Information 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 A

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Part A. Justification

- **Goal:** Determine the knowledge, attitudes, and practices of missionaries and humanitarian aid workers and their organizations (sending agencies) about travel health, including personal protection measures to avoid illness while traveling abroad, specifically mosquito-borne diseases (dengue, chikungunya, and Zika). Identify barriers and facilitating factors for pre-travel medical consultations and preferred routes for travel health and disease prevention information. Assess potential usefulness and content of CDC's travel health information.
- **Purpose:** Improve outreach to missionary and humanitarian aid organizations regarding health risks. Develop appropriate mosquito-borne disease messages and a more user-friendly and interactive dengue, chikungunya, and Zika website.
- **Methods:** Conduct online focus groups using Adobe Connect or similar software; conduct direct recruitment via telephone using available online information of missionary and humanitarian organizations and snowball suggestions from key informants.
- **Subpopulation:** Target participants include missionaries/volunteers and staff of missionary and humanitarian aid organizations from the US and Puerto Rico.
- **Analysis:** A thematic and content analysis of the notes from focus groups discussions will be performed.

A nearly identical gen-IC was submitted and approved in September, 2015. However, that information collection never took place because the international Zika response (which began shortly thereafter) took up most of the division's resources. This project is being revisited now, with the only meaningful change being the addition of Zika Virus to the focus group moderator guides.

1. Circumstances Making the Collection of Information Necessary

A significant number of travelers from mission and humanitarian aid organizations are visiting foreign destinations and coming into contact with dengue, chikungunya, and Zika viruses that are unfamiliar to most Americans. The World Health Organization (WHO) estimates that 50-100 million dengue infections occur annually in over 100 dengue endemic countries. Chikungunya and Zika had never been detected in the Western Hemisphere prior to 2014. In 2016, the Pan-American Health Organization (PAHO)/WHO reported 149,914 confirmed cases of chikungunya as a result of local transmission in the Americas. In February 2016, WHO declared Zika a global public health emergency and its relationship with congenital brain abnormalities including microcephaly and Guillain-Barré Syndrome. Since then, PAHO/WHO have reported 209,628 confirmed cases of Zika in 50 countries from the Americas and the Caribbean. Chikungunya and Zika remain an important health threat for travelers to Africa, Asia, and islands in the Indian Ocean and Western Pacific.

Most travelers do not seek pre-travel medical care before going abroad. Of those who do, most see a primary care provider who might not be trained in travel medicine. Unlike traditional tourists,

missionary and volunteer humanitarian aid travelers typically stay in rustic conditions in rural areas while traveling, further increasing their health risks. Travel health messages may not always reach these unique travelers.

Two Morbidity and Mortality Weekly Reports (MMWRs) were published in June 2010 and July 2011 reporting dengue fever in two groups of missionaries returning from the Caribbean. The first was a group of missionaries from Iowa and Minnesota that traveled to the Dominican Republic in 2008 of which at least 42% (14/33) were diagnosed with dengue fever upon return to the US. The second was a group of 28 missionaries from Georgia and Nebraska of which seven (25%) had diagnosed dengue virus (DENV) infection after travel to Haiti; five of these missionaries were hospitalized.

Of the missionaries to the Dominican Republic, none of those interviewed were aware of dengue fever as a health threat in the Caribbean and none had sought travel health information from online sources before departure. Only two had visited a health care provider or travel health clinic for pre-travel information, and neither had discussed dengue with the provider. The study of missionaries returning from Haiti found that 19 of the 21 (90%) had a pre-travel healthcare appointment, 12 (57%) sought pre-travel advice on Internet, and 10 (48%) reported pre-travel knowledge about dengue. Although 10 (48%) of the missionaries reported being bitten by mosquitoes, only five (24%) used insect repellents multiple times a day, 10 (48%) wore long pants and two (10%) wore long-sleeve shirts more than one day. At present, there are no reports of missionaries or humanitarian aid volunteers from the US and its territories infected with Zika virus. Nonetheless, CDC has reported 5,106 confirmed cases of returning travelers infected with the Zika virus from January 2015 to April 2017.

A review of the literature highlighted travel agents as the best source to provide pre-travel health information. Hamer and Connor (2004) found that 50% of US travelers interviewed in an airport survey considered travel agents to be their primary source of general pre-travel information. Both Provost and Soto (2001) and Crockett and Keystone (2005) also found that a recommendation to visit a travel health clinic, as provided by a travel agent, was the single most important factor predicting pre-travel health consultations. Regarding dengue, over 50% of surveyed agents in Ivatts, et. al. (1999) recommended seeing a travel health provider, but the majority also incorrectly answered questions about dengue fever.

