## Request for Approval Under the Generic Clearance for Emergency Epidemic Investigation Data Collections (0920-1011)

*Instruction:* This form should be completed by the primary contact person from the CDC CIO that will be sponsoring the investigation.

**Determine if your investigation is appropriate for this Generic mechanism:** *Instruction: Before completing and submitting this form, determine first if the proposed investigation is appropriate for the EEI Generic ICR mechanism. Complete the checklist below. If you select "yes" to all criteria in Column A, the EEI Generic IR mechanism <u>can</u> be used. If you select "yes" to any criterion in Column B, the EEI Generic ICR mechanism <u>cannot</u> be used.* 

Column A	Column B
CDC epidemiological assistance is requested by	The Investigation is initiated by CDC, without
one or more external partners (e.g., local, state,	request from an external partner.
tribal, military, port, other federal agency, or	Yes No
international health authority or other partner	<del>_</del>
organization).	
Yes No	
The investigation is urgent in nature (i.e., timely	The investigation is not urgent in nature.
data are needed to inform rapid public health action	Yes No
to prevent or reduce injury, disease, or death).	
Yes No	
The investigation is characterized by undetermined	The investigation is conducted for the primary
agent, undetermined source, undetermined mode of	purpose of program evaluation, surveillance, needs
transmission, or undetermined risk factors.	assessment, or research to
Yes No	contribute to generalizable knowledge.
	Yes No
One or more CDC staff (including trainees and	CDC staff (including trainees or fellows) are not
fellows) will be deployed to the field.	deployed to the field.
Yes No	Yes No
Data collection will be completed in 90 days or	Data collection expected to require greater than 90
less.	days.
Yes No	Yes No

Did you select "Yes" to *all* criteria in Column A?

If yes, the EEI Generic ICR may be appropriate for your investigation.  $\rightarrow$  You may proceed with this form.

Did you select "Yes" to *any* criterion in Column B?

If yes, the EEI Generic ICR is not appropriate for your investigation.  $\rightarrow$  Stop completing this form now.

**GenIC** # 201500 3 - XXX **Date** 12/12/2014

**Title of Investigation:** Instruction: Provide the title of the investigation in the following format: [Undetermined agent, undetermined source, undetermined mode of transmission, undetermined risk factor] for [disease/problem] among [subpopulation]—[State], [Year]

Undetermined risk factors for dengue virus infection— Arizona, 2014.

**Location of Investigation:** *Instruction: Indicate location where investigation will occur. If multiple locations, specify each one.* 

State: Arizona
City/County (if applicable) Yuma county

Country USA

**Requesting Agency:** *Instruction: Indicate name of agency requesting epidemiological assistance and the name and position title of the requestor* 

Agency: Arizona Department of Health Services

Name and Position Title: Ken Komatsu, State Epidemiologist

Note: Attach the Letter of Invitation requesting support. The letter should include the following information: 1) background on the outbreak or event; 2) steps already taken toward prevention and control, if any; 3) request for CDC assistance, including objectives of the investigation; and 4) how data will be used to inform prevention and control measures. Sensitive information in the Letter of Invitation not appropriate for public dissemination should be redacted.

## **Description of Investigation**

1. Problem to be Investigated: Instruction: Provide a summary of the outbreak or event. The summary should include all the information you know at this time about the outbreak or event and the investigation that is planned. At minimum, please provide the following information: 1) background necessary to understand the importance of the outbreak or event, including a justification of the need for an investigation and why this issue requires an urgent response; 2) the objectives of the investigation, including how the information collected will be used to inform prevention and control measures; and 3) a brief overview of the investigation planned, including study design, respondents, mode of data collection. In the description, indicate whether a data collection instrument is attached with the GenIC request (refer to as Appendix 1, etc.) and what instruments will be developed in the field (suggested length: 250-500 words).

