

QUARTERLY REPORT

Grant Programs Progress Report

We are pleased to transmit to you the Grant Programs Performance Report for the 1st quarter of fiscal year 2004. This report details accomplishments toward achieving the Office of Healthy Homes and Lead Hazard Control's (OHHLHC) key performance goals. This information has been compiled from grantee quarterly and final reports, as well as Government Technical Representative (GTR) monitoring activities. The report includes activities occurring through December 31, 2003.

These quarterly reports are part of our overall strategy to refocus our collective efforts and

attention toward achieving results and sharing successes. This is the third report we have issued and we are continually refining the data and analyses contained herein. In doing so, we hope to provide you with a better understanding of our programs' overall performance as well as individual grantee performance. We also will highlight good performance and areas of concern, with the intent of elevating everyone's performance and ensuring success.

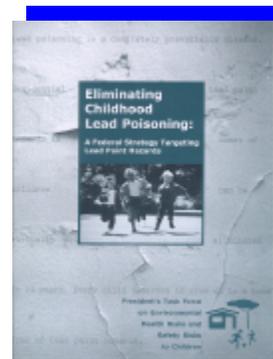
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Lead Hazard Control Grant Program

Results - Goals

For the first quarter FY2004 reporting time period, 2,227 units were made lead-safe (see chart on next page). This represents a seven percent increase for the same reporting period in FY2003. Cumulatively, the Lead Hazard Control Grant

Program has made 55,455 housing units lead safe and has tested over 111,695 units for the presence of lead-based paint and lead-based paint hazards.



Highlights

✓ Lead Hazard Control Grant Program Results and Goals

✓ Lead Hazard Control Grant Program Accomplishments

✓ Healthy Homes Grant Program Results and Goals

✓ Healthy Homes Grant Program Accomplishments

✓ Lead Technical Studies and Outreach Program Results and Goals

✓ Lead Technical Studies and Outreach Program Accomplishments

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Discussion

A review of our quarterly production data for the fiscal year indicated a seven percent increase for the same reporting period in FY2003. An assessment of the quarterly data indicates a maturing and refinement in the development and use of our monitoring tools, evaluations, and activities. Nearly 65 percent

of grantees are on track to meeting their work plan goals by the end of the calendar year.

An analysis of active grant rounds is provided below.

Grant Round	Fiscal Year	Units in 3-Year Grant Agreement	Percent of Units Complete
9	2001 (start dates ~ 3/1/2002)	6,616	44%
10	2002 (start dates 2/1/2003)	6,464	19%
11	2003 (start dates 10/01/2003)	In start up phase	In start up phase

Specific Lead Hazard Control Grantee Accomplishments

Detailed grantee status production and expenditure reports for the reporting period October 1 – December 30, 2003 are provided in Attachment A. These reports sort grantees by funding round and by performance and are used to help us determine the necessary technical assistance needed to improve performance and to track planned milestones for major tasks/activities against actual performance. Specific program accomplishments during the first quarter of FY 2004 (October 1 – December 30, 2003) include:

National/Local Capacity Building

- Availability of Contractors: The Lead Hazard Control Grant Program has stimulated the creation of a large cadre of competent contractors and trained workers. This quarter alone grantees have trained, or sponsored training of 3,503 individuals. This training ranged from Lead Abatement Worker and Supervisor training courses, refresher training for lead contractor/supervisor license renewal, lead-safe renovator training to contractors and landlords, loan or

other incentive programs available to contractors, including grant funds to assist with EPA training and licensing, and medical screening fees, and Lead-Safe Work Practices training for property owners and contractors. Several grantees have made this mandatory for participants and it has proven to be an incentive for contractors to become eligible to bid on projects.