Travel health clinics/physicians are the best resource for pre-travel health information, yet their services are greatly underutilized. La Rocque et. al. (2010) found that of the 476 survey respondents residing in the US, 54% sought health advice prior to departure. Of those, 30% visited a travel medicine specialist to seek health information. In analyzing travel health behaviors using the Health Belief Model, Crockett and Keystone (2005) identified improved health practices (i.e., vaccine uptake) when travelers were both aware of the potential risks on their trip and given access to appropriate pre-travel health information. Because sending agencies (missionary organizers and humanitarian organizations) provided some form of travel assistance when planning trips, they are in the unique position of raising awareness with their volunteers of the importance of health and safety while abroad.

The information collection for which approval is sought is in accordance with DGMQ's mission to reduce morbidity and mortality among immigrants, refugees, travelers, expatriates, and other globally mobile populations, and to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the United States. This mission is supported by delegated legal authorities.

2. Purpose and Use of the Information Collection

The purpose of this data collection is to assess knowledge, attitudes, and practices of sending agencies and their volunteers about travel health, particularly for dengue, chikungunya, and Zika prevention. Since mission and humanitarian aid trips from the US to foreign countries are increasingly common and the incidence of diseases such as dengue, chikungunya, and Zika is becoming higher among these travelers, there is a need to ensure prevention messaging is effective and available to protect these travelers from disease. Inadequate travel health information for these and other diseases might increase the risk of travelers becoming infected abroad, with the potential for importation into the US. This assessment will gather information about what pre-travel health recommendations were made to these travelers, determine their sources of information, and identify best ways to improve prevention messaging and delivery channels. The Moderator's Guide of Questions for Focus Groups with Sending Agencies (Attachment A English, Attachment A1 Spanish) and the Moderator's Guide for Focus Group with Missionaries/Volunteers (Attachment B English, B1 Spanish) were designed to collect data from the point of view of the sending agency staff and from the volunteers to help identify the following:

1) barriers and facilitating factors for the routine implementation of pre-travel health consultations;
2) preferred routes for travel health and disease prevention information, with a specific focus on groups traveling internationally, as with short-term missionaries and other humanitarian groups;
3) current knowledge, attitudes, and practices towards the prevention of mosquito bites and vector-borne diseases like dengue, chikunguya, and Zika;
4) gather information to assist in the creation of educational materials for missionary and humanitarian aid volunteers; and,
5) determine interest and best mechanism to report illness for surveillance purposes.

Although focus groups provide immediate knowledge of participants' opinions and understanding on a particular topic, there are limitations in their use. Moderators may deliberately or unconsciously impact the participants' opinions by introducing their personal opinions, and leading participants into conclusions (Quinn Patton, 2002). Participants can also hide their true opinions for fear of disappointing the moderator (U.S. HHS, 2002). Results from focus groups cannot be generalized the same way as data collection from quantitative techniques because of sample size and selection procedures, therefore data generated from focus groups are less representative of the total universe (U.S. HHS, 2002).

Results from this data collection will be used to develop tailor-made educational materials for missionaries and humanitarian volunteers and will be uploaded to the CDC's Travelers' Health and Dengue, Chikungunya, and Zika websites. Recommendations will be used to develop a mechanism for

reporting dengue, chikungunya, and Zika cases in missionaries and humanitarian service travelers. Results may also be presented at a national or international conference and reported in a manuscript and submitted for publication in a peer reviewed journal.

3. Use of Improved Information Technology and Burden Reduction

This information request is in compliance with the Government Paperwork Elimination Act (GPEA), Public Law 105-277, title XVII.

All (100%) focus groups will be conducted online using question guide. The focus group discussions will be led by a trained moderator from CDC. A note taker, also from CDC, will record participants' responses; therefore, participants will not need to complete any online survey or write their responses. Participants will receive an electronic copy of the consent form that the moderator will read to them and will ask participants to verbally consent before focus group sessions begin (Attachment C English, Attachment C1 Spanish).

4. Efforts to Identify Duplication and Use of Similar Information

A review of the scientific and gray literature indicates that no other agency is collecting similar data. There are no similar published data available about travel health knowledge, attitudes, and practices and the best strategies to reach these specific audiences (U.S. missionary and humanitarian services organization) regarding health risks during travel, particularly for dengue, chikungunya, and Zika. Two MMWRs published in June 2010 and July 2011 report on dengue morbidity and travel health among U.S. residents returning from international destinations, making evident the need of this data collection.

