NATIONAL CENTER FOR HEALTH STATISTICS

Vital and Health Statistics

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September 2023

# National Center for Health Statistics' 2019 Research and Development Survey, RANDS 3

## Programs and Collection Procedures

Centers for Disease Control and Prevention
National Center for Health Statistics

*NCHS reports can be downloaded from: https://www.cdc.gov/nchs/products/index.htm.*

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# National Center for Health Statistics' 2019 Research and Development Survey, RANDS 3

## Programs and Collection Procedures

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

Hyattsville, Maryland
September 2023

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# National Center for Health Statistics' 2019 Research and Development Survey, RANDS 3

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## Abstract

### Objective

This report on the third round of the Research and Development Survey (RANDS 3) provides a general description of RANDS 3 and presents percentage estimates of selected demographic and health-related variables from the overall sample and by one set of experimental groups embedded in the survey. Statistical tests comparing estimates for the two randomized groups were conducted to evaluate the randomization.

### Methods

NORC at the University of Chicago conducted RANDS 3 for the National Center of Health Statistics in 2019 using its AmeriSpeak Panel in web-only mode. To assess question–response patterns, probe questions and four sets of experiments were embedded in RANDS 3, with panelists randomized into two groups for each set of experiments. Participants in each group received questions with differences in wording, question-and-response formats, or question order.

### Results

Of the 4,255 people sampled, 2,646 completed RANDS 3 for a completion rate of 62.2% and a weighted cumulative response rate of 18.1%. Iterative raking was performed using demographic and selected health condition variables to calibrate the RANDS 3 sample to 2019 National Health Interview Survey (NHIS) estimates. As a result, the overall demographic distribution and percentages of asthma, diabetes, hypertension, and high cholesterol for the calibrated RANDS 3 sample aligned with the percentages estimated from the 2019 NHIS. The distributions of demographic and health-related variables were comparable between the two randomized groups examined except for ever-diagnosed hypertension.

### Conclusion

As part of a research series using probability-based survey panels, RANDS 3 included health-related questions with a focus on disability and opioids. Because RANDS is an ongoing research platform, a variety of persistent and emergent research questions relating to survey methodology will continue to be examined in current and future rounds of RANDS.

**Keywords:** web panel survey • questionnaire design • split-sample experiment • probability-sampled recruited panel

## Introduction

Complex multistage probability surveys have been one of the major approaches for producing nationally representative estimates of the target population. The responses collected through these well-designed, high-quality surveys provide widely used information on population health, informing policy and program decision-making as well as enabling reviews of the effectiveness of current policies and programs. Traditional survey modes include face-to-face interviews, telephone interviews, and mail-in questionnaires. Although these survey modes were effective for response collection in the past, both operational cost and nonresponse rates have been increasing in recent years (1). Consequently, many survey researchers and administrators seek to identify potential solutions to the problems incurred by rising costs and declining response rates while maintaining the methodological rigor of large-scale complex probability surveys.

As the nation's primary health statistical agency, the National Center for Health Statistics (NCHS) also is interested in identifying approaches to supplement traditional survey methods, considering these challenges. The NCHS Division of Research and Methodology initiated this exploration by examining web-based, probability-sampled commercial survey panels. In 2015, NCHS launched the Research and Development Survey (RANDS), with the objectives of 1) understanding whether and how commercial probability-

sampled survey panels could enhance traditional NCHS population health surveys, and 2) examining question–response patterns with probe questions and embedded experiments (2). Moreover, through RANDS and the work of its second objective, potential questions for future national health surveys may first be evaluated in the field before dissemination in official national health surveys.

For the first two rounds of RANDS, known as RANDS 1 and RANDS 2, NCHS contracted with Gallup, Inc. to administer the web-mode questionnaires with probability-based samples selected from the Gallup Panel (3). In both RANDS 1 and RANDS 2, selected questions from the National Health Interview Survey (NHIS) Family and Sample Adult questionnaires were included in the surveys, with additional probe questions embedded in RANDS 2 to gain insight into question–response patterns (4). Complete questionnaires and detailed descriptions of RANDS 1 and RANDS 2 are available elsewhere (2), with public-use versions of the data files available from: https://www.cdc.gov/nchs/rands.

In 2019, NORC at the University of Chicago (NORC) conducted the third round of RANDS (RANDS 3) for NCHS using their AmeriSpeak Panel. Similar to RANDS 2, RANDS 3 contained selected NHIS questions and probe questions. Moreover, RANDS 3 incorporated four randomized experiments to examine how participants responded to similar questions that had slightly different question wording, question order, response options, or response formats. For each experiment, respondents were divided into two groups in separate randomization processes (Figure).

This report has two main goals: The first is to provide a general description of RANDS 3, and the second is to present percentage estimates of selected demographic and health-related variables. To demonstrate the data with the underlying experimental design along with an evaluation of the randomization process, this report presents, for the overall sample and by one set of randomized groups, the percentages of selected demographic and health-related variables that were applied for adjustment (calibration) of the final sample weights to improve estimate precision. Results from most of the individual experiments embedded in RANDS 3 are not presented in this report. A public-use version of the RANDS 3 data set is available from: https://www.cdc.gov/nchs/rands.

# Methods

## Background

NORC conducted RANDS 3 using their AmeriSpeak Panel with web administration only. The AmeriSpeak Panel is a probability-based panel designed to be representative of the U.S. household population. Details about the AmeriSpeak panel can be found on NORC's website: https://amerispeak.norc.org.

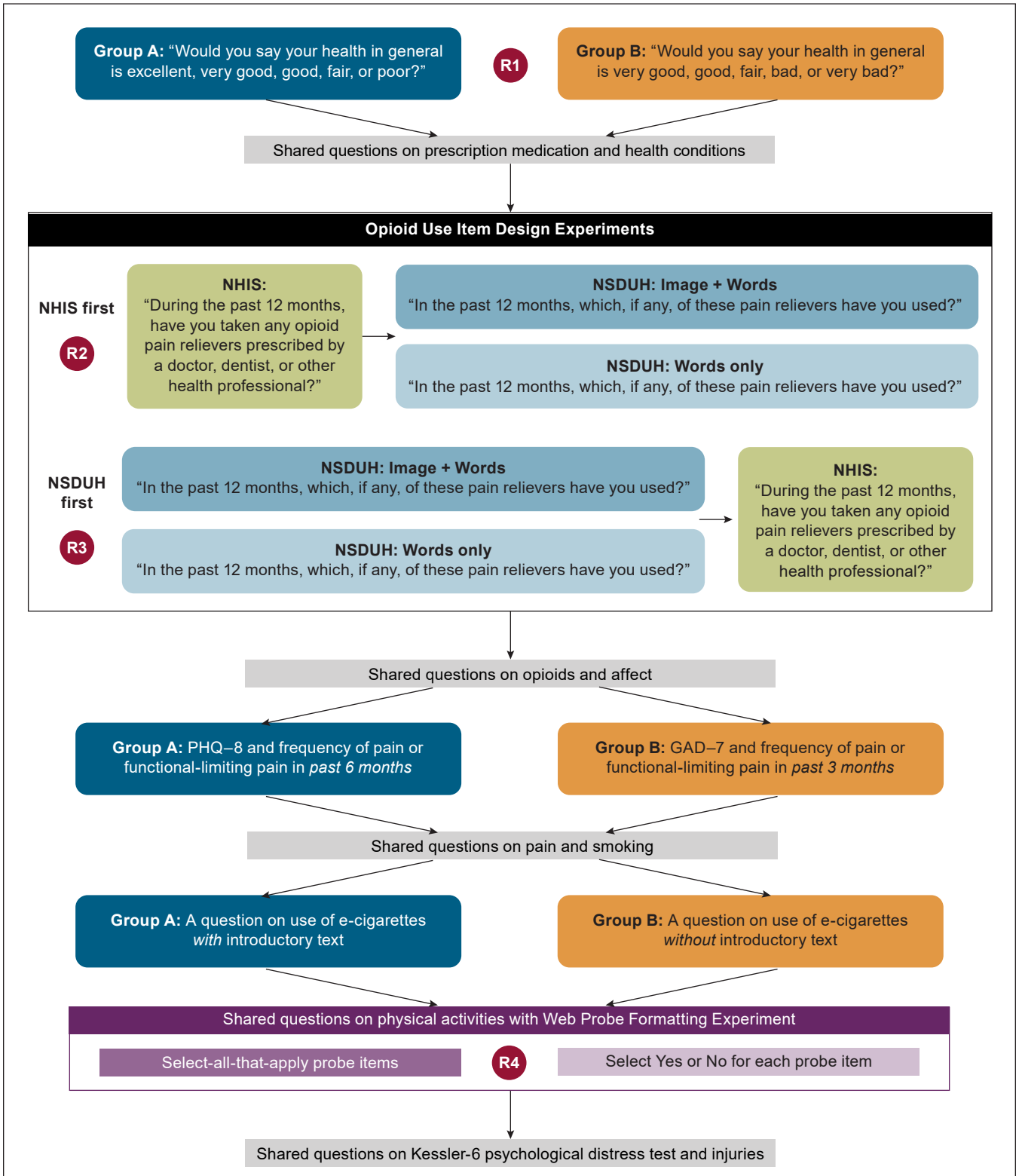
## Questionnaire Design

RANDS 3 contained selected questions from the 2018 and 2019 NHIS, along with embedded probe questions for question–response pattern assessments (4). NHIS is an annual cross-sectional survey collecting information on the health of the U.S. civilian noninstitutionalized population; details are available from: https://www.cdc.gov/nchs/nhis/. In addition to the NHIS questions, RANDS 3 also contained a question on the use of opioid pain relievers that was taken from the National Survey on Drug Use and Health (NSDUH), conducted by the Substance Abuse and Mental Health Services Administration and available from: https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health. In total, RANDS 3 contained 77 items (with experimental variants counting as one question), including 17 probe questions. Four experiments designed independently from each other were embedded in RANDS 3, with participants randomly divided into two groups for each of the four experiments. All participants were involved in all four experiments, but the randomization group to which each respondent was assigned for each experiment was unrelated to their randomization group assignment for other experiments. The four experiments embedded in RANDS 3 were:

1. *Form A and Form B Experiment* (*Experiment 1*)—Participants were divided into two groups, Group A and Group B. Groups A and B received slightly different question wordings or response options as Form A and Form B versions, respectively, for each of the following topics:
    a. A self-rated health question with different response scales
    b. A set of questions on pain with different reference periods
    c. Testing the effect of including or excluding introductory text with a set of questions regarding e-cigarette use
    d. Reporting of depression and anxiety (affect) and their functional impact due to the examined construct, using the eight-item Patient Health Questionnaire (PHQ–8) (5,6) to screen for depression symptoms or the seven-item Generalized Anxiety Disorder test (GAD–7) (7) for identifying generalized anxiety disorder symptoms

    An example that illustrates the difference between two versions of the same question tested is the self-rated health question. Group A received the question (A_PHSTAT) with the following wording: "Would you say your health in general is excellent, very good, good, fair, or poor?" The question for Group B (B_PHSTAT) was: "Would you say your health in general is very good, good, fair, bad, or very bad?" The response options that the two groups received correspond to the categories listed in the questions. Based on the response

## Figure. Flowchart of Research and Development Survey 3




NOTES: NHIS is National Health Interview Survey, NSDUH is National Survey on Drug Use and Health, PHQ–8 is the eight-item Patient Health Questionnaire, and GAD–7 is the seven-item Generalized Anxiety Disorder test. Research and Development Survey 3 contains four experiments, with distinct randomization processes (R1–R4) for each experiment. Form A and Form B Experiment (Experiment 1) randomized survey respondents into two groups, Group A and Group B, and respondents with the same group designation received the same version of questions for Experiment 1. The Opioid Use Item Design Experiments involved two separate experiments: a) Question Order Experiment and b) NSDUH Version Experiment. For the Question Order Experiment (Experiment 2), respondents were divided into two groups with one group receiving the NHIS question before a version of the NSDUH question, and the other group receiving a version of the NSDUH question before the NHIS question. In the NSDUH Version Experiment (Experiment 3), about one-half of the respondents received the NSDUH question listing 36 opioids with both pictures and names, while the other half received the list of opioids by name only. The Web Probe Formatting Experiment (Experiment 4) randomized the respondents into two groups for physical activity-related probe questions, with one group receiving the "select all that apply" response format and the other receiving a grid format soliciting a yes or no response to each probe item.
SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019

options the two groups received, Group A received an unbalanced scale, with three options for good health, one for poor health, and one in between, while Group B received a balanced scale, with two good health and two poor health options and one in between.

2. *Opioid Use Item Design Experiments* (*Experiment 2 and Experiment 3*)—These involved two separate experiments: a) the Question Order Experiment (Experiment 2) and b) the NSDUH Version Experiment (Experiment 3). The RANDS 3 questionnaire had separate questions asking all respondents whether they took any opioid pain reliever in the past 12 months, with one question soliciting an overall yes or no response without requiring the respondent to specify the type of opioid pain relievers (examined in the 2019 NHIS), and the other question asking the respondent to indicate the specific opioid(s) used in the past 12 months from a list of 36 opioids (examined annually in NSDUH), with or without images of the opioids. The NHIS version asks, "During the past 12 months, have you taken any opioid pain relievers prescribed by a doctor, dentist, or other health professional? Examples include hydrocodone, Vicodin, Norco, Lortab, oxycodone, OxyContin, Percocet and Percodan." The NSDUH version with and without images asks, "In the past 12 months, which, if any, of these pain relievers have you used?" For those who received the version with both images and words, the following text preceded the question: "Please look at the names and pictures of the pain relievers shown below. Please note that some forms of these pain relievers may look different from the pictures, but you should include any form that you have used."

   For Experiments 2 and 3, all participants received two questions on the use of opioid pain relievers in the past 12 months, one from NHIS and one from NSDUH. In Experiment 2, respondents were randomized to have about one-half receiving the NHIS question before receiving one of the NSDUH question versions, and the other half receiving one of the NSDUH question versions before receiving the NHIS question. This experiment was intended to test whether the order difference affected the responses collected from the NHIS and NSDUH questions on opioid use. In Experiment 3, although all respondents received an NSDUH question with the same list of 36 opioids, about one-half of the randomized respondents received a version with both images and names of individual opioids, and the other half received a version with the opioid names described in words only. Experiment 3 was designed to test whether pictures of each opioid pain reliever helped opioid users recall their use of opioid pain relievers (Figure).