- Local Capacity Building: The Lead Hazard Control Grant Program has created in-house expertise in over 250 justifications across the country. A sample of activities conducted by grantees during the 1st quarter included:
 - The Lead Safe Springfield program co-sponsored the Ohio Lead Conference in Dayton Ohio for 120 participants. The conference was run by the Help End Lead Poisoning organization. Continuing education credits were given to social workers. Other co-sponsors included the Ohio Center for Disease Control, Lead Safe Columbus, and the Montgomery Co. Dept

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- of Community Development. (Springfield, Ohio)
- Lead Safe Columbus sponsored a Lead Safe Renovator training through the In-service Training Network where 27 people attended and were certified as Lead Safe Renovators. All of the people trained were already employed by the general contractors. (Columbus, Ohio)
 - Safe Work Practice classes were held and a total of 23 attended class with 22 receiving certificates of completion. The majority of attendees are contractors and their workers. A few landlords have attended or had maintenance staff attend. (Cedar Rapids, Iowa)
 - The City of Portland provided Lead Abatement Worker / Supervisor Training to 8 new workers. The workers were part of a company that is in the process of applying for a full lead abatement license which will add a new contractor to our bid list. (Portland, Maine)
 - Contractor training and certification continues through the available scholarship program. It is expected that the scholarship training program will continue to ensure that the SLHAP maintains an adequate number of contractors available to perform the amount of work required due to the increase in productivity. We continue to target first-time homebuyers and new potential landlords for training and information on state and federal lead laws and how to participate in the SLHAP. 85 potential

landlords/homeowners were trained over the past quarter. (Somerville, Massachusetts)

Development of Comprehensive Community Approaches

- Collaborative Partnerships: The Lead Hazard Control Grant Program has stimulated the effective collaboration of local health, housing, and community development agencies as well as local faith-based and community-based organizations and groups of parents of lead poisoned children. Quarterly grantee accomplishments included:
 - Working with the Ottawa County Health Department, Grand Gateway published a mutual flyer to run in the Miami News Record free weekly newspaper. There were Seven Thousand (7,000) sent through the paper. The Health Department advertised free lead screening and GGEDA offered free LBP Inspection/Risk Assessments. GGEDA is still working with countywide area daycares, Head start Programs, and attending parents teachers meetings on the education and information on the hazards of lead-based paint in the homes. (Grand Gateway, Oklahoma)
 - Outreach activities completed this quarter revolved almost completely around National Lead Poisoning Prevention Week in late October. Scheduling the events along with all of the planning, organizing, and details that go into that week's events is most

important for a successful anti-lead campaign. Events included a Bowling-a-thon, Recognition Luncheon and participation in the Zoo Boo. Attendance at all of our events was good and/or better than we expected. A direct result of these efforts was getting several program referrals from individuals who attended. (Syracuse, New York)

- The Manchester Health Department Community Health Nurse provided education during blood lead level screenings at the WIC Clinic, at the refugee center and at the Health Department. Children with elevated blood lead levels received a follow-up home visit. Through this effort, 72 families received individual lead education. Healthy Home Services/Child Health Services project reported eight new families received in-home education. (Manchester, New Hampshire)
- LHCP staff participated in the National Family Week Connections Count Picnic, sponsored by Southminster Head Start. The fair was a showcase for resources for Head Start families. Staff and church personnel made initial contacts with potential program enrollees and distributed lead poisoning prevention information to parents - county staff provided one-on-one lead poisoning prevention education to 52 individuals. The Southminster Presbyterian Church (faith-based partner of the LHCP) is under contract to pre-qualify families for the program and

conduct a community event for lead education during the course of the grant. (Phoenix, Arizona)

Economic Opportunities for Low-Income and Minority Residents

- *Economic Opportunities:* The Lead Hazard Control Grant Program is creating economic opportunities for low-income residents of target areas all over the country. Quarterly grantee accomplishments include:
 - Completing lead-based paint worker training for 3,503 low to very low-income individuals and employed 156 as a result of this training.

