

**Burden Memo for the Generic Clearance of Emergency Epidemic Investigation Data Collections  
(0920-1011)**

GenIC No.:	2014008-060
EPI AID No. (if applicable):	2014-060
Requesting entity (e.g., jurisdiction):	Puerto Rico Department of Health
Title of Investigation:	Undetermined burden of disease and risk factors for chikungunya virus infections—Puerto Rico, 2014
Purpose of Investigation: (Use as much space as necessary)	The EpiAid Team in collaboration with PRDH completed the following: 1) Conducted cluster investigations around the case-patients' homes. Information obtained included: a) detection of chikungunya cases that would not otherwise have been detected by passive surveillance; b) identification of the health care-seeking behaviors of patients; c) description of the clinical spectrum of disease across age groups; d) estimation of the level of DENV circulation in areas with known CHIKV transmission; e) entomologic surveillance to determine vector density and the frequency with which adult mosquitoes are infected with DENV and/or CHIKV; and f) identification of household and individual risk factors for infection with CHIKV. 2) Established sentinel chikungunya surveillance sites. Because most chikungunya case-patients are likely to only need out-patient care, we established sentinel surveillance sites in outpatient clinics and emergency departments to detect acute febrile illnesses consistent with chikungunya. These sites along with data from the sentinel enhanced dengue surveillance system (SEDSS) enable tracking of the outbreak and estimation of disease incidence. 3) Provided messaging, alerts and educational material for clinicians and the public. 4) Provided recommendations on vector surveillance and control mechanisms to monitor and mitigate the mosquito vectors that transmit CHIKV. 5) Conducted a rapid assessment of hospital needs to ensure availability of necessary medications (IV fluids, pain medication, antipyretics, etc.).
Duration of Data Collection:	
Date Began:	6/22/2014
Date Ended:	9/5/2014
Lead Investigator	
Name:	Tyler M. Sharp, Ph.D.
CIO/Division/Branch:	NCEZID/DVBD/DB

**Complete the following for each instrument used during the investigation.**

**Data Collection Instrument 1**

Name of Data Collection Instrument:

Type of Respondent

- General public    
 Healthcare staff    
 Laboratory staff    
 Patients    
 Restaurant staff  
 Other (describe):

Data Collection Methods (check all that apply)

Epidemiologic Study (indicate which type(s) below)

Descriptive Study (describe):

Performed household investigations to identify demographic, geographic, or behavioral risk factors for infection, health care-seeking behaviors of infected individuals, and clinical awareness and diagnosis of patients with chikungunya to help direct public and clinical mitigation efforts including reducing mosquito exposures and vector control.

Cross-sectional Study (describe):

Cohort Study (describe):

Case-Control Study (describe):

Other (describe):

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<input checked="" type="checkbox"/> Environmental Assessment (describe):	Households offered mosquito traps to be placed on the premise of their household to determine the relative abundance of mosquitoes and the % of infected mosquitoes. No data were collected from households where traps were placed beyond what was collected on the household investigation form.
<input type="checkbox"/> Laboratory Testing (describe):	
<input type="checkbox"/> Other (describe):	

*Data Collection Mode (check all that apply)*

<input checked="" type="checkbox"/> Survey Mode (indicate which mode(s) below):	
<input checked="" type="checkbox"/> Face-to-face Interview (describe):	Interviews completed in households by in-person interview with the head-of-household.
<input type="checkbox"/> Telephone Interview (describe):	
<input type="checkbox"/> Self-administered Paper-and-Pencil Questionnaire (describe):	
<input type="checkbox"/> Self-administered Internet Questionnaire (describe):	
<input type="checkbox"/> Other (describe):	
<input type="checkbox"/> Medical Record Abstraction (describe):	
<input type="checkbox"/> Biological Specimen Sample	
<input type="checkbox"/> Environmental Sample	
<input type="checkbox"/> Other (describe):	

*Response Rate (if applicable)*

Total No. Responded (A):	137
Total No. Sampled/Eligible to Respond (B):	200
Response Rate (A/B):	69%

**Data Collection Instrument 2**

Name of Data Collection Instrument:

*Type of Respondent*

General public     
 Healthcare staff     
 Laboratory staff     
 Patients     
 Restaurant staff  
 Other (describe):