3. *Web Probe Formatting Experiment* (*Experiment 4*)—In three probe questions related to physical activities, one-half of participants were provided with closed-ended probe items and asked to select the applicable responses ("select all that apply"), while the other half were asked to select a yes or no response in a grid for each probe item. For example, in one of the probe questions (PROBE20), every participant received the same question: "Which of the following types of physical activity, if any, did you include when you answered the previous question?" Depending on the randomized group to which the participant was assigned (P_PROBEEXP), they may receive the response format that asks them to select one or more of the closed-ended response options ("running or jogging"; "hiking"; "walking as part of your job"; "walking outside of work"; "yardwork or cleaning your home"; "working out with exercise equipment"; "lifting weights"; "cycling, swimming, or other aerobic exercises"; "yoga or stretching"; "playing a sport, please specify which sport:"; and "other, please specify:"), or the grid format requesting a yes or no response for each probe item shown above.

Because this report aims to provide a general description of RANDS 3 and demonstrate the data with the underlying experimental design, results from most of the individual experiments embedded in RANDS 3 are not presented in this report, except for the self-rated health question in the Form A and Form B Experiment. The responses collected for different response scales in the self-rated health question are included as a demonstration of one of the experiments embedded in RANDS 3. Detailed studies on individual experiments are currently underway and will be presented in future reports. The full RANDS 3 questionnaire is included in Appendix II.

As part of the demonstration of the underlying experimental design, the percentage estimates of variables involved in calibration of sample weights are presented for the overall sample and by one set of the randomized groups (Group A and Group B for the Form A and Form B Experiment). Although four experiments are embedded in RANDS 3, this report specifically focuses on examining the set of randomizations (Group A and Group B) involved in the Form A and Form B Experiment (Experiment 1), based on the following rationale:

1. Unlike the other three experiments involving only the same questions with different question orders or response formats, part of Experiment 1 had different questions assigned to the two groups (PHQ–8 questions for Group A and GAD–7 questions for Group B) (Figure).
2. Experiment 1 examined a collection of subject topics, while the other three experiments focused on one specific topic.

Comparable underlying characteristics of these two groups may be of interest to researchers interested in exploring the RANDS 3 data set for subject areas related to Experiment 1. To demonstrate the comparability of the two groups, variables involved in calibrating the sample weights were examined by the second-order Rao–Scott chi-square test.

## Summary of Operation Processes

The RANDS 3 sample of U.S. adults aged 18 and over was selected from NORC's AmeriSpeak Panel, which was designed to represent the U.S. household population. A total of 48 sampling strata were based on age (18–34, 35–49, 50–64, and 65 and over); race and ethnicity (categories for Hispanic, Black non-Hispanic, and other non-Hispanic races, which includes White non-Hispanic and multiple race); education (associate degree or some college or less, and bachelor's degree or higher); and sex (male and female), with the sample size selected per stratum based on the U.S. population composition in each stratum and the expected differential survey completion rates (8). If more than one active adult panel member was in a household, within-household random sampling was done so that only one adult in the household was eligible for selection.

NORC conducted RANDS 3 from April 11 through April 24, 2019. The sampled 4,255 AmeriSpeak web-mode panelists were invited to complete the survey on April 11. Panelists who had not completed the survey received the first e-mail reminder on April 14 and the second reminder on April 16. Of the 4,255 invited panelists, 2,646 completed the survey (defined as getting to the last screen of the interview), and 123 provided partial responses, which were excluded from analyses in this report. The completion rate was 62.2%, calculated as the percentage of final respondents divided by the total sampled people. The weighted cumulative response rate was 18.1%, calculated as the product of the weighted panel recruitment rate, the weighted household retention rate, and the survey completion rate. The household retention rate is the weighted percentage of households recruited to the AmeriSpeak Panel available for sampling among the recruitment cohorts of the AmeriSpeak Panel being sampled. Additional information about sampling and response rates may be found in the RANDS 3 technical documentation (8).

## Sample Weights Development

The sample weights used to produce national estimates in this report were developed in several steps. Because the AmeriSpeak Panel is a probability panel, each panel member has an associated panel weight. Details on the development of panel weights can be found in the RANDS 3 technical documentation (8). For the RANDS 3-specific sampling weights, the overall survey sampling weight was calculated as the panel base sampling weight multiplied by the inverse probability of selection of an AmeriSpeak Panel member into the RANDS 3 sample within a stratum (defined by sex, race and ethnicity, age, and education), where the probability of selection for a panelist within a stratum was $n_h/N_h$—the ratio of the number of panelists sampled ($n_h$) to the total number of panelists available ($N_h$) in that stratum ($h$). To adjust for survey nonrespondents and decrease potential nonresponse bias, sampling weights were raked to general population totals associated with the following sociodemographic characteristics: age, sex, education, race and Hispanic ethnicity, housing tenure, telephone status, and census division. Any extreme weight was trimmed based on a criterion of minimizing the mean squared error associated with key survey estimates, and then weights were raked again to the same population totals. Once weighting adjustment achieved the goal of matching the U.S. Census Bureau's Current Population Survey population poststratum totals, the weights provided by NORC were proportionally adjusted to sum to the total number of RANDS 3 respondents (sample size [$n$] = 2,646). These weights are reported in the RANDS 3 public-use file.

Because the examined variables in this report are health-related, the weights applied for the analyses were developed by further raking the NORC-provided weights to match the 2019 NHIS estimates of selected health variables, in addition to matching the demographic characteristics (9). As a result, not only did the demographics of the population represented by RANDS 3 match the U.S. general population from NHIS, but so did the prevalence of selected health conditions. Inclusion of the selected health conditions in calibrating the final sample weights is expected to improve the estimate precision for the examined health-related variables. The specific variables used in raking were: age (18–34, 35–49, 50–64, and 65 and over); sex (male, female); race and ethnicity (Hispanic, Black non-Hispanic, White non-Hispanic, and other non-Hispanic, which includes American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and two or more races non-Hispanic categories); education (high school diploma or less, associate degree or some college, and bachelor's degree or higher); household income ($0–$49,999, $50,000–$99,999, and $100,000 or above); census region (Northeast, Midwest, South, and West); marital status (married, widowed, divorced, separated, never married, and living with partner); and ever had high cholesterol (yes, no), ever had asthma (yes, no), ever had hypertension (yes, no), and ever had diabetes (yes, no). The percentages and standard errors presented in this report were estimated using these postraking weights and accounted for the sampling strata.

## Analyses of Health Conditions and Health-related Behaviors

The estimates shown in this report are based on questions that were not part of any experiment and were presented to all eligible participants (rather than only people in the designated experimental groups) (Table 1), except for the self-rated health question, the results of which are shown to demonstrate one of the experiments in RANDS 3. In addition to the chronic health conditions that were used to calibrate the sample weights, RANDS 3 contained other questions related to health conditions, such as the self-rated health question, ever been diagnosed as having chronic obstructive pulmonary disease or COPD, and having repetitive-strain and nonrepetitive-strain injuries in the past

3 months. Respondents who indicated having nonrepetitive-strain injuries in the past 3 months received additional injury-related questions, such as whether the nonrepetitive-strain injuries limited usual activities for at least 24 hours or caused work or school to be missed; the number of times these functional-limiting nonrepetitive-strain injury events occurred in the 3 months before the survey; and what activities respondents were conducting when these injuries took place. These estimates are shown for the total RANDS 3 sample. Only eligible respondents were included in the analyses.

RANDS 3 also contained questions on health-related behaviors, including physical activity, smoking, and use of opioid pain relievers. These results are also shown for the total sample. According to the *Physical Activity Guidelines for Americans*, published by the U.S. Department of Health and Human Services, adults should do at least 150 minutes per week of moderate-intensity or 75 minutes per week of vigorous-intensity aerobic activity, or an equivalent combination of both (10). Additionally, the guidelines call for performing muscle-strengthening activities on 2 or more days a week. The percentages of people who met the guidelines for aerobic activity, and for both aerobic and muscle-strengthening activities, were examined. For aerobic activity, unless either the reported moderate- or vigorous-intensity aerobic activity alone met the guidelines for aerobic activity, respondents with unknown responses to either the frequency or duration questions for either moderate- or vigorous-intensity aerobic activity were excluded from the analyses. For the percentage estimate of people who met both aerobic and muscle-strengthening activities, respondents with unknown responses to aerobic activity or the muscle-strengthening leisure-time physical activity were excluded from the analyses.

For smoking, all participants were asked, "Have you smoked at least 100 cigarettes in your entire life?" and the response options (yes, no). While respondents with unknown responses to this question were excluded from the analyses, respondents who answered no were categorized as nonsmokers, and those who selected yes received a follow-up question: "Do you now smoke cigarettes every day, some days, or not at all?" Respondents who indicated "every day" or "some days" were categorized as current smokers, and those who indicated "not at all" were categorized as former smokers.

On the subject of opioid use, in addition to the two questions in the Opioid Use Item Design Experiments (Experiment 2 and Experiment 3) that asked all participants whether they used opioids and the type of opioids used in the past 12 months, participants who indicated using opioids in the past 12 months were then asked questions about current opioid use, and reasons and length of time for the opioid use. Only estimates of opioid use derived from questions that are not part of Experiment 2 or Experiment 3 are presented in this report.

## Statistical Analysis

Percentage estimates of selected variables were calculated based on the nonmissing responses to the corresponding questions, incorporating the sampling strata information and the sample weights raked to the 2019 NHIS. Percentages and standard errors were estimated using SAS-callable SUDAAN version 11.0.3 (RTI International, Research Triangle Park, N.C.). All percentages presented in this report follow NCHS data presentation standards for proportions unless otherwise indicated (11).

For successful randomization, the underlying characteristics of the groups subjected to the experiments should be comparable. The second-order Rao–Scott chi-square test scores and their corresponding *p* values are presented to evaluate variables involved in calibration of sample weights on whether the differences between the two randomized groups (Group A and Group B) for Experiment 1 were significant, as well as whether the randomization was successful. The second-order Rao–Scott chi-square test was carried out using SAS software version 9.4 (SAS Institute Inc., Cary, N.C.).

# Results

To describe the RANDS 3 data, a subset of variables including demographics, selected health conditions, and health-related behaviors was examined.

## Nonresponse Rates of Selected Variables

The frequencies of item nonresponses for selected variables are shown in Appendix Tables I–III. For most of the questions targeting all respondents, the unweighted item nonresponse rates were less than 3%. The only questions (not accounting for the probe questions) that had nonresponse rates greater than 3% were questions examining the frequency of performing moderate-intensity (4.8%), vigorous-intensity (7.1%), and muscle-strengthening (8.8%) leisure-time physical activities, defined as not reporting either the unit of time or the numeric value of frequency (Appendix Table II).

## Descriptive Statistics of Selected Variables

### Calibration variables

For this report, selected demographic and health condition variables in RANDS 3 were raked to the 2019 NHIS estimates. As a result, the overall percentages of age, sex, race and ethnicity, education, household income, census region, and marital status, as well as the prevalence rates of ever-diagnosed high cholesterol, asthma, hypertension, and diabetes, were the same as the population characteristics estimated from the 2019 NHIS (Table 2). The distributions of the calibration variables for the two randomized groups (Group A and Group B) involved in Experiment 1 were

comparable for most of these variables, except for responses to ever-diagnosed hypertension. The second-order Rao–Scott chi-square test showed that Group A had a significantly lower prevalence of having a history of hypertension (28.2%) compared with Group B (35.2%).

### Variables on health conditions and health-related behaviors not applied in calibration

Besides the health condition variables involved in calibration, other health conditions and health-related variables were also examined in RANDS 3. Overall, 6.7% of U.S. adults reported ever having chronic obstructive pulmonary disease or COPD, emphysema, or chronic bronchitis (Table 3). In the 3 months before the survey, 19.2% of U.S. adults had injuries due to repetitive strain, and 16.9% had injuries unrelated to repetitive strain. For smoking, 16.3% of the population were current smokers, 28.6% were former smokers, and 55.1% were nonsmokers (smoked less than 100 cigarettes in their lifetime). With leisure-time physical activity, 56.2% of adults were sufficiently active and met the guidelines for aerobic activity, and 31.2% met the full guidelines for both aerobic and muscle-strengthening activities.

Among people who indicated having injuries unrelated to repetitive strain, 63.7% reported that the injury limited their usual activities for at least 24 hours, and 32.3% missed at least 1 day of work or school (Table 4). Regarding how these functional-limiting nonrepetitive-strain injuries occurred in the 3 months before the survey, 43.0% were injured while doing household activities, 36.6% while exercising, and 39.6% from falling. When asked about the number of times these injuries occurred in the past 3 months, 15.0% of people reported zero times, while 80.3% reported 1–5 times. The effect of the 3-month reference period on this and other questions had been explored previously using cognitive interviews (12).

Regarding opioid use, the percentage estimates of people who indicated their use of opioids in the past 12 months from either the NHIS or NSDUH questions (Experiment 2 and Experiment 3) are not included in this report. Respondents who indicated their usage of opioid pain relievers in the past 12 months from either the NHIS or NSDUH questions were asked about the reasons and duration of their opioid use. Among them, 26.4% reported currently taking the opioid medication, and 50.7% of current users reported having taken the opioid pain relievers for more than 1 year (Table 5). Among former users, 5.8% reported using the opioid pain relievers for more than 1 year, and most of the former users only used opioids for less than 1 month (80.8%). Regardless of their current usage status, 94.0% of opioid users in the past 12 months used opioids to relieve physical pain, and 10.0% used opioids to relax or relieve tension. Each of the other reasons were selected by less than 10% of respondents.