5. Impact on Small Businesses or Other Small Entities

No small businesses will be involved in this data collection.

6. Consequences of Collecting the Information Less Frequently

This request is for a one time data collection.

There are no legal obstacles to reduce the burden. Evaluation is critical to the health communication process because it can reveal why specific outcomes occur and the impact of health education efforts. These insights facilitate program improvement and ensure the best allocation of resources. Information on current knowledge, attitudes, and practices regarding travel health, dengue, chikungunya, and Zika prevention, could help determine gaps in knowledge and help develop tailor-made messages for missionaries and humanitarian service volunteers. The identification of barriers and facilitating factors for pre-travel consultation could help determine preferred routes for travel health and disease information (e.g., development of electronic educational materials, inclusion of information specific for these audiences in CDC websites and enhancement of the CDC's Travelers' Health, Dengue, Chikungunya, and Zika websites), and the development of a mechanism to report dengue, chikungunya,

and Zika illness for surveillance purposes. Evaluation provides accountability to stakeholders for DGMQ's activities by demonstrating the effectiveness and the impact of their communication, training, and educational activities. Evaluation improves the effectiveness and efficiency of existing programs and supports the most effective distribution of resources. For example, acknowledging the incidence of foreign diseases among travelers will help to detect and treat cases in a timely manner and potentially prevent the spread of these diseases in the U.S.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

There are no special circumstances with this information collection package.

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

A. This data collection is being conducted using the Generic Information Collection mechanism of The Data Collection for Evaluation of Education, Communication, and Training (ECT) Activities for DGMQ– OMB No. 0920-0932. A 60-day Federal Register Notice was published in the Federal Register on Wednesday, December 17, 2014 (Vol. 70, No. 242; pp. 75155-57). One non-substantive comment was received, and CDC's standard response was sent to address the comment.

B. The following individuals were consulted to obtain their views on availability of data, frequency of collection, clarity of instructions and record keeping, disclosure, or reporting format, and on the data elements to be recorded, disclosed, or reported:

Individuals	Contact Information
Ashley Landry (2011-2013)	Student Department of Anthropology, Colorado State University, Fort Collins, Colorado 80523, USA Tel. 1-225-963-0832 alandry@rams.colostate.edu
José G. Rigau Pérez (2015)	Captain, USPHS, Retired Former Chief, Epidemiology Section, OID/NCEZID/CDC Dengue Branch Tel.1-787-783-7379 jos.rigau@gmail.com
Aurimar Ayala (2015)	Epidemiologist Office of Epidemiology Maricopa County Department of Public Health 4041 N. Central Ave. Phoenix, AZ 85012 Tel. 1-(602) 372-2665 | C: 1-(602) 527-0108 | F: 1- (602) 372-2610

	aurimarayala@mail.maricopa.gov facebook.com/MCDPH | twitter.com/Maricopahealth | www.WeArePublicHealth.org

9. Explanation of Any Payment or Gift to Respondents

No incentive payment will be provided.

10. Protection of Privacy and Confidentiality of Information Provided to Respondents

This information collection request has been reviewed by the National Center for Emerging and Zoonotic Infectious Diseases, and it has been determined that the Privacy Act does not apply. No personally identifiable information will be filed or retrievable by CDC. No additional individually identifiable information is being collected.

DGMQ and Dengue Branch staff will follow procedures for assuring and maintaining privacy during all stages of data collection. Data will be treated in a secure manner and will not be disclosed, unless otherwise compelled by law. Respondents will be informed that information collected may be recorded and transcribed, and that any multimedia recordings will be destroyed in compliance with the Federal Records Act. DGMQ/Dengue Branch staff will collect and evaluate the research data.

All information provided by respondents will be treated in a secure manner and will not be disclosed unless otherwise compelled by law. Respondents will be informed prior to participation that their responses will be treated in a secure manner.

The data collected will be retained for five years, which exceeds the minimum outlined in Federal IRB regulations. This will enable CDC to refer to previous data if similar projects are conducted in the future.

The proposed data collection will have little or no effect on the respondent's privacy. All data will be reported in an anonymous manner. Participants will not be able to be identified either directly or indirectly from the information that appears in the final data set. Disclosure of the subjects' response outside of the research setting (such as in a journal publication) would not have the potential to place the subjects at risk of criminal or civil liability or be otherwise damaging – the subject matter is unlikely to contain sensitive information and responses will not be traceable to the subjects.

