Attachment 3a

Summary of Examination and Questionnaire Changes in 2021-2022

TABLE OF CONTENTS

MEC Examination Change Summary

In 2021-2022, the NHANES Examination consist of the following components:

- Anthropometry - Body Measures
- Standing Balance
- Dual Energy X-Ray Absorptiometry (DXA)
- Blood Pressure Measurement
- Liver Elastography
- Urine collection
- Venipuncture

To promote the safety of survey participants as well as field staff in the context of the pandemic, for the 2021-2022 cycle, NHANES program will make the following changes to the examination components to shorten the face-to-face contact in the Mobil Examination Center (MEC), and to preserve the essential data collection needed in monitoring the nation's health.

- For the Standing Balance Component, all nonessential subcomponents (i.e., binocular static visual acuity, dynamic visual acuity, contrast sensitivity and lensometer) will not be conducted so that the length of the component and overall time in the MEC is reduced. Additionally, belts worn by participants and used to assist the MEC staff to grab a participant in the event they started to lose their balance, will not be used. It was determined that their use was very limited in 2019-20 and the subject matter experts have suggested other methods to achieve the same purpose if a participant starts to lose the balance. Reasoning for this change was to reduce the number of touch points between MEC staff and participants.

- Dual Energy X-Ray Absorptiometry (DXA) component will be modified to drop the osteoporosis assessment of the spine and femur. Reasoning for this change is to reduce the length of the component and overall time in the MEC.

- Measurement of resting pulse rate will be discontinued for children 0-7 years. This change is made to reduce the overall MEC exam time, and in account of the relatively lower utility of this data item for this age group. Resting pulse rate will still be measured for survey participants 8 years and older as part of their blood pressure measurements. Blood pressure has always been measured among participants 8 years and older. No changes anticipated for this protocol or the target age group in the 2021-22 cycle.

- While the exam protocol for venipuncture/phlebotomy component will remain the same, improved talking points for children and their parents, and additional distraction and pain management techniques will be implemented to improve the phlebotomy response rates for children aged 1-17 years old. Blood will be collected for COVID-19 serology tests. This will provide data for national estimates of COVID-19 immunity. In addition, this information can be used in conjunction with other exam and lab data collected to further assess the effect of COVID-19 on the nation's health. There are other changes in lab analytes planned for the 2021-22 cycle as well. Complete lists of these changes are provided in Attachment 6a. Lab analytes from previous cycles of NHANES are found in Attachment 6b.

- Audiometry and the Words-In-Noise components will not be conducted for safety reasons. The exam is required to be conducted in a relatively small soundproof booth where the MEC staff must spend time with the participants to set-up the earphones and look inside the participant's ear. Afterwards, the participant was left in this booth with door closed through the exam. Therefore, it was decided to not conduct this exam during this data collection period.

- The Cognitive Function component was conducted as part of the MEC Interview. In 2021-22, we will not conduct this exam. The target group for this exam is participants 60 years and older, and the exam requires the participant and the MEC staff to interact face-to-face to complete the multiple domains of the test. Individuals 60 years and older are at higher risk for severe illness from COVID-19. Given the situation of the pandemic, it was deemed best not to conduct this exam to reduce the face-to-face contact and overall time for this group of participants.

- The Oral Health examination will not be conducted for safety reasons. NHANES is a health study, not conducting an exam during which the MEC dentist is looking and touching the inside of a participant's open mouth seems prudent in the context of pandemic.

- HPV swab collection in both males and females will not be conducted to reduce the time of the overall survey for participant and MEC Staff safety.

Traditionally, each MEC examination session was scheduled with 10-12 participants. To preserve proper social distancing, fewer participants will be scheduled in each MEC section so the person/space ratio in the MEC is consistent with CDC guidance. Additional sanitary protocols will be implemented in the MEC to clean the equipment and contacting surfaces after the completion of each individual exam and each exam section.

Screening for COVID-19 will take place prior to participants and visitors (i.e., interpreters, consultants, contractors, etc.) entering the NHANES Mobile Examination Center (MEC). The screening protocol will follow the most updated CDC guidance. Participants and visitors will receive a COVID-19 antigen test and be asked about any COVID-19 symptoms and/or contacts with individuals diagnosed having COVID-19. Temperatures via thermal thermometers will also be taken. Those testing positive, with symptoms, or who have had contact to individuals with COVID-19 will not be allowed to enter the MEC and their visits will be rescheduled if possible. Additionally, those testing positive will receive and letter informing them of this result as well as CDC informational fact sheets that detail how not to spread the virus (Attachment 14L).

