Supporting Statement B

Maternal and Child Health (MCH) Jurisdictional Survey Instrument for the Title V MCH Block Grant Program, OMB No. 0906-0042 – Revision

B. Collection of Information Employing Statistical Methods

1. <u>Respondent Universe and Sampling Methods</u>

Respondent Universe

The respondent universe is women age 18 or older who live in one of the eight U.S. jurisdictions (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the Republic of Palau, Puerto Rico, the Republic of the Marshall Islands, the Federated States of Micronesia, and U.S. Virgin Islands) and who are mothers or guardians of at least one child aged 0-17 years living in the same household.

Sampling Methods

Sampling Households. We will first create population estimates for each jurisdiction and for sub-locations within the jurisdictions from the most recent census data available in each jurisdiction. In the event that a more recent set of population estimates is available, such as a more recent enumeration of the jurisdiction's population conducted by a Non-Governmental Organization, we will evaluate the quality and completeness of those estimates and use them if they represent an improvement over the available census figures.

The next step will be to select a sample of primary sampling units (PSUs) in each jurisdiction using a probability proportional to population size (PPS) method. The PPS method assigns a greater probability of selection to PSUs that have larger populations. The PSUs will be defined as sub-locations within the jurisdictions and will align with geographic designations commonly used within each jurisdiction (states, counties, districts, census enumeration areas, etc.). Households will be sampled only within the sampled PSUs. The sampling of PSUs and households within sampled PSUs is preferred to simple random sampling of households from the jurisdiction as a whole because it confines the selected households to be within a relatively small number of geographic locations, which reduces the cost of in-person interviewing by reducing travel costs.

Households will be selected within sampled PSUs using a random walk sampling approach. The random walk approach will begin with the data collection team randomly selecting a starting point (a landmark, building, intersection, or other easily identifiable location), within the sampling unit. Interviewers will then begin walking in different directions from the starting point. Interviewers will use a pre-determined skip interval, where a certain number of dwellings will be skipped before screening for the next household to be sampled, to ensure a geographically diverse and random distribution of interviews within the primary sampling unit. For example, if the data collection team is in a village with an

estimated 150 households and they need to select 10 households to interview, the basic skip interval could be set for 15 to assure that interviews are conducted throughout the entire village and are not clustered near the starting point. This basic skip interval will be further adjusted to account for factors such as expected ineligibility rates (households without children, in this case) and refusal rates.

This method ensures that interviewers do not simply select the households that are easiest to access or the most convenient locations in general. Interviewers will be required to select households using the protocol rather than their preferences. Adherence to the selection protocol will be monitored by supervisors on the ground during field implementation and by using the GPS coordinates on the tablet for each survey.

The random walk methodology is standard protocol for conducting household surveys in international locations. This technique is used by USAID; the United Nations; World Bank; Foreign, Commonwealth & Development Office (FCDO – UK); and a wide variety of other international organizations who conduct field research in locations where fully enumerated household listings are not available.

Planned Sample Size. The planned sample size is based on a consideration of the tradeoffs between the precision of the resulting estimates and the cost of data collection. Given the varying populations of children in each jurisdiction, the sample size varies for each jurisdiction. While the planned number of interviews for each jurisdiction may be limited by funding, the maximum number of completed interviews possible for each jurisdiction is as follows: American Samoa, 450; Guam, 450; Commonwealth of the Northern Mariana Islands, 500; Republic of Palau, 250; Puerto Rico, 1,250; Republic of the Marshall Islands, 300; Federated States of Micronesia, 450; and U.S. Virgin Islands, 350.

Within-Household Selection. When there is more than one child in the household, children with special health care needs (CSHCN) will be given priority. The interviewing software automates the selection of the child after Section A of the questionnaire is completed as follows:
- Only the first four children rostered are eligible for selection for the main interview.
- If there is one child in the household, that child is selected.
- If there is more than one child in the household:
    o The software will determine the CSHCN status of each child.
    o If there is one CSCHN child in the household, select that child.
    o If there is more than one CSHCN child in the household, randomly select one of the CSCHN.
    o If there are no CSCHN in the household, randomly select one of the non-CSHCN children.

