

FY 2003 LEAD TECHNICAL STUDIES GRANTEES

Panhandle Health District (Idaho)

The study will compare the results of lead risk screening that has been used in homes near the Bunker Hill and Coeur D'Alene Basin (Idaho) Superfund site that makes use of vacuum cleaner bag samples and dust from an entryway mat with the results of a traditional HUD/EPA lead hazard risk assessment. Seventy-five homes will be sampled.

Contact: Ian H. von Lindern
Panhandle Health District
(208) 882-7858

University of Illinois at Urbana-Champaign, IL

The research will develop a new class of accurate, reliable, and user-friendly colorimetric spot test kits for lead in household paint and dust. The project will be based on the recent journal publication introducing a new specific colorimetric test for lead, and will adjust the sensitivity of the reagent for lead-based paint. The objectives will be to develop and optimize the specific DNAzyme gold nanoparticle test, demonstrate the use of the test under different conditions of lead level, operator, pigment type, substrate, and overlayer, and address false positive results and improve selectivity.

Contact: Yi Lu
University of Illinois at Urbana-Champaign
(217) 333-2619

University of Cincinnati, OH

The researchers will compare the amount of lead in exterior dust and lead removed by two vacuum collection methods. The applicant will design and conduct a laboratory study on the factors found to affect the relative amounts of dust and lead removed by the two vacuum methods and field test the modified methods.

Contact: C. Scott Clark
University of Cincinnati
(513) 558-3684

Research Triangle Institute, Research Triangle, NC

RTI and RMD, a manufacturer of XRF lead analyzers will develop and test a mechanical dust sampling device. This tool will reduce sampling variability by controlling the area sampled and the pressure on the sampling media. The tool has the potential to improve the current dust sampling test with a rapid, cost-effective, accurate and reproducible device, substantially reduce operator effects on the dust collection process, and may provide a new method to combine XRF technology with quick dust lead measurements for risk assessment and clearance.

Contact: William Gutknecht
Research Triangle Institute
(919) 541-6883

Xavier University of Louisiana, New Orleans, LA

The applicant will use a published “soil-lead concentration map” for New Orleans, which will be used in combination with census tract data to locate and target potential communities to carry out the study. Twenty-five families will be recruited and potential lead exposure will be assessed using hand wipes of children, interior dust-lead samples, and soil-lead samples. Contaminated soil will then be covered with a five-inch layer of clean soil from alluvial deposits.

Contact: Howard Mielke
Xavier University
(504) 483-7523

Howard University, Washington, D.C.

Howard University will evaluate two program components of lead hazard control projects: (a) selection and recruitment of units, and (b) outreach and education. The project will determine if the involvement of community-based organizations and faith-based organizations in outreach and recruitment will lead to more efficacious programs.

Contact: Rodney Green
Howard University
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