

B. Collections of Information Employing Statistical Methods

This section provides statistical information on the proposed collection of data from HUD Lead Hazard Control grantees to support a review of the Federal dust-lead standards. The information is organized according to OMB guidance for Section B of the information collection request.

1. Respondent Universe and Sampling Plan

Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

The respondent universe is HUD's Lead Hazard Control (LHC) grantees, that includes the Lead-Based Paint Hazard Control (LBPHC) grantees and the Lead Hazard Reduction Demonstration (LHRD) grantees, with awards made using fiscal year (FY) 2010, 2011 or 2012 funding. There are 116 grantees in this universe. Because the universe is small, and it is important to capture the full range of grantee experience meeting dust clearance standards, HUD proposes to conduct a census, i.e., all 116 grantees will be asked to participate. A response rate of at least 85% is anticipated for several reasons:

- Grantees are required, as a condition of the NOFA under which their awards were made, to participate in HUD-funded research or evaluation studies.
- Most, if not all, grantees plan to seek additional HUD grants in the future and, therefore, have an incentive to cooperate with HUD's information collection activities
- The estimated burden on grantees is reasonable – approximately 16 hours of staff and/or subcontractors' time distributed over a response period of 15 business days.
- An information collection conducted in 2013, "HUD Lead Hazard Control Grantees Regarding Their Use of Healthy Homes Supplemental Funding", achieved a response rate of 95% after follow-up by HUD OHHLHC and the contractor.

As noted in the response to Part A of this Supporting Statement (see: 2.d Data Analysis Plan) the houses included in the survey are not considered a representative estimate of the population that would be affected by the EPA rulemaking. This housing, because it is targeted by HUD Lead Hazard Control program grantees, is more likely than the general housing population to have dust-lead hazards. The housing is also expected to be older and in poorer condition than the general housing population. This is an important distinction because older (i.e., primarily pre-1950) housing that has significant amounts of LBP and is in poorer condition represents the greatest challenge for achieving successful clearance following completion of lead hazard control activities. The approximately 116 grantees that will be surveyed are located in 37 states and in FY 2013 conducted interventions in approximately 12,000 homes, representing a wide range of housing types. HUD grantees have extensive knowledge of the housing stock in their communities and they target the homes that have been known to be connected with or which pose the highest risk of lead poisoning.

It would be prohibitively costly (and we believe unnecessary) to create a sample frame and conduct a survey that is representative of all of the housing that would be potentially affected if the current federal dust-lead standards were changed.

2. Procedures for the Collection of Information

Describe the procedures for the collection of information including:

- * *Statistical methodology for stratification and sample selection,*
- * *Estimation procedure,*
- * *Degree of accuracy needed for the purpose described in the justification,*
- * *Unusual problems requiring specialized sampling procedures, and*
- * *Any use of periodic (less frequent than annual) data collection cycles to reduce burden.*

Statistical methodology for stratification and sample selection

All FY 2010, 2011 and 2012 Lead Hazard Control and Lead Hazard Reduction Demonstration grantees will be asked to participate. HUD OHHLHC will randomly select 20 of the last 100 homes¹ that received interventions and clearance testing by the grantees. HUD will randomly select these homes from the list of addresses submitted by each grantee as part of their quarterly reporting requirements in OHHLHC's Quarterly Progress Reporting System (QPRS). The questionnaire will be provided to the grantees in a spreadsheet format that will facilitate responses (e.g. drop-down menus will be provided for individual responses where appropriate). This will provide HUD with responses based on a review of approximately 2,000 individual records. The random selection of homes for each grantee (20 of the last 100 or 20% of all homes) provides a stratified simple random sample (SRS) of homes in a "recently completed" group (the lesser of the last 100 homes or all homes, per grantee). All homes in the group have the same probability of selection. When the grantees differ significantly in performance, stratification by grantee provides a more precise estimate of the overall percentage of homes with a specified characteristic (e.g., cleared at below 20 $\mu\text{g}/\text{ft}^2$) than an overall SRS of homes,

Estimation procedure

Estimates of the percent of grantees meeting various possible dust clearance standards for floors and window sills using different cleaning methods will be produced. Separate estimates will also be made by such factors as floor and window surface condition, housing age, type of dwelling and type of grantee organization. Simple (unweighted) percentages will provide unbiased estimates, because each home has the same probability of selection. Confidence intervals for estimated percentages will be calculated by combining variances for each grantee in the stratified SRS.

Degree of accuracy needed for the purpose described in the justification

The purpose of the information collection is to provide data on the lead-dust clearance levels for floors and window sills that are being routinely achieved by HUD's Lead Hazard Control Program grantees and to identify factors (work practices) that affect the grantees' ability to attain clearance. Previous studies indicate that low dust-lead clearance levels can be routinely achieved. HUD's LHC grantees include agencies that have received multiple grants since the program's inception in FY 1993 as well as agencies that are implementing their first grants. The grantees have a wide geographic distribution and conduct interventions in a broad range of housing types. The housing is required to be of pre-1978 construction, and tends to be older (e.g., pre-1950) and has known lead-based paint hazards (i.e., housing that presents a significant lead exposure risk). Because the housing targeted by HUD grantees is more likely than the general housing population to have dust-lead hazards, HUD and EPA consider it an excellent population of housing for providing an indication of the feasibility of achieving different dust-lead clearance levels.

