

**Data Collection for Evaluation of Education, Communication, and Training (ECT)
Activities for the Division of Global Migration and Quarantine**

Gen IC

**Knowledge, Attitudes, and Practices about Dengue,
Chikungunya and Zika among Travel Consultants and Aid
Agencies**

**OMB No. 0920-0932
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Statement B

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Statement B –Statistical Methods

No statistical methods will be employed in this qualitative study.

1. Respondent Universe and Sampling Methods

A range of 3 to 9 focus group discussions will be conducted online with a range of 18 to 90 individual participants for this data collection. A maximum of 180 potential participants will be screened to reach the goal of 18 to 90 participants, using an estimated response rate of 50%.

Potential responders to this information collection will be adult employees and participants of international missionary/humanitarian aid organizations. Potential participants will be recruited based on self-identified experience participating in or organizing international trips. Direct recruitment will take place via two approaches: 1) we will identify and make a list of 3 potential missionary and humanitarian organizations using online information of a universe of 89 organizations, and 2) we will use snowball suggestions (key informants identify others who know about the topic or who the researcher should contact). We will contact target agencies via phone explaining the goal of the focus groups and request to speak with the most appropriate person. If this approach is unsuccessful, we will send email requests to introduce the study and place follow-up phone calls. If individuals agree to participate, we will send them the date, time and internet link for joining focus groups sessions as well as an electronic copy of the consent form. We will conduct one to three focus groups with each sending agency.

Table B.1: Potential Respondent Universe

Entity	Potential Respondent	N*
Missionary/Humanitarian Non-religious Sending Agency 1	Sending agency staff and missionaries and humanitarian aid workers	30
Missionary/Humanitarian Religious Sending Agency 2	Sending agency staff and missionaries and humanitarian aid workers	30
Missionary/Humanitarian Medical Sending Agency 3	Sending agency staff and missionaries and humanitarian aid workers	30
Total Universe of Potential Respondents		90

* N is based on the maximum number of participants recruited from the 3 types of sending agencies.

2. Procedures for the Collection of Information

CDC staff developed a list of 175 missionary and humanitarian organizations from the US and Puerto Rico using information publicly available online. Missionary and humanitarian aid organizations were categorized by type of sending agency (i.e., non-religious, religious, and medical-based). Missionary/humanitarian aid sending agencies listed under the selected categories will be contacted until one target agency for each category agrees to participate in the

focus groups. We will contact the three sending agencies via telephone to explain the purpose of the focus groups and will request to speak with the most appropriate person. If this approach is not successful, we will send email requests to introduce the data collection ahead of time and place follow-up phone calls. If they agree to participate, we will send the date, time, and internet link for joining focus groups sessions. If we do not reach the number of six to ten participants for each focus group, we will ask key informants from the selected organizations to identify other missionaries/aid workers who know about the topic and would participate in the online focus groups (snowball technique). We will conduct a minimum of one and a maximum of three focus group session with each type of sending agency. For each group session we will recruit between six participants (minimum) and 10 participants (maximum). In total, we will conduct a range of three to nine focus groups sessions and will recruit a range of 18 – 90 individual participants.

Before participation, focus group participants will be explicitly asked their age to ensure they are legal adults (minimum age 18 years for the US and age 21 years for Puerto Rico). Focus group participants will receive an electronic copy of the consent form prior to the beginning of the online focus group discussion. At the beginning of the online focus group, the moderator will read the consent form along with the participants and will ask participants to verbally consent. In the consent process, participants will be informed about the purpose of the data collection, that participation is strictly voluntary, that they may decline to answer any or all questions, and that they may withdraw from participation at any time. Verbal consent will be obtained from all participants as focus groups will be conducted via internet using Adobe Connect or other software. No personally identifiable information will be recorded as part of data collection.

Focus groups are the most appropriate method to collect in-depth information to understand individuals' knowledge and attitudes, as well as their practices and preferences. By using a discussion guide, a moderator can probe participants and generate discussion about their knowledge, attitudes, and practices with regards to a specific topic. We have developed two discussion guides: one for sending agencies and one for missionaries and aid workers to learn about travel health practices of volunteers during missionary/humanitarian aid trips.

A CDC moderator (from Travelers' Health or Dengue Branch) will brief participants on the focus group discussion process before each group session begins (e.g. the importance of speaking one at a time, there is no wrong or right answers, all opinions are welcome, the presence of note takers to record answers and that audio will be taped, the voluntary nature of participation, and that no individually identifiable information will be collected during the group discussion). The moderator will use the Moderator's Guide of Questions for Focus Groups with Sending Agencies to conduct discussion with staff of sending agencies that coordinate missionary/humanitarian aid trips. The objective is to learn about the recommendations sending agencies' staff make to their volunteers regarding health and safety when traveling overseas and to assess the potential usefulness and content of the CDC's travel health information. The question guide for sending agencies consists of 17 questions related to the travel health information practices of sending agencies when organizing a mission trip, how often they refer

volunteers to travel health clinic, and how often they give advice to volunteers about mosquito bites. This question guide also gathers data on sending agencies' attitudes towards the CDC's website, interest in learning more on and disseminating information about travel health recommendations and receiving reports of volunteers about illness, and their preferences about best channels to disseminate information to volunteers. In addition, the question guide asks about the knowledge sending agencies have about dengue, chikungunya, Zika, and the mosquito vector.

