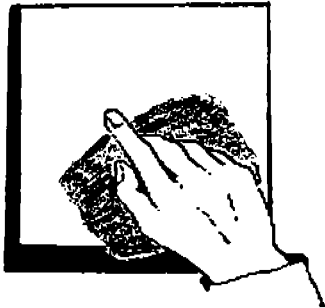




Just the Facts

93-006-1294

Lead Dust Sampling in Residential Facilities



Why It Is Important to Sample Dust for Lead

Lead-bearing dust is a major source of lead exposure to children. The lead in dust may come from sources such as lead-based paint (LBP) or lead-contaminated soil. Army policies (references 1 and 2) incorporate lead-bearing dust sampling as an important part of a risk assessment process.

When to Sample for Lead Dust

The following are two situations which may require analysis of lead concentration in dust:

- ◆ Investigating potential lead-exposure sources in the case of a lead-poisoned child. When a healthcare practitioner identifies a lead-poisoned child and the child resides in military housing or spends a large amount of time in an Army-operated child-development center or family child-care home, an investigation is necessary to identify the source of exposure.
- ◆ Performing risk assessments of housing units/areas or facilities to identify potential lead exposures to occupants or maintenance personnel. Occupants and maintenance personnel who live or work around lead-bearing dust may also be exposed to lead. The Department of Army (DA) policies state that sampling for LBP and lead-bearing dust must occur in housing units and target facilities built prior to 1980, including units and facilities transferred from DA control (references 1 and 2).

How to Sample for Lead-Bearing Dust

Interior-wipe sampling is a method for collecting settled dust from hard, smooth surfaces, such as cement floors, tile, vinyl, windowsills, and window wells. Do not take samples from carpet or furniture. Follow these procedures when performing lead-dust sampling:

- ◆ Collect floor samples from an area of 1 square foot using a template.
- ◆ Measure and record the length and width of the sample area when sampling windowsills and window wells.
- ◆ Identify and document all areas sampled (location, surface type, area measurements, surface material, etc.) when performing wipe sampling.
- ◆ Wear clean, disposable gloves.
- ◆ Use commercially available, non-alcohol, non-aoe wet wipes (such as baby wipes).
- ◆ Wipe over the entire measured area using moderate pressure.
- ◆ Refold the wet wipe exposing a clean side; repeat the process at a 90 degree angle to the original pattern.
- ◆ Fold the wipe again with exposed side facing inward.
- ◆ Place in a clean collection tube and label appropriately.

◆ Installation Lead Teams, Inspectors, and Risk Assessors

◆ Methods

◆ Risk Assessment

U.S. Army Center for Health Promotion and Preventive Medicine (Provisional)

USACHPPM (Prov) Lead Team

Aberdeen Proving Ground, Maryland 21010-5422

DSN 584-2488 or Commercial (410) 671-2488

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◆ Be sure to change gloves, and clean equipment after taking each sample.

◆ Collect dust samples from carpeted areas using a vacuum-collection method. Contact the U.S. Army Center for Health Promotion and Preventive Medicine (Provisional) [USACHPPM (Prov)] for details.

NOTE: Also see the USACHPPM (Prov) fact sheet entitled Points of Contact for Lead Issues.

How to Interpret Sampling Results

The current action levels for dust-wipe samples are as follows:

- Floors.....greater than 200 micrograms lead per ft²
- Windowsills.....greater than 500 micrograms lead per ft²
- Window wells (and exterior sills)...greater than 800 micrograms lead per ft²

Initiate actions such as in-place management (interim controls) or abatement if results exceed the above levels to reduce the lead-dust levels. [See USACHPPM (Prov) Fact Sheet entitled In-Place Management Controls of Lead-Based Paint.]

These results, by themselves, do not present an accurate picture of the true hazard to occupants or employees. A risk assessment is important because it considers the use and condition of the structure and the possible sources of lead (water, soil, etc.). Therefore, a risk assessment, along with the results of LBP sampling, provides the most accurate representation of the health risks posed by lead-bearing dust and lead in general. Please consult the appropriate guidance or USACHPPM (Prov) before initiating a sampling program.

NOTE: The methods and action levels described above are generally not appropriate for adult occupational settings. In these situations, please contact the USACHPPM (Prov) for specific guidance.

References:

1. Memorandum, Office of the Assistant Secretary, 28 April 1993, subject: Lead-Based Paint Policy Guidance.
2. Memorandum, Assistant Chief of Staff for Installation Management, DAIM-FDF-B, 5 November 1993, subject: Policy Guidance - Lead-Based Paint and Asbestos in Army Properties Affected by Base Realignment and Closure.
3. U.S. Department of Housing and Urban Development, Office of Public and Indian Housing, September 1990 (pages 87, 89, and A14-111 revised May 1991), Lead-Based Paint: Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing.