

Assessment of Local Health Departments' Interventions to Address TB among Persons Experiencing Homelessness

OSTLTS Generic Information Collection Request
OMB No. 0920-0879

Supporting Statement – Section A

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Section A – Justification

1. Circumstances Making the Collection of Information Necessary

Background

This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. The respondent universe for this data collection aligns with that of the OSC. Data will be collected from state and local public health Tuberculosis (TB) control program staff and their designees acting in their official capacities.

In the United States, 1% of persons experience homelessness in a given year, but 6% of persons with TB are homeless and they represent a much larger proportion of persons who are involved in TB outbreaks. (1,2) In recent TB outbreaks investigated by CDC involving a total of 398 persons, 78 or 20% of the persons were homeless. In one outbreak, all 31 persons with TB were linked to a single homeless shelter. CDC recently instituted a new surveillance system for detecting aberrations in TB genotype clusters; this system continuously scans TB patient reports for statistical anomalies that indicate possible outbreaks. The 30 TB clusters with the highest aberration scores involved a total of 490 TB patients, of whom 184 (38%) were homeless. Analysis has shown that if even one of the first three persons in a TB cluster is homeless, the risk that the cluster will grow is 92%. (3) These findings are not surprising, given that the high prevalence of substance use and the crowded conditions in congregate settings, like shelters, are conducive to explosive transmission of TB and that persons experiencing homelessness often lack ready access to the medical care required to make an early diagnosis of TB. (4,5)

Implementing effective TB control interventions among homeless persons is challenging, but several success stories prove that the challenges can be overcome. The Denver Public Health Department implemented a mandatory TB infection screening program conducted on-site at homeless shelters; officials concluded that the program led to a 49% decrease in TB transmission (official correspondence). The Tarrant County Health Department in Fort Worth, Texas, installed mobile chest x-ray machines at community-based organizations (CBOs), conducted TB skin testing, and had physicians available on-site to evaluate TB suspects. During the 28 months the program was conducted, 44 cases of TB were detected and treated, and the incidence of TB dropped more than 10 fold, from 28.5 cases to 2.4 cases per 1000 clients. (6) An economic analysis of this screening program concluded that it cost \$14,350 to prevent one TB case. (7) Ensuring completion of treatment for TB infection has been a widespread challenge, and many TB programs do not screen homeless persons for TB infection because of expected low rates of treatment completion. One successful approach, however, has been to provide incentives in conjunction with directly observed therapy. (8) Despite these isolated successes, interventions are resource-intensive and difficult to sustain, especially without more generalizable scientific evidence demonstrating the effectiveness of interventions.

The Division of Tuberculosis Elimination (DTBE) last published formal guidance on addressing TB among homeless persons in 1992. (9) (**Attachment A**) While these guidelines recommend a valid framework for TB control program activities, the current milieu presents new and different challenges to controlling TB among persons experiencing homelessness. In addition, advances in TB control and changing diagnostic and treatment strategies have not been incorporated into this guidance. For example, there has been some evidence that the use of a blood test (interferon gamma release assay) rather than the tuberculin skin test for screening for TB infection can improve acceptability and reduce cost for the health department (internal reports). It is unclear at this time, how many state and local TB control programs have been able to implement the use of the blood test for this population.

There has been no previous systematic collection of information regarding practices adopted by state and local public health jurisdictions to address TB among persons experiencing homelessness. Given that there are examples of successful interventions that may prove to be best practices; our objective is to better understand the current perception of the problem and interventions being used to address this problem.

In response to an Advisory Committee for the Elimination of Tuberculosis (ACET) resolution, the Outbreak Investigations Team within the Surveillance, Epidemiology, and Outbreak Investigations Branch has been charged with developing updated guidance to best address TB among persons experiencing homelessness. In an effort to develop new guidelines, an extensive literature review demonstrated the lack of supporting evidence upon which to base official CDC guidelines. Thus, it was determined that the most efficient approach would be for the DTBE to develop and disseminate best practices. To implement ACET recommendations and develop best practices, it is necessary to evaluate the current practice of TB control among persons experiencing homelessness among local public health programs. It is also important to understand the TB knowledge, perception, and practices among TB control staff members and health care providers of this population of patients.

The Outbreak Investigation Team (OIT) in DTBE requests approval for a new information package under the approved generic ICR that supports quick assessment of program impact. OIT interfaces with public health departments primarily after outbreaks have been detected; this information will help to understand the baseline level of programming targeted toward this unique population with the hopes of helping to inform best practices, implement better TB control strategies, and prevent TB outbreaks.

Information for this collection will be provided by local public health department TB control program staff members; state TB control programs receive funds through DTBE cooperative agreements and thus provide funds for each county within their state. TB control programs that have reported 15 or more cases of TB with at least 1 case of TB among a homeless

person within the last 3 years will be given the opportunity to provide information. Results will be presented to TB controllers through various dissemination products (e.g., abstracts, presentations, manuscript).

This data collection is authorized by Section 301 of the Public Health Service Act (42 U.S.C. 241).

