing, and hospitalization rates.

Conclusions

The COVID pandemic majorly disrupted the ability of federal agencies to collect survey data. As data from 2020 becomes available, even in a limited capacity or delayed from a usual annual release schedule, it will be more important than ever for researchers to not only understand changes in data that may be a result of the coronavirus pandemic, but also understand the factors that may affect data collection, such as limitations in data collection and changing response rates.

These factors may not only impact the actual survey estimates, but how states and other users can and should use the data. SHADAC plans to continue to monitor the changes and revisions to each of these surveys as they are announced by the organization which conduct them, and will update this resource, as well as others (see our [2020 ACS resource page](#)), as new information is available.

¹ For more on SHADAC's work with the Household Pulse Survey, visit our resource page: <https://www.shadac.org/Household-Pulse-SurveyMethods>

² Reese, D., Scanniello, N., & Villa Ross, C. (2021, May 27). Adapting the American Community Survey amid COVID-19. U.S. Census Bureau. <https://www.census.gov/newsroom/blogs/random-samplings/2021/05/adapting-the-ac-s-amid-covid-19.html>

³ Berchick, E.R., Mykyta, L., & Stern, S.M. *The influence of COVID-19-related data collection changes on measuring health insurance coverage in the 2020 CPS ASEC* [SESHD 2020-13]. U.S. Census Bureau. <https://www.census.gov/content/dam/Census/library/working-papers/2020/demo/sehshd-wp2020-13.pdf>

Minnesota Population Center (MPC). (n.d.). *CPS and COVID-19*. University of Minnesota. <https://cps.ipums.org/cps/covid19.shtml>

⁴ Agency for Healthcare Research and Quality (AHRQ). (2020, August 4). Agency Information Collection Activities: Proposed Collection; Comment Request [2020-16948]. *Federal Register*, 85 FR 47214, 47214-47216. <https://www.federalregister.gov/documents/2020/08/04/2020-16948/agency-information-collection-activities-proposed-collection-comment-request>.

⁵ Davis, K.E. (August 2021). *Sample design of the 2020 Medical Expenditure Panel Survey Insurance Component* [Method Report #34]. Agency for Healthcare Research and Quality (AHRQ). https://meps.ahrq.gov/data_files/publications/mr34/mr34.pdf

⁶ National Center for Health Statistics (NCHS). (2021, May 7). *National Health Interview Survey: 2020 NHIS*. U.S. Centers for Disease Control and Prevention (CDC). <https://www.cdc.gov/nchs/nhis/2020nhis.htm>

⁷ Rothbaum, J. (2020, September 15). How Does the Pandemic Affect Survey Response: Using Administrative Data to Evaluate Nonresponse in the Current Population Survey Annual Social and Economic Supplement. U.S. Census Bureau. <https://www.census.gov/newsroom/blogs/research-matters/2020/09/pandemic-affect-survey-response.html>

⁸ AHRQ has published an update to their release schedule noting that portions of the MEPS-IC, normally released in July, are now available as of August 2021, while other portions of the MEPS-IC will be released in December 2021. While the data for the 2019 MEPS-HC will be released as usual in August 2021, no announcements have yet been made as to any possible delays in releasing 2020 MEPS-HC data.