

Selecting a Lead Laboratory

National Center for Lead-Safe Housing - Fact Sheet #4

How do I select a laboratory to analyze lead samples?

Who should use this fact sheet?

This fact sheet was developed for lead sampling technicians, risk assessors, and lead inspectors, as well as health and housing officials overseeing renovation programs. HUD recommends that qualified technicians be used to collect samples.

Why is selecting a qualified laboratory important?

Results Can Vary. The results of lead testing are often used to show that a home is free of hazardous levels of lead in dust, soil or paint. Small mistakes in lab procedures can produce results that have different meanings. In some cases, lab mistakes may falsely show that a home is lead-safe or may falsely identify lead hazards. Two key ways to check a laboratory's quality are to:

1. Make sure the lab is part of the National Lead Laboratory Accreditation Program (NLLAP). NLLAP is a program designed to test a lab's ability to analyze dust wipes, soil and paint samples for lead. HUD regulations require the use of NLLAP-recognized laboratories when laboratory analysis of lead samples is required.
2. Check the accuracy and precision of the laboratory by sending them blind quality control samples. Many laboratories will provide these samples. This is an important step if you collect many samples, but not practical for homeowners and others submitting very few samples.

Supplies and Services are Different. Some laboratories work only with large industrial or commercial clients. Others provide help to those who need a few samples analyzed.

Price is Only One Factor to Consider. Laboratories that have higher prices may offer a better value if you consider the services that they provide and their attention to quality control.

The checklist on the next page outlines questions to ask labs to help determine if they have the services and capacity to meet your needs.

Small amounts of lead in dust can poison young children.

Dangerous levels of lead dust may remain after working with paint, even if a work site looks clean.

Workers may bring lead-contaminated dust home.

Cleaning protects children in homes where work is done, as well as children in the homes of workers.

Simple cleaning techniques reduce dust lead levels.

1. 1. Accreditation	<ul style="list-style-type: none"> ◆ Is the lab recognized by the EPA as accredited under the National Lead Laboratory Accreditation Program (NLLAP)? Only use labs with NLLAP accreditation. ◆ Some states also regulate lead laboratories.
2. Types of Clients	<ul style="list-style-type: none"> ◆ Are samples accepted from the general public PA vacuum all surfaces including the plastic, work clothes and work shoes. Include walls and ceilings. ◆ Is there a minimum number of samples?
3. Samples Analyzed	<ul style="list-style-type: none"> ◆ Are paint, dust, soil and/or water samples analyzed? ◆ Are composite samples analyzed?
4. Cost and Turn-around Time	<ul style="list-style-type: none"> ◆ What is the cost per sample for standard turn-around time? ◆ What is the standard turn-around time? ◆ Does the lab offer 24-hour turn-around? ◆ Are there volume discounts?
5. Reporting	<ul style="list-style-type: none"> ◆ How are the results provided? U.S. mail, fax and/or e-mail? ◆ What units are used for reporting each type of sample result? For lead dust, it is easiest if results are reported in micrograms per square foot ($\mu\text{g}/\text{ft}^2$) and calculated using the measurements you provide. This saves time and reduces errors. ◆ Are the results compared with appropriate federal, state or local standards to determine compliance?
6. Client Support	<ul style="list-style-type: none"> ◆ Are sample collection materials provided, such as wipes, gloves, templates, tubes for submitting samples, and forms? ◆ Are written sample collection directions provided? ◆ Will the lab offer assistance over the phone? ◆ Does the lab have a home sampling kit for lead?
7. Quality Control	<ul style="list-style-type: none"> ◆ Will the lab provide blind quality control samples to check the accuracy and precision of the laboratory's procedures? Click on Field Quality Control Samples to see a listing of labs that supply field QC samples.

Additional Topic Resources:

To obtain a current list of laboratories recognized by the EPA as accredited under the National Lead Laboratory Accreditation Program (NLLAP):

Call the National Information Center at 1-800-424-LEAD Or go to www.leadlisting.org

To learn about a specific laboratory's past performance or complaint history:

Contact the American Industrial Hygiene Association (AIHA) at 703-849-8888 or the American Association for Laboratory Accreditation (A2LA) at 301-644-3200. AIHA and A2LA are EPA-recognized accreditation organizations in the NLLAP audit process.

To obtain a current list of lead laboratories licensed by your state:
Call your state health department. Your state program contacts can be found at:

National Conference of State Legislatures
Lead Poisoning Prevention-State Contacts Directory

To view the EPA training module on selecting a laboratory:

EPA Lead Sampling Technician Training Course EPA 747-B-00-002 July 2000), Module 4:
Selecting a Laboratory and Interpreting Results

Go to HUD Office of Lead Hazard Control or call the National Information Center at 1-800-424-LEAD.

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