¹ If a grantee has treated and cleared fewer than 100 housing units, 20% of the units will be randomly selected.

HUD and EPA will use the estimates described above under “Estimation procedure” to determine the clearance levels that are currently being routinely achieved by grantees and what work practices are being conducted to achieve these levels. As indicated previously, estimates will be unbiased and will have variance no greater than the corresponding SRS. For example, the percentage of homes cleared to below, e.g., $20\mu\text{g}/\text{ft}^2$, will be estimated to within less than +4.5% with 95% confidence. This level of accuracy is sufficient for the purposes of this study. If possible, HUD will use the results to provide grantees with guidance on how they can more effectively clean surfaces in preparation for clearance testing and the results will be useful for EPA’s review of the current standards.

Unusual problems requiring specialized sampling procedures

None. The stratified SRS proposed is a standard procedure, easy to implement.

Any use of periodic (less frequent than annual) data collection cycles to reduce burden

Not applicable. This is a one-time data collection.

3. Methods for Maximizing Response Rates and Dealing with Nonresponse

Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

Methods to maximize response rates

As mentioned under B.1 above, respondents have an incentive to cooperate with this information collection because they are required to do so as a condition of their funding, and because they are likely to seek future HUD funding. A cover letter from the OHHLHC Programs Division Director, who has management oversight of all OHHLHC LBPHC and LHRD grants, will be sent to each respondent to explain the purpose of, and authority for, the data collection and to encourage response. The grantees will be given approximately 3 weeks to respond, which should be more than sufficient. To facilitate grantee responses, the questionnaire will be provided to them in electronic spreadsheet format. The electronic questionnaire will guide respondents through the flow of data and will inform them if they omit a question or provide an unreasonable answer or one incompatible with a previous response. Each grantee’s Government Technical Representative (GTR) on the OHHLHC staff will follow-up with the grantee about one week before the due date to encourage responding and answer questions grantees may have regarding this information collection. The survey contractor staff will also be available by email and telephone to answer any questions respondents may have regarding this collection.

Respondents will be able to suspend answering the questionnaire (and return to it later without losing information provided) if they need to attend to other work or need to compile data to answer some questions. HUD OHHLHC and the contractor will follow up by e-mail and telephone with any grantees that do not respond to the survey within the specified time.

Dealing with nonresponse

Grantees who do not respond to the questionnaire within the specified time period will be contacted by the survey contractor by e-mail and/or telephone to inquire about perceived obstacles, offer solutions, and encourage them to participate. Grantees who still do not respond will be referred to their GTRs for further contact. The GTRs will also ask about obstacles and offer solutions as appropriate. Item nonresponse will be minimized by follow-up with grantees.

Adequacy of accuracy and reliability of information collected for intended purposes

As discussed under B.2 above, HUD intends to obtain information on the lead dust clearance levels for floors, window sills, and window troughs that programs are routinely achieving using current work practices. The use of records randomly selected by HUD OHHLHC and an electronic questionnaire to facilitate responses will help to ensure the accuracy and reliability of responses. The housing targeted by the grantees varies considerably in type and geographic distribution and will all have documented lead-based paint hazards. Therefore the data collection will provide important information for HUD on this topic and will be useful for the EPA's review of the current standards for clearance regarding floors, window sills, and window troughs.

4. Test of procedures

Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of test may be submitted for approval separately or in combination with the main collection of information.

A pilot test was conducted using an earlier paper version of the questionnaire that was provided to two experienced grantees. Their responses were evaluated and modifications to the questionnaire were made to prevent errors or misunderstandings. The current electronic version of the questionnaire/spreadsheet will be pilot tested with 5 grantees before it is used in the full study. Modifications to the programming will be made as necessary.

As a quality control check after data collection, HUD OHHLHC will review the results by asking 22 randomly selected grantees to submit full copies of three (3) specific case files (randomly selected by HUD). HUD will then check the data against the records in the files to insure accuracy. The decision to target a sample of 22 grantees for the audit is based on a statistical estimate that this would provide a 90% probability of detecting a systematic error by 10% or more of the respondents. HUD will then check the data against the records in the files to insure accuracy. If isolated problems are identified, the grantees will be asked to correct their submittals. If any systematic errors are identified (e.g., interpreting a question differently than what was intended), the grantees will be asked to correct their submittals and the issue will be communicated to other grantees, if necessary, to ensure the accuracy and uniformity of responses.

5. Consultations and the Project Team

Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Individuals consulted on statistical aspects of the design

David C. Cox, Ph.D.

QuanTech

(240)397-2993

Frederick G. Dewalt, Ph.D.

QuanTech

(610) 255-5525

Contractors responsible for collecting information for the Department

Contractor Name: QuanTech, Inc. Contact: David Cox
Contractor Address: 6110 Executive Blvd Suite 480
Rockville MD 20852
(240)397-2993

Contractors responsible for analyzing information for the Department

Contractor Name: QuanTech, Inc. Contact: David Cox
Contractor Address: 6110 Executive Blvd Suite 480
Rockville MD 20852
(240)397-2993