Sample Plan Overview. Table 1 presents the number of addresses or housing units that we estimate will need to be sampled to achieve the target number of completed interviews.

To complete an interview, a sampled address or housing unit first must be screened for the presence of children. Based on the results of prior rounds of data collection, we have assumed that the proportion of housing units screened for the presence of children will vary by jurisdiction, ranging from 57 percent in Guam to 95 percent in American Samoa.

To be eligible for the survey, the household must contain one or more children under the age of 18. We have set expectations for the proportion of screened households that will contain one or more children in each jurisdiction based on the results of prior rounds of data collection. These expectations range

from 14 percent in Puerto Rico to 79 percent in Federated States of Micronesia.

Finally, of households that complete the screener and are eligible, we have assumed that the proportion that will complete the interview will range from 75 percent in Guam to 93 percent in Federated States of Micronesia. These assumptions are based on the results from prior rounds of data collection.

With these assumptions, we estimate that the total initial sample size of addresses/housing units across all eight jurisdictions will be 23,440 and will range from 383 in Federated States of Micronesia to 15,461 in Puerto Rico. Based on prior rounds of data collection, we anticipate that overall response rates will range from 44 percent in Guam to 93 percent in Marshall Islands.

Table 1: Sample Plan

	Northern Mariana Islands	American Samoa	Palau	Marshall Islands	Federated States of Micronesia	Puerto Rico	U.S. Virgin Islands	Guam
Target Population	Non-institutionalized children in housing units							
Sampling	Interval sampling (random walk method)							
Within Household Selection	Select one screened child to be the subject of the topical interview							
Target Sample Size	500	450	250	300	450	1,250	350	450
Estimated Sample								
Households	696	591	285	360	699	5,487	720	1,475
Assumed screener completion rate	96%	95%	100%	100%	89%	95%	91%	90%
Screened for presence of children	670	564	285	360	625	5,205	658	1,334
Assumed eligibility rate	83%	91%	88%	90%	84%	37%	65%	70%
Child in household	556	512	251	323	526	1,903	428	927
Assumed interview completion rate	90%	88%	99%	93%	86%	66%	82%	49%
Completed interview	500	450	250	300	450	1,250	350	450
Response rate	87%	84%	99%	93%	77%	63%	76%	44%

2. Procedures for Collection of Information Collection

All data will be collected from respondents using a pre-programmed tablet. NORC will ensure that all needed supplies, including the tablets, will be available to each interviewer.

Interviewers will use a standardized script to assess household eligibility. The screener asks respondents to verify that they are a woman aged 18 or older and mother or caregiver/guardian of at least one child aged 0-17 years, living in the same household. Respondents who meet these eligibility criteria will be

asked to review and indicate verbal agreement to an informed consent statement, which is presented both as a printed copy and read out loud to each respondent. Those who agree to answer the survey questions will then be ask asked questions regarding each child in the household, including their ages, gender, and special-health-care-needs status. This set of questions produces a 'roster' of children in the household.

Once the roster is completed for an eligible household, one child who is 17 years of age or under per household will be selected from the roster to be the subject of the main questionnaire. The interviewer will administer the main questionnaire on tablets using the Survey to Go application, a data collection software created by Dooblo. A topical survey will be administered for each selected child and will cover the following content areas: demographic information; child's health and functional status; health insurance coverage; health care access and utilization; medical home; early childhood; middle childhood and adolescence; family functioning; parental health; and health insurance experience. Following the topical survey, a series of jurisdiction-specific survey questions will be asked.

3. <u>Methods to Maximize Participation Rates and Deal with Nonresponse</u>

Methods to maximize response rates include advance outreach; hiring and training of local interviewers; incentives for respondents; number of in-person visits; and the questionnaire design.

Interviewer hiring and training: To ensure cultural competency, NORC will make every effort to identify local interviewers familiar with the jurisdiction and fluent in the local languages. This training will focus on the sampling and survey protocols, gaining cooperation, documentation contact efforts, and using the tablet-based instrument.