All screening tests, questions and temperature checks will be completed by NHANES clinical staff and be done in a large canopy tent outside the MEC. This tent will be large enough to allow tables/chairs with social distancing inside. Upon arrival to the MEC location, all participants that arrive via car will be asked to remain in their cars until called by MEC staff to come to the tent for check-in. This will enable safe social distancing and allowing the staff to help check in participants that arrive via public transportation or ride-hailing services (i.e., taxi, Uber, Lyft). Each participant or family members will be screened at a time with sanitizing occurring after each screening. Everyone will be advised mask wearing is mandatory and will be provided with a mask or will be allowed to wear their own mask if they choose.

Description of changes

Component Name *Target Age*	Descriptions
Anthropometry - Body Measures *Target Age: Birth+*	- No changes anticipated.
Standing Balance *Target Age: 20-69 years*	- Changed target age group from participants ages 40 years and older to 20-69 years. - Only Modified Romberg Test is retained in 2021-22. - Dropped the following tests: • Binocular static visual acuity test • Dynamic visual acuity test • Vision contrast sensitivity test • Lensometer measurement
Dual Energy X-Ray Absorptiometry (DXA) *Target Age: 8-59 years*	- Retained measurement on whole body composition. - Dropped osteoporosis measurements on femur and spine.
Blood Pressure Measurement *Target Age: 8+ years*	- Discontinued resting pulse rate measurement for children 0-7 years (resting pulse rate was the only measurement taken for this age group in this component in prior cycles). - Resting pulse rate will still be measured for survey participants 8 years and older as part of their blood pressure measurements. No changes anticipated for blood pressure measurement protocol or the target age group.
Liver Elastography *Target Age: 12+ years*	- No changes anticipated.
Urine collection *Target Age: 3+ years*	- No changes anticipated in urine collection protocol.
Venipuncture *Target Age: 1+ years*	- Added transition statements to Pesticide Use (PUQ), Volatile Toxicant (VTQ), and Pre-Venipuncture questions to help make moving between questionnaire sections a smoother process for participants. - Improved talking points for children and their parents, and additional distraction and pain management techniques, including the use of distraction cards and phlebotomy photo story, will be implemented to improve the phlebotomy response rates for children aged 1-17 years old.

Audiometry (Includes Words-In-Noise) *Target Age: 6-19 and 70+ years*	- Discontinued in 2021-22 cycle.
Cognitive Function *Target Age: 60+ years*	- Discontinued in 2021-22 cycle.
Oral Health *Target Age: 1+ years*	- Discontinued in 2021-22 cycle.
HPV swab collection *Target Age: 14-59 years*	- Discontinued in 2021-22 cycle.

Questionnaire Change Summary

The NHANES interview consists of the following major components:

1. Household Screener Questionnaire (determines eligibility) (SCQ)
2. Household Family Relationship Questionnaire (SFQ)
3. Household Sample Participant Questionnaire (HPQ)
4. Household Family Questionnaire (HFQ)
5. Mobile Examination Center (MEC) Interview (CAPI and ACASI)
6. Dietary Interviews (24-hour Dietary Recall, Post-Dietary Recall Questions, and 30-day Dietary Supplement Use)
7. Special Follow-Up Questionnaire: Flexible Consumer Behavior Survey (FCBS) Phone Follow-Up Supplemental Module

To promote the safety of survey participants as well as field staff in the context of the pandemic, for the 2021-2022 cycle, NHANES program will make changes to the interview mode for the following instruments to reduce face-to-face contact:

- For the Household Screener Questionnaire (SCQ) and Family Relationship Questionnaire (SFQ), a multi-mode approach will be implemented so the respondent will have the option to complete the questionnaires using a self-administered web instrument, a self-administered paper questionnaire, a toll-free telephone number to participate in an interviewer-administered telephone interview, or having an in-person interview with an interviewer at their residence. Use of hand card will be eliminated for administering screeners to reduce the touch points with in-person interview.

