

Request for Approval of a Non-Substantive Change to the
National Health and Nutrition Examination Survey

OMB No. 0920-0950
(Expiration: 04/30/2023)

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Justification

1. Circumstances making the collection of information necessary

This request is for a non-substantive change to the National Health and Nutrition Examination Survey (NHANES) (OMB No. 0920-0950, Exp. Date 04/30/2023), conducted by the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC). NHANES is conducted annually. The NHANES consists of three primary methods of data collection: the personal interviews, the physical examinations (conducted in the Mobile Examination Center (MEC)) including laboratory assessments, and follow-up interviews that take place after the examinations. A major advantage of continuous NHANES data collection is the ability to address emerging public health issues and provide objective data on health conditions and issues by adding/changing/modifying survey content.

On April 12, 2021, OMB approved the NHANES 2021 – 2022 data collection cycle. The supporting statements requested approval to 1) collect data in years 2021-2022 with modifications to adapt the survey due to the coronavirus disease (COVID-19) pandemic and related concerns; 2) collect follow-up data and conduct activities related to data collection/processing into 2023; 3) conduct developmental projects to support data collection for 2023 and beyond; and 4) conduct non-response projects, as needed.

Using preliminary data from the first 4 completed locations of the 2021-2022 cycle, the interview response rate (RR) was 56%, which is comparable to the interview RR observed during the 2019-2020 NHANES cycle. However, in these 4 locations, only 75% or less of interviewed participants went on to complete the MEC exam (vs. 90% MEC RR in the previous cycle). NCHS submitted, and OMB approved, a non-substantive change request in January 2022 in efforts to increase participation. The specifics of this request include:

- 1) Restoration of the MEC exam incentive for adults (ages 16+) from \$85, that was implemented for 2021 data collection, to \$125 in place from 2009-2020. This incentive increase was approved for only 5 NHANES locations.

Concurrently, NHANES is implementing and optimizing the following additional strategies:

- 2) Enhancing the timing and content of contact attempts
- 3) Utilizing study ambassadors, and
- 4) Analyzing paradata to identify characteristics associated with MEC exam participation, closely assessing those who missed or canceled appointments, and developing targeted recontact strategies and messaging for these groups

This multi-faceted approach to increase participation in the ever-evolving landscape of the COVID-19 pandemic is necessary to optimize response and survey completion. To further maximize these efforts, NHANES is requesting OMB approval to administer the following questionnaires to household interview respondents who did or did not agree to a MEC exam in the current 2021-2022 cycle:

- 1) Follow-up questionnaire for interviewed adult (ages 18+) participants who ***completed the MEC exam (referred to as MEC “respondents”)***
 - a. The “respondent” questionnaire will be administered to participants who, at the conclusion of their household interview, agreed to schedule a MEC exam, and completed a MEC examination.
- 2) Follow-up questionnaire for interviewed adult (ages 18+) participants who ***refused to be scheduled for the MEC exam, did not come to their MEC exam appointment, or canceled their MEC appointment (referred to as MEC “nonrespondents”)***
 - a. The “nonrespondent” questionnaire will be administered to participants who at the conclusion of their household interview:
 - i. refused participation in the MEC examination, and continued to refuse at successive refusal conversion attempts;
 - ii. scheduled a MEC appointment but did not show up for their scheduled MEC exam appointment and refused further attempts to reschedule;
 - iii. canceled their MEC exam appointment and refused further attempts to reschedule.
 - b. Survey participants who refused participation in the MEC are asked for their reasons for refusal (e.g., compensation, travel burden, COVID-19 risk, being too busy, etc.) at the conclusion of the household interview. The information is tracked in the NHANES case management system and will supplement the additional data collected from this follow-up questionnaire.