Privacy Impact Assessment

Overview of the Data Collection System – The data collection system consists of a data collection instrument (see **Attachment B**) designed to elicit information from public health TB control program staff or their designees regarding their perceptions and TB control practices specifically regarding TB in persons experiencing homelessness. The data collection instrument will be distributed using SurveyMonkey@ software by emailing potential respondents a link to the instrument. The email will contain instructions for completing the instrument online. Respondents will also be given the choice of filling in a hard copy version of the instrument that can be returned by either email or fax. The data collection instrument was piloted by five TB control program staff members. Feedback from this group was used to refine questions as needed and establish the estimated time required to complete each data collection instrument.

Items of Information to be Collected – The data collection instrument consists of 30 questions with multiple responses for selection. Respondents will be informed to select either one or multiple responses that apply. Some selections are formatted for open-ended responses. The data collection instrument will collect information on the following:

- a. Demographics and control program characteristics
- b. Perception and assessment of TB among homeless persons as a problem
- c. Outbreak history and current assessment of potential for outbreaks
- d. Communication and involvement with health care for the homeless providers and shelters
- e. Screening for TB among persons experiencing homelessness
- f. TB control program interventions
 1. Housing as a TB control program intervention
 2. Use of incentives

No individually identifiable information is being collected.

Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age – This information collection does not involve websites or website content directed at children less than 13 years of age.

2. Purpose and Use of the Information Collection

The purpose of this data collection is to understand current TB control practices of local public health jurisdictions that have reported 15 or more TB cases and at least 1 case of TB in a homeless person in the last 3 years. Secondary objectives are listed here:

1. Describe state and local TB control program staff member's current perception of TB among persons experiencing homelessness;
2. Understand the current level of interaction between TB control programs and local health care for the homeless providers and other homeless service agencies.
3. Understand how the occurrence of a TB outbreak among persons experiencing homelessness may affect TB control practices and the level of interaction between TB control programs and local homeless service providers.

The data collected will be used to inform DTBE of current perceptions and practices in local TB control programs. From the national perspective, TB among the homeless remains an important reservoir of U.S.-born TB cases. Increasingly, DTBE is requested to be involved in the investigation and response to outbreaks of TB among the homeless. These outbreaks are often as a result of recent transmission and local jurisdictions are in need of recommendations to interrupt transmission. DTBE hopes to work with partner agencies such as, National Health Care for the Homeless (NHCHC) and the National TB Controller's Association (NTCA) to publish best practices and help local jurisdictions implement these best practices in jurisdictions that continue to see TB among homeless persons. Having an understanding of the baseline perceptions and current practices will help DTBE to author the most useful best practices.

Privacy Impact Assessment

Information will be collected electronically. CDC will not receive any personally identifiable information. Respondents are participating in their official capacity as health officials in state (or District) and county departments of health.

3. Use of Improved Information Technology and Burden Reduction

Data collection will be conducted by using a web-based instrument, using SurveyMonkey@ software allowing respondents to complete and submit their responses electronically. This method was chosen to reduce the overall burden on respondents. The data collection instrument was designed to collect the minimum information necessary for the purposes of this project (i.e., limited to 30 data collection instrument questions). Web-based data collection reduces respondent burden by enabling easy access and completion at a convenient time and location. The online data collection will consist of either easy-to-read response selections or embedded text boxes. Skip patterns will be programmed into the instrument to direct respondents to appropriate questions. The data collection instrument was designed to collect the minimum information necessary for the purposes of this project.

4. Efforts to Identify Duplication and Use of Similar Information

The information being collected is specific to TB control among homeless persons. There are no other data collection systems available for assessment of these programs. In addition, a review of the literature did not reveal any similar efforts to describe best practices in addressing TB among persons experiencing homelessness in public health programs.

5. Impact on Small Businesses or Other Entities

No small businesses will be involved in this data collection.

6. Consequences of Collecting the Information Less Frequently

The purpose of CDC's request for this generic clearance is to ensure collection of data that is not otherwise available. Specifically, without this data there would be:

- No timely feedback regarding the impact of CDC's dissemination of best practices. It is necessary to understand the current scope of services in order to ultimately measure impact of CDC's interventions.
- Potentially less effective dissemination of our materials
- Incomplete understanding of the barriers of the adoption of interventions.
- Reduced ability to fully promote the adoption of best practices which has the ability to save lives.

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

This data collection is an essential step in confirming and drafting best practices of addressing TB among homeless persons. Obtaining this information is crucial to measuring the outcomes of local public health department interventions in addressing TB among homeless persons. As we approach TB elimination in the United States, TB among homeless persons represents an important reservoir of infection and incident cases. Homeless persons are particularly vulnerable to TB infection and disease.

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.

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

This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. A 60-day Federal Register Notice was published in the Federal Register on October 22, 2010, Vol. 75, No. 204; pp. 65353-54. Two comments were received from the Association

of State and Territorial Health Officials (ASTHO), and the National Association of County and City Health Officials (NACCHO).

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.

This data collection is not research involving human subjects.

11. Justification for Sensitive Questions

No sensitive information will be collected.