Incentives: As a thank you for participating, respondents in all jurisdictions except Palau will be offered a $10 token of appreciation, as described in Supporting Statement A.

Minimizing Non-Response: Contacting protocols will maximize the chance that we will reach a possible respondent at home, while minimizing excessive contact attempts. Whenever possible, interviewers will re-visit households at times when others in the household believe the selected respondent will be home and available for the interview. All respondent contact attempts and outcomes will be documented. Non-contact and refusal cases will be discussed with the Field Manager in order to identify the best approach for gaining cooperation. To maximize response rates, all interviewers receive refusal aversion/conversion training and job aides with frequently asked questions that anticipate potential questions from respondents; such as how the respondent was selected.

Questionnaire Design: In designing the MCH Jurisdictional Survey Instrument, attention was placed on the following design elements to help facilitate cooperation and reduce item nonresponse by respondents:

- Creating a logical, clear questionnaire with concrete question wording, simple grammar, and questions grouped according to subject areas.
- Administering the survey in languages appropriate for the jurisdiction, based on the experience of the experts from CDC, jurisdictional leads, and other organizations. Table 2 presents the languages the survey will be fielded in.

Table 2:   Languages

Title V Jurisdictions	Languages
Puerto Rico	English, Spanish
USVI	English, Spanish
Guam	English, Chuukese, Tagalog
American Samoa	English, Samoan
Federated States of Micronesia	English, Chuukese, Pohnpeian
Marshall Islands	English, Marshallese
Northern Mariana Islands	English
Palau	English, Palauan, and Tagalog

4. Test of Procedures or Methods to be Undertaken

Items included in the survey were taken from validated, national surveys including:

- Behavioral Risk Factor Surveillance System (BRFSS)
- National Immunization Surveys (NIS)
- National Survey of Children's Health (NSCH)
- National Survey of Children with Special Health Care Needs (NS-CSHCN)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- Youth Risk Behavior Surveillance System (YRBSS)

In addition, we conducted a Pretest (OMB Control Number 0915-0379) to evaluate the screener and survey for comprehension, skip patterns, and accurate wording prior to using the instrument for the main data collection. Feedback from this Pretest was incorporated into the final version of the survey questionnaires and was considered in planning data collection for the current survey. Experiences from the Pretest are reflected in two main aspects of the data collection plan for the current study. First, we piloted both in-person and telephone data collection in the pretest. We experienced difficulty reaching and recruiting eligible women using telephone mode and have chosen to complete all data collection in person in the current study. Second, as discussed in Statement A, no incentive was offered during the Pretest and interviewers in all, but one jurisdiction noted that multiple potential respondents refused to participate in a survey of this length when they learned there would be no incentive. Due to these refusals, additional time and cost were required to reach the target number of completed interviews. The sole exception is in Palau, where the Pretest confirmed that respondents in that location do not require an incentive to participate in a survey.

The survey has been successfully fielded three times in four of the jurisdictions between April 2019 and January 2024; a third round of data collection is planned for Puerto Rico and Guam in late 2024 and in the Marshall Islands and the US Virgin Islands in early 2025. Two non-substantive change requests (ICR 201910-0906-004 and 202102-0906-001) were reviewed and approved over this period to enable select survey questions to better align the data collected for National Performance Measures 7 and 9 with other federally available data sources; add translations in the Marshall Islands and Federated States of Micronesia; adjust the height and weight data collection method; add COVID-19 related questions; and increase sample size to 250 respondents in each jurisdiction. The 2022 extension (ICR 202203-0906-002)

enhanced the detail in collecting demographic data through race and ethnicity survey questions in response to jurisdictional feedback. Since the 2022 extension, two non-substantive change requests (ICRs: 202211-0906-001, and 202404-0906-002) allowed for adjustments, such as refining hurricane-related questions to make them more general and increasing sample sizes.

5. Statistical Consultants

Data collection will be conducted by a research organization under subcontract to NORC at the University of Chicago.

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