- In previous NHANES, the Household Sample Participant Questionnaire (HPQ) and Family Questionnaire (HFQ) were administered by field interviewers as in-person interviews. In 2021-2022, these interviews will be conducted via telephone, unless the participant does not have access to a phone. Appointments will be scheduled with potential participants after their eligibilities are confirmed with SCQ.

- Mobile Examination Center (MEC) Interview will mainly be conducted using the Audio-Computer-Assisted Self-Interview (ACASI) system so participants can complete the questionnaire on their own using the touch screen on the computer. Only limited questions will be asked by a clinician or and phlebotomist in the MEC using the Computer-Assisted Personal Interview (CAPI) system.

- Similar to previous NHANES, two Dietary Interviews (24-hour Dietary Recall, Post-Dietary Recall Questions, and 24-hour Dietary Supplement use) will be collected for each participant. However, instead of having the first dietary interview collected in-person by an interviewer in the MEC and the second one collected via telephone, both dietary interviews will be collected via telephone in 2021-2022. At the end of their MEC visit, participants will be asked to take part in the dietary interview and schedule a telephone appointment.

With most of the interviews developed to be conducted via telephone or self-administered ACASI, a significant reduction in interview content is planned for the 2021-2022 data collection

so the length of the interviews is feasible for the designed interview modes with reasonable burden to the respondents. The NHANES staff conducted a thorough review of the questionnaire content and made changes to focus on retaining questions that are directly related to the interpretation of exam or lab data collected in the survey and relevant to assess the pandemic's effect on health topics. As a result, the household HPQ and HFQ retained 343 questions from the original 769 questions in the previous cycle. There are 14 new questions added in various sections in HPQ and HFQ. In addition, a new section was added in HPQ to ask 14 COVID infection and testing related questions that are essential in the interpretation of laboratory results collected in the survey on COVID serology. There are 109 questions retained from the 198 questions in the MEC interview questionnaire in the previous cycle. The descriptions of these changes are included in the tables below.

Description of changes

Household Screener Questionnaire (SCQ) and Family Relationship Questionnaire (SFQ)

Component Name	Descriptions
Screener Module #1 & #2 (SCQ and SFQ)	- Three instruments (i.e., web, paper, and in-person CAPI) were developed to administer both SCQ and SFQ. While the information collected through each instrument is the same, each instrument contains instrument-appropriate probes and display instructions to ensure the operational feasibility.
	- Use of hand card will be eliminated for administering screeners to reduce the touch points with in-person interview.
	- Added questions (SCQ.NEW0a/SCQ.NEW0b, SFQ.NEW2/SFQ.NEW3) to encode the interview mode.
	- Revised the introduction for SCQ (SCQ_INTR) to include the updated language for Assurance of Confidentiality and Public reporting burden.
	- Dropped the question that asked the interviewer to identify whether the address is for a dormitory room.
	- Replaced the questions on date of birth (DOB; SCQ.290, SCQ.291) with questions on age (SCQ.New1, SCQ.300). Updated sampling domains and weighting scheme for the 2021-22 cycle only require certain age categories to be identified, therefore, DOB information will no longer be collected for all household (HH) members in the screener to decrease respondent burden and to avoid collecting unnecessary personally identifiable information. DOB will be collected for sampled participants in the HH Sample Participant Questionnaire (HPQ).
	- Dropped the question on HH income level (SCQ.340) since no oversampling of low-income HHs will be performed in 2021-22 cycle.

	- Dropped branding questions (SCQ.500-SCQ.540) to decrease the respondent burden.
	- Updated the questions collecting phone number(s) from the respondent with modernized language. New question was included to ask permission for sending text messages related to study participation. Question on to whom the number was listed under is dropped.
	- Dropped questions on missing dwelling units (SCQ.560, SCQ.570, SFQ.260, SFQ.270). Previous data indicated only about 2-3 missing units identified in each survey location.
	- Dropped questions collecting interpreter's age and gender.