Data collected via these follow-up questionnaires will inform data collection operations, including tailored communication strategies and outreach materials, and enable NHANES to better understand barriers to MEC exam participation. Combined with data collected through the NHANES household interviews and paradata, profiles of different types of participants may be developed and the likelihood of completing a MEC examination may be assessed. Further, data from these questionnaires may be used to inform NHANES 2024 operations related to placement of the MEC, survey or exam length, incentive amounts, and other operational elements. Additionally, NHANES will consider publishing the results from these follow-up questionnaires as they may have important implications for operational design among other nationally representative surveys experiencing declines in response rates.

2. Purpose and use of the information collection

Household questionnaire

NHANES collects questionnaire data as stand-alone components or to complement one or more examination or laboratory assessments. As a result of the COVID-19 pandemic, NHANES 2021-2022 screening, household, and family interviews previously conducted via in-person interview in the home are administered either in-person, through multi-mode methods, or over the phone to reduce person-to-person contact. The average household interview time was shortened from 1.5 hours to approximately 1 hour to reduce burden and help maximize

response rates. Trained interviewers may now ask questions of NHANES participants over the phone or using online tools. NHANES makes use of self-administered approaches of data collection, such as online surveys or paper surveys, that participants mail back.

MEC examination

The MEC examination visits were shortened from 4 to 2.5 hours to reduce burden and maximize response rates. A MEC visit consists of physical examinations (i.e., anthropometry, standing balance, dual energy x-ray absorptiometry, blood pressure management, liver elastography), laboratory assessments (e.g., renal and hepatic function, biochemical panel, etc.), and more sensitive interview components administered via ACASI (e.g., alcohol use, mental health, etc.). Previously, NHANES also conducted an in-person dietary Day 1 interview at the MEC and a dietary Day 2 interview by phone. NHANES changed the mode of the in-person dietary Day 1 interview to also be via phone to limit face-to-face interaction with participants and mitigate COVID-19 risk. In January of 2022, NHANES received approval to increase the adult (ages 16+) MEC exam incentive at 5 locations in efforts to increase MEC exam response rates.

In addition to shortening the household interview and MEC exam visits and increasing the adult MEC exam incentive, the identification of factors contributing to both MEC response and nonresponse is imperative to increase survey participation and completion. To assess for these factors, NHANES proposes the administration of a follow-up questionnaire for both MEC exam respondents and nonrespondents who completed the household interviews in the current 2021-2022 cycle.

MEC respondent follow-up questionnaire

The MEC respondent follow-up questionnaire consists of a letter (**see Att. 1**) requesting participation in the brief questionnaire from adult (ages 18+) participants who completed the household interview and MEC exam. The questionnaire will not be administered until after all core NHANES components are completed, including the dietary interviews, as introduction of this questionnaire prior to completion of the dietary interviews may have a negative effect on cooperation rates for those components. Administering this questionnaire while still present in the MEC may also introduce social desirability bias as some of the questions focus on the quality of the MEC experience.

Respondents completing their final dietary telephone interview will be asked to complete this new follow-up questionnaire at that time. Those who refuse will be sent a hard copy questionnaire via express mail to their household address. Respondents who refused dietary interviews entirely will only receive hard copy questionnaires. Those who receive a hard copy questionnaire will have the option to return their questionnaire via mail or provide responses via toll free telephone number. Respondents will receive \$10 as remuneration for their time and cooperation.

Questionnaire items were adapted or developed from other work on follow up surveys^{a b} and refined by survey methodologists from NHANES' data collection contractor. The questionnaire (**see Att. 2**) first asks questions about the household interview (i.e., experience with NHANES staff, appropriateness of interview time, reasons for interview participation). Participants are then asked to provide their level of agreement via a Likert scale regarding topics such as survey participation, disclosure of health information and related privacy and confidentiality, trust in government, participation in the community, and preventative health measures. The questionnaire concludes by soliciting responses to questions regarding the respondent's experience during the MEC exam visit as well as reasons one may not have participated in the MEC exam if concerns ever arose.