Dengue is a potentially fatal acute febrile illness that is transmitted by *Aedes* species mosquitoes. Dengue is endemic throughout the tropics and sub-tropics worldwide, and recent outbreaks in the United States have occurred in Florida, Hawaii, and Texas. Prior outbreaks in south Texas have occurred in association with dengue epidemics in northern Mexico. During 2008–2013, the mean number of travel-associated dengue cases reported by Arizona to ArboNET, the national arboviral surveillance system, was 4 (range: 0–12). Thus far in 2014, a total of 72 travel-associated, laboratory-positive dengue cases have been identified in Arizona, most of which occurred in Yuma and were associated with recent travel to northern Mexico, where an epidemic is ongoing. The clinical course of these patients has not yet been fully described. Although locally acquired dengue cases have not yet been identified, the number of travel-associated cases, potential under-identification of clinically apparent dengue cases, and ~75% rate of asymptomatic infection together suggest that locally acquired dengue virus (DENV) infections are likely occurring. To develop effective prevention and control measures for locally acquired infections, an investigation is needed to determine the extent to

which locally acquired infections is occurring and to identify risk factors for infection.

The Arizona Department of Health Services requests CDC assistance with an investigation in Yuma, Arizona to: 1) Identify unreported travel-associated or locally acquired dengue cases by conducting household-based cluster investigations around the homes of reported, laboratory-positive dengue cases. Household and individual questionnaires (Appendices 1 and 2) will be collected from participants, immature mosquitoes from water containers in and around the house will be collected to count mosquito larvae and mosquitoes will be collected from the home (Appendix 3), and serum specimens will be collected and tested by RT-PCR and IgM ELISA to detect current and recent DENV infection, respectively (Appendix 2); 2) Conduct entomologic surveillance for *Aedes* mosquitoes in conjunction with the cluster investigations, including testing of serum specimen collected in the household investigation for serologic evidence of recent *Aedes* mosquito bites (Appendix 2); 3) Abstract the medical records (Appendix 4) of clinically apparent, laboratory-positive dengue cases to describe their clinical course. Medical records will be abstracted by federal staff on the investigation team. Specimen collection, storage, and transport will done according to local procedures and protocols. CDC will also assist Arizona with conducting web-based and/or in-person trainings with local physicians on the clinical management of dengue.

Information collected in this investigation will be used to inform local prevention and control measures, including development of educational materials in Spanish and English for the public to prevent additional dengue cases.

This request is to obtain OMB approval for the household interviews, serum collection, and environmental sampling (Appendices 1, 2, and 3) and medical record abstraction (Appendix 4).

	environmental sampling (Appendices 1, 2, and 3) and medical record abstraction (Appendix 4).
2.	Characteristics of Outbreak or Event (Check all that Apply):
	Undetermined agent
	Undetermined source
	Undetermined mode of transmission
	☐ Undetermined risk factor
3.	Respondents: Instruction: Select all that apply. For each respondent type selected, provide a brief description. Be sure to include a description of control respondents, if applicable. Use as much space as necessary for each description.
	General public (describe):
	Household members and neighbors of laboratory-positive dengue case-patients in Arizona (Appendices 1 and 2).
	Healthcare staff (describe):
	Laboratory staff (describe):
	Patients (describe):
	Restaurant staff (describe):
	Other (describe):
	Hospital staff from whom medical records will be requested to collect the charts of laboratory-positive dengue cases so that an investigation team member can abstract it (Appendix 4).
	positive actingue cases so that all investigation team inclineer can aboutact it (hippenan in

4. Selection of Respondents: *Instruction: Provide a brief description of how respondents will be identified and selected. Use as much space as necessary for the description.* 

Reported, laboratory-positive dengue case-patients will be contacted, and the nature and purpose of the investigation will be explained to them. They, other individuals living in their household, and neighbors living within a 50 meter radius of their home will be offered participation in the investigation. Neighbors will be contacted by knocking on the front door of their home.

<del>-</del> .	Study Design: Instruction: Select all that apply. For each study design planned, provide a brief description. Use as much space as necessary for the description.
	Epidemiologic Study (indicate which type(s) below)
	Descriptive Study (describe):  All willing household members and neighbors of reported, laboratory-positive dengue cases will be included in the investigation.
	Cross-sectional Study (describe):
	Cohort Study (describe):
	Case-Control Study (describe):
	Other (describe):
	Environmental Assessment (describe):
	Laboratory Testing (describe):
	Participants' serum specimens will be tested for evidence of current or recent DENV infection, and for evidence of recently being bitten by <i>Aedes</i> species mosquitoes. Specimens sent to private diagnostic laboratories from Arizona for dengue diagnostic testing will be forwarded to CDC-Dengue Branch and tested by RT-PCR and IgM ELISA.
	Other (describe):
õ.	Data Collection Mode: <i>Instruction: Select all that apply. For each data collection mode planned, provide a brief description. Use as much space as necessary for the description.</i>
	Survey Mode (indicate which mode(s) below):
	☐ Face-to-face Interview (describe):
	Household and interview questionnaires will be completed through in-person interview with participants.
	Telephone Interview (describe):
	Self-administered Paper-and-Pencil Questionnaire (describe):
	Self-administered Internet Questionnaire (describe):
	Other (describe):