Sample Person Questionnaire (HPQ)

Component Name *Target Age*	Descriptions
Respondent Selection (RIQ) *Target Age: Birth+*	- Modified introduction and consent language to accommodate the verbal consent process in 2021-22, and included text emphasizing the voluntary nature of the survey. Revised consent module, including requesting permission to audio record the interview, comprises of 11 questions (the module used in 2019-20 cycle contained 26 questions). - Dropped 2 questions collecting interpreter's age and gender. - Added 1 question on sample participant's date of birth. - Added 1 question to encode the interview mode.
COVID-19 (COQ) *Target Age: Birth+*	- Added this new section to collect information related to COVID infection and testing, including: • 2 questions on ever had COVID-19 and severity of the symptoms, • 7 questions on infection test, first positive date, antibody test, and vaccination, • 5 questions on overnight hospital stay for COVID-19, any household member ever tested positive for COVID-19, diagnosed weakened immune system, taking medication for weakened immune system, and received flu vaccination in last 12 months. These questions are adapted from NCHS's National Health Interview (NHIS), Research and Development Survey (RANDS), or NIH's Multi-Ethnic Study of Atherosclerosis (MESA) questionnaires.

Early Childhood (ECQ) *Target Age: 0-15 years*	- Retained 3 questions on birth weight and 2 questions on whether the child participant has been considered overweight by the HH adult respondent or a doctor. - Dropped 1 question on whether the adult HH respondent is currently helping the child to control weight. - Dropped 4 questions on birth mother's age, smoking status during pregnancy, and pre-pregnancy weight/height.
Hospital Utilization and Access to Care (HUQ) *Target Age: Birth+*	- Retained 3 questions on self-reported general health and routine place for health care - Added 1 question on health care received via telemedicine in the last 12 months (adapted from NHIS). - Dropped 4 questions on the frequency of doctor visit, overnight hospital stay, and mental health care in the last 12 months, and last health care received

Immunization (IMQ)
 	
Target Age: 2+ years
	- Retained 5 vaccination questions on hepatitis A and HPV to support the interpretation of related lab test results.
	
	- Revised language to IMQ060, IMQ070, IMQ090 and IMQ100 to include text clarifying that the HPV vaccine is used to prevent cervical cancer and other conditions caused by HPV, and to shorten the question wordings thus reduce respondent burden.
	
	- Limited target age for IMQ060, IMQ070, IMQ091, and IMQ100 from 9-59 to 9-49 years to be consistent with HPV lab data.
	
	- Dropped the following 2 questions:
	
	  • Ever been vaccinated for hepatitis B, and
	
	  • The type of HPV vaccine received.

Medical Conditions (MCQ)
 	
Target Age: 1+ years
	- Retained 26 questions on medical conditions that related to the interpretation of current exam and lab components.
	- Dropped the following:
	
	    • 8 "first diagnosed age" questions for various conditions,
	
	    • 2 questions on the year/month menstrual period first started,
	
	    • 1 question on ever told by a health professional as overweight,
	
	    • 1 question on having experienced confusion/memory loss in the past 12 months,
	
	    • 1 question on ever having received a blood transfusion,
	
	    • 3 questions on upper abdomen pain,
	
	    • 1 question on the age received first gallbladder surgery,
	
	    • 3 questions on close biological relatives having asthma, diabetes, or a heart attack or angina before the age of 50,
	
	    • 4 questions on having been told to control/lose weight, increase physical activity, watch/reduce salt intake, or watch/reduce calories intake, in the past 12 months, and
	
	    • 4 questions on currently controlling/losing weight, increasing physical activity, watching/reducing salt intake, or watching/reducing calories intake.

Hepatitis (HEQ) *Target Age: 6+ years*	- Retained question on ever had hepatitis B but dropped the question on ever prescribed any medicine. - Dropped 2 questions on ever had, and ever prescribed any medicine for hepatitis C.
Kidney Conditions (KIQ) *Target Age: 20+ years*	- Dropped 2 questions related to kidney stone conditions.
Diabetes (DIQ) *Target Age: 20+ years*	- Retained 7 questions on diagnosed diabetes & pre-diabetes, age first diagnosed, had blood test in the past 3 years, currently taking insulin, length of taking insulin, and currently taking diabetic pills. - Dropped 17 questions on diabetes consultation and related cares.

