

Improving State and Local Vector Control Program Performance

OSTLTS Generic Information Collection Request

OMB No. 0920-0879

SUPPORTING STATEMENT – Section A

Submitted: 8/11/2014

Program Official/Project Officer

Name: Justin Gerding, MPH, CPH, REHS

Title: Environmental Health Officer

CIO: National Center for Environmental Health (NCEH)

Division: Division of Emergency and Environmental Health Services (DEEHS)

Branch: Environmental Health Services Branch (EHSB)

Address: 4770 Buford Hwy MS F-58 Atlanta, GA 30341

Phone: 770-488-3972

Fax: 770-488-7310

Email: jgerding@cdc.gov

Section A. JUSTIFICATION

1. Circumstances Making the Collection of Information Necessary

Background

This information collection is being conducted using the Generic Information Collection mechanism of the OSTLTS OMB Clearance Center (O2C2) – OMB No. 0920-0879. The respondent universe for this information collection aligns with that of the O2C2. Data will be collected from 80 state, tribal, local or territorial (STLT) vector control program staff at 20 STLT public health departments.

This information collection is authorized by Section 301 of the Public Health Service Act (42 U.S.C. 241). This information collection falls under the essential public health services of 1) evaluating effectiveness, accessibility, and quality of personal and population-based health services, and 2) development of policies and plans that support individual and community health efforts.¹

Approximately 75% of recently emerging infectious diseases affecting humans are of animal origin. Vectors are insects, arthropods, or animals that can carry and spread these diseases. Since 1999, mosquitos have caused almost 40,000 confirmed U.S. West Nile virus infections (see **Attachment A—West Nile Virus Cases 1999-2013**). Each year ticks contribute to approximately 30,000 confirmed and an estimated 300,000 U.S. cases of Lyme disease. The mosquito borne Chikungunya virus was recently recognized in the western hemisphere, causing outbreaks in the Caribbean. The first U.S. locally acquired case of this virus occurred in south Florida during July 2014. This was the first domestically-acquired case in the country.

To prevent the spread of vector borne diseases, STLT public health and environmental health departments establish vector control programs that provide services to control the presence of vectors. Vector control programs commonly establish policy and regulation, increase public awareness and knowledge, conduct disease surveillance, and provide insect/pest control services. Recent National Association of County and City Health Officials (NACCHO) and Association of State and Territorial Health Officials (ASTHO) profiles indicate that roughly half of state and local health departments provide vector control services and activities.^{2,3}

STLT vector control programs were strengthened after detection of West Nile virus in 1999. However, surveys indicate these programs and services have since been on the decline. Public health departments are reporting that budgetary constraints have negatively impacted vector control services (see **Attachment B—Vector Control Capacity, Attachment C—Impact of Environmental Health Budget Cuts, and Attachment D—State Vector Control Needs Assessment Report**). There is currently minimal understanding of the specific vector control services that are provided, how those services are delivered, and what barriers limit their provision. STLT vector control programs are the first line of defense to control vector-borne disease and their capacity to meet emerging challenges is uncertain.

CDC Environmental Health Services Branch (EHSB) supports STLT environmental public health departments and vector control programs as they confront endemic and emerging vector borne disease threats to populations within their respective jurisdictions. CDC has trained environmental

public health professionals to prevent, prepare, and respond to vector-borne disease threats through a highly successful vector control and integrated pest management training course. CDC is now tasked with defining and responding to diminishing STLT vector control program capacity. In order to accomplish this task, CDC recognizes the need to facilitate assessment of STLT vector control program performance to understand their capacity needs and inform on the current limited knowledge of these program services and activities.

Public health performance improvement has been an evolving process, fueled by the 1988 release of the Institute of Medicine's report *The Future of Public Health*.⁴ The report identified three core functions: assessment, policy development, and assurance. In 1994, the U.S. Department of Health and Human Services coordinated the Public Health Functions Project, with national representation, to describe public health services. This collaborative project produced a statement called "Public Health in America" that identified 10 Essential Public Health Services.⁵ In 2002, the CDC released the National Public Health Performance Standards Program (NPHPSP), a public health system assessment framework based on the essential services (see **Attachment E—NPHPSP Fact Sheet**). While resources to improve public health performance were developed and released, work was under way to develop guidance and tools specific to environmental public health. By 2002, the 10 Essential Public Health Services were adapted to fit environmental public health by creating the 10 Essential Environmental Public Health Services. Subsequently, CDC released the Environmental Public Health Performance Standards (EnvPHPS) in 2006 to improve the environmental health service delivery system (see **Attachment F—EnvPHPS and Performance Improvement Column**). The EnvPHPS were developed by an expert panel of environmental health professionals with input from several national public health organizations, including NACCHO and ASTHO (see **Attachment G—EnvPHPS Descriptive Column**). The standards provide a framework for assessing environmental public health program capacity and ability to deliver the 10 Essential Environmental Public Health Services. Environmental health departments and programs have since had success using these performance standards to assess and improve performance.⁶

