

# **Assessment of Zika Prevention Strategies in the U.S. Virgin Islands**

Request for OMB approval of an Emergency ICR

**Supporting Statement B**  
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### 1. Respondent Universe and Sampling Methods

The purpose of this project is not to make statistical generalizations beyond the particular respondents.

According to the 2010 census, the US Virgin Islands has a population of 106,405 residents. Almost 66% of the population are between the ages of 15-65 years old with slightly more women than men in this age group. This is particularly relevant in the current response to Zika since women of reproductive age who become pregnant and become exposed to Zika may have babies born with serious birth defects. Because Zika virus is both an arboviral disease and a sexually transmitted disease that infects most people without them exhibiting signs or symptoms, any person can be an unknowing transmitter of the disease. Recently there has been a marked increase in cases of Zika virus infections on the island of St. Thomas. CDC and the USVI Department of Health do not know what is contributing to this increase and have requested a rapid assessment of the situation there. The sampling plan proposed attempts to speak with enough people to gain some understanding of relevant factors (e.g., knowledge, beliefs, risk perceptions, and opinions) and the ability to gather and analyze information rapidly. A variety of clinics, both public and private, from different regions on each island will be approached for participation so that we can speak with a diverse group of respondents. USVI DOH staff will guide the selection of clinics to ensure that different geographic and demographic groups will be included. This assessment is descriptive in nature and is intended to offer insights on the perspectives of key audiences. It is not research, nor intended to offer findings that are generalizable. The findings will represent the perspectives of the participants who agree to be interviewed.

The US Virgin Islands include three islands: St. Croix, with a population of 53,234 residents; St. Thomas, with a population of 51,181 residents; and St. John, with a population of 4,197 residents. We propose conducting interviews with several audiences on all three of the islands as follow:

Intercept interviews with:	St. Croix	St. Thomas	St. John	Total
Pregnant women	125	150	25	300
Community members (residents)	50	60	15	125
Total	175	210	40	425

## Inclusion Criteria

1. Pregnant women residing in USVI at the time of the interview
2. Community members who are residents in the USVI at the time of the interview
3. 18 years of age or older

## **2. Procedures for the Collection of Information**

Data from pregnant women and community members will be collected during in-person intercept interviews. Interviews with up to 300 pregnant women will take approximately 20 minutes (Attachment C) and interviews with up to 125 community members will take approximately 10 minutes (Attachment D). Interviews will be conducted in the field using Epi Info for Mobile (Android app) running on six Samsung Galaxy Tab A 8.0 devices. Data will be collected into custom forms and sent to CDC over Secure Shell File Transfer Protocol (SFTP). Within the CDC private network, the data will reside in encrypted “eftp” file storage and accessed from CDC network PCs for data processing and analysis.

We will use Epi Info for Mobile as our data collection software. Epi Info is a CDC-developed and Section 508 compliant software that will be secured through security services provided by underlying device operating system and hardware. The data collection hardware used will be Samsung Galaxy Tab A 8.0, which are CDC approved devices running the FIPS 140-2 compliant KNOX security platform. Data will be transmitted using a secure shell file transfer protocol (SFTP). We will use SFTP to transmit data into CDC’s encrypted private site “eftp.cdc.gov”. This site meets the FIPS 140-2 requirements for encryption and is the ITSO recommended path for transmission of Personally Identifiable Information (PII).

Many of the questions are similar to and follow-up from questions that were asked in telephone interviews of pregnant women in Puerto Rico currently underway (interviews started in July) (OMB Control No. 0920-1118). The preliminary findings from the previous studies were used to develop the response options for closed-ended questions for the interviews that will be conducted in this project. Most of the questions are multiple choice, but women will have the opportunity to provide answers not included as response options. Proposed questions are grounded in social science literature in their respective domains (e.g., motivation, self-efficacy, perceptions of threat, etc.). The project lead who designed this project has a long history of constructing orally-administered interviews by in-person encounters. The project lead has estimated that each of the instruments can be completed within the proposed time.

All interviews will be collected by trained interviewers who are USVI Department of Health staff. CDC health scientists who have experience in conducting interviews and/or facilitating focus group discussions will serve as instructors and coaches for USVI DOH staff. Most interviews will be conducted in English though one CDC staff person is fluent in Spanish, French, and Creole, which are other languages spoken by residents in USVI.