### Demonstration of experimental results

In addition to the specific health conditions and health-related behaviors mentioned previously, a general health condition question, along with additional questions on mental and emotional health and health-related behaviors, were also included in RANDS 3 as part of split-sample experiments. Although detailed studies on individual experiments are currently underway, the effect of the response scales for the self-rated health question is described here as a demonstration of the experimental results. For the self-rated health question, Group A received the unbalanced response scale and Group B received the balanced scale. The distribution of responses was significantly different statistically between the two response scales, with 51.8% of Group A and 70.7% of Group B reporting the top two health categories (excellent or very good and very good or good categories for the unbalanced and balanced scales, respectively), based on Rao–Scott second-order $\chi^2_{(3.95)} = 70.6$, $p < 0.0001$ (Table 6).

## Summary

As part of the NCHS RANDS series of surveys based on commercial survey panels, RANDS 3 included questions examining general health conditions and health-related behaviors, as well as probe questions to assess question–response patterns. In addition, RANDS 3 contained four sets of experiments with separate randomization processes. The two randomized groups (Group A and Group B) for the Form A and Form B Experiment (Experiment 1) with topics on self-rated health, pain, e-cigarette use, and affect were examined for the distribution of their underlying demographic and selected health characteristics. Other than the prevalence of hypertension, the distributions of demographic and health-related variables examined in this report were similar between Group A and Group B. Because the two groups had comparable demographics and health-related conditions, the significant difference in the distribution of responses for the self-rated health questions between Group A and Group B may be due to the unbalanced or balanced scales that the respondents received rather than the underlying health conditions of the respondents in the two groups. Despite this, some other health conditions or factors that were not examined in this report may have had an effect on the responses collected.

The self-rated health question described above illustrates how RANDS may serve as a platform for examining the effect of different questionnaire design features or approaches. Through RANDS, potential questions or revisions to questions under consideration may first be examined before dissemination in official national health surveys. For instance, the questions related to injuries in RANDS 3 were included for the first time in the 2020 NHIS.

In addition to the embedded experiments that distinguish RANDS 3 from RANDS 1 and 2, RANDS 3 had an expanded

scope, with questions on disability and the use of opioid pain relievers. Questions related to disability in RANDS 3 examine how pain, injuries, anxiety, and depression may impact the respondents' functional capacity. Although the effect of the reference period on the frequency of pain and of functional-limiting pain was part of the Form A and Form B Experiment, questions related to the intensity of pain, and the causes and functional impacts of both pain and injuries, were presented consistently to all respondents who indicated having relevant episodes. For anxiety and depression, four sets of questions were included in the questionnaire examining constructs relevant to these two topics. These multiple sets of instruments measuring mental and emotional health, along with follow-up probes or functional-impact questions within or following mental and emotional health questions, may be used to examine whether responses collected from different instruments are consistent with each other. Similarly, inclusion of both the NHIS and NSDUH versions of questions on the use of opioid pain relievers also makes it possible to compare how questions with different wording may impact responses regarding opioid use. Therefore, evaluation of question–response patterns is realized in RANDS 3 not only by the use of probe questions and embedded experiments, but also through having two or more sets of questions examining the same underlying health-related construct.

Beyond evaluating question–response patterns as in RANDS 3, one of the objectives of RANDS is to investigate the feasibility of using probability-sampled commercial survey panels to complement high-quality national health surveys. Previous research has shown that combining data from a web-based nonprobability sample with data from a probability sample may reduce the mean squared error of the probability sample, on the condition that the bias of the nonprobability sample is small (13–15). Because statistical adjustments may not entirely remove the bias inherent in the nonprobability sample (16,17), probability-sampled survey web panels may provide estimates with less bias than the nonprobability sample and are more cost-efficient to administer compared with traditional survey modes (face-to-face interviews, telephone interviews, or mail-in surveys). Consequently, complementing traditional national health surveys with probability-sampled web panels may be one option for overcoming the problems of declining survey response rates and the rising cost of administering surveys.

Additional rounds of RANDS have been carried out or are in the planning stages. Because RANDS has been serving as a platform to examine survey designs, these additional rounds of RANDS have different focuses and may relate to different subject areas. Moreover, during the COVID-19 pandemic, RANDS was adapted to rapidly report on COVID-19-related health measures (for more information, visit: https://www.cdc.gov/nchs/covid19/rands.htm). As more rounds of RANDS are carried out, these surveys will enable researchers to address persistent and emergent research questions relating to survey methodology.

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## Table 1. Selected demographic and health variables examined in Research and Development Survey 3

| Variable[1] | Content and grouping |
|---|---|
| Age group (years) | 18–34, 35–49, 50–64, 65 and over |
| Sex | Male, female |
| Race and ethnicity | Hispanic, Black non-Hispanic, White non-Hispanic, other non-Hispanic races[2] |
| Education | High school diploma or less[3], associate degree or some college, bachelor's degree or higher |
| Household income | $0–$49,999, $50,000–$99,999, $100,000 or more |
| Region | Northeast, Midwest, South, West |
| Marital status | Married, widowed, divorced, separated, never married, living with partner |
| High cholesterol (ever) | Survey question: "Have you ever been told by a doctor or other health professional that you had high cholesterol?" Responses: yes, no |
| Asthma (ever) | Survey question: "Have you ever been told by a doctor or other health professional that you had asthma?" Responses: yes, no |
| Hypertension (ever) | Survey question: "Have you ever been told by a doctor or other health professional that you had hypertension, also called high blood pressure?" Responses: yes, no |
| Diabetes (ever) | Survey question: "(Not including prediabetes or gestational diabetes,) has a doctor or other health professional ever told you that you had diabetes?" Responses: yes, no |
| Self-rated health status (unbalanced scale) | Survey question: "Would you say your health in general is excellent, very good, good, fair, or poor?" Responses: excellent, very good, good, fair, or poor |
| Self-rated health status (balanced scale) | Survey question: "Would you say your health in general is very good, good, fair, bad or very bad?" Responses: very good, good, fair, bad, or very bad |
| COPD/emphysema/ chronic bronchitis (ever) | Survey question: "Have you ever been told by a doctor or other health professional that you have Chronic Obstructive Pulmonary Disease, COPD, emphysema or chronic bronchitis?" Responses: yes, no |
| Injury due to repetitive strain | Survey question: "During the past 3 months, did you have any injuries due to repetitive strain?" Responses: yes, no |
| Injury other than repetitive strain injury | Survey question: "(Not including any of the repetitive strain injuries you just mentioned,) during the past 3 months, did you have an accident or an injury where any part of your body was hurt?" Responses: yes, no |
| Leisure-time physical activities—Aerobic activity | Calculated as the percentages of respondents who met the Physical Activity Guidelines for Americans for aerobic activity (categorized as "sufficiently active") and who did not meet the guidelines (categorized as "inactive" and "insufficiently active"), based on responses to the survey questions: "How often do you do light or moderate leisure-time physical activities for at least 10 minutes that cause only light sweating or a slight to moderate increase in breathing or heart rate?" "About how long do you do these light or moderate leisure-time physical activities each time?" "How often do you do vigorous leisure-time physical activities for at least 10 minutes that cause heavy sweating or large increases in breathing or heart rate?" "About how long do you do these vigorous leisure-time physical activities each time?" |
| Leisure-time physical activities—Meeting full guidelines for both aerobic and muscle-strengthening activity | Calculated as the percentages of respondents who met the Physical Activity Guidelines for Americans for both aerobic and muscle-strengthening activity (categorized as "yes") and who did not meet the guidelines (categorized as "no"), based on responses to survey questions used to define leisure-time physical activities—aerobic activity, along with the survey question, "How often do you do leisure-time physical activities specifically designed to strengthen your muscles such as lifting weights or doing calisthenics?" |
| Cigarette-smoking status (current, former, nonsmoker) | Survey question: "Have you smoked at least 100 cigarettes in your entire life?" Responses: yes, no. Respondents who selected "no" were categorized as nonsmoker. Respondents who selected "yes" were asked: "Do you now smoke cigarettes every day, some days, or not at all?" Responses: every day, some days, not at all. Respondents who indicated "every day" or "some days" were categorized as current smokers, and those who indicated "not at all" were categorized as former smokers. |

[1]Unless otherwise stated, all variables listed in this table have appeared in the National Health Interview Survey.
[2]Includes non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Native Hawaiian or Other Pacific Islander, and non-Hispanic two or more races.
[3]Includes respondents with GED.

NOTE: COPD is chronic obstructive pulmonary disease.

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

## Table 2. Weighted percentage estimates of demographic and health variables used to calibrate Research and Development Survey 3, overall and by experimental group

| Variable | Overall | | Group A[1] | | Group B[1] | | Rao–Scott chi-square test, second order | | |
|---|---|---|---|---|---|---|---|---|---|
| | Percent | Standard error | Percent | Standard error | Percent | Standard error | Test statistic[2] | Degrees of freedom[2] | *p* value[2] |
| Age group (years) | *n* = 2,646 | | *n* = 1,330 | | *n* = 1,316 | | | | |
| 18–34 | 29.7 | 1.0 | 29.9 | 1.6 | 29.5 | 1.8 | 0.17 | 2.96 | 0.982 |
| 35–49 | 24.3 | 0.9 | 24.7 | 1.4 | 24.0 | 1.5 | | | |
| 50–64 | 24.9 | 0.8 | 24.5 | 1.4 | 25.4 | 1.5 | | | |
| 65 and over | 21.1 | 0.8 | 20.9 | 1.3 | 21.2 | 1.5 | | | |
| Sex | | | | | | | | | |
| Male | 48.3 | 1.0 | 48.0 | 1.7 | 48.6 | 1.8 | 0.04 | 1.00 | 0.835 |
| Female | 51.7 | 1.0 | 52.0 | 1.7 | 51.4 | 1.8 | | | |
| Race and ethnicity | | | | | | | | | |
| Hispanic | 16.5 | 0.9 | 16.0 | 1.4 | 17.1 | 1.5 | 0.28 | 2.99 | 0.964 |
| Black non-Hispanic | 11.8 | 0.6 | 11.9 | 1.1 | 11.6 | 1.2 | | | |
| White non-Hispanic | 63.2 | 1.1 | 63.7 | 1.8 | 62.8 | 1.9 | | | |
| Other non-Hispanic races[3] | 8.5 | 0.8 | 8.4 | 1.3 | 8.6 | 1.0 | | | |
| Education | | | | | | | | | |
| High school diploma or less[4] | 39.9 | 1.4 | 39.1 | 2.0 | 40.8 | 2.2 | 1.85 | 1.82 | 0.357 |
| Associate degree or some college | 31.1 | 1.1 | 30.2 | 1.5 | 32.0 | 1.6 | | | |
| Bachelor's degree or higher | 29.0 | 0.8 | 30.7 | 1.4 | 27.2 | 1.4 | | | |
| Household income[5] | | | | | | | | | |
| $0–$49,999 | 37.7 | 1.3 | 39.7 | 1.9 | 35.6 | 1.9 | 4.10 | 2.00 | 0.129 |
| $50,000–$99,999 | 32.0 | 1.3 | 29.5 | 1.7 | 34.7 | 2.0 | | | |
| $100,000 and over | 30.3 | 1.3 | 30.9 | 1.8 | 29.8 | 1.9 | | | |
| Region | | | | | | | | | |
| Northeast | 17.8 | 1.2 | 17.8 | 1.6 | 17.7 | 1.8 | 0.38 | 2.94 | 0.941 |
| Midwest | 21.0 | 1.1 | 20.4 | 1.4 | 21.7 | 1.7 | | | |
| South | 37.7 | 1.4 | 38.3 | 1.9 | 37.1 | 2.0 | | | |
| West | 23.5 | 1.2 | 23.6 | 1.6 | 23.5 | 1.7 | | | |
| Marital status | | | | | | | | | |
| Married | 52.4 | 1.4 | 52.8 | 1.9 | 51.9 | 2.1 | 4.57 | 4.49 | 0.402 |
| Widowed | 6.0 | 0.7 | 5.8 | 0.9 | 6.1 | 1.1 | | | |
| Divorced | 9.0 | 0.6 | 9.1 | 0.9 | 9.0 | 0.9 | | | |
| Separated | 1.2 | 0.2 | 0.6 | 0.2 | 1.8 | 0.4 | | | |
| Never married | 22.5 | 1.2 | 23.3 | 1.7 | 21.7 | 1.7 | | | |
| Living with partner | 8.9 | 0.9 | 8.4 | 1.2 | 9.6 | 1.4 | | | |
| High cholesterol (ever) | *n* = 2,633 | | *n* = 1,325 | | *n* = 1,308 | | | | |
| Yes | 24.9 | 1.0 | 23.5 | 1.4 | 26.3 | 1.5 | 1.72 | 1.00 | 0.189 |
| No | 75.1 | 1.0 | 76.5 | 1.4 | 73.7 | 1.5 | | | |
| Asthma (ever) | *n* = 2,628 | | *n* = 1,321 | | *n* = 1,307 | | | | |
| Yes | 13.5 | 0.9 | 14.1 | 1.3 | 12.7 | 1.1 | 0.68 | 1.00 | 0.410 |
| No | 86.5 | 0.9 | 85.9 | 1.3 | 87.3 | 1.1 | | | |

See footnotes at end of table.

## Table 2. Weighted percentage estimates of demographic and health variables used to calibrate Research and Development Survey 3, overall and by experimental group—Con.

| Variable | Overall | | Group A[1] | | Group B[1] | | Rao–Scott chi-square test, second order | | |
|---|---|---|---|---|---|---|---|---|---|
| | Percent | Standard error | Percent | Standard error | Percent | Standard error | Test statistic[2] | Degrees of freedom[2] | *p* value[2] |
| Hypertension (ever)[6] | *n* = 2,637 | | *n* = 1,325 | | *n* = 1,312 | | | | |
| Yes | 31.6 | 1.2 | 28.2 | 1.6 | 35.2 | 1.9 | 7.45 | 1.00 | 0.006 |
| No | 68.4 | 1.2 | 71.8 | 1.6 | 64.8 | 1.9 | | | |
| Diabetes (ever) | *n* = 2,631 | | *n* = 1,326 | | *n* = 1,305 | | | | |
| Yes | 9.3 | 0.8 | 9.8 | 1.2 | 8.9 | 1.2 | 0.26 | 1.00 | 0.610 |
| No | 90.7 | 0.8 | 90.2 | 1.2 | 91.1 | 1.2 | | | |

[1]AmeriSpeak panelists sampled for RANDS 3 were randomly assigned to either Group A or Group B for the Form A and Form B Experiment (Experiment 1). The two groups received different versions of questions on topics of self-rated health, pain, e-cigarette use, and depression and anxiety (affect).
[2]Test data apply to all category entries combined.
[3]Includes non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Native Hawaiian or Other Pacific Islander, and non-Hispanic two or more races.
[4]Includes respondents with GED.
[5]Calibrated to National Health Interview Survey 2019 estimates that included partial responses with income reported in brackets but excluded missing responses.
[6]Percentage estimates are based on responses to the survey question, "Have you ever been told by a doctor or other health professional that you had hypertension, also called high blood pressure?"