	File Name: 2015003-XXX Dengue_AZ
Medical Record Abstraction (describe):	
	oratory-positive dengue cases will be abstracted to l course.
⊠ Biological Specimen Sample	
Serum specimens will be collected and test recent DENV infection.	ed by RT-PCR and IgM ELISA to detect current and
Environmental Sample:	
We will count the number of mosquito larv use a backpack vacuum to capture adult mo	ae in water containers in and around the house and osquitoes in the home (Appendix 3).
Other (describe):	
7. Type of Information to be Collected: <i>Instruction: S be collected, provide a brief description. Use as n</i>	
Behaviors (describe):	mosquito repellent, wearing long sleeves and
pants). (Appendix 2)	mosquito repenent, wearing long sieeves and
Clinical information/symptoms (describe):	
Clinical signs and symptoms of clinically a	pparent dengue patients (Appendix 4)
Contact information (describe):	Et a rea Section of the control
Name, phone number, and GPS coordinates household investigations (Appendix 1)	s will be collected from participants of the
Demographic information (describe):	
Age, sex, and race will be collected from pe	articipants of the household investigations I records of clinically apparent, laboratory-positive
Environmental factors (describe):	
Immature mosquito specimens will be colle	ected (Appendix 3)
Exposures (describe):	
Medical history (describe):	
Diele factore (describe):	
Risk factors (describe):	
Specimen/lab information (describs):	
Specimen/lab information (describe):	ories will be collected; serum specimens will be
	d investigations for dengue diagnostic testing and to
Travel history (describe):	
History of travel outside of Arizona will be	collected for participants of the household cally-apparent, laboratory-positive dengue cases
Other (describe):	

8. Duration of Data Collection (number of weeks):				
12				
	on: Indicate the research determination decision. If the decision is rmination letter and IRB approval, if required.			
<b>CDC Investigation Lead:</b> <i>Instruction: Indicate the name, title, and affiliation of the person who will serve as the CDC lead for this investigation.</i>				
Name: Jefferson Jones, M	ID			
Title: EIS officer				
Affiliation: CDC and Arizona	Department of Health Services			
<b>CDC Sponsoring Program and Primary Contact Person:</b> Instruction: Indicate the sponsoring CIO/Division/Branch for this investigation. Indicate the name, title, and contact information of the CDC Primary Contact Person for this investigation. Indicate the preferred method of contact during the OMB approval process. Note, contact person or a designee <u>must</u> be available during the OMB approval process in case questions arise.				
CIO/Division/Branch: NCEZII	D/DBVD/DB			
Name: Tyler M	I. Sharp, Ph.D.			
Title: Acting 1	Epidemiology Team Lead			
<b>Certification:</b> Please read the certification carefully. Type your name to validate that you are providing certification. Note: If you incorrectly certify, the collection will be returned as improperly submitted or it will be disapproved. Certification should be signed by the CDC Primary Contact Person for this Investigation.				
<ol> <li>Tyler M. Sharp, certify the following to be true:</li> <li>The collection is voluntary.</li> <li>Respondents will not be personally identified in any published reports of the study.</li> <li>Information gathered will be primarily used to inform effective prevention and control measures.</li> </ol>				

CDC Sponsoring Program Primary Contact Name: Tyler M. Sharp, Ph.D.

Date of Certification: 12/12/14

**Requested Approval Date (mm/dd/yyyy):** *Instruction: Indicate the date by which approval is needed.* 12/15/14

E-mail the completed form to the Information Collection Request Liaison (ICRL) or EIS program ICRL designee.

## **EEI Information Collection Request Liaison:**

Danice Eaton, PhD, MPH EIS Program Staff Epidemiologist EWB/DSEPD/CDC 2400 Century Center, MS E-92

Office: 404.498.6389 Deaton@cdc.gov

For internal use. Do not complete.

Date/Time initial GenIC received

by ICRL

Date/Time final GenIC received by ICRL

Date/Time submitted to OMB

Date/Time approved

12/11/2014, 7:21PM

12/12/14, 3:00PM

12/12/14