Blood Pressure (BPQ) *Target Age: 16+ years*	- Retained 3 questions on diagnosed hypertension, diagnosed in 2 occasions, and currently taking prescribed medicine for hypertension. - Dropped 2 questions on first diagnosed age and ever being told to take prescribed medicine for hypertension. - Retained 2 questions on diagnosed high cholesterol and currently taking prescribed medicine for high cholesterol. - Dropped 3 questions on high cholesterol screening and ever being told to take prescribed medicine for high cholesterol.
Cardiovascular Disease (CDQ) *Target Age: 40+ years*	- Dropped this entire section of 9 questions adapted from the Rose Angina Questionnaire because these were deemed as secondary to current exam and lab measurements in the survey.
Osteoporosis (OSQ) *Target Age: 40+ years*	- Dropped this entire section of 26 questions because they were collected to accommodate the DXA bone density component which will be discontinued in 2021-22.
Audiometry (AUQ) *Target Age: 1+ years*	- Retained 4 questions on general hearing condition, reason(s) for hearing loss, last hearing test, and hearing difficulty with background noise. - Dropped 37 questions related to details on hearing conditions, hearing loss, and noise exposure.
Dermatology (DEQ) *Target Age: 20-59 years*	- Retained 3 questions related to sun exposure. - Dropped 2 questions on time exposed to sun (time spent outdoors) in the last 30 days.
Oral Health (OHQ) *Target Age: 1+ years*	- Retained 7 questions on perception of general tooth/gum health and quality of life related to oral health (4 of these 7 questions were cycled back from 2003-2008 cycles). - Dropped 18 questions on dental care and oral cancer exam.
Physical Activity and Physical Fitness (PAQ) *Target Age: 2+ years*	- Replaced the 16 adult PAQ questions in previous cycles with the 4 NHIS 2020 questions on moderate and vigorous recreational activity (PAQ.New1 - PAQ.NEW4), and retained 1 question on sedentary activity (PAQ.680) - Retained 2 questions on child participants' physical activity and screen time (PAQ706, PAQ711).

Functioning (FNQ) *Target Age: 5+ years*	- Retained 12 questions for adults 18+ so the questions included is consistent with the Washington Group Short Set on Functioning – Enhanced questionnaire. - Dropped 2 adult questions on wearing eyeglasses or contacts and use of hearing aids, and the 3 additional questions regarding social functioning. - Retained 15 questions for children 5-17 years, which will complete the Washington Group / UNICEF Child Functioning Module. - Dropped 2 children questions on wearing eyeglasses or contacts and use of hearing aids, and the 2 follow-up questions regarding mobility.
Standing Balance (BAQ) *Target Age: 20-69 years*	- Target age for this section was changed from 40+ years to 20-69 years to be consistent with the target age for the balance exam in 2021-22. - This section has been significantly shortened by only retaining 14 questions from the original 41-question module. These 14 questions were deemed to be necessary in conjunction with the updated balance exam protocol in 2021-22.
Sleep Disorders (SLQ) *Target Age: 16+ years*	- Retained 4 questions on sleep/awake time during workdays and non-workdays. - Dropped 4 questions regarding specific symptoms related to sleep disorders and seeking professional consultation.
Dietary Behavior and Nutrition (DBQ) *Target Age: Birth+*	- Dropped 17 questions on infant feeding and the introduction of new foods. These were implemented in the survey in 2019 as proposed as part of the Birth-to-24-months project. - Dropped 2 questions on reasons children did not receive or discontinued their WIC benefits. - Dropped 14 questions on general eating habits, milk consumption, the frequencies of eating meals prepared away from home, ready-to-eat foods, and frozen meals/frozen pizzas, and the awareness of federal nutrition programs.
Weight History (WHQ) *Target Age: 16+ years*	- Retained 2 questions on self-reported weight/height. - Retained 2 questions on weight 1 year ago, and the attempt to lose weight in the past 12 months - Dropped 8 questions on additional weight history details and the method to lose weight in the past 12 months.

Smoking and Tobacco Use (SMQ) *Target Age: 18+ years*	- Retained 5 questions to identify current smokers and formal smokers, and to quantify the cigarettes smoking amount and to ascertain whether menthol or non-menthol cigarettes was used for current smokers. - Dropped 6 questions on additional smoking habit details for current and formal smokers. - Dropped 13 questions on secondhand smoking. Some of these questions are moved to the MEC interview so that time frame will be more consistent with the lab data.
Occupation (OCQ) *Target Age: 16+ years*	- Dropped 1 question on the description of work schedule.
Acculturation (ACQ) *Target Age: 3+ years*	- Dropped 3 questions specific for Asian-language speakers since there will be no Asian oversampling in 2021-22. - Retained 2 questions on language usually spoken at home for English-, and Spanish-speaking persons.