### Description of how the information will be shared and for what purposes

Findings will be used to inform implementation of vector control activities and communication efforts for USVI's Zika response. USVI's Department of Health and CDC need this assessment to assess the current situation and to inform future actions. Interviews with pregnant women in USVI can help articulate motivations for and against engaging in Zika prevention behaviors that are critical for preventing Zika-associated birth defects and morbidities. Interviews with community members can offer insights about knowledge, perceived risks, trusted information sources, and perceived barriers and benefits of interventions that could help improve implementation of response efforts. An Atlanta-based data transcription and analysis team will review the data in real-time for quality and track progress towards achieving established targets. The Atlanta-team, working closely with USVI DOH staff and CDC deployees, will analyze data and generate a report of findings that describe the responses to all questions – quantitative data will be presented in both narrative and graphic formats while qualitative data will be presented in terms of themes with illustrative quotes. Preliminary findings will be presented to USVI DOH and CDC staff in the field as soon as targets are reached or a determination is made that no more data needs to be gathered (e.g., saturation has been reached), whichever comes first. Preliminary findings will be presented to the CDC Incident Manager after the team has returned from the field.

Final reports, manuscripts, and presentations will contain no information regarding identities of the participants. All collected data will be destroyed within one year after the data collection is complete.

### **3. Methods to Maximize Response Rates and Deal with No Response**

The following procedures will be used to maximize response rates and deal with no response:

- Informing respondents of what the project is asking, why it is being asked, who will see the results, and how the results will be used, as well as discussion how respondents will benefit from the results and how the findings will be put into action.
- Addressing data security with respondents. Although we cannot guarantee anonymity, we will assure all participants that significant efforts will be made to secure data and that their answers will not be linked to them in any way. Additionally, participants will be informed that the interview is voluntary, and they are free to skip questions they do not wish to answer, respond “I don't know,” or end the interview at any time for any reason.
- Using an incentive, in the form of a raffle (a chance to win a cash prize) may improve the response rate and will demonstrate respect and appreciation for the participant's time and effort.

### **4. Tests of Procedures or Methods to be Undertaken**

Pilot testing of the interview guides on the Samsung tablets will begin on October 31<sup>st</sup>. Atlanta-based health scientists are working with the data manager to pilot test the instruments and ensure technology is working before staff are deployed on November 10<sup>th</sup>.

## 5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

The project's leadership and oversight will include:

### **Christine Prue**

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### **Ann O'Leary**

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Roles and Responsibilities for CDC staff involved in this project are described below:

- **Behavioral Science TEAM LEAD** – Overall responsibility for the successful and timely data collection according to IRB protocol, OMB approved parameters, with scientific integrity and with demonstrated cultural competence. To this end, the **TEAM LEAD** oversees the implementation of information collection activities, and reports any divergences for all information collections on St. Croix. The team lead provides feedback to team members and assigns tasks to team members to meet needs in the field. The **TEAM LEAD** is responsible for reporting on team activities to the IM (three times/week) and keeping Atlanta JIC leaders posted on the team's activities. [Christine Prue will serve in this role].
- **DEPUTY Team Lead** – Responsible to the **TEAM LEAD** for successful and timely accomplishment of all data collection phases according to approved information collection protocols. Identifies systems problems and raises them with the **TEAM LEAD**. To this end, the **TEAM LEAD** oversees the implementation of information collection activities, and reports any divergences for all information collections on St. Thomas and St. John. The team lead provides feedback to team members and assigns tasks to team members to meet needs in the field. The Deputy team lead gives daily reports to the Behavioral Science **TEAM LEAD**. [Ann O'Leary will serve in this role]

- **DATA MANAGER** –Responsible training and trouble-shooting of computer tablets used for information collections. Responsible for successful transfer of the data to CDC’s secure, encrypted share folder. Ensures that Epi-Info files are successfully loaded into Excel and SPSS files for analysis. Responsible for the verification of the data in Epi-info, Excel, and SPSS. Assures that the codebook is accurate and up to date. Handles all recoding programming in Epi-info, if needed. [Mohammed Lamtahri will serve in this role]
- **QUALITY CONTROL and DATA ANALYSES** – Responsible for implementing and documenting the completion of each of interview. Ensures that the responses given by respondents match the response options selected. Documents discrepancies and makes appropriate corrections in a manner that tracks the changes made. Provides insightful feedback on patterns of “mistakes” so that constructive feedback is given to the interviewer in the field. Analyzes data for reporting purposes. [3 Atlanta-based team members will perform this work in Atlanta: Alison Yoos, Amanda Garcia-Williams, and Lauren Witbart]
- **INTERVIEWER and/or MODERATOR INSTRUCTORS/COACHES (4)** – Responsible for coaching USVI DOH staff in completing interviews and focus group discussions with identified audiences in accordance with protocols and permissions granted. Responsible for ensuring that USVI DOH staff build rapport with participants and gather feedback with scientific integrity and use CDC issued equipment for all information collections (e.g., tablet and/or digital recorder). As time permits, they also may help transcribe audio recorded answers that are captured in the data set and assist with thematic analyses. [The following individuals will serve in this role: Debra Karch, Douglas Wiegand, Michelle Rose, and Lena Camperlengo]