The same methodology will be used for missionary/humanitarian aid travelers, although with a discussion guide tailored to this specific audience. The 17 question Moderator's Guide for Focus Groups with Volunteers will probe participants on their knowledge, attitudes, and practices about personal protection measures to avoid illness while traveling abroad, especially about dengue, chikungunya, and Zika. The guide includes questions about participants' travel practices and preparation habits, their experience locating travel health information, and the training they received from their sending agencies' delivery of travel health information practices. It also contains questions regarding the attitudes of program participants towards health and safety during travel, attitudes towards and experience with the CDC's website, attitudes and practices regarding mosquito bite prevention, and their interest in learning more about travel health recommendations and reporting illness during travel. Additionally, the guide includes questions about knowledge regarding diseases transmitted by mosquito bites, specifically dengue, chikungunya, Zika, and how to prevent mosquito bites. If necessary, note takers can send additional questions to the moderator and the moderator will probe participants to clarify participants' responses to questions. No individually identifiable information will be collected using the two guides of questions. The whole intervention is a one-time data collection.

The question guides will be administered online in approximately 3 to 9 focus group discussions to a total of 18 to 90 participants (maximum). Data from these focus group discussions will be used to improve outreach to missionary/humanitarian organizations regarding health risks, develop appropriate mosquito-borne disease prevention messages, develop a more user-friendly and interactive dengue, chikungunya, and Zika website, and determine the best way to report dengue, chikungunya, and Zika fever among travelers.

A CDC note taker from Travelers' Health or Dengue Branch will assist with recording participants' responses to questions. The moderator and the note taker will meet after each group session to go over the discussion, check notes to clarify doubts regarding participants' responses, and add probes to expand discussion on specific concepts in the next focus group session. In addition to these notes, focus group discussion audio will also be digitally recorded for verbatim transcription.

A thematic and content analysis of the transcript and notes from focus groups discussions will be performed. For the data analysis, CDC behavioral scientists will compile and code the data under

categories developed a priori based on evaluation objectives. Inter-coder reliability will be established between the two coders, aiming for $\alpha > 90\%$, to ensure consistency of coding. Categories will later be arranged by themes for reporting. Results may be presented at a national or international conference and reported in a manuscript and submitted for publication in a peer-reviewed journal.

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

The following methodology and best practices will be employed to maximize response rates to 80%: (1) Informing respondents of what the study is asking, why questions are being asked, who will see the results, how the results will be used, how respondents may benefit from the results and how the findings will be put into action; (2) Addressing privacy and ensuring anonymity of participants: respondents who know their answers will not be linked to them in any way may be more likely to respond and more likely to provide truthful responses; (3) Using bilingual and bicultural interviewers and culturally and linguistically appropriate data collection instruments as some focus group sessions will be also conducted with Puerto Rican residents; and, (4) Minimizing study length while maximizing the richness of data that can be obtained. Respondents will be told how much time the study will take to complete so they know what to expect.

4. Test of Procedures or Methods to be Undertaken

Before the proposed information collection is implemented, the Moderator's Guide of Questions for Focus Groups with Sending Agencies and the Moderator's Guide for Focus Groups with Volunteers were pilot tested with four and five participants respectively. An additional question regarding Zika was added to both the Moderator's Guide of Questions for Focus Groups with Sending Agencies and the Moderator's Guide for Focus Groups with Volunteers after the Zika outbreak in Puerto Rico. The following lessons from the pilot test were identified:

- Some questions needed additional explanations.
- Probes were added to obtain more information from respondents.
- Some questions led to the repetition of responses from participants.

The following changes were incorporated into the Moderator's Guide of Questions for Focus Groups with Sending Agencies. As stated in Supporting Statement A, this gen-IC submission is nearly identical to one approved in September, 2015. However, for this submission, question #15 (see below) is being added:

- Question #1- changed wording to: How many international trips you have worked with in the past year.
- Question #2- question's order was changed to: What regions do you primarily organize trips for (e.g. Africa, Latin America, and the Caribbean, Southeast Asia and the Pacific Islands, North America).

- Question #3- was divided in two and probes were added: Which type of trips do you help organize, long-term or short-term trips? Do you organize trips for large or small groups? How does coordination of these types of trips differ? How is it the same? In what type of accommodations have missionaries stayed in during the trips?
- Question #8- a probe was added: How comfortable do you feel providing health and safety information to your volunteers? How informed (confident) do you feel when providing health and safety information to your volunteers?
- Question # 15 – Have you ever heard of Zika fever? What do you know about Zika fever? How Zika differs from dengue and Chikungunya?

The following changes were incorporated into the Moderator’s Guide for Focus Groups with Volunteers. Question #14 is a new question since the previous 0920-0932 gen-IC submission:

- Question #1- changed the number of years to: How many trips have you participated in the last three years?
- Question #2- changed the number of years and added a probe: What regions have you visited in the last three years (e.g. Africa, Latin America and the Caribbean, Southeast Asia and the Pacific Islands, North America)? How long have you stayed?
- Question #3- changed question to: What type of accommodations have you stayed in during the trips?
- Question #5- added “about your mission”: How often do you look for travel health and safety information about your mission destination? When do you look for this information?
- Question # 14 – Have you ever heard of Zika fever? What do you know about Zika fever? How Zika differs from dengue and chikungunya?

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

No statistical methods will be employed in this qualitative study.

The protocol, screeners, and the Moderator’s Guide of Questions for Focus Groups with Sending Agencies and the Moderator’s Guide for Focus Groups with Volunteers were developed in collaboration with and were reviewed by staff of the Division of Global Migration and Quarantine and the staff of the Division of Vector Borne Diseases, Communications Unit of the Dengue Branch.

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