Recognizing the need to define and respond to diminishing STLT vector control program capacity, CDC is funding the Public Health Foundation (PHF), through a cooperative agreement, to assist STLT vector control programs with assessing their performance and finding ways to improve program quality. PHF and CDC will aid selected STLT vector control programs with conducting self-assessments using the EnvPHPS. The assessment results will be used by PHF to help develop and implement quality improvement plans for STLT vector control programs. This is intended to increase program efficiency, effectiveness, and ability to respond to emerging vector concerns. PHF and CDC will also develop and make available case studies and guidance materials based on the STLT vector control program assessment processes, results, and quality improvement activities. Results will be submitted for peer-reviewed journal publication. Ultimately, this overall performance improvement project is intended to increase STLT vector control program efficiency, effectiveness, and capacity to provide the 10 essential services and respond to emerging vector concerns.

Privacy Impact Assessment

Overview of the Data Collection System

CDC, supported by PHF, will convene vector control program staff in a group setting facilitated Environmental Public Health Performance Standards (EnvPHPS) self-assessment process (see **Attachment F—Self-assessment Instrument**). The EnvPHPS self-assessment is a standardized process that has been tested and is intended for use in a group setting. It has been shown to be used successfully within environmental health departments and programs to assess and improve performance.⁶ The group facilitated self-assessment methodology was chosen over other methods because it allows for collaborative and in-depth discussion among participants who can collectively identify their vector control program strengths and weaknesses in delivering the 10 Essential Environmental Public Health Services and hear one another's opinions.

Each of the 20 selected STLT vector control programs will be asked to provide 4 individuals to participate in each of the self-assessment groups, for a maximum of 80 total participants. The 4 individuals will include the program director and 3 staff members. This collection of information will describe vector control services of each STLT participant program and identify areas of strengths and weaknesses.

Each group will engage in the self-assessment process and record responses on the instrument. Participants may record responses on a laptop or computer during the group session then email it to CDC and PHF. The self-assessment instrument was pilot tested by 8 environmental public health professionals. Feedback from this group was used to refine questions as needed and establish the estimated time required to complete the EnvPHPS self-assessment instrument. The self-assessment process will last no more than three hours.

The collection of information will be conducted as follows:

- The assessment process will be self-facilitated by STLT vector control program staff. The self-assessment group will select an individual to serve as facilitator and another as a recorder.
 - The facilitator's role includes reading instructions and the model standards/questions, and guiding group members in brainstorming and discussion about the model standard and the vector control program.
 - Using a laptop or computer, the recorder will register responses on the self-assessment instrument (Word document) and take notes of major discussion points during the self-assessment process.
- Programs will email completed documentation (self-assessment instrument and discussion notes) to PHF.
- Once PHF and CDC receive the information, it will be analyzed using both qualitative and quantitative methods.
 - Analysis will be conducted with Microsoft Excel. Analysis will consist of simple descriptive statistics and qualitative analysis to understand STLT vector control program capacity and current practices. The majority of data will be analyzed using basic descriptive analyses.

Items of Information to be Collected

The EnvPHPS self-assessment instrument consists of 13 fill-in-the-blank questions that collect descriptive information about the program and the self-assessment team and 64 multiple response questions/measures specific to conducting each of the 10 Essential Services. Each question/measure allows for 5 possible responses on the level of activity: None = 0, Minimal = 1, Moderate = 2, Significant = 3 and Optimal = 4. A recorder will take notes of major discussion points during the self-assessment process. These discussion notes will support responses to the 64 multiple choice questions and are critical for ranking gaps as determined by those responses.

Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age

The information collection system does not involve use of a web-based information collection instrument. No website content will be directed at children.

2. Purpose and Use of the Information Collection

NACCHO and ASTHO profiles indicate that roughly half of state and local health departments perform vector control services and activities, but the profiles do not have a description of the types and levels of these services. Currently, there is minimal understanding of specific STLT vector control services and activities. Public health departments are reporting that budgetary constraints have negatively impacted vector control programs and that capacity to provide effective services is diminishing. Vector and vector borne disease prevalence and emergence emphasizes the need to understand and enhance STLT vector control program capacity and services.