MEC nonrespondent follow-up questionnaire

Comparable to the MEC respondent follow-up questionnaire, the MEC nonrespondent questionnaire mailing includes an introductory letter (**see Att. 3**) that invites participation from nonrespondents (i.e., MEC exam visit refusals, "no shows," or cancellations) who only completed the household interview. These participants will also be sent \$10, included in the express mailing, as remuneration and are given the option to complete the survey via mail or telephone. Nonrespondent questionnaires for each location will be mailed 3 weeks after the MEC has closed in that location.

MEC nonrespondents who participate in this questionnaire (**see Att. 4**) are first asked the same questions about their household interview as in the respondent follow-up questionnaire. Then, they are asked questions on why they chose not to complete the MEC exam visit. Questions include the importance of COVID-19 affecting one's decision to not have a health exam, concern over COVID-19 risk, travel distance to the MEC, government distrust, disinterest in mask wearing, and fear of disclosure of health information. Questionnaire development followed an identical process as the respondent follow-up survey discussed above.

NHANES field interviewers and refusal conversion specialists explicitly probe for and track reasons for MEC refusal in the NHANES case management system. These paradata provided by survey participants who refused participation in the MEC at the conclusion of the household interview (e.g., reasons for refusal such as remuneration, travel burden, COVID-19 risk, being too busy, etc.) will supplement the data collected from the nonrespondent questionnaire. NHANES considers these data sources to be complementary as participants do not always provide detailed explanations or reasons for refusal to field interviewers but may be more likely to answer honestly in a self-administered setting.

^a Triplett, Timothy, Adam Safir, Kevin Wang, Rebecca Steinbach, and Simon Pratt 2002. "Using a Short Follow-up Survey to Compare Respondents and Nonrespondents" Proceeding of the Joint Statistical Meetings, American Statistical Association.

^b Stoop, Ineke, A.L. 2004. "Surveying Nonrespondents." *Field Methods*, Vol. 16, No. 1, 23–54. DOI: 10.1177/1525822X03259479

We do not know what the response rate to these follow-up questionnaires will be; however, we expect them to be low. Most surveys do not conduct follow-up surveys for this reason. However, NHANES is in a unique position as our “nonrespondents” will have all completed the household interview, therefore, they may be more likely to respond than a true nonresponder.

A summary of the approved changes in interview modes between NHANES 2019-2020 and 2021-2022 are provided in **Table 1** below. The proposed modes of collection for the follow-up respondent and nonrespondent questionnaires are noted in the table. Mailings for the follow-up questionnaires will be sent out immediately after OMB and Ethics Review Board approvals.

Table 1. NHANES 2021 – 2022: Modes of Data Collection by Component

Order	Component	2019 – 2020	2021 – 2022
1	Household Screener & Relationship Questionnaire	In-person	Multi-mode
2	Sample Participant & Family Questionnaires	In-person	Telephone & In-person
3	MEC Exam: Interview portion	In-person, some ACASI	Primarily ACASI
4	1 st Dietary Recall	In-person (at MEC)	Telephone (post MEC)
5	2nd Dietary Recall	Telephone (post MEC)	Telephone (post MEC)
6	Food Consumer Behavior Survey (FCBS)	Telephone (post MEC)	Telephone (post MEC)
7	MEC Respondent & Nonrespondent Follow-up Questionnaires	N/A	Mail or Telephone (post FCBS questionnaire for respondents) Mail or Telephone (post household interview for nonrespondents)

9. Explanation of any payment or gift to respondents

Adult participants (ages 18+) who complete the respondent and nonrespondent follow-up questionnaires are offered \$10, included in the mailing, as remuneration for their time and cooperation.