12. Estimates of Annualized Burden Hours and Costs

The estimate for burden hours is based on a pilot test of the data collection instruments by 5 TB control program staff members or their designees.

In the pilot test, the average time to complete the data collection instrument including time for reviewing instructions, gathering needed information and completing the data collection instrument, was approximately 15 minutes. Based on these results, the estimated time range for actual respondents to complete the data collection instrument is 15-20 minutes. For the purposes of estimating burden hours, the upper limit of this range (i.e., 20 minutes) is used for completion of the data collection instrument.

The data collection instrument will be sent to 220 local public health jurisdictions, in 43 states (see **Attachment D**). The Division of TB Elimination maintains a database of all reported and verified cases of tuberculosis within the United States. This information is maintained within the National TB Surveillance System (NTSS). Information is reported to the NTSS via web-based data entry and uploaded without identifiable information to the national system through the Report of Verified Case of TB (RVCT). The RVCT includes information on whether a patient with TB is considered homeless. The RVCT incorporates the official definition of homeless based on the U. S. Housing and Urban Development (HUD) definition¹. A TB patient is considered homeless if they have been without stable

housing (according to the HUD definition) any time within a 12-month period prior to diagnosis. The CDC project officer and epidemiologist queried the NTSS to determine how many counties reported 15 or more TB cases and at least one case of TB in a person that qualified as homeless during 2009 through 2011.

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 \$57.11 is estimated for all 220 respondents. Table A-12 shows estimated burden and cost information for each respondent or their designee to complete the data collection instruments.

Table A-12: Estimated Annualized Burden Hours and Costs to Respondents – TB among the Homeless Data Collection Instruments

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
TB program controller or program designee	220	1	20/60	73	\$57.11	\$4,169.03
TOTALS	220	1	20/60	73	\$57.11	\$4,169.03

¹ Homeless is defined as having one of the following:

No fixed, regular, and adequate nighttime residence; primary nighttime residence was publicly or privately operated shelter; institution that provides temporary residence; building not designated for, or ordinarily used as, regular sleeping accommodation for human beings; or alternating between multiple residences.

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

There will be no direct costs to the respondents other than their time to participate in each data collection instrument.

14. Annualized Cost to the Federal Government

There are no equipment or overhead costs. Contractors are not being used to support this data collection. The only cost to the federal government would be the salary of CDC staff supporting the data collection activities and associated tasks.

The lead staff from the OIT for this project consists of a medical officer, an epidemiologist, and the Team Lead from the Outbreak Investigation Team. The lead staff will collect the data, code, enter, and prepare the data for analysis, conduct data

analyses and prepare the assessment report. Hourly rates of \$53.48 for GS-13, \$61.43 for the medical officer and team lead were used to estimate staff costs. The estimated cost to the federal government is \$37,450.02. Table A-14 describes how this cost estimate was calculated.

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

Staff (FTE)	Average Hours per Collection	Average Hourly Rate	Average Cost
Medical Officer (O-5) Instrument development, pilot testing, OMB package preparation, data collection, data coding and entry, quality control, data analysis, report preparation	500 hours	\$61.43	\$30,715.00
Medical Officer (O-4), Team lead, Outbreak Investigations Team Instrument development, report preparation and revision	40 hours	\$61.43	\$2,457.02
Epidemiologist (GS-13) Instrument development, data analysis, report preparation consultation.	80 hours	\$53.48	\$4,278.00
Estimated Total Cost of Information Collection			\$37,450.02

15. Explanation for Program Changes or Adjustments

This is a new data collection.

16. Plans for Tabulation and Publication and Project Time Schedule

CDC lead staff will externally communicate results to health officials representing the National TB controller’s association and the National Health Care for the Homeless Council. Concurrently, results of this data collection will be prepared for publication in a peer-reviewed journal.

Project Time Schedule

- Develop data collection instrument, instructions, and analysis plan.....June 2013
- Pilot test questionnaire.....July 1–9, 2013
- Prepare OMB package..... July 15, 2013
- Submit OMB package..... August 1, 2013
- OMB approval..... August 15, 2013
- Conduct data collection.....September 2013
- Collect, code, enter, quality control, and analyze data.....October–December 2013
- Prepare report..... January–March 2014
- Disseminate results/reports..... March 2014

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

CDC does not request exemption from display of the OMB expiration date.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification.

LIST OF ATTACHMENTS – Section A

Note: Attachments are included as separate files as instructed.

- A. ACET Guidelines: Preventing TB among Homeless Persons**
- B. Data Collection Instrument (word version)**
- C. Web Screen Shot: Data Collection Instrument**
- D. List of jurisdictions to be included (counties)**

References

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4. Hwang SW, Ueng JJ, Chiu S, et al. Universal health insurance and health care access for homeless persons. *Am J Public Health*. 2010;100(8):1454–61. Epub 2010 Jun 17.
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9. Centers for Disease Control and Prevention. Prevention and Control of Tuberculosis Among Homeless Persons Recommendations of the Advisory Council for the Elimination of Tuberculosis.. *MMWR* 1992;41(RR-5).