NOTE: All sample sizes correspond to nominal sample sizes.

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

## Table 3. Weighted percentage estimates of selected health conditions and health-related behaviors in Research and Development Survey 3

| Variable | Percent | Standard error |
|---|---|---|
| COPD[1]/emphysema/chronic bronchitis (ever) | *n* = 2,633 | |
| Yes | 6.7 | 0.6 |
| No | 93.3 | 0.6 |
| Injury due to repetitive strain during the past 3 months | *n* = 2,624 | |
| Yes | 19.2 | 1.1 |
| No | 80.8 | 1.1 |
| Injury other than repetitive strain injury during the past 3 months | *n* = 2,614 | |
| Yes | 16.9 | 1.0 |
| No | 83.1 | 1.0 |
| Smoking status[2] | *n* = 2,631 | |
| Current | 16.3 | 1.1 |
| Former | 28.6 | 1.2 |
| Nonsmoker | 55.1 | 1.4 |
| Leisure-time physical activities—Aerobic activity[3] | *n* = 2,434 | |
| Inactive | 10.1 | 1.0 |
| Insufficiently active | 33.7 | 1.4 |
| Sufficiently active | 56.2 | 1.5 |
| Leisure-time physical activities—Meeting full guidelines for both aerobic and muscle-strengthening activity[4] | *n* = 2,349 | |
| Yes | 31.2 | 1.4 |
| No | 68.8 | 1.4 |

[1]Chronic obstructive pulmonary disease.
[2]Current smokers are defined as smoking at least 100 cigarettes in their lifetime and now smoking every day or some days. Former smokers are defined as smoking at least 100 cigarettes in their lifetime and not smoking now. Nonsmokers are defined as smoking less than 100 cigarettes in their lifetime.
[3]Measures of physical activity were evaluated based on the Physical Activity Guidelines for Americans (available from: https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf). For substantial health benefits, adults are advised to perform at least 150 minutes a week of moderate-intensity aerobic activity, or 75 minutes a week of vigorous-intensity aerobic activity, or an equivalent combination. Respondents who met the guidelines were considered sufficiently active. Respondents who performed more than zero minutes but less than the equivalent of 150 minutes of moderate-intensity aerobic activity per week were considered insufficiently active. Respondents who did not perform aerobic activity (including those who reported being unable to do both moderate- and vigorous-intensity aerobic activity) were considered inactive. Unless either the reported moderate- or vigorous-intensity aerobic activity alone met the guidelines for aerobic activity, respondents who did not provide frequency or duration for either intensity level were excluded from the analyses.
[4]In addition to recommended aerobic activity, the Physical Activity Guidelines for Americans recommend performing muscle-strengthening activity on 2 or more days per week. Respondents who met the guidelines for both aerobic and muscle-strengthening activities were considered to be in the "yes" category. Respondents who did not meet the guidelines for either aerobic or muscle-strengthening activities were considered to be in the "no" category, including those who were unable to do muscle-strengthening activity or both moderate- and vigorous-intensity aerobic activity and one person who provided zero for the numerical response but did not provide a unit item for the frequency of performing muscle-strengthening leisure-time physical activity.

NOTE: All sample sizes correspond to nominal sample sizes.

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

## Table 4. Weighted percentage estimates of injury occurrences among those reporting having nonrepetitive-strain injuries in the past 3 months in Research and Development Survey 3

| Survey question | Variable | Percent | Standard error |
|---|---|---|---|
| Were any of these injuries serious enough to limit your usual activities for at least 24 hours after the injury occurred? | Injury limited usual activities | *n* = 464 | |
| | Yes | 63.7 | 3.3 |
| | No | 36.3 | 3.3 |
| Were any of these injuries serious enough that you missed at least 1 day of work or school? | Injury caused work or school to be missed | *n* = 462 | |
| | Yes | 32.3 | 3.2 |
| | No | 67.7 | 3.2 |
| During the past 3 months, how many times did these accidents or injury events occur? | Number of times injury events occurred | *n* = [1]307 | |
| | 0 | 15.0 | 2.7 |
| | 1–5 | 80.3 | 3.4 |
| | More than 5 | * | * |
| [During the past 3 months, did any of these injuries occur while you were:] working at a job or business? | Injury occurred at a job | *n* = [1]311 | |
| | Yes | 22.4 | 3.1 |
| | No | 77.6 | 3.1 |
| [During the past 3 months, did any of these injuries occur while you were:] at school, taking classes, or doing schoolwork? | Injury occurred at school | *n* = [1]307 | |
| | Yes | 5.1 | 1.4 |
| | No | 94.9 | 1.4 |
| [During the past 3 months, did any of these injuries occur while you were:] playing sports or exercising, including walking, biking, or running for exercise? (Please also include recreational sports, such as skating, skiing, tennis, golf, bowling, or fishing.) | Injury occurred while exercising | *n* = [1]310 | |
| | Yes | 36.6 | 3.8 |
| | No | 63.4 | 3.8 |
| [During the past 3 months, did any of these injuries occur while you were:] doing household activities, such as housework, cooking, home maintenance, or yard work? | Injury occurred while doing household activities | *n* = [1]312 | |
| | Yes | 43.0 | 4.0 |
| | No | 57.0 | 4.0 |
| [During the past 3 months, did any of these injuries occur while you were:] doing leisure activities, such as hobbies, volunteer work, socializing, watching TV, or relaxing? | Injury occurred while doing leisure activities | *n* = [1]311 | |
| | Yes | 20.6 | 3.3 |
| | No | 79.4 | 3.3 |
| [During the past 3 months, did any of these injuries occur while you were:] walking to get some place outside your home? | Injury occurred while walking outside home | *n* = [1]311 | |
| | Yes | 26.7 | 3.6 |
| | No | 73.3 | 3.6 |
| During the past 3 months, were any of these injuries a result of a fall or falling? | Any injury due to falling | *n* = [1]312 | |
| | Yes | 39.6 | 3.9 |
| | No | 60.4 | 3.9 |
| During the past 3 months, were any of these injuries a result of a collision involving a motor vehicle? | Any injury involving a motor vehicle | *n* = [1]313 | |
| | Yes | 10.8 | 2.5 |
| | No | 89.2 | 2.5 |

* Estimate does not meet National Center for Health Statistics standards of reliability.
[1]Response universe was restricted to people who indicated having any injuries serious enough to limit usual activities for at least 24 hours after the injury occurred or to miss at least 1 day of work or school.

NOTES: All sample sizes correspond to nominal sample sizes; the number of people who reported having nonrepetitive-strain injuries in the past 3 months is 464. Two people ineligible for these questions (reporting "no" to the question of having injuries unrelated to repetitive strain injuries in the past 3 months) were presented with these questions and consequently were excluded from the analyses.

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

## Table 5. Weighted percentage estimates of opioid use among those reporting using opioid pain relievers in the past 12 months in Research and Development Survey 3

| Survey question | Variable | Percent | Standard error |
|---|---|---|---|
| You said you took an opioid pain reliever in the past 12 months. Are you currently taking any opioid pain relievers? | Currently taking opioid medication[1] | *n* = 780 | |
| | Yes | 26.4 | 2.3 |
| | No | 73.6 | 2.3 |
| (For current users:) About how long have you been taking opioid pain relievers? | Length of time of opioid use (current user)[2] | *n* = [3]232 | |
| | Less than 1 month | 21.5 | 4.4 |
| | 1 month to less than 1 year | 27.9 | 4.5 |
| | 1 year or more | 50.7 | 5.0 |
| (For former users:) About how long were you taking opioid pain relievers? | Length of time of opioid use (former user)[2] | *n* = [4]546 | |
| | Less than 1 month | 80.8 | 2.7 |
| | 1 month to less than 1 year | 13.4 | 2.5 |
| | 1 year or more | 5.8 | 1.5 |
| [What were the reasons you took opioid pain relievers the last time?] To relieve physical pain | Reason for opioid use: To relieve physical pain | *n* = 773 | |
| | Yes | 94.0 | 1.1 |
| | No | 6.0 | 1.1 |
| [What were the reasons you took opioid pain relievers the last time?] To relax or relieve tension | Reason for opioid use: To relax or relieve tension | *n* = 773 | |
| | Yes | 10.0 | 1.5 |
| | No | 90.0 | 1.5 |
| [What were the reasons you took opioid pain relievers the last time?] To increase or decrease the effect(s) of some other drug | Reason for opioid use: To adjust other drug effects | *n* = 773 | |
| | Yes | 3.0 | 0.9 |
| | No | 97.0 | 0.9 |
| [What were the reasons you took opioid pain relievers the last time?] To feel good or get high | Reason for opioid use: To feel good | *n* = 773 | |
| | Yes | 3.1 | 0.9 |
| | No | 96.9 | 0.9 |
| [What were the reasons you took opioid pain relievers the last time?] To help with my sleep | Reason for opioid use: To help with sleep | *n* = 773 | |
| | Yes | 8.7 | 1.2 |
| | No | 91.3 | 1.2 |
| [What were the reasons you took opioid pain relievers the last time?] To help me with my feelings or emotions | Reason for opioid use: To help with emotions | *n* = 773 | |
| | Yes | 2.0 | 0.5 |
| | No | 98.0 | 0.5 |
| [What were the reasons you took opioid pain relievers the last time?] Because I am "hooked" or I have to have them | Reason for opioid use: Addiction | *n* = 773 | |
| | Yes | 0.8 | 0.4 |
| | No | 99.2 | 0.4 |
| [What were the reasons you took opioid pain relievers the last time?] For a suicide attempt or suicidal thoughts | Reason for opioid use: For suicidal thoughts | *n* = 773 | |
| | Yes | 0.2 | 0.1 |
| | No | 99.8 | 0.1 |
| [What were the reasons you took opioid pain relievers the last time?] Because of peer pressure, friends, or trying to feel cool | Reason for opioid use: Peer pressure | *n* = 773 | |
| | Yes | 0.5 | 0.3 |
| | No | 99.5 | 0.3 |

[1]Percentage estimates exclude two people who were ineligible for the question (had no indication of using opioid pain relievers in the past 12 months) but were presented with the question.
[2]Respondents selecting the response options "Less than a week" and "1 to 4 weeks" were categorized as "Less than 1 month." Those selecting "1 to 6 months" and "6 months to a year" were categorized as "1 month to less than 1 year." Those selecting "1 to 5 years" and "5 years or more" were categorized as "1 year or more."
[3]Response universe was restricted to respondents who indicated currently taking any opioid pain relievers at the time of interview.
[4]Response universe was restricted to respondents who used opioid pain relievers in the past 12 months before the survey interview but either indicated not currently using any opioid pain relievers or did not provide a response on whether they were using any opioid pain relievers at the time of interview.

NOTE: All sample sizes correspond to nominal sample sizes; the number of people who reported using opioid pain relievers in the past 12 months is 783.

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

## Table 6. Weighted percentage estimates of the self-rated health question in Research and Development Survey 3, by experimental group

| Response options (Unbalanced/balanced scale) | Group A[1] | | Group B[1] | | Rao–Scott chi-square test, second order | | |
|---|---|---|---|---|---|---|---|
| | Percent | Standard error | Percent | Standard error | Test statistics[2] | Degrees of freedom[2] | *p* value[2] |
| Self-rated health assessment | *n* = 1,330 | | *n* = 1,316 | | | | |
| Excellent/Very good | 11.1 | 1.2 | 19.4 | 1.5 | 70.6 | 3.95 | Less than 0.0001 |
| Very good/Good | 40.7 | 1.9 | 51.4 | 2.1 | | | |
| Good/Fair | 33.7 | 1.8 | 25.3 | 1.9 | | | |
| Fair/Bad | 12.5 | 1.3 | 3.7 | 0.8 | | | |
| Poor/Very bad | 2.0 | 0.5 | 0.3 | 0.1 | | | |

[1]AmeriSpeak panelists sampled for RANDS 3 were randomly assigned to either Group A or Group B for the Form A and Form B Experiment (Experiment 1). The two groups received different versions of survey questions on topics of self-rated health, pain, e-cigarette use, and depression and anxiety (affect).
[2]Test data apply to all category entries combined.

NOTE: All sample sizes correspond to nominal sample sizes.

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

# Appendix I. Supporting Tables

## Table I. Item nonresponse counts and percentages of demographic and health variables applied to calibrate Research and Development Survey 3, overall and by experimental group

| Variable | Overall nonresponse count (percent[1]) | Group A[2] nonresponse count (percent) | Group B[2] nonresponse count (percent) |
|---|---|---|---|
| Age group | – | – | – |
| Sex | – | – | – |
| Race and ethnicity | – | – | – |
| Education | – | – | – |
| Household income | – | – | – |
| Region | – | – | – |
| Marital status | – | – | – |
| High cholesterol (ever) | 13 (0.5) | 5 (0.4) | 8 (0.6) |
| Asthma (ever) | 18 (0.7) | 9 (0.7) | 9 (0.7) |
| Hypertension (ever) | 9 (0.3) | 5 (0.4) | 4 (0.3) |
| Diabetes (ever) | 15 (0.6) | 4 (0.3) | 11 (0.8) |

– Quantity zero.
[1]Nonresponse percentages were calculated as the percentage of nonresponses out of total eligible responses for the corresponding survey question.
[2]AmeriSpeak panelists sampled for RANDS 3 were randomly assigned to either Group A or Group B for the Form A and Form B Experiment (Experiment 1). The two groups received different versions of survey questions on topics of self-rated health, pain, e-cigarette use, and depression and anxiety (affect).