There are two primary purposes for the EnvPHPS assessment:

- 1.) Inform on STLT vector control program activities/services and capacity to perform the 10 Essential Services. This information is essential to understanding the current status of STLT vector control programs and where need for program support/development may exist.
- 2.) Identify service gaps for inclusion in STLT vector program quality improvement plans.

The assessment results will be used by PHF and CDC to help develop and implement quality improvement plans for STLT vector control programs. This is intended to increase program efficiency, effectiveness, and ability to respond to emerging vector concerns. PHF and CDC will also develop and make available case studies and guidance materials based on the STLT vector control program assessment processes, results, and quality improvement activities. Results will be submitted for peer-reviewed journal publication. Identifiable information for any of the STLT vector control programs will only be published with permission of the participant.

Privacy Impact Assessment

STLT vector control program staff will be speaking from their official roles and will not be asked to provide individually identifiable information other than their name and work contact information.

No sensitive information is being collected. Respondents are participating in their official capacity as officials in STLT public health departments. CDC and PHF will only collect information on the provision of vector control program services.

3. Use of Improved Information Technology and Burden Reduction

An online method was not selected since the EnvPHPS self-assessment is a standardized process that has been tested and is intended for use in a group setting (see **Attachment G—EnvPHPS Descriptive Column**). It has been shown to be used successfully within environmental health departments and programs to assess and improve performance.⁶ The group facilitated self-assessment methodology was chosen over other methods because it allows for collaborative and in-depth discussion among participants who can collectively identify their vector control program strengths and weaknesses in delivering the 10 Essential Environmental Public Health Services and hear one another's opinions. The self-assessment instrument is provided as an electronic Word document so that group participants can easily record scores on a laptop or computer during the group self-assessment process. Once completed, participants will email instrument and discussion notes to CDC and PHF.

4. Efforts to Identify Duplication and Use of Similar Information

The EnvPHPS is the only methodology specific to environmental public health programs and assessment of their capacity to deliver the 10 essential environmental public health services. Review of peer reviewed literature indicates that there have been no past efforts to systematically describe STLT vector control programs and their capacity to deliver the 10 essential services using a standardized methodology.

5. Impact on Small Businesses or Other Small Entities

No small businesses will be involved in this information collection.

6. Consequences of Collecting the Information Less Frequently

The purpose of this request is to collect information that is not otherwise available in current, time sensitive or relevant formats to specific or emergent priorities of CDC. Specifically, without this information, CDC will have:

- Incomplete understanding of STLT vector control program services and activities and their capacity to deliver essential environmental public health services.
- Reduced ability in supporting STLT vector control programs to develop and improve their capacity and ability to respond to emerging vectors and vector borne disease.

This request is for a one-time information collection. There are no legal obstacles to reduce the burden.

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

There are no special circumstances with this information collection package. This request fully complies with the regulation 5 CFR 1320.5 and will be voluntary.

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

This information collection is being conducted using the Generic Information Collection mechanism of the OSTLTS OMB Clearance Center (O2C2) – OMB No. 0920-0879. A 60-day Federal Register Notice was published in the Federal Register on October 31, 2013, Vol. 78, No. 211; pp. 653 25-26. No comments were received.

CDC partners with professional STLT organizations, such as the Association of State and Territorial Health Officials (ASTHO), the National Association of County and City Health Officials (NACCHO), and the National Association of Local Boards of Health (NALBOH) along with the National Center for Health Statistics (NCHS) to ensure that the collection requests under individual ICs are not in conflict with collections they have or will have in the field within the same timeframe.

9. Explanation of Any Payment or Gift to Respondents

CDC will not provide payments or gifts to respondents.

10. Assurance of Confidentiality Provided to Respondents

The Privacy Act does not apply to this data collection. Employees of state and local public health agencies will be speaking from their official roles and will not be asked, nor will they provide individually identifiable information.

11. This data collection is not research involving human subjects. Justification for Sensitive Questions

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

12. Estimates of Annualized Burden Hours and Costs

The EnvPHPS self-assessment instrument was pilot tested by 8 environmental public health professionals. Feedback from this group was used to refine questions as needed and establish the estimated time required to complete the self-assessment instrument. The average time to complete the self-assessment, including time for reviewing instructions, gathering needed information, and completing the instrument, is approximately 120 minutes. The estimated time range for actual respondents to complete the instrument is 60-180 minutes. For the purposes of estimating burden hours, the upper limit of this range (i.e., 180 minutes) is used.