Demographics (DMQ) *Target Age: Birth+*	- Dropped the following 4 questions:
	
	  • Serving in a foreign country during a time of armed conflict (DMQ054),
	
	  • State/territory of birth (DMQ130),
	
	  • Asian origin (DMQ.336), and
	
	  • Social security number being reported from memory or record (DMQ.300).

Health Insurance (HIQ) *Target Age: Birth+*	- Dropped the following 2 questions:
	
	  • Whether Medicare card was seen, and
	
	  • Whether the insurance plan covers prescription medication.

Infant Formula (IFQ) *Target Age: Birth-24 months*	- Dropped this entire section of 13 questions because the anticipated sample size in the 2021-22 cycle will be too small to be analytically useful.
Dietary Supplements (DSQ) /Prescription Medication (RXQ) *Target Age: Birth+*	- The entire DSQ module (32 questions) will be dropped from the HPQ. Information on dietary supplement use in the past 30 days will be collected as part of the first dietary interview. - Retained 1 question on the use of prescription medications in the past 30 days, dropped the rest 13 questions on the details of the medication(s). - Added 1 question on the number of prescription medications used in the last 30 days. - Retained 3 questions on low-dose aspirin use.

Mailing Address (MAQ)	- Dropped 1 question on interview location (participant's home/workplace/others).
Target Age: Birth+	

Family Questionnaire (HFQ)

Component Name	Descriptions
Respondent Selection (RIQ)	- Modified introduction and consent language to accommodate the verbal consent process in 2021-22. Revised consent module, including requesting permission to audio record the interview, comprises of 3 questions (the module used in 2019-20 cycle contained 12 questions). - Dropped 2 questions collecting interpreter's age and gender. - Added 1 question to encode the interview mode.
Demographic Background (DMQ)	- Dropped 1 question on the US state/territory the family reference person was born in.
Housing Characteristics (HOQ)	- Dropped 3 questions on type of house, length lived in this address, and home ownership. - Added 1 question on number of rooms in the house. This question is cycled back from the 2017-18 cycle and has been used as an indicator for HH crowdedness in infectious disease analyses.
Smoking (SMQ)	- Dropped 1 question on the number of people who smoked inside the house in the last 7 days (SMQ480).
Consumer Behavior (CBQ)	- No changes anticipated.
Income (INQ)	- Dropped 7 questions on the sources of income. - Dropped 1 question on access to a vehicle for food shopping.
Food Security (FSQ)	- Dropped 8 questions from the US Food Security Survey Module. These questions are only applicable to HHs with children under the age of 18 years. The 10 questions that are applicable to all HHs will be retained. - Dropped 5 questions on anticipated SNAP benefits for HHs approved but not yet started receiving the benefit.
Tracking and Tracing (TTQ)	- Dropped 1 question on interview location (participant's home/workplace/others).
Salt Use (SUQ)	- The entire SUQ module (20 questions) will be dropped from the HFQ because the in-home salt sample collection will be discontinued.

Water Module (HWC)	- The entire HWC module (12 questions) will be dropped from the HFQ because the in-home water sample collection will be discontinued.

MEC Interview - ACASI

Component Name *Target Age*	Descriptions
Current Health Status (HSQ) *Target Age: 16+ years*	- This section will now be completed using the ACASI system. - No changes made in the section content. The section only has 1 question (HIV testing) and it will be retained.
Alcohol (ALQ) *Target Age: 18+ years*	- This section will now be completed using the ACASI system. - Dropped 1 question on the frequency of having 12 or more drinks in a single day. - Moved 1 question on binge drinking from Dietary interview to ACASI.
Kidney Conditions (KIQ) *Target Age: 20+ years*	- This section will now be completed using the ACASI system. - Dropped 5 questions on details about incontinence.
Physical Activity and Physical Fitness (PAQ) *Target Age: 12-15 years*	- This section will now be completed using the ACASI system. - No changes made in the section content, both current questions on physical activity will be retained.
Tobacco (SMQ) *Target Age: 12-17 years*	- Dropped the following 5 questions: • Age when last smoked cigarettes for those who didn't smoke for at least one year, • How soon smoke cigarette after waking up, • Has stopped smoking for longer than one day to try to quit smoking in the past 12 months, and • Follow-up questions on the use of chewing tobacco and snuff.
Tobacco (SMQ) *Target Age: 18+ years*	- Dropped the following 12 questions: • 2 follow-up questions on the use of chewing tobacco and snuff, • 1 question on the use of nicotine replacement therapy products, and, • 9 questions on secondhand smoke exposure.
Alcohol (ALQ) *Target Age: 12-17 years*	- No changes anticipated.