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

## Table II. Item nonresponse counts and percentages of selected health conditions and health-related behaviors in Research and Development Survey 3

| Variable | Nonresponse count (percent[1]) |
|---|---|
| COPD[2]/emphysema/chronic bronchitis | 13 (0.5) |
| Injury due to repetitive strain during the past 3 months | 22 (0.8) |
| Injury other than repetitive strain injury during the past 3 months | 32 (1.2) |
| Smoking status | 15 (0.6) |
| Leisure-time physical activities—Frequency of performing activities with moderate intensity[3] | 126 (4.8) |
| Leisure-time physical activities—Frequency of performing activities with vigorous intensity[4] | 187 (7.1) |
| Leisure-time physical activities—Frequency of performing muscle-strengthening activity[5] | 233 (8.8) |
| Leisure-time physical activities—Aerobic activity[6] | 212 (8.0) |
| Leisure-time physical activities—Meeting full guidelines for both aerobic and muscle-strengthening activity[7] | 297 (11.2) |
| Self-rated health status (unbalanced scale) | – |
| Self-rated health status (balanced scale) | – |

– Quantity zero.
[1]Nonresponse percentages were calculated as the percentage of nonresponses out of total eligible responses for the corresponding survey question.
[2]COPD is chronic obstructive pulmonary disease.
[3]Missing responses were defined as missing either the unit or the numeric value for the survey question, "How often do you do light or moderate leisure-time physical activities for at least 10 minutes that cause only light sweating or a slight to moderate increase in breathing or heart rate?"
[4]Missing responses were defined as missing either the unit or the numeric value for the survey question, "How often do you do vigorous leisure-time physical activities for at least 10 minutes that cause heavy sweating or large increases in breathing or heart rate?"
[5]Missing responses were defined as missing either the unit or the numeric value for the survey question, "How often do you do leisure-time physical activities specifically designed to strengthen your muscles such as lifting weights or doing calisthenics?"
[6]Missing responses were defined as missing either the frequency or duration for survey questions on either moderate- or vigorous-intensity aerobic activity, unless the total amount of either moderate- or vigorous-intensity aerobic activity alone met the guideline for aerobic activity.
[7]Missing responses included those for leisure-time physical activities—aerobic activity (as specified in footnote 6) as well as those for the frequency question on muscle-strengthening leisure-time physical activity (as specified in footnote 5).

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

## Table III. Item nonresponse counts and percentages of injury- and opioid-related variables in Research and Development Survey 3

| Variable | Nonresponse count (percent[1]) |
|---|---|
| Injury limited usual activities[2] | – |
| Injury caused work or school to be missed | 2 (0.4) |
| Number of times injury events occurred | 7 (2.2) |
| Injury occurred at a job | 3 (1.0) |
| Injury occurred at school | 7 (2.2) |
| Injury occurred while exercising | 4 (1.3) |
| Injury occurred while doing household activities | 2 (0.6) |
| Injury occurred while doing leisure activities | 3 (1.0) |
| Injury occurred while walking outside home | 3 (1.0) |
| Any injury due to falling | 2 (0.6) |
| Any injury involving a motor vehicle | 1 (0.3) |
| Currently taking opioid medication | 3 (0.4) |
| Length of time of opioid use (current user) | 1 (0.4) |
| Length of time of opioid use (former user) | 4 (0.7) |
| Reason for opioid use[3] | 10 (1.3) |

– Quantity zero.
[1]Nonresponse percentages were calculated as the percentage of nonresponses out of total eligible responses for the corresponding survey question.
[2]All injury-related questions presented in this table refer to injuries that took place in the past 3 months before the survey.
[3]Respondents who indicated using opioids in the past 12 months before the survey but did not select any reason for using opioid pain relievers were considered as nonresponses.

SOURCE: National Center for Health Statistics, Research and Development Survey 3, 2019.

# Appendix II. Research and Development Survey 3 Questionnaire

**RANDS3 Questionnaire**

[START OF SURVEY]

CREATE DATA-ONLY VARIABLE: QUAL
1=Qualified Complete
2=Not Qualified
3=In progress

AT START OF SURVEY COMPUTE QUAL=3 “IN PROGRESS”

---

CREATE MODE_START
1=CATI
2=CAWI

---

[DISPLAY – WINTRO_1]
Thank you for agreeing to participate in our new AmeriSpeak survey! To thank you for sharing your opinions, we will give you a reward of [INCENTWCOMMA] AmeriPoints after completing the survey. As always, your answers are confidential.

*Please use the "Continue" and "Previous" buttons to navigate between the questions within the questionnaire. Do not use your browser buttons.*

---

[DISPLAY]
OMBNOTICE.

Thank you again for agreeing to participate. Your survey will continue on the next screen.
[SPACE]
[REDUCE TEXT SIZE SLIGHTLY; TEXT BELOW BORDERED BY THIN BLACK BOX/OUTLINE]

Notice - CDC estimates the average public reporting burden for this collection of information as 20 minutes per response, including the time for reviewing instructions, searching existing data/information sources, gathering and maintaining the data/information 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 Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0222).

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 2002 (CIPSEA, Title 5 of Public Law 107-347).

---

[SHOW IF P_GROUP=1]
[SP; PROMPT TWICE IF REFUSED]
A_PHSTAT.

Would you say your health in general is excellent, very good, good, fair, or poor?

RESPONSE OPTIONS:
1. Excellent
2. Very good
3. Good
4. Fair
5. Poor

---

[SHOW IF P_GROUP=2]
[SP; PROMPT TWICE IF REFUSED]
B_PHSTAT.

Would you say your health in general is very good, good, fair, bad, or very bad?

RESPONSE OPTIONS:
1. Very good
2. Good
3. Fair
4. Bad
5. Very bad

---

[MP]
PROBE1.
When you answered the previous question about your health, what did you think of?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

A. Your diet and nutrition
B. Your exercise habits
C. Your smoking or drinking habits
D. Your health problems or conditions
E. Your *lack of* health problems or conditions
F. The amount of pain that you have
G. Your ability to do daily activities without assistance
H. The amount of sleep you get
I. Your mental or emotional health

---

[GRID, SP; 5,4]
PROBE2.
Please rate your agreement with the following statements:

GRID ITEMS:

A. I have a healthy diet
B. I get enough exercise
C. I drink more alcohol than I should
D. I smoke more than I should
E. I'm satisfied with my sleep
F. I don't have any major health problems or medical conditions
G. I frequently experience pain
H. I'm able to perform my daily activities independently
I. My thoughts or emotions sometimes cause me problems

RESPONSE OPTIONS:

1. Strongly Agree
2. Somewhat Agree
3. Somewhat Disagree
4. Strongly Disagree

---

[SP]
RX12M_A.
At any time in the <u>PAST 12 MONTHS</u>, did you take prescription medication?

RESPONSE OPTIONS:

1. Yes
2. No

---

[DISPLAY]
INTRO_MED.
The next series of questions will ask you about certain medical conditions.

---

[SP]
HYPEV.
Have you <u>ever</u> been told by a doctor or other health professional that you had hypertension, also called high blood pressure?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SP]
PROBE9.
How did you define hypertension?

RESPONSE OPTIONS:
1. A feeling when you are stressed or overwhelmed
2. A medical condition when a medical professional tells you that you have chronic high blood pressure
3. A medical condition when a medical professional tells you that you have had one or two high blood pressure readings

---

[SHOW IF HYPEV=1]
[SP]
HYPDIF_A.
Were you told on two or more different visits that you had hypertension, also called high blood pressure?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF HYPDIF_A =1]
[SP]
HYPYR.
During the past 12 months, have you had hypertension, also called high blood pressure?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF HYPEV=1]
[SP]
HYPMED2.
Are you <u>now</u> taking any medicine prescribed by a doctor for your high blood pressure?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SP]
CHLEV.
Have you <u>ever</u>been told by a doctor or other health professional that you had high cholesterol?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF CHLEV=1]
[SP]
CHLYR.
During the past 12 months, have you had high cholesterol?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF CHLEV=1]
[SP]
CHLMDNW2.
Are you <u>now</u> taking any medication prescribed by a doctor to help lower your cholesterol?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SP]
AASMEV.
Have you <u>ever</u> been told by a doctor or other health professional that you had asthma?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF AASMEV=1]
[SP]
AASSTILL.
Do you still have asthma?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF AASMEV=1]
[SP]
AASSMYR.

<u>During the past 12 months</u> have you had an episode of asthma, or an asthma attack?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF AASMEV=1]
[SP]
AASSMERYR.
<u>During the past 12 months</u> have you had to visit an emergency room or urgent care center because of asthma?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SP]
PREDIB_A.
Has a doctor or other health professional <u>ever</u> told you that you had prediabetes or borderline diabetes?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF S_GENDER=2]
[SP]
GESDIB_A.
Has a doctor or other health professional <u>ever</u> told you that you had gestational diabetes, a type of diabetes that occurs <u>only</u> during pregnancy?

Gestational diabetes is diabetes that you did not have prior to being pregnant and goes away after you are pregnant. Pregnant women are usually screened for gestational diabetes during the 24th to 28th week of pregnancy.

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF S_GENDER=1 OR 2]
[SP]
DIBEV_A.
[SHOW IF (S_GENDER=2) AND (PREDIB_A = 1) AND (GESDIB_A = 1)] Not including prediabetes or gestational diabetes, has a doctor or other health professional <u>ever</u> told you that you had diabetes?

[SHOW IF (S_GENDER=2) AND (PREDIB_A = 1) AND (GESDIB_A = 2, 98)] Not including prediabetes, has a doctor or other health professional <u>ever</u> told you that you had diabetes?

[SHOW IF (S_GENDER=2) AND (PREDIB_A = 2, 98) AND (GESDIB_A = 1)] Not including gestational diabetes, has a doctor or other health professional <u>ever</u> told you that you had diabetes?

[SHOW IF (S_GENDER=2) AND (PREDIB_A = 2, 98) AND (GESDIB_A = 2, 98)] Has a doctor or other health professional <u>ever</u> told you that you had diabetes?

[SHOW IF (S_GENDER=1) AND (PREDIB_A = 1)] Not including prediabetes, has a doctor or other health professional <u>ever</u> told you that you had diabetes?

[SHOW IF (S_GENDER=1) AND (PREDIB_A = 2, 98)] Has a doctor or other health professional <u>ever</u> told you that you had diabetes?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF DIBEV_A=1]
[NUMBOX, RANGE 1-120, 998]
DIBAGE_A.
[SHOW IF (S_GENDER=2) AND (PREDIB_A = 1) AND (GESDIB_A = 1)] How old were you when a doctor or other health professional <u>first</u> told you that you had diabetes, not including prediabetes or gestational diabetes?

[SHOW IF (S_GENDER=2) AND (PREDIB_A = 1) AND (GESDIB_A = 2, 98)] How old were you when a doctor or other health professional <u>first</u> told you that you had diabetes, not including prediabetes?

[SHOW IF (S_GENDER=2) AND (PREDIB_A = 2, 98) AND (GESDIB_A = 1)] How old were you when a doctor or other health professional <u>first</u> told you that you had diabetes, not including gestational diabetes?

[SHOW IF (S_GENDER=2) AND (PREDIB_A = 2, 98) AND (GESDIB_A = 2, 98)] How old were you when a doctor or other health professional <u>first</u> told you that you had diabetes?

[SHOW IF (S_GENDER=1) AND (PREDIB_A = 1)] How old were you when a doctor or other health professional <u>first</u> told you that you had diabetes, not including prediabetes?

[SHOW IF (S_GENDER=1) AND (PREDIB_A = 2, 98)] How old were you when a doctor or other health professional <u>first</u> told you that you had diabetes?
[SPACE]
*Enter 1 if age was 1 or younger.*

[NUMBER BOX, RANGE 1-120] Age at which diagnosed

---

[SHOW IF (DIBEV_A=1) OR (PREDIB_A=1)]
[SP]
DIBPILL_A.

Are you <u>now</u> taking diabetic pills to lower your blood sugar? These are sometimes called oral agents or oral hypoglycemic agents.

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF (DIBEV_A=1) OR (PREDIB_A=1)]
[SP]
DIBINS_A.
Insulin can be taken by shot or pump. Are you <u>now</u> taking insulin?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF (DIBEV_A=1)]
[SP]
DIBTYPE_A.
According to your doctor or other health professional, what type of diabetes do you have? Is it type 1, type 2, or some other type? If you don't remember or weren't told, that's OK.

RESPONSE OPTIONS:

1. Type 1
2. Type 2
3. Other type of diabetes
77. Don't know

---

[SP]
NEWLUNG.
Have you <u>ever</u> been told by a doctor or other health professional that you have Chronic Obstructive Pulmonary Disease, COPD, emphysema, or chronic bronchitis?

RESPONSE OPTIONS:

1. Yes
2. No

---

[SHOW IF NEWLUNG=1]
[MP]
PROBE13.
Which condition were you told you had?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

1. COPD
2. Emphysema
3. Chronic Bronchitis
4. Bronchitis
5. Something else, please specify: [TEXTBOX]

---

[SHOW IF NEWLUNG=1]
[SP]
PROBE14.
Thinking about the most recent time you had symptoms of Chronic Obstructive Pulmonary Disease, COPD, emphysema, or chronic bronchitis, how long did the symptoms last?

RESPONSE OPTIONS:

1. Less than one week
2. One week to less than one month
3. One month to less than three months
4. Three or more months

---

[P_OPIOIDEXP=1]
[DISPLAY]
OPIOID1_INTRO.
These next questions are about the use of prescription pain relievers called opioids. When answering these questions, please <u>do not include</u> over-the-counter pain relievers such as aspirin, Tylenol, Advil, or Aleve.

---

[RECORD AND COMPUTE TIME ON SCREEN]
[SP]
OPIOID1.
<u>During the past 12 months</u>, have you taken any opioid pain relievers prescribed by a doctor, dentist, or other health professional? Examples include hydrocodone, Vicodin, Norco, Lortab, oxycodone, OxyContin, Percocet and Percodan.