Estimates for the average hourly wage for respondents are based on the Department of Labor (DOL) National Compensation Survey estimate for management occupations – medical and health services managers in state government (<http://www.bls.gov/ncs/ocs/sp/nctb1349.pdf>). Based on DOL data, an average hourly wage of \$45 is estimated STLT vector control program staff. Table A-12 shows estimated burden and cost information.

Table A-12: Estimated Annualized Burden Hours and Costs to Respondents

Data Collection Instrument: Form Name	Type of Respondent	No. of Respondents	No. of Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
EnvPHPS Self-assessment	State, tribal, local or territorial (STLT) Vector Control Program staff	80	1	3	240	45	10800
	TOTALS	80	1		240		10800

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 each information collection.

14. Annualized Cost to the Government

A cooperative agreement project with PHF is in place. PHF will oversee the EnvPHPS self-assessments, collection of information, and subsequent quality improvement activities. There will be no additional cost above the funds provided to PHF through the cooperative agreement. The costs to the government include the cost of the cooperative agreement and the CDC technical monitor's time while overseeing the tasks in partnership with PHF. The estimated costs reflect 100 hours of a CDC FTE US Public Health Service Commissioned Officer at the O-4 pay scale for oversight of the project.

Table A-14: Estimated Annualized Cost to the Federal Government

Staff (FTE)	Average Hours per Collection	Average Hourly Rate	Average Cost
CDC Technical Monitor USPHS CO O-4: Project oversight	100	43	4300
PHF Cooperative Agreement Project: Collection of information and subsequent quality improvement activities	0	0	101250
Estimated Total Cost of Information Collection			105550

15. Explanation for Program Changes or Adjustments

This is a new information collection.

16. Plans for Tabulation and Publication and Project Time Schedule

Once the information has been collected, it will be analyzed by quantitative methods and qualitative thematic analyses. CDC and PHF will perform the analysis using Microsoft Excel. The analysis will consist of simple descriptive statistics and qualitative analysis.

Participants will receive a site-specific vector control program assessment report and quality improvement plan. Collected information will be used to develop site specific assessment reports, quality improvement plans, and case studies. Project description and results will be published in a peer-reviewed journal. Identifiable information for any of the STLT vector control programs will only be published with permission of the participant program.

Project Time Schedule

- ✓ Design questionnaire..... (COMPLETE)
- ✓ Develop protocol, instructions, and analysis plan..... (COMPLETE)
- ✓ Pilot test questionnaire..... (COMPLETE)
- ✓ Prepare OMB package..... (COMPLETE)
- ✓ Submit OMB package..... (COMPLETE)
- OMB approval..... (TBD)
- Gather responses..... (performance assessments will be completed within 4 weeks)
 - Reminder email if no response 7 days before the assessment deadline
- Collect, code, quality control, and analyze data..... (3 weeks)
- Disseminate results/publication of findings..... (4 weeks)

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

We are requesting no exemption.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification. These activities comply with the requirements in 5 CFR 1320.9.

LIST OF ATTACHMENTS – Section A

Note: Attachments are included as separate files as instructed.

- A. West Nile Virus Cases 1999-2013**
- B. Vector Control Capacity**
- C. Impact of Environmental Health Budget Cuts**
- D. State Vector Control Needs Assessment Report**
- E. NPHPSP Fact Sheet**
- F. EnvPHPS and Performance Improvement Column**
- G. EnvPHPS Descriptive Column**
- H. Self-assessment Instrument**

REFERENCE LIST

1. Centers for Disease Control and Prevention (CDC). "National Public Health Performance Standards Program (NPHPSP): 10 Essential Public Health Services." Available at <http://www.cdc.gov/nphpsp/essentialservices.html>. Accessed on 8/14/14.
2. National Profile of Local Health Departments. (2013). National Association of County and City Health Officials. <http://www.naccho.org/topics/infrastructure/profile/upload/2013-National-Profile-of-Local-Health-Departments-report.pdf>
3. Profile of State Public Health, Volume 3. Association of State and Territorial Health Officers. 2012. <http://www.astho.org/Profile/Volume-Three/>
4. Institute of Medicine. 1988. *The future of public health*. Washington, DC: National Academies Press.
5. Ten Essential Environmental Public Health Services. Centers for Disease Control and Prevention. <http://www.cdc.gov/nceh/ehs/Home/HealthService.htm>
6. Barron, G., Glad, J., Vukotich, C. (2007). The use of the National Public Health Performance Standards to evaluate change in capacity to carry out the 10 essential services. *Journal of Environmental Health*, 70 (1): 29-31.