10. Protection of the Privacy and Confidentiality of Information Provided by Respondents

The following confidentiality and burden statements will be included in the questionnaire:

Assurance of Confidentiality – We take your privacy very seriously. All information that relates to or describes identifiable characteristics of individuals, a practice, or an establishment will be used only for statistical purposes. NCHS staff, contractors, and agents will not disclose or release responses in identifiable form without the consent of the individual or establishment in accordance with section 308(d) of the Public Health Service Act (42 U.S.C. 242m(d)) and the Confidential Information Protection and Statistical Efficiency Act of 2018 (CIPSEA Public Law No. 115-435, 132 Stat. 5529 § Sec. 302)). In accordance with CIPSEA, every NCHS employee, contractor, and agent has taken an oath and is subject to a jail term of up to five years, a fine of up to \$250,000, or both if he or she willfully discloses ANY identifiable information about you. In addition to the above cited laws, NCHS complies with the Federal Cybersecurity Enhancement Act of 2015 (6 U.S.C. §§ 151 and 151 note) which protects Federal information systems from cybersecurity risks by screening their networks.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road, MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0950).

12. Estimates of annualized burden hours and costs

The respondent and nonrespondent follow-up questionnaires are each budgeted for 10 minutes per response. The respondent questionnaire will be administered to all adult study participants (ages 18+) who completed the household interviews and the MEC exam visit in the 2021-2022 NHANES cycle. The nonrespondent questionnaire will be administered to all adult study participants (ages 18+) who only completed the household interviews in the 2021-2022 cycle. Both questionnaires will be administered for the full 2-year cycle (i.e., 10,000 total participants). The annualized burden is 833 hours (5,000 respondents * 10/60 hours = 833 hours) (**see Table 3**). This burden time was already budgeted and approved in line 6 (“Developmental Studies & Special Projects”) of the original submission (**see Table 4**). No additional burden is sought.

Table 3. Annualized Burden Hours for MEC Respondent and Nonrespondent Follow-up Questionnaires

Type of Respondent	Form	Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in hours)	Total Burden (in hours)
Individuals in households	MEC Respondent & Nonrespondent Follow-up Questionnaires	5,000	1	10/60	833
Total	5,000 per year (10,000 total for 2021-2022 cycle)				833 (1,667 total cycle)

<u>Type of Respondent</u>	<u>Form Name</u>	<u>Number of Respondents</u>	<u>Number of Responses per Respondent</u>	<u>Average Burden per Response (in hours)</u>	<u>Total Burden (in hours)</u>
<u>Individuals in households</u>	<u>Screener</u>	<u>8,300</u>	<u>1</u>	<u>10/60</u>	<u>1,383</u>
<u>Individuals in households</u>	<u>Household Interview</u>	<u>5,600</u>	<u>1</u>	<u>1</u>	<u>5,600</u>
<u>Individuals in households</u>	<u>MEC Interview & Examination</u>	<u>5,600</u>	<u>1</u>	<u>2.5</u>	<u>14,000</u>
<u>Individuals in households</u>	<u>Day 1 and Day 2 Telephone Dietary Recall & Dietary Supplements</u>	<u>5,600</u>	<u>1</u>	<u>1.3</u>	<u>7,280</u>
<u>Individuals in households</u>	<u>Flexible Consumer Behavior Survey Phone Follow-Up</u>	<u>5,600</u>	<u>1</u>	<u>20/60</u>	<u>1,867</u>
<u>Individuals in households</u>	<u>Developmental Projects & Special Studies</u>	<u>3,500</u>	<u>1</u>	<u>3</u>	<u>10,500</u>
<u>Individuals in households</u>	<u>24-hour wearable device projects</u>	<u>1,000</u>	<u>1</u>	<u>25</u>	<u>25,000</u>

<u>Total</u>	<u>65,630</u>
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Table 4. 2021 - 2022 Approved Annualized Burden Hours

15. Explanation for program changes and adjustments

The respondent and nonrespondent questionnaires described in this non-substantive change request do not change the burden hours from the previously approved clearance. The burden hours in this submission are captured in the “Developmental Studies & Special Projects” line of the burden table currently approved for NHANES (**see Table 4**).

List of Attachments

- Att. 1 MEC FollowUp_Letter_02242022
- Att. 2 NHANES_Follow_up_Questionnaire_v9_04102022
- Att. 3 MEC Refusers_Letter_02242022
- Att. 4 NHANES_Refuser_No_Show_v8_04102022