

Attachment 4: Description of NCS Vanguard Study Visits

Participants enrolled in the National Children's Study Vanguard Study as asked to complete a series of Study visits that may begin before pregnancy. Below we provide a brief overview of each Study visit including the types of information collected at each time point. Some NCS procedures and protocols are common across all or a subset of Study visits. Those elements are noted separately and not included within the each Study visit description.

Estimated Study visit durations are provided for each visit. These ranges were calculated with the assumption that two data collectors were present for in-person visits (to facilitate sample and specimen collection) and self-administered questionnaires were completed by the participant either before or after the visit. Time required to administer required informed consent was included in these estimates. These ranges demonstrate the consent for specimen collection and other embedded skip patterns within instruments and show how participant-specific responses prompt additional follow up questions, leading to variation in administration time across participant. When compared to the associated burden estimates they also highlight the efficiencies gained by having well-choreographed Study visits that maximize the time spent with participants.

Common Protocols

Informed Consent

All participants must provide full informed consent prior to the collection of any information. The consent process is ongoing, with visit-specific information and a reiteration of participants' rights being provided at each collection point. Additional details are provided in Supporting Statement B.

Visit Scheduling Contact

Prior to administration of a visit, Vanguard Study participants are contacted to schedule an appropriate time and confirm key pieces of information. This is accomplished with the Participant Verification & Tracing Instrument (PVT). The PVT confirms the identity of the enrolled child and the respondent(s) required for completion of Study instruments. Residential and other participant contact information is also confirmed at this time. The PVT contact will also inquire whether the caregiver has been using the NCS Infant and Child Health Care Log and will mail a new copy if one is not available.

Event-Driven Contacts

Other Study instruments included in this ICR are not associated with a specific Study visit but rather a phase, milestone, or event. For example, if a death occurs in an enrolled family, be it the child a caregiver, we will seek to collect information on the death and request formal authorization to collect official medical and vital statistics records in conjunction with administration of the Parent/Caregiver or Child Death Questionnaires. Validation interviews represent another example of this type of contact. Validation questionnaires are a useful tool to assess data collection quality and identify potential falsification of Study data. Typically completed by telephone soon after a Study visit, validations are not attempted with all participants but rather a random subset of an individual data collector's completed cases. A final example of an event-driven contact is the Non-Interview Respondent self-administered questionnaire (SAQ), which is designed for administration to participants who refuse to participate in specific Study visits or choose to withdraw from the Study.

Visit-Specific Protocols

Pre-Pregnancy

The Pre-Pregnancy Study visit will be administered to a subset of women who have a child already enrolled in the NCS and who are actively trying to become pregnant again. Participants will be asked to complete an interview and provide blood and urine samples. While designed for in-person administration, the questionnaire portions of the visit may be conducted over the telephone, web or via mailed survey. Specimen collection may be completed at an alternate time and location to best accommodate participant schedules. The estimated administration time frame for this visit is 30 to 60 minutes.

Pregnancy Visit 1

Women who complete the pre-pregnancy visit and subsequently become pregnant will be asked to participate in pregnancy related study visits. Other enrolled women who report a new pregnancy but didn't participate in the pre-pregnancy event will also be eligible for this visit. Their initial visit, called Pregnancy Visit 1, should occur as early in pregnancy as possible. This Study visit also includes a questionnaire focused on the emotional development of the child. Designed for in-person, at home administration, women will be asked to complete a questionnaire, provide urine and blood samples, and a sample of vacuum bag dust will be collected from their residence. However, to promote cooperation, the questionnaire portion of the interview may also be completed in various modes, including telephone, web, and mail. The estimated administration time frame for this visit is 30 to 105 minutes.

Pregnancy Visit 2

Women who complete the Pregnancy Visit 1 are asked to participate in Pregnancy Visit 2 as long as at least 60 days have elapsed after the former. The purpose of the second contact during pregnancy is to understand the critical windows for exposure and data collection. Determining optimal times for collection during the Vanguard phase will allow the NCS to make informed decisions for the larger, Main Study. At this visit, women will be asked to complete Study questionnaires and provide blood and urine samples. Multi-mode options for administration are permitted. The estimated administration time frame for this visit is 30 to 50 minutes.

Father Pre-Natal Interview

Women who agree to participate in pregnancy visits will be asked about their willingness to identify the father and allow the NCS to contact him to complete a separate interview. Fathers are not required to have biological ties to the baby and may be a stepfather or hold the role of social father in the family. With this ICR we have revised the instrument with gender-neutral language to accommodate administration to same-sex couples. With the mother's cooperation we will contact the father and request permission to interview him. This interview may be done in conjunction with another Study visit or at any time before the birth event that accommodates the participant's schedule. The estimated administration time frame for this visit is 32 minutes.

Birth Visit

Birth visits will be administered to all pregnant women who already have a child enrolled in the NCS, regardless of whether they completed pre-pregnancy or pregnancy visits. Babies born as the result of these subsequent pregnancies will comprise the new Sibling Birth Cohort. The Birth visit includes the administration of questionnaires and the collection of biospecimens from both the mother and newborn. If not already collected, informed consent for the child's participation through the 6 month

Study visit will be administered at this time. The estimated administration time frame for this visit is 25 to 85 minutes.

