Why test dust for lead? How should testing be done?

Who should use this fact sheet?
This summary of why and how to conduct dust tests was developed for lead professionals, health and housing officials overseeing dust testing, providers of lead testing training and for persons conducting dust testing. It can supplement existing materials or serve as a checklist to verify that testing is done correctly.

Why test?
Young children exposed to lead-contaminated dust can become very sick. Lead can cause permanent brain and nerve damage and result in learning difficulties and behavior problems.

You cannot see lead-contaminated dust. The only way to know if dust lead levels are safe is to take a test. Testing dust for lead can identify unseen lead hazards in pre-1978 housing. Testing can also confirm that lead dust levels are safe following a renovation or repainting job. HUD regulations require such testing after a wide range of federally funded activities that disturb paint in housing built before 1978. A test will measure the lead in dust at the time you collect the sample. Lead levels can change. The test results do not tell you about past or future levels.

Who Can Test for Lead Dust?
Certified inspectors, risk assessors and sampling technicians can be hired to collect samples. These lead professionals have learned how and where to collect samples, and how to interpret results. If a sampling technician collects dust samples as part of a HUD required clearance, the technician must be state or EPA certified or must be supervised by a certified inspector or risk assessor.

If hazardous levels of lead dust are found, there are simple steps to reduce dust lead levels. (Fact sheet #3 tells you how to cleanup lead-contaminated dust.)
How To Test for Lead Dust
To measure lead in dust, take six steps. For risk assessments, dust lead is measured on floors and windowsills. For clearance, dust lead is measured on floors, windowsills and window troughs.

1. Lay out the sample area
   - Outline the sample area using a template or tape. Tape the template to the floor. Do not touch or disturb the area inside the template or tape.

2. Place the sample collection tube near the sample area
   - Place partially opened tubes near the spot you will sample. Label the tube with its own identification number and record this number on the sample collection form.

3. Put on clean gloves
   - Put on clean gloves before collecting each sample. Do not touch anything other than the wipe after putting on the gloves.

4. Wipe sample area
   - Use a baby wipe or moist towelette that conforms to the standard defined in ASTM E1792.
   - Make sure the wipe is moist.
   - Hold wipe between your thumb and the rest of your hand.
   - Wipe the entire area inside the template or tape.
   - Press down firmly at an upper corner of the sample area. Press with your palm and fingers. Make as many “S” like motions as needed to wipe the entire sample area, moving from side to side.
   - Fold the wipe in half. Keep the dirty side in.
   - Repeat “S” motions. Start at an upper corner and move from top to bottom. For narrow interior windowsills and troughs, use a side-to-side motion.
   - Fold the wipe again. Keep any paint chips and dust in the wipe.
   - Place the folded wipe in the nearby tube or sampling container.

5. Record the area you sampled
   - If a template is used, record its measurement. If you used tape, measure along the width and length of the sample area.

6. Clean the sampling equipment
   - Clean all of the sampling equipment including template and tape measure or ruler.

<table>
<thead>
<tr>
<th>HUD and EPA Standards for Risk Assessments</th>
<th>HUD and EPA Standards for Clearance</th>
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<tbody>
<tr>
<td>Floors: 40 µg/ft²</td>
<td>Floors: 40 µg/ft²</td>
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<tr>
<td>Interior window sills: 250 µg/ft²</td>
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<td>Window troughs: 400 µg/ft²</td>
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**Additional Resources:**

To find a qualified lead professional to take dust samples:
- State health department contacts can provide names of lead professionals contact:
  - National Lead Information Center - 1-800-424-LEAD
  - National listing of lead professionals - [www.leadlisting.org](http://www.leadlisting.org)

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