RESPONSE OPTIONS:
1. Yes
2. No

---

[P_OPIOIDEXP=1 AND P_IMAGEEXP=1]
[RECORD AND COMPUTE TIME ON SCREEN]
[MP; DISPLAY 9 ITEMS IN 3 X 3 GRID ACROSS 4 SCREENS; AT THE END OF EACH SCREEN ADD A SP "NONE OF THESE" AT THE END OF THE PAGE]
[DISPLAY IMAGES FROM PDF; PLEASE SHRINK IMAGES BY 30%; HAVE THE IMAGE BE CLICKABLE FOR INDICATING RESPONSE]
[PLEASE HIDE ITEM TEXT – ONLY IMAGE SHOULD APPEAR]
OPIOID2.
Please look at the names and pictures of the pain relievers shown below. Please note that some forms of these pain relievers may look different from the pictures, but you should include any form that you have used.
[SPACE]
In the <u>past 12 months</u>, which, if any, of these pain relievers have you used?

RESPONSES:
1. Vicodin
2. Lortab
3. Norco
4. Zohydro ER
5. Hydrocodone (generic)
6. OxyContin
7. Percocet
8. Percodan
9. Roxicodone
10. Oxycodone (generic)
11. Ultram
12. Ultram ER
13. Ultracet
14. Tramadol (generic)
15. Extended-release tramadol (generic)
16. Tylenol with codeine 3 or 4 (NOT over-the-counter Tylenol)
17. Codeine pills (generic)
18. Avinza
19. Kadian
20. MS Contin
21. Morphine (generic)
22. Extended-release morphine (generic)
23. Duragesic
24. Fentora
25. Fentanyl (generic)
26. Suboxone
27. Buprenorphine (generic)
28. Buprenorphine plus naloxone (generic)
29. Opana
30. Opana ER
31. Oxymorphone (generic)
32. Extended-release oxymorphone (generic)

33. Demerol
34. Dilaudid or hydromorphone
35. Exalgo or extended-release hydromorphone
36. Methadone

---

[P_OPIOIDEXP=1 AND P_IMAGEEXP=2]
[MP; DISPLAY 9 ITEMS ACROSS 4 SCREENS; AT THE END OF EACH SCREEN ADD A SP "NONE OF THESE" AT THE END OF THE PAGE]
[RECORD AND COMPUTE TIME ON SCREEN]
OPIOID2_MOD.
In the <u>past 12 months</u>, which, if any, of these pain relievers have you used?

RESPONSES:
1. Vicodin
2. Lortab
3. Norco
4. Zohydro ER
5. Hydrocodone (generic)
6. OxyContin
7. Percocet
8. Percodan
9. Roxicodone
10. Oxycodone (generic)
11. Ultram
12. Ultram ER
13. Ultracet
14. Tramadol (generic)
15. Extended-release tramadol (generic)
16. Tylenol with codeine 3 or 4 (NOT over-the-counter Tylenol)
17. Codeine pills (generic)
18. Avinza
19. Kadian
20. MS Contin
21. Morphine (generic)
22. Extended-release morphine (generic)
23. Duragesic
24. Fentora
25. Fentanyl (generic)
26. Suboxone
27. Buprenorphine (generic)
28. Buprenorphine plus naloxone (generic)
29. Opana
30. Opana ER
31. Oxymorphone (generic)
32. Extended-release oxymorphone (generic)
33. Demerol
34. Dilaudid or hydromorphone
35. Exalgo or extended-release hydromorphone
36. Methadone

---

[P_OPIOIDEXP=2]
[DISPLAY]
OPIOID2_INTRO.
These next questions are about <u>any</u> use of <u>prescription pain relievers</u>**.** Please do <u>not</u> include "over-the-counter" pain relievers such as aspirin, Tylenol, Advil, or Aleve.

---

[P_OPIOIDEXP=2 AND P_IMAGEEXP=1]
[RECORD AND COMPUTE TIME ON SCREEN]
[MP; DISPLAY 9 ITEMS IN 3 X 3 GRID ACROSS 4 SCREENS; AT THE END OF EACH SCREEN ADD A SP "NONE OF THESE" AT THE END OF THE PAGE]
[DISPLAY IMAGES FROM PDF; PLEASE SHRINK IMAGES BY 30%; HAVE THE IMAGE BE CLICKABLE FOR INDICATING RESPONSE]
[PLEASE HIDE ITEM TEXT – ONLY IMAGE SHOULD APPEAR]
OPIOID2_2.
Please look at the names and pictures of the pain relievers shown below. Please note that some forms of these pain relievers may look different from the pictures, but you should include any form that you have used.
[SPACE]
In the <u>past 12 months</u>, which, if any, of these pain relievers have you used?

RESPONSES:

1. Vicodin
2. Lortab
3. Norco
4. Zohydro ER
5. Hydrocodone (generic)
6. OxyContin
7. Percocet
8. Percodan
9. Roxicodone
10. Oxycodone (generic)
11. Ultram
12. Ultram ER
13. Ultracet
14. Tramadol (generic)
15. Extended-release tramadol (generic)
16. Tylenol with codeine 3 or 4 (NOT over-the-counter Tylenol)
17. Codeine pills (generic)
18. Avinza
19. Kadian
20. MS Contin
21. Morphine (generic)
22. Extended-release morphine (generic)
23. Duragesic
24. Fentora
25. Fentanyl (generic)
26. Suboxone
27. Buprenorphine (generic)
28. Buprenorphine plus naloxone (generic)
29. Opana
30. Opana ER
31. Oxymorphone (generic)
32. Extended-release oxymorphone (generic)
33. Demerol
34. Dilaudid or hydromorphone
35. Exalgo or extended-release hydromorphone
36. Methadone

[P_OPIOIDEXP=2 AND P_IMAGEEXP=2]
[RECORD AND COMPUTE TIME ON SCREEN]
[MP; DISPLAY 9 ITEMS ACROSS 4 SCREENS; AT THE END OF EACH SCREEN ADD A SP "NONE OF THESE" AT THE END OF THE PAGE]
OPIOID2_MOD_2.
In the <u>past 12 months</u>, which, if any, of these pain relievers have you used?

RESPONSES:

1. Vicodin
2. Lortab
3. Norco
4. Zohydro ER
5. Hydrocodone (generic)
6. OxyContin
7. Percocet
8. Percodan
9. Roxicodone
10. Oxycodone (generic)
11. Ultram
12. Ultram ER
13. Ultracet
14. Tramadol (generic)
15. Extended-release tramadol (generic)
16. Tylenol with codeine 3 or 4 (NOT over-the-counter Tylenol)
17. Codeine pills (generic)
18. Avinza
19. Kadian
20. MS Contin
21. Morphine (generic)
22. Extended-release morphine (generic)
23. Duragesic
24. Fentora
25. Fentanyl (generic)
26. Suboxone
27. Buprenorphine (generic)
28. Buprenorphine plus naloxone (generic)
29. Opana
30. Opana ER
31. Oxymorphone (generic)
32. Extended-release oxymorphone (generic)
33. Demerol
34. Dilaudid or hydromorphone
35. Exalgo or extended-release hydromorphone
36. Methadone

---

[P_OPIOIDEXP=2]
[RECORD AND COMPUTE TIME ON SCREEN]
[SP]
OPIOID1_2.
<u>During the past 12 months</u>, have you taken any opioid pain relievers prescribed by a doctor, dentist, or other health professional? Examples include hydrocodone, Vicodin, Norco, Lortab, oxycodone, OxyContin, Percocet and Percodan.

RESPONSE OPTIONS:

1. Yes
2. No

PROGRAMMING: CREATE DOV_OPIOID

IF **ONLY ONE ITEM SELECTED** IN (OPIOID2A=1-OPIOID2JJ=1) OR (OPIOID2_MODA=1- OPIOID2_MODJJ=1) OR (OPIOID2_2A=1- OPIOID2_2JJ=1) OR (OPIOID2_MOD_2A=1- OPIOID2_MOD_2JJ=1) **DOV_OPIOID=1**
"One Item selected in NSDUH series"
Only One medication selected in OPIOID2, OPIOID2_MOD, OPIOID2_2, OPIOID2_MOD_2 questions, assign DOV_OPIOID=1 value

IF **MULTIPLE ITEMS SELECTED** IN (OPIOID2A=1-OPIOID2JJ=1) OR (OPIOID2_MODA=1- OPIOID2_MODJJ=1) OR (OPIOID2_2A=1- OPIOID2_2JJ=1) OR (OPIOID2_MOD_2A=1- OPIOID2_MOD_2JJ=1) **DOV_OPIOID=2**
"Multiple Items selected in NSDUH series"
More than one medication selected in OPIOID2, OPIOID2_MOD, OPIOID2_2, OPIOID2_MOD_2 questions, assign DOV_OPIOID=2 value

IF **NONE SELECTED** IN ((OPIOID2A=2-OPIOID2JJ=2) OR (OPIOID2_MODA=2- OPIOID2_MODJJ=2) OR (OPIOID2_2A=2-OPIOID2_2JJ=2) OR (OPIOID2_MOD_2A=1- OPIOID2_MOD_2JJ=1)) AND (OPIOID1=1 OR OPIOID1_2=1) **DOV_OPIOID=3** "NO medications selected in NSDUH question, but said YES to NHIS question"
NO medications selected in OPIOID2, OPIOID2_MOD, OPIOID2_2, OPIOID2_MOD_2 questions, BUT Respondent says YES in OPIOID1 OR OPIOID1_2, assign DOV_OPIOID=3 value

IF MISSING DOV_OPIOID, DOV_OPIOID=4 "NO Opioids reported being used in the past 12 months"

If none of the first 3 conditions are met, assign DOV_OPIOID=4 value and skip OPIOID3 through OPIOID6.

---

[SHOW IF (OPIOID1=1 OR OPIOID1_2=1) OR ((OPIOID2A=1 THROUGH OPIOID2JJ=1) OR (OPIOID2_MODA=1 THROUGH OPIOID2_MODJJ=1) OR (OPIOID2_2A=1 THROUGH OPIOID2_2JJ=1) OR (OPIOID2_MOD_2A=1 THROUGH OPIOID2_MOD_2JJ)]
[RECORD AND COMPUTE TIME ON SCREEN]
[SP]
OPIOID3.
[IF DOV_OPIOID=1] You said you took [INSERT THE ONE ITEM SELECTED IN OPIOID2, OPIOID2_MOD, OPIOID2_2, OR OPIOID2_MOD_2] in the past 12 months.
[SPACE]
[IF DOV_OPIOID=1] Are you currently taking this medication?

[IF DOV_OPIOID=2] You said you took the following medications in the past 12 months:
[SPACE]
[INSERT, IN BULLET LIST, THE ITEMS SELECTED IN OPIOID2, OPIOID2_MOD, OPIOID2_2, OR OPIOID2_MOD_2; SEE A_PHQImp FOR EXAMPLE OF BULLET LIST OF INSERTED TEXT]
[SPACE]
[IF DOV_OPIOID=2] Are you currently taking any of these medications?

[IF DOV_OPIOID=3] You said you took an opioid pain reliever in the past 12 months.
[SPACE]
[IF DOV_OPIOID=3] Are you currently taking any opioid pain relievers?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF OPIOID3=1]
[RECORD AND COMPUTE TIME ON SCREEN]
[SP]
OPIOID4.
[IF DOV_OPIOID=1] About how long have you been taking this medication?

[IF DOV_OPIOID=2] About how long have you been taking these medications?

[IF DOV_OPIOID=3] About how long have you been taking opioid pain relievers?

RESPONSE OPTIONS:
1. Less than a week
2. 1 to 4 weeks
3. 1 to 6 months
4. 6 months to a year
5. 1 to 5 years
6. 5 years or more

---

[SHOW IF OPIOID3=2, 98]
[RECORD AND COMPUTE TIME ON SCREEN]
[SP]
OPIOID5.
[IF DOV_OPIOID=1] About how long were you taking this medication?

[IF DOV_OPIOID=2] About how long were you taking these medications?

[IF DOV_OPIOID=3] About how long were you taking opioid pain relievers?

RESPONSE OPTIONS:
1. Less than a week
2. 1 to 4 weeks
3. 1 to 6 months
4. 6 months to a year
5. 1 to 5 years
6. 5 years or more

---

[SHOW IF (OPIOID1=1 OR OPIOID1_2=1) OR ((OPIOID2A=1 THROUGH OPIOID2JJ=1) OR (OPIOID2_MODA=1 THROUGH OPIOID2_MODJJ=1) OR (OPIOID2_2A=1 THROUGH OPIOID2_2JJ=1) OR (OPIOID2_MOD_2A=1 THROUGH OPIOID2_MOD_2JJ)]
[RECORD AND COMPUTE TIME ON SCREEN]
[MP]
OPIOID6.
[IF DOV_OPIOID=1] What were the reasons you took this medication the last time?

[IF DOV_OPIOID=2] What were the reasons you took these medications the last time?

[IF DOV_OPIOID=3] What were the reasons you took opioid pain relievers the last time?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

1. To relieve physical pain
2. To relax or relieve tension
3. To increase or decrease the effect(s) of some other drug
4. To feel good or get high
5. To help with my sleep
6. To help me with my feelings or emotions
7. Because I am "hooked" or I have to have them
8. For a suicide attempt or suicidal thoughts
9. Because of peer pressure, friends, or trying to feel cool

---

[RECORD AND COMPUTE TIME ON SCREEN]
[MP]
PROBE18.
Please select the statements, if any, that apply to you:

RESPONSE OPTIONS, RANDOMIZE:

A. I'm not sure what an opioid is
B. I have never taken an opioid pain killer in my life
C. I don't like to take pills; I'm not a pill person
D. I have pain that requires me to take opioid pain killers
E. I use opioid pain relievers responsibly
F. I'm addicted, or used to be addicted to opioids
G. I understand the harm opioids can cause
H. I have heard about the opioid crisis in the news
I. I know someone who has been hurt by opioid pain killers
J. I have only taken opioid pills briefly to help recover from an injury or medical procedure

---

[SP]
ANX_1.
How often do you feel worried, nervous, or anxious?