3 Month Visit

The 3 month Study visit is designed to be a brief interview conducted over the telephone. As requested by the participant, this visit may also be administered in a variety of modes, including in-person, web, or by mail. This Study visit includes neurodevelopmental items related to the baby and others addressing the mother's post-natal health status. Some measures are best collected by the participant and self-administered questionnaires will be provided. At this time we will also provide supplies and guidance for the self-collection and shipping of breast milk. The estimated administration time frame for this visit is 35 minutes.

6 Month Visit

The 6 month Study visit represents the first opportunity to collect detailed information on the child after birth. This Study visit includes questionnaires focused on the health and development of the child, the status and characteristics of the child's primary caregiver, and additional information on the household to understand the range of potential exposures. The 6 month visit also includes the collection of physical measures from the child and introduces microbiome swab collection from both the child and adult caregiver. To accommodate participants' needs and schedules elements may be completed via alternative modes and at locations outside of the home. For example, blood draws from the enrolled child should be collected outside of the home in a clinical environment. The estimated administration time frame for this visit is 60 to 120 minutes.

9 Month Visit

The 9 month Study visit is designed to be a brief, interview-only contact, with the child's primary caregiver. While intended for telephone administration, it may be completed in participant's preferential mode. The estimated administration time frame for this visit is 15 minutes.

Post-Natal Father/Secondary Parent Interview

Similar to the pre-natal interview with the enrolled child's father, the NCS will conduct questionnaire-only interviews with babies' fathers or secondary parent figures. The respondent for this interview may be the biological father, step- or social father, or other adult, including those in same sex couples, who fill a parental role in the child's life. Depending on the child's individual circumstance, multiple adults associated with the child may be administered this questionnaire. This interview may be done in conjunction with another Study visit to accommodate participants' schedules. The estimated administration time frame for this visit is 15 minutes.

12 Month Visit

The 12 month visit will collect health, development, and exposure information related to children and their environment. To measure potential exposures, biospecimens will be collected from both child and adult participants and visual observations of indoor and outdoor environments will be made. The collection of both direct and indirect measures of exposure will help us understand the utility and limits of indirect observations and make critical decisions about what is required in the Main Study. To promote cooperation, the questionnaire portion of the interview may also be completed in various modes, including telephone, web, and mail. The estimated administration time frame for this visit is 40 to 135 minutes.

18 Month Visit

Designed to be a brief contact with participants, the 18 month visit is designed for interview-administration by telephone supplemented with short self-administered questionnaires to be completed by mail. This Study visit also includes a questionnaire focused on the emotional development of the child. As with all other NCS visits, participants' preferred mode of administration will be accommodated. The estimated administration time frame for this visit is 40 minutes.

24 Month Visit

The 24 month visit is intended for in-person administration to facilitate the collection of physical measures and biospecimens from both the mother and child. Neurodevelopmental and health measures are also collected via questionnaires. To accommodate participants' needs and schedules elements may be completed via alternative modes and at locations outside of the home. The estimated administration time frame for this visit is 40 to 90 minutes.

30 Month Visit

This brief contact is planned for interview-administration by telephone supplemented with short self-administered questionnaires to be completed by mail. Neurodevelopmental measures will be collected via SAQs. As with all other NCS visits, participants' preferred mode of administration will be accommodated. The estimated administration time frame for this visit is 45 to 80 minutes.

36 Month Visit

The 36 month visit represents a unique opportunity to conduct a comprehensive assessment of enrolled children with their direct participation in measures. Specifically, the NCS will be piloting newly developed, non-propriety assessments designed by the NIH Toolbox effort. We will also be collecting biospecimens from both children and adults and environmental samples from the child's home environment. Some assessments require interviewer administration while others will be self-administered or are solely interviewer collected without participant involvement. These options provide flexibility for participation and reduce in-person data collection time. The estimated administration time frame for this visit is 90 to 240 minutes.

42 Month Visit

This brief contact is planned for interview-administration by telephone supplemented with short self-administered questionnaires focusing on medical history, participant satisfaction, and diet to be completed by mail. This Study visit also includes a questionnaire focused on the emotional development of the child. As with all other NCS visits, participants' preferred mode of administration will be accommodated. The estimated administration time frame for this visit is 40 to 75 minutes.

48 Month Visit

Designed as an in-person Study visit, this contact includes interviews with the child's primary caregiver, microbiome swab collection, and environmental sample collection. We are also introducing the measurement of body composition via bioelectrical impedance analysis (BIA). To best accommodate participant schedules the questionnaire portions of the visit may be conducted over the telephone, web or via mailed survey. Physical measures may also be completed at an alternate time and location. After completion of the visit, participants will be mailed a separate questionnaire assessing Study engagement and motivation, allowing us to refine our retention procedures. The estimated administration time frame for this visit is 90 to 180 minutes.

54 Month Visit

This brief contact is planned for interview-administration by telephone supplemented with short self-administered questionnaires to be completed by mail. As with all other NCS visits, participants' preferred mode of administration will be accommodated. The estimated administration time frame for this visit is 45 minutes.

60 Month Visit

The 60 month Study visit affords an opportunity to pilot new assessments in children, including pulmonary function. We will also continue to test the battery of assessments available through the NIH Toolbox. Designed for in-person administration, this visit includes the collection of physical measures, biospecimens, and environmental samples plus interview questions that may be completed in a variety of modes. The estimated administration time frame for this visit is 90 to 240 minutes.