| Drug Use (DUQ)

Target Age: 12-59 years	- Dropped 7 questions in the following topics: • Age first used marijuana or cannabis, • Mode of marijuana use, • Time since last used cocaine, heroin, or methamphetamine, • Time since last used a needle to inject a drug not prescribed by a doctor, and • Type of drugs having injected using a needle.
Sexual Behavior (SXQ)

Target Age: 14-69 years | - Retained 12 questions for women and 12 questions for men in the following topics (original module has 25 questions for women and 27 questions for men):

• Ever had various type of sex,

• Total number of male sex partners in lifetime and in the last 12 months,

• Total number of female sex partners in lifetime and in the last 12 months,

• Ever had any new sex partner in the last 12 months,

• Ever being diagnosed with genital herpes, or genital warts. |

MEC Interview - CAPI

Component Name *Target Age*	Descriptions
Respondent Selection (RIQ)

Target Age: 12+ years | - Minor changes to the introductory text to accommodate the revised content in the MEC CAPI interview. |
| Sexual Behavior (SXQ)

Target Age: 18-59 years | - These questions will be asked by a clinician in the MEC so the interview mode is consistent with NHIS.

- No changes made in the section content, both current questions (SXQ.295 and SXQ.296) on sexual identity (one for males and one for females) will be retained. |

Reproductive Health (RHQ)
 	
Target Age: 12+ years (Female); women 60+ years will not be asked pregnancy history
	- This section will be asked by a clinician in the MEC.
	- Retained only 12 questions from the original 36-question module to collect the following information:
	
	  • Age at first menstrual period,
	  • Had at least one menstrual period in the past 12 months,
	  • Reason not had a menstrual period in the past 12 months,
	  • History of hysterectomy, ovary removal, age of last ovary removal and age of last menstrual period (for lab FSH and other hormones),
	  • Ever being treated for pelvic inflammatory disease,
	  • Ever pregnant,
	  • Currently pregnant,
	  • Number of deliveries, and
	  • Currently breastfeeding a child.

Depression Screen (DPQ) *Target Age: 12+ years*	- This section will be asked by a clinician in the MEC. - No changes made tothe section content, all 10 current questions will be retained.
Pesticide Use (PUQ) *Target Age: 8+ years*	- This section will be asked by the phlebotomist in the MEC to align with the timing of the blood sample collection. - No changes made in the section content, both current questions on pesticide use in the past 7 days will be retained.
Weight History (WHQ) *Target Age: 8-15 years*	- Dropped this entire section of 3 questions.
Dietary Behavior and Nutrition (DBQ) *Target Age: 12-15 years*	- Dropped this entire section of 4 questions.

Dietary Interview

Component Name and ID (3 Letters)	Descriptions
Dietary Recall (DRX)	- Changed interview mode for the first dietary interview from an in-person interview collected in the Mobile Examination Center (MEC) to a telephone interview. - Same as the protocol used in previous cycles, the second dietary interview will also be conducted via telephone in 2021-22. - No content changes anticipated. In previous cycles, the same instrument has been used to collect both in-person first dietary interview and the second dietary interview via telephone.
Post-Dietary Recall Questions (DRQ)	- No changes anticipated.
Dietary Supplement (SAQ)	- Changed reference time frame from dietary supplements used in the last 24 hours to the last 30 days. Dietary supplements used in the last 30 days is a better measurement for usual supplement use. - With the new reference time frame, no dietary supplement use will be collected during the second dietary interview.

Special Follow-Up Questionnaires

Component Name and ID (3 Letters)	Descriptions
Flexible Consumer Behavior Survey (FCBS) Phone Follow-Up Supplemental Module	- No changes anticipated.