Participants will receive an electronic copy of the consent form prior to the focus group discussion. At the beginning of the focus group, the moderator will read the consent form aloud and inform participants about the purpose of the research, that their participation is strictly voluntary, that they may decline to answer any or all questions and they may withdraw from participation at any time. Verbal consent will be obtained from all participants as focus groups will be conducted online.

All potential participants, regardless of their affiliation with an agency, will be explicitly asked before they are consented whether they are over age 18 in the US and over the age of 21 in Puerto Rico. The

focus group moderators will read the consent form to all potential participants in focus groups and participants will be asked verbally if they would like to participate before the focus group starts.

Focus group sessions will have a moderator and a note taker from CDC. Names of participants will not be recorded. Data will be stored in computers of staff conducting the information collection at CDC's Dengue Branch and DGMQ which have technical controls such as a unique personal ID and password. Carmen Pérez, a behavioral scientist from CDC's Dengue Branch, will oversee data analysis. Joanna Gaines, a behavioral scientist from CDC's Travelers' Health Branch, will serve as a secondary coder to ensure inter-rater reliability. A thematic and content analysis of the notes from focus groups discussions will be performed. Notes will be compiled and coded under categories which will be developed based on study objectives. Categories will later be arranged by themes for discussion.

No System of Records will be created as a part of this project. No PII will be collected from focus group participants in group sessions. Audio will be recorded during group discussions to later transcribe the collected data. Audio recording and transcription will be stored in CDC computers accessible only by a CDC user's unique ID and password.

11. Institutional Review Board (IRB) and Justification for Sensitive Questions

IRB has reviewed Protocol 6009 (Attachment E - Knowledge, Attitudes, and Practices about Travel Health among Aid Agency Staff and Volunteers) and has determined this data collection falls within an exempt category involving human subjects (Attachment F – IRB Determination Letter of Exemption Protocol 6009).

No information will be collected that is of a personal or sensitive nature.

12. Estimates of Annualized Burden Hours and Costs

A. The information collection requires the use of screening to determine eligibility to participate in focus groups. Standard recruitment procedures estimate that twice the number of respondents needed must be screened in order to yield an adequate number of respondents. The burden in the table below is as follow:

- Of the 180 potential participants, we expect to recruit 90 participants for a response rate of 50%. Of the 90 recruited respondents, 45 will be employees of three different types of sending agencies (Non-religious, religious, and medical-based) and 45 will be missionaries/volunteers.

- A total of 72 employees of US sending agencies will be screened using the Script for Screening and Recruitment (Attachment D), to reach the goal of 36 participants. Employees will be contacted by telephone to explain the purpose of the focus groups. An average of 5 minutes per respondent will be spent for the screening for a total of 6 burden hours (72 x 5 = 360 mins.; 360 ÷ 60 mins. = 6 hrs).

- Eighteen employees of PR sending agencies will be screened via telephone using the Script for Screening and Recruitment (Attachment D1) to reach the goal of 9 participants. An average of 5 minutes per respondent will be spent for the screening for a total of 2 hours (18 x 5 = 90 mins.; 90 ÷ 60 mins. = 1.5 hrs; rounded to 2 hrs.).

- Thirty-six employees will participate in the discussion using the Moderator's Guide of Questions for Focus Groups with Sending Agencies (Attachment A) for approximately 20 minutes per session (36 x 20 mins. = 720 mins.; 720 ÷ 60 = 12 hrs.).

- Nine employees will respond to the Moderator's Guide of Questions for Focus Groups with Sending Agencies in Spanish (Attachment A1) for approximately 20 minutes per session (9 x 20 mins. = 180 mins. 180 ÷ 60 = 3 hrs.

- A total of 72 missionaries/volunteers of US sending agencies will be screened using the Script for Screening and Recruitment (Attachment D), to reach the goal of 36 participants. Missionaries/volunteers will be contacted by telephone to explain the purpose of the focus groups. An average of 5 minutes per respondent will be spent for the screening for a total of 6 burden hours (72 x 5 = 360 mins.; 360 ÷ 60 mins. = 6 hrs).

- Eighteen missionaries/volunteers of PR sending agencies will be screened via telephone using the Script for Screening and Recruitment (Attachment D1) to reach the goal of 9 participants. An average of 5 minutes per respondent will be spent for the screening for a total of 2 hours (18 x 5 = 90 mins.; 90 ÷ 60 mins. = 1.5 hrs; rounded to 2 hrs.).

- Thirty-six missionarires/volunteers will respond to the Moderator's Guide of Questions for Focus Groups with Missionaries/Volunteers (Attachment B) for approximately 20 minutes per session (36 x 20 mins. = 720 mins.; 720 ÷ 60 = 12 hrs.).