*Data Collection Methods (check all that apply)*

<input checked="" type="checkbox"/> Epidemiologic Study (indicate which type(s) below)	
<input checked="" type="checkbox"/> Descriptive Study (describe):	Performed household investigations to identify demographic, geographic, or behavioral risk factors for infection, health care-seeking behaviors of infected individuals, and clinical awareness and diagnosis of patients with chikungunya to help direct public and clinical mitigation efforts including reducing mosquito exposures and vector control.
<input type="checkbox"/> Cross-sectional Study (describe):	
<input type="checkbox"/> Cohort Study (describe):	
<input type="checkbox"/> Case-Control Study (describe):	
<input type="checkbox"/> Other (describe):	
<input type="checkbox"/> Environmental Assessment (describe):	
<input checked="" type="checkbox"/> Laboratory Testing (describe):	All serum specimens collected from individuals participating in the household investigations were tested by RT-PCR and IgM ELISA to detect evidence of current and recent infection with chikungunya virus

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Other (describe): and dengue virus.

*Data Collection Mode (check all that apply)*

Survey Mode (indicate which mode(s) below):

- Face-to-face Interview (describe): Interviews completed in households by in-person interview with the individual.
- Telephone Interview (describe):
- Self-administered Paper-and-Pencil Questionnaire (describe):
- Self-administered Internet Questionnaire (describe):
- Other (describe):

Medical Record Abstraction (describe):

Biological Specimen Sample

Environmental Sample

Other (describe):

*Response Rate (if applicable)*

Total No. Responded (A): 251

Total No. Sampled/Eligible to Respond (B): 416

Response Rate (A/B): 60%

**Data Collection Instrument 3**

Name of Data Collection Instrument: Chikunguna\_Case Report Form (Spanish)

*Type of Respondent*

General public       Healthcare staff       Laboratory staff       Patients       Restaurant staff

Other (describe):

*Data Collection Methods (check all that apply)*

Epidemiologic Study (indicate which type(s) below)

- Descriptive Study (describe): Established sentinel surveillance for chikungunya.
- Cross-sectional Study (describe):
- Cohort Study (describe):
- Case-Control Study (describe):
- Other (describe):

Environmental Assessment (describe):

Laboratory Testing (describe): Patients with chikungunya-like illness presenting to sentinel surveillance sites had serum specimens collected for clinical diagnostic testing (RT-PCR and IgM ELISA) to confirm evidence of chikungunya or dengue virus infection. All diagnostic testing performed at CDC Dengue Branch, where test results are maintained in a secure database.

Other (describe):

*Data Collection Mode (check all that apply)*

Survey Mode (indicate which mode(s) below):

- Face-to-face Interview (describe): The chikungunya case investigation form was completed by in-person interview of the patient by their healthcare provider.
- Telephone Interview (describe):
- Self-administered Paper-and-Pencil

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<input type="checkbox"/> Questionnaire (describe): <input type="checkbox"/> Self-administered Internet Questionnaire (describe): <input type="checkbox"/> Other (describe): <input type="checkbox"/> Medical Record Abstraction (describe): <input type="checkbox"/> Biological Specimen Sample <input type="checkbox"/> Environmental Sample <input type="checkbox"/> Other (describe):	
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*Response Rate (if applicable)*

Total No. Responded (A):	531
Total No. Sampled/Eligible to Respond (B):	531
Response Rate (A/B):	100%

**(Additional Data Collection Instrument sections may be added if necessary.)**

**Complete the following burden table. Each data collection instrument should be included as a separate row.**

*Burden Table (insert rows for additional respondent types if needed)*

Data Collection Instrument Name	Type of Respondent	No. Respondents (A)	No. Responses per Respondent (B)	Burden per Response in Minutes (C)	Total Burden in Hours (A x B x C)/60*
Chikungunya_Household Interview Form		137	1	15	35
Chikungunya_Individual Interview Form		251	1	15	63
Chikunguna_Case Report Form (Spanish)		531	1	15	133

Return completed form and a blank copy of each final data collection instrument within 5 business days of data collection completion to the EEI Information Collection Request Liaison, Danice Eaton ([dhe0@cdc.gov](mailto:dhe0@cdc.gov)).

**EEI Information Collection Request Liaison:**

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