**Technical Assistance Brief:**

**Assessing Lead-Based Paint Hazard Control Treatment Post-Remediation**

Attachment B.1: Suggested Methods for Analyzing Visual Assessment Data   
of Paint Condition and Windows at Baseline and Post-Remediation Time Intervals

This document outlines the types of analyses state and local childhood lead poisoning prevention programs can do to compare visual assessment data at baseline and post-remediation time intervals. This document uses the visual assessment and data entry templates provided in attachments B.2 and B.3 as examples to describe the possible analyses. Note that, rather than using the templates, you should use your own assessment forms and protocols as desired for this type of evaluation. If you are using your own assessment forms, this document can still help to identify various statistics you can use to compare your baseline and post-remediation data.

**Summary of Data Collected:**

* If using the visual assessment template from Attachment B.2, you assess six component systems in each room: (1) walls/ceiling, (2) floors/stairs, (3) trim, (4) doors, (5) interior windowsills and sashes, and (6) window troughs, jambs, and exterior sashes. For each room and component system, rate the paint condition 0 = No paint, 1 = All paint intact, or 2 = Some paint not intact. *Note that the exterior counts as a “room.”*
* In each room, count the number of windows and number of replacement windows. Note that windows go with the interior room not the building exterior.
* In addition to the six component systems, we consider two other combined component systems:
  + Windows: Non-intact paint on either (a) interior windowsills and sashes, or (b) window troughs, jambs, and exterior sashes.
  + Any component in room: Non-intact paint in any of the six component systems assessed.

**Step 1: Compile data for each housing unit for each period:**

* Component-level calculations: For each component system in a given unit at a given time, calculate the number of rooms that are assessed for that component system, number of rooms with any non-intact paint on that component system, percentage of rooms with any non-intact paint on that component system, and whether any rooms have non-intact paint on that component system (see Table 1 for example).
* Number of windows and replacement windows: Calculate the number of windows and number and percentage of replacement windows in each unit.

**Table 1: Component-Level Summary for Each Unit and Period Considered**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Statistic | Component System | | | | | | | |
| Walls/ ceiling | Floors/ stairs | Trim | Doors | Window interior sills and sashes | Window troughs, jambs, and exterior sashes | WindowsA | Any component  in room |
| Row 2: Number of rooms assessed for component |  |  |  |  |  |  |  |  |
| Row 3: Number of rooms with non-intact paint on component |  |  |  |  |  |  |  |  |
| Row 4: Percentage of rooms with non-intact paint on component |  |  |  |  |  |  |  |  |
| Row 5: Any rooms with non-intact paint on component (Yes/No) |  |  |  |  |  |  |  |  |

A = Combining window interior sills and sashes with window troughs, jambs, and exterior sashes

**Step 2: Compile data across all housing units for each period (e.g., baseline and post-remediation):**

* Table 2 contains an example of how to compile the window data for all housing units assessed at each period.
* Table 3 contains an example of how to compile the paint condition data for all housing units assessed at each period. For each of the statistics calculated in Table 2, you can calculate the average (arithmetic mean), minimum, and maximum values.

**Table 2: Replacement and Non-Replacement Windows for Each Period Considered**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of Window | Number per Unit | | Percentage per Unit | |
| Range (Minimum, Maximum) | Average | Range (Minimum, Maximum) | Average |
| All Windows |  |  |  |  |
| Replacement Windows |  |  |  |  |
| Non-Replacement Windows |  |  |  |  |

**Table 3: Paint Condition Results for Each Period Considered**

| Characteristic | Statistic | Component | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Walls/ ceiling | Floors/ stairs | Trim | Doors | Window interior sills and sashes | Window troughs, jambs, and exterior sashes | WindowsA | Any component in room |
| Number of rooms assessed | Total number of rooms assessed with specific component  *(From Table 1, row 2: Sum across all units)* |  |  |  |  |  |  |  |  |
| Range  (Minimum, Maximum)  *(From Table 1, row 2: Minimum and maximum across all units)* |  |  |  |  |  |  |  |  |
| Average  *(From Table 1, row 2: Average of all units)* |  |  |  |  |  |  |  |  |
| Number of Rooms with non-intact paint1 on specific component | Total  *(From Table 1, row 3: Sum across all units)* |  |  |  |  |  |  |  |  |
| Range  (Minimum, Maximum)  *(From Table 1, row 3: Minimum and maximum across all units)* |  |  |  |  |  |  |  |  |
|  | Average  *(From Table 1, row 3: Average of all units)* |  |  |  |  |  |  |  |  |
| Percentage of Rooms with non-intact paint on specific component | Range  (Minimum, Maximum) *(From Table 1, row 4: Minimum and maximum across all units)* |  |  |  |  |  |  |  |  |
| Average  *(From Table 1, row 4: Average of all units)* |  |  |  |  |  |  |  |  |
| Any non-intact paint on specific component | Total  *(From Table 1, row 5: Count the number of “Yes” replies across all units)* |  |  |  |  |  |  |  |  |
| Total  *(From Table 1, row 5: Percentage of “Yes” across all units)* |  |  |  |  |  |  |  |  |

A = Combining window interior sills and sashes with window troughs, jambs, and exterior sashes

**Step 3: Compare the results of the baseline and post-remediation periods:**

* At this point, you should have a separate version of tables 2 and 3 for each period (baseline and post-remediation).
* Compare the information in the tables for the two periods (baseline and post-remediation) by considering such questions as:
  + What is the average number of rooms with non-intact paint on any component at the two periods?
  + What is the average number of rooms with non-intact paint on specific components at the two periods? Does it appear that paint on certain components (e.g., walls and ceilings) is intact in more rooms compared with other components (e.g., doors and windows) at post-remediation? What lessons does this provide for your existing protocols?
  + What percentage of rooms have non-intact paint on any component at the two periods? Do you notice large differences in the percentage of rooms with non-intact paint on certain components at the two periods?