RESPONSE OPTIONS:

1. Daily
2. Weekly
3. Monthly
4. A few times a year
5. Never

---

[SP]
ANX_2.
Do you take prescription medication for these feelings?

RESPONSE OPTIONS:

1. Yes
2. No

---

[SHOW IF (ANX_1=1,2,3,4) OR ((ANX_1=5) AND (ANX_2=1))]
[SP]
ANX_3.
Thinking about the last time you felt worried, nervous, or anxious, how would you describe the level of these feelings?

RESPONSE OPTIONS:

1. A little
2. A lot
3. Somewhere in between a little and a lot

---

[SP]
DEP_1.
How often do you feel depressed?

RESPONSE OPTIONS:

1. Daily
2. Weekly
3. Monthly
4. A few times a year
5. Never

---

[SP]
DEP_2.
Do you take prescription medication for depression?

RESPONSE OPTIONS:

1. Yes
2. No

---

[SHOW IF (DEP_1=1,2,3,4) OR ((DEP_1=5) AND (DEP_2=1))]
[SP]
DEP_3.
Thinking about the last time you felt depressed, how depressed did you feel?

RESPONSE OPTIONS:

1. A little
2. A lot
3. Somewhere in between a little and a lot

---

[SHOW IF P_GROUP=1]
[GRID, SP; 4,4]
A_PHQ.
Over the <u>last 2 weeks</u>, how often have you been bothered by any of the following problems?

GRID ITEMS:

A. Little interest or pleasure in doing things
B. Feeling down, depressed, or hopeless
C. Trouble falling or staying asleep, or sleeping too much
D. Feeling tired or having little energy
E. Poor appetite or overeating
F. Feeling bad about yourself — or that you are a failure or have let yourself or your family down
G. Trouble concentrating on things, such as reading the newspaper or watching television
H. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual

RESPONSE OPTIONS:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

---

[SHOW IF A_PHQA=2,3,4 OR A_PHQB=2,3,4 OR A_PHQC=2,3,4 OR A_PHQD=2,3,4 OR A_PHQE=2,3,4 OR A_PHQF=2,3,4 OR A_PHQG=2,3,4 OR A_PHQH=2,3,4]
[SP]
A_PHQImp.
Over the past 2 weeks, you've been bothered by:

- [SHOW IF A_PHQ_A=2,3,4]Little interest or pleasure in doing things
- [SHOW IF A_PHQ_B=2,3,4]Feeling down, depressed, or hopeless
- [SHOW IF A_PHQ_C=2,3,4]Trouble falling or staying asleep, or sleeping too much
- [SHOW IF A_PHQ_D=2,3,4]Feeling tired or having little energy
- [SHOW IF A_PHQ_E=2,3,4]Poor appetite or overeating
- [SHOW IF A_PHQ_F=2,3,4]Feeling bad about yourself — or that you are a failure or have let yourself or your family down
- [SHOW IF A_PHQ_G=2,3,4]Trouble concentrating on things, such as reading the newspaper or watching television
- [SHOW IF A_PHQ_H=2,3,4]Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual

[SPACE]
Altogether, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

RESPONSE OPTIONS:

1. Not at all difficult
2. Somewhat difficult
3. Very difficult
4. Extremely difficult

---

[SHOW IF A_PHQA=2,3,4 OR A_PHQB=2,3,4 OR A_PHQC=2,3,4 OR A_PHQD=2,3,4 OR A_PHQE=2,3,4 OR A_PHQF=2,3,4 OR A_PHQG=2,3,4 OR A_PHQH=2,3,4]
[MP]
A_PROBE33.
Which of the following statements, if any, describe your feelings of being sad or depressed?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

1. Sometimes the feelings can be so intense that I cannot get out of bed.
2. The feelings sometimes interfere with my life, and I wish that I did not have them.
3. I get over the feelings quickly.
4. Feeling that way is normal, and everyone feels that way sometimes.
5. I have been told by a medical professional that I have depression.

---

[SHOW IF P_GROUP=B]
[GRID, SP; 4,3]
B_GAD.
Over the <u>last 2 weeks</u>, how often have you been bothered by the following problems?

GRID ITEMS:

A. Feeling nervous, anxious or on edge
B. Not being able to stop or control worrying
C. Worrying too much about different things
D. Trouble relaxing
E. Being so restless that it is hard to sit still
F. Becoming easily annoyed or irritable
G. Feeling afraid as if something awful might happen

RESPONSE OPTIONS:

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day

---

[SHOW IF B_GADA=2,3,4 OR B_GADB=2,3,4 OR B_GADC=2,3,4 OR B_GADD=2,3,4 OR B_GADE=2,3,4 OR B_GADF=2,3,4 OR B_GADG=2,3,4]
[SP]
B_GADImp.
Over the past 2 weeks, you've been bothered by:

- [SHOW IF B_GAD_A=2,3,4]Feeling nervous, anxious or on edge
- [SHOW IF B_GAD_B=2,3,4]Not being able to stop or control worrying
- [SHOW IF B_GAD_C=2,3,4]Worrying too much about different things
- [SHOW IF B_GAD_D=2,3,4]Trouble relaxing
- [SHOW IF B_GAD_E=2,3,4]Being so restless that it is hard to sit still
- [SHOW IF B_GAD_F=2,3,4]Becoming easily annoyed or irritable
- [SHOW IF B_GAD_G=2,3,4]Feeling afraid as if something awful might happen

[SPACE]
Altogether, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

RESPONSE OPTIONS:

1. Not at all difficult
2. Somewhat difficult
3. Very difficult
4. Extremely difficult

---

[SHOW IF B_GADA=2,3,4 OR B_GADB=2,3,4 OR B_GADC=2,3,4 OR B_GADD=2,3,4 OR B_GADE=2,3,4 OR B_GADF=2,3,4 OR B_GADG=2,3,4]
[MP]
B_PROBE34.
Which of the following statements, if any, describe your feelings of being nervous or anxious?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

1. Sometimes the feelings can be so intense that my chest hurts and I have trouble breathing.
2. These are positive feelings that help me to accomplish goals and be productive.
3. The feelings sometimes interfere with my life, and I wish that I did not have them.
4. Feeling that way is normal, and everyone feels that way sometimes.
5. I have been told by a medical professional that I have anxiety.

---

[SHOW IF P_GROUP=1]
[SP]
A_CHPAIN6M.
In the PAST 6 MONTHS, how often did you have pain?

RESPONSE OPTIONS:
1. Never
2. Some days
3. Most days
4. Every day

---

[SHOW IF A_CHPAIN6M =2,3,4]
[SP]
A_PAINLMT6.
Over the PAST 6 MONTHS, how often did pain limit your life or work activities?

RESPONSE OPTIONS:
1. Never
2. Some days
3. Most days
4. Every day

---

[SHOW IF P_GROUP=2]
[SP]
B_PAIN_2.
In the PAST 3 MONTHS, how often did you have pain?

RESPONSE OPTIONS:
1. Never
2. Some days
3. Most days
4. Every day

---

[SHOW IF B_PAIN_2=2,3,4]
[SP]
B_ PAINLMT3.
Over the PAST 3 MONTHS, how often did pain limit your life or work activities?

RESPONSE OPTIONS:
1. Never
2. Some days
3. Most days
4. Every day

---

[SHOW IF (A_CHPAIN6M =2,3,4) OR (B_PAIN_2=2,3,4)]
[SP]
PAIN_4.
Thinking about the last time you had pain, how much pain did you have?

RESPONSE OPTIONS:

1. A little
2. A lot
3. Somewhere in between a little and a lot

---

[SHOW IF (A_CHPAIN6M =2,3,4) OR (B_PAIN_2=2,3,4)]
[MP]
PROBE17.
Which of the following statements, if any, describe your pain in the PAST [IF P_GROUP=1, INSERT 6; IF P_GROUP=2, INSERT 3] MONTHS?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

1. It is constantly present
2. Sometimes I'm in a lot of pain and sometimes it's not so bad
3. Sometimes it's unbearable and excruciating
4. When I get my mind on other things, I'm not aware of the pain
5. It is occasional and does not last
6. Medication can take my pain away completely
7. My pain is because of my current or past work
8. My pain is because of exercise
9. My pain was caused by a recent injury or infection
10. My pain is minor and infrequent

---

[DISPLAY]
SMK_INTRO.
These next questions are about cigarette smoking.

---

[SP]
SMKEV.
Have you smoked at least 100 cigarettes in your <u>entire life</u>?

RESPONSE OPTIONS:

1. Yes
2. No

---

[SHOW IF SMKEV=1]
[SP]
SMKNOW.

Do you <u>now</u> smoke cigarettes every day, some days, or not at all?

RESPONSE OPTIONS:

1. Every day
2. Some days
3. Not at all

---

[SHOW IF P_GROUP=1]
[SP]
A_ECIGEV_A.
The next question is about electronic cigarettes or e-cigarettes. E-cigarettes and other electronic vaping products include electronic hookahs (e-hookahs), vape pens, e-cigars, and others. These products are battery-powered and usually contain nicotine and flavors such as fruit, mint, or candy.
[SPACE]
Have you <u>ever</u> used an e-cigarette or other electronic vaping product, <u>even one time,</u> in your entire life?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF P_GROUP=2]
[SP]
B_ECIGEV_A.
Have you <u>ever</u> used an e-cigarette or other electronic vaping product, <u>even one time,</u> in your entire life ?

RESPONSE OPTIONS:
1. Yes
2. No

---

[MP]
PROBE19.
What counts as an e-cigarette?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:
1. A vape with cannabis, THC, or CBD oil
2. A vape with nicotine or other flavored oil
3. A hookah-pen or e-hookah
4. An e-vaporizer
5. A tobacco cigarette or cigar
6. A marijuana cigarette

---

[DISPLAY]
ACTV_INTRO.
The next questions are about physical activities (exercise, sports, physically active hobbies…) that you may do in your leisure time. The first questions ask about <u>light or moderate</u> physical activities, then there will be questions about <u>vigorous</u> physical activities.

---

[NUMBOX, DROPDOWN, FOR DROPDOWN HAVE “Per week” AS DEFAULT DISPLAYED]
[PROMPT IF NUMBERBOX HAS A VALUE BUT DROPDOWN LIST IS EMPTY]
MODNO.
How often do you do <u>light or moderate</u> leisure time physical activities for <u>at least 10 minutes</u> that cause <u>only light</u> sweating or a <u>slight to moderate</u> increase in breathing or heart rate?

<u>per day/week/month</u>
[NUMBER BOX, RANGE 0-995, 998] Number of times [DROPDOWN LIST]

DROPDOWN LIST RESPONSE OPTIONS:

1. Never
2. Per day
3. Per week
4. Per month
5. Per year
6. Unable to do this type of activity

---

[SHOW IF MODNO_DROPDOWN=2,3,4,5 AND (MODNO_NUMBOX>0 AND MODNO_NUMBOX NE '998')]
[NUMBOX, DROPDOWN, FOR DROPDOWN HAVE "Minutes" AS DEFAULT DISPLAYED]
[PROMPT IF NUMBERBOX HAS A VALUE BUT DROPDOWN LIST IS EMPTY]
MODLNGNO.
About how long do you do these light or moderate leisure-time physical activities each time?

<u>Minutes/Hours</u>
[NUMBER BOX, RANGE 1-90, 998] Number of [DROPDOWN LIST]

DROPDOWN LIST RESPONSE OPTIONS:

1. Minutes
2. Hours

---

[SHOW IF MODNO_DROPDOWN=2,3,4,5 AND (MODNO_NUMBOX>0 AND MODNO_NUMBOX NE '998')
AND P_PROBEEXP=1]
[RECORD AND COMPUTE TIME ON SCREEN]
[MP]
PROBE20_1.
Which of the following types of physical activity, if any, did you include when you answered the previous question?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

A. Running or jogging
B. Hiking
C. Walking as part of your job
D. Walking outside of work
E. Yardwork or cleaning your home
F. Working out with exercise equipment
G. Lifting weights
H. Cycling, swimming, or other aerobic exercises
I. Yoga or stretching
J. Playing a sport, please specify which sport: [TEXTBOX]
K. Other, please specify: [TEXTBOX]

---

[SHOW IF MODNO_DROPDOWN=2,3,4,5 AND (MODNO_NUMBOX>0 AND MODNO_NUMBOX NE '998') AND
P_PROBEEXP=2]
[RECORD AND COMPUTE TIME ON SCREEN]
[GRID, SP]
PROBE20_2.
Which of the following types of physical activity, if any, did you include when you answered the previous question?

GRID ITEMS:

A. Running or jogging
B. Hiking
C. Walking as part of your job
D. Walking outside of work
E. Yardwork or cleaning your home
F. Working out with exercise equipment
G. Lifting weights
H. Cycling, swimming, or other aerobic exercises
I. Yoga or stretching
J. Playing a sport, please specify which sport: [TEXTBOX]
K. Other, please specify: [TEXTBOX]

RESPONSE OPTIONS:

1. Yes
2. No

---

[NUMBOX, DROPDOWN, FOR DROPDOWN HAVE "Per week" AS DEFAULT DISPLAYED]
[PROMPT IF NUMBERBOX HAS A VALUE BUT DROPDOWN LIST IS EMPTY]
VIGNO.
How often do you do <u>vigorous</u> leisure-time physical activities for <u>at least 10 minutes</u> that cause <u>heavy</u> sweating or <u>large</u> increases in breathing or heart rate?

<u>per day/week/month</u>
[NUMBER BOX, RANGE 0-99, 998] Number of times [DROPDOWN LIST]

DROPDOWN LIST RESPONSE OPTIONS:

1. Never
2. Per day
3. Per week
4. Per month
5. Per year
6. Unable to do this type of activity

---

[SHOW IF VIGNO_DROPDOWN=2,3,4,5 AND (VIGNO_NUMBOX>0 AND VIGNO_NUMBOX NE '998')]
[NUMBOX, DROPDOWN, FOR DROPDOWN HAVE "Minutes" AS DEFAULT DISPLAYED]
[PROMPT IF NUMBERBOX HAS A VALUE BUT DROPDOWN LIST IS EMPTY]
VIGLNGNO.
About how long do you do these vigorous leisure-time physical activities each time?