- Nine missionaries/volunteers will respond to the Moderator's Guide of Questions for Focus Groups with Missionaries/Volunteers (Attachment B1) for approximately 20 minutes per session (9 x 20 mins. = 180 mins. 180 ÷ 60 = 3 hrs.).

Prior to the focus groups the employees of sending agencies and missionaries/volunteers that agreed to participate will receive an email with the date, time, and internet link for joining group session. Participants will also receive an electronic copy of the consent form (Attachment E, Attachment E1) for their record.

Table A 12.1

Type of Respondent	**Form Name**	**No. of Respondents**	**No. of Responses per Respondent**	**Average Burden per Response (in hours)**	**Total Burden Hours**

Type of Respondent	Form Name	No. of Respondents	No. of Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours
Agency	Script Screening and recruitment (Spanish)	18	1	5/60	2
	Moderator's Guide of Questions for Focus Groups with Sending Agencies	36	1	20/60	12
	Moderator's Guide of Questions for Focus Groups with Sending Agencies (Spanish)	9	1	20/60	3
Missionaries /Volunteers	Script for Screening and recruitment	72	1	5/60	6
	Script for Screening and recruitment (Spanish)	18	1	5/60	2
	Moderator's Guide of Questions for Focus Groups with Missionaries/Volunteers	36	1	20/60	12
	Moderator's Guide of Questions for Focus Groups with Missionaries/Volunteers (Spanish)	9	1	20/60	3
Total					46

B. Estimates for the average hourly wage for respondents are based on the Department of Labor (DOL) National Compensation Survey estimate for the general public's mean hourly wages in the United States (https://www.bls.gov/oes/current/oes_nat.htm) and Puerto Rico (https://www.bls.gov/oes/current/oes_pr.htm).

Based on DOL data, an average hourly wage of $23.86 is estimated for 72 US respondents and $9.73 for 18 Puerto Rico respondents. Table A.12.2 shows estimated burden and cost information.

Table A.12.2:

Type of Respondent	Form Name	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
Employees of Sending Agency	Script for Screening and recruitment	6	$23.86	143.16
	Script for Screening and recruitment (Spanish)	2	$9.73	19.46
	Moderator's Guide of Questions for Focus Groups with Sending Agencies	12	$23.86	286.32
	Moderator's Guide of Questions for Focus Groups with Sending Agencies (Spanish)	3	$9.73	29.19
Missionaries /Volunteers	Script for Screening and recruitment	6	$23.86	143.16
	Script for Screening and recruitment (Spanish)	2	$9.73	19.46
	Moderator's Guide of Questions for Focus Groups Missionaries/Volunteers	12	$23.86	286.32
	Moderator's Guide of Questions for Focus Groups with Missionaries/Volunteers (Spanish)	3	$9.73	29.19
TOTALS				**$956.26**

13. Estimates of Other Total Annual Cost Burden to Respondents or Record Keepers

There will be no direct costs to the respondents other than their time to participate in the online focus groups.

14. Annualized Cost to the Government

Table 14:

Annualized Cost to the Government	No. of Hours per Year	Average Annualized Cost
Principal investigator - Behavioral Scientist GS 12-8 – focus group moderator; note taker; data analyst; manuscript writer; manuscript author; presenter at a public health conference; developer of outreach strategies for missionaries and humanitarian aid workers.	416	*17,143.36

Co-Principal Investigator - Behavioral Scientist Commissioned Corps O-4 - focus group moderator; note taker; data analyst; manuscript coauthor; presenter at a public health conference; developer of outreach strategies for missionaries and humanitarian aid workers	Full Time	65,941.20
Assistant investigator – GS 5-2 - Health Educator – recruiter; note taker; transcriber; data analyst, manuscript coauthor.	213	*3,461.25
TOTAL		**$86,545.81**

* General Schedule for the locality <Locality pay for Puerto Rico is 14.16% specify locality>

15. Explanation for Program Changes or Adjustments

This is a new Gen IC.

16. Plans for Tabulation and Publication and Project Time Schedule

Project Time Schedule	
Activity	**Time Schedule**
Recruitment of respondents	July - September, 2017
Data collection	October - December, 2017
Complete field work	January, 2018
Analyses	February - April 2018
Publication	May – August, 2018

17. Reason(s) Display of OMB Expiration Date is Inappropriate

The display of the OMB expiration date is not inappropriate. No exemption is being requested.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification.

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