<u>Minutes/Hours</u>
[NUMBER BOX, RANGE 1-90, 998] Number of [DROPDOWN LIST]

DROPDOWN LIST RESPONSE OPTIONS:

1. Minutes
2. Hours

---

[SHOW IF VIGNO_DROPDOWN=2,3,4,5 AND (VIGNO_NUMBOX>0 AND VIGNO_NUMBOX NE '998') AND P_PROBEEXP=1]
[RECORD AND COMPUTE TIME ON SCREEN]
[MP]
PROBE21_1.
Which of the following types of physical activity, if any, did you include when you answered the previous question?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

1. Running or jogging
2. Hiking
3. Walking as part of your job
4. Walking outside of work
5. Yardwork or cleaning your home
6. Working out with exercise equipment
7. Lifting weights
8. Cycling, swimming, or other aerobic exercises
9. Yoga or stretching
10. Playing a sport, please specify which sport: [TEXTBOX]
11. Other, please specify: [TEXTBOX]

---

[SHOW IF VIGNO_DROPDOWN=2,3,4,5 AND (VIGNO_NUMBOX>0 AND VIGNO_NUMBOX NE '998') AND P_PROBEEXP=2]
[RECORD AND COMPUTE TIME ON SCREEN]
[GRID, SP]
PROBE21_2.
Which of the following types of physical activity, if any, did you include when you answered the previous question?

GRID ITEMS:

A. Running or jogging
B. Hiking
C. Walking as part of your job
D. Walking outside of work
E. Yardwork or cleaning your home
F. Working out with exercise equipment
G. Lifting weights
H. Cycling, swimming, or other aerobic exercises
I. Yoga or stretching
J. Playing a sport, please specify which sport: [TEXTBOX]
K. Other, please specify: [TEXTBOX]

RESPONSE OPTIONS:

1. Yes
2. No

---

[NUMBOX, DROPDOWN, FOR DROPDOWN HAVE "Per week" AS DEFAULT DISPLAYED]
[PROMPT IF NUMBERBOX HAS A VALUE BUT DROPDOWN LIST IS EMPTY]
STRNGNO.
How often do you do leisure time physical activities specifically designed to <u>strengthen</u> your muscles such as lifting weights or doing calisthenics?
[SPACE]
*Include all such activities even if you have mentioned them before*.

<u>per day/week/month</u>
[NUMBER BOX, RANGE 0-995, 998] Number of times [DROPDOWN LIST]

DROPDOWN LIST RESPONSE OPTIONS:

1. Never
2. Per day
3. Per week
4. Per month
5. Per year
6. Unable to do this type of activity

---

[P_PROBEEXP=1]
[RECORD AND COMPUTE TIME ON SCREEN]
[MP]
PROBE22_1.
In the last week, did you do any of the following things for 20 or more minutes at once?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:

1. Running or jogging
2. Hiking
3. Walking as part of your job
4. Walking outside of work
5. Yardwork or cleaning your home
6. Working out with exercise equipment
7. Lifting weights
8. Cycling, swimming, or other aerobic exercises
9. Yoga or stretching
10. Playing a sport, please specify which sport: [TEXTBOX]
11. Other, please specify: [TEXTBOX]

---

[P_PROBEEXP=2]
[RECORD AND COMPUTE TIME ON SCREEN]
[GRID, SP]
PROBE22_2.
In the last week, did you do any of the following things for 20 or more minutes at once?

GRID ITEMS:

A. Running or jogging
B. Hiking
C. Walking as part of your job
D. Walking outside of work
E. Yardwork or cleaning your home
F. Working out with exercise equipment
G. Lifting weights
H. Cycling, swimming, or other aerobic exercises
I. Yoga or stretching
J. Playing a sport, please specify which sport: [TEXTBOX]
K. Other, please specify: [TEXTBOX]

RESPONSE OPTIONS:

1. Yes
2. No

---

[SP]
ACISAD.
During the <u>past 30 days</u>, how often did you feel so sad that nothing could cheer you up?

RESPONSE OPTIONS:
1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time

---

[SHOW IF ACISAD=1,2,3,4]
[MP]
PROBE29.
Which of the following statements, if any, describe your feelings of being sad or depressed?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:
1. Sometimes the feelings can be so intense that I cannot get out of bed
2. The feelings sometimes interfere with my life, and I wish that I did not have them
3. I get over the feelings quickly
4. Feeling that way is normal, and everyone feels that way sometimes
5. I have been told by a medical professional that I have depression

---

[SP]
ACINERV.
During the <u>past 30 days</u>, how often did you feel nervous?

RESPONSE OPTIONS:
1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time

---

[SHOW IF ACINERV=1,2,3,4]
[MP]
PROBE30.
Which of the following statements, if any, describe your feelings of being nervous or anxious?
[SPACE]
*Please select all that apply.*

RESPONSE OPTIONS:
1. Sometimes the feelings can be so intense that my chest hurts and I have trouble breathing.
2. These are positive feelings that help me to accomplish goals and be productive.
3. The feelings sometimes interfere with my life, and I wish that I did not have them.
4. Feeling that way is normal, and everyone feels that way sometimes.
5. I have been told by a medical professional that I have anxiety.

---

[GRID, SP]
ACIRSTLS.
During the <u>past 30 days</u>, how often did you feel…

GRID ITEMS:

A. Restless or fidgety
B. Hopeless
C. That everything was an effort

RESPONSE OPTIONS:

1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time

---

[SP]
PROBE31.
Would you consider everything being an effort a good thing or a bad thing?

RESPONSE OPTIONS:

1. Good thing
2. Bad thing
3. Neither good nor bad

---

[SHOW IF ACIRSTLS_C = 1,2,3,4]
[SP]
PROBE32.
How concerned are you about feeling as if everything is an effort?

RESPONSE OPTIONS:

1. Very concerned
2. Somewhat concerned
3. A little concerned
4. Not at all concerned

---

[SP]
ACIWTHLS.
During the <u>past 30 days</u>, how often did you feel worthless?

RESPONSE OPTIONS:

1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time

---

[DISPLAY]
INJ_INTRO.
The next set of questions asks about injuries. People can be injured accidentally, or on purpose. They may hurt themselves or others may cause them to be hurt.

[SP]
INJURY1.
The first question is about repetitive strain injuries. By this, we mean injuries caused by repeating the same movement over an extended period. Examples include carpal tunnel syndrome, tennis elbow, or tendonitis. DURING THE PAST 3 MONTHS, did you have any injuries due to repetitive strain?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SP]
INJURY2.
[IF INJURY1=1, INSERT *Not including any of the repetitive strain injuries you just mentioned,*]
DURING THE PAST 3 MONTHS, did you have an accident or an injury where any part of your body was hurt?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF INJURY2=1]
[SP]
INJURY3.
Were any of these injuries serious enough to limit your usual activities for at least 24 hours after the injury occurred?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF INJURY2=1]
[SP]
INJURY4.
Were any of these injuries serious enough that you missed at least one day of work or school?

RESPONSE OPTIONS:
1. Yes
2. No

---

[SHOW IF INJURY3=1 OR INJURY4=1]
[DISPLAY]
NUMTIMES_INTRO.
[IF INJURY1=1, INSERT *Not counting repetitive strain injuries,* please; IF INJURY1=2,98, INSERT Please] think about all of the accidents or events that caused an injury IN THE PAST 3 MONTHS, and that caused you to miss at least one day of work or school, or that made it difficult for you to do things that you usually do for one day or more.

---

[SHOW IF INJURY3=1 OR INJURY4=1]
[NUMBOX]
INJURY5.
DURING THE PAST 3 MONTHS, how many times did these accidents or injury events occur?

<u>Number of times: </u>
[NUMBER BOX, RANGE 0-995, 998]

---

[SHOW IF INJURY3=1 OR INJURY4=1]
[GRID, SP; 3,3]
INJURY6.
DURING THE PAST 3 MONTHS, did [IF INJURY5=1,998 INSERT this injury; IF INJURY5=2-995, INSERT any of these injuries] occur while you were:

GRID ITEMS:

A. Working at a job or business?
B. At school, taking classes, or doing schoolwork?
C. Playing sports or exercising, including walking, biking, or running for exercise? (Please also include recreational sports such as skating, skiing, tennis, golf, bowling, or fishing).
D. Doing household activities, such as housework, cooking, home maintenance, or yardwork?
E. Doing leisure activities, such as hobbies, volunteer work, socializing, watching TV, or relaxing?
F. Walking to get some place outside your home?

RESPONSE OPTIONS:

1. Yes
2. No

---

[SHOW IF INJURY3=1 OR INJURY4=1]
[DISPLAY]
CAUSE_INTRO.
The next questions are about two ways that you might have been injured. Remember that we are just talking about [IF INJURY5=1, 998 INSERT the injury; IF INJURY5=2-995, INSERT any of the injuries] that caused you to miss at least one day of work or school, or that made it difficult for you to do things that you usually do for one day or more.

---

[SHOW IF INJURY3=1 OR INJURY4=1]
[SP]
INJURY12.

DURING THE PAST 3 MONTHS, [IF INJURY5=1, 998 INSERT was this injury; IF INJURY5=2-995, INSERT were any of these injuries] a result of a fall or falling?

RESPONSE OPTIONS:

1. Yes
2. No

---

[SHOW IF INJURY3=1 OR INJURY4=1]
[SP]
INJURY13.
DURING THE PAST 3 MONTHS, [IF INJURY5=1, 998 INSERT was this injury; IF INJURY5=2-995, INSERT were any of these injuries] a result of a collision involving a motor vehicle?

RESPONSE OPTIONS:
1. Yes
2. No

---

RE-COMPUTE QUAL=1 "COMPLETE"

SET CO_DATE, CO_TIME, CO_TIMER VALUES HERE

CREATE MODE_END
1=CATI
2=CAWI

---

SCRIPTING NOTES: PUT QFINAL1, QFINAL2, QFINAL3 in the same screen.
[SINGLE CHOICE]
QFINAL1.
Thank you for your time today. To help us improve the experience of AmeriSpeak members like yourself, please give us feedback on this survey.

[RED TEXT – CAWI ONLY] If you do not have any feedback for us today, please click "Continue" through to the end of the survey so we can make sure your opinions are counted and for you to receive your AmeriPoints reward.

Please rate this survey overall from 1 to 7 where 1 is Poor and 7 is Excellent.

| Poor | | | | | | Excellent |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

[SINGLE CHOICE – CAWI ONLY]
QFINAL2.
Did you experience any technical issues in completing this survey?
1. Yes – please tell us more in the next question
2. No

[TEXT BOX]
QFINAL3.
Do you have any general comments or feedback on this survey you would like to share? If you would like a response from us, please email support@AmeriSpeak.org or call (888) 326-9424.

---

[DISPLAY]
END.
[CAWI version]
Those are all the questions we have. You have earned a reward of [INCENTWCOMMA] AmeriPoints for completing the survey. If you have any questions at all for us, you can email us at support@AmeriSpeak.org or call us toll-free at **888-326-9424**. Thank you for participating in our new AmeriSpeak survey!

You can close your browser window now if you wish or click Continue below to be redirected to the AmeriSpeak member website.

# Vital and Health Statistics Series Descriptions

## Active Series

**Series 1.** **Programs and Collection Procedures**
Reports describe the programs and data systems of the National Center for Health Statistics, and the data collection and survey methods used. Series 1 reports also include definitions, survey design, estimation, and other material necessary for understanding and analyzing the data.

**Series 2.** **Data Evaluation and Methods Research**
Reports present new statistical methodology including experimental tests of new survey methods, studies of vital and health statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, and contributions to statistical theory. Reports also include comparison of U.S. methodology with those of other countries.

**Series 3.** **Analytical and Epidemiological Studies**
Reports present data analyses, epidemiological studies, and descriptive statistics based on national surveys and data systems. As of 2015, Series 3 includes reports that would have previously been published in Series 5, 10–15, and 20–23.

## Discontinued Series

**Series 4.** **Documents and Committee Reports**
Reports contain findings of major committees concerned with vital and health statistics and documents. The last Series 4 report was published in 2002; these are now included in Series 2 or another appropriate series.

**Series 5.** **International Vital and Health Statistics Reports**
Reports present analytical and descriptive comparisons of U.S. vital and health statistics with those of other countries. The last Series 5 report was published in 2003; these are now included in Series 3 or another appropriate series.

**Series 6.** **Cognition and Survey Measurement**
Reports use methods of cognitive science to design, evaluate, and test survey instruments. The last Series 6 report was published in 1999; these are now included in Series 2.

**Series 10.** **Data From the National Health Interview Survey**
Reports present statistics on illness; accidental injuries; disability; use of hospital, medical, dental, and other services; and other health-related topics. As of 2015, these are included in Series 3.

**Series 11.** **Data From the National Health Examination Survey, the National Health and Nutrition Examination Surveys, and the Hispanic Health and Nutrition Examination Survey**
Reports present 1) estimates of the medically defined prevalence of specific diseases in the United States and the distribution of the population with respect to physical, physiological, and psychological characteristics and 2) analysis of relationships among the various measurements. As of 2015, these are included in Series 3.

**Series 12.** **Data From the Institutionalized Population Surveys**
The last Series 12 report was published in 1974; these reports were included in Series 13, and as of 2015 are in Series 3.

**Series 13.** **Data From the National Health Care Survey**
Reports present statistics on health resources and use of health care resources based on data collected from health care providers and provider records. As of 2015, these reports are included in Series 3.

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Reports include analyses by cause of death and demographic variables, and geographic and trend analyses. The last Series 20 report was published in 2007; these reports are now included in Series 3.

**Series 21.** **Data on Natality, Marriage, and Divorce**
Reports include analyses by health and demographic variables, and geographic and trend analyses. The last Series 21 report was published in 2006; these reports are now included in Series 3.

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For answers to questions about this report or for a list of reports published in these series, contact:

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