For more information, visit the lead hazard control program web site at: <http://www.hud.gov/offices/lead/lhc/index.cfm>

Healthy Homes Grant Program

Results - Goals

To achieve HUD's strategic goal of developing safe and affordable housing, the Healthy Homes Initiative made operational a total of 7 grants/cooperative agreements in FY 2004. OHHLC executed a total of 7 Healthy Homes Demonstration grants and 4 Healthy Homes Technical studies grants in the fourth

quarter of 2003 and made all 11 of these grants operational in FY 2004. To date, we have awarded \$39.4 million to 52 grantees in 21 states, positively impacting the lives of tens of thousands of young children.

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Measure	YTD Planned	YTD Funded	YTD Operational	YTD Reporting Progress	Status
Number of operational grants/cooperative agreements funded by the Healthy Homes Initiative Program	26	52	45	45	Above plan

¹ Of the 52 grants that have been funded, 7 grants have been closed out.

Discussion

Healthy Homes grant activities continue to identify ways to prevent or reduce the severity of childhood health problems, such as asthma, lead poisoning, and unintentional injuries, related to substandard housing conditions. Healthy Homes demonstration projects develop protocols (e.g., visual assessment, cleaning, interventions), develop instrumental methods, provide educational materials for children and adults, produce websites, and build capacity (training community health workers, interns, residents, and grantee staff) to carry out healthy homes assessments and interventions. Core programmatic elements of the Healthy Homes grants include:

- Method Development of assessment tools and intervention protocols to identify and repair housing-related

hazards and evaluation of the effectiveness of these protocols;

- Capacity Building/Training for “high performance” housing that is energy efficient, durable, sustainable, and healthy and safe for occupants;
- Assessment of housing-related health and safety hazards that pose risks to the health of residents, particularly children in low-income families;
- Interventions to correct these hazards, together with an evaluation of the effectiveness of these interventions;
- Education/Outreach about healthy homes issues to individuals and the general public.

Healthy Homes grantees are successfully performing assessments and interventions, as well as providing Healthy Homes information to residents, property

owners and construction professionals. A summary of achievements, and cumulative totals is provided in the table below.

Performance Element	1st Quarter	Total Date
No. of Clients Contacted	1937	63,335
No. of Clients Enrolled	609	2,893
No. of Units Assessed	358	2693
No. of Interventions Completed	606	2022
No. of Individuals Trained	664	7109
No. of Individuals Reached	10496	517805

Specific Healthy Homes Grantee Accomplishments

Method Development:

Healthy Homes grantees are developing and validating assessment methods that include resident questionnaires, visual assessment, and environmental assessment (sampling and analytical methodologies)

- *Radiation Monitoring Devices, Inc.* has gathered field observations from specific buildings in different parts of the country that are currently under investigation for mold problems. Through such site visits, investigators have gained a basic understanding of operating environments for portable mold detection equipment, along with an understanding of some of the economic and physical constraints on those who perform the work. They have also surveyed literature and performed telephone interviews to help understand the parts of buildings that commonly require inspection for mold. The construction of a laboratory scanner is now in process.
- *University of Wisconsin, School of Pharmacy* investigators are currently applying the results of the Delphi injury survey to the home assessment data to calculate an injury hazard

score for each household. Quantification of the degree of household injury risk will permit measurement of the impact of interventions by allowing comparison of baseline with follow-up scores. They will also apply the hazard scoring method to compare self-reported responses from parents with observations from project staff. Establishing the veracity of self-reported responses may allow future studies to streamline home assessment protocols by omitting questions that are answered reliably by caregivers.

- *St Louis University School of Public Health (SLUSPH)*, has been asked by the American Association for Textile Chemists, RA 49 Insect Resistance Committee, to perform testing for development and improvement of a standard for house dust mite testing on carpet. SLUSPH staff is being trained on state of the art mite rearing and carpet bioassays.
- Two approaches are being implemented in parallel by *Research Triangle Institute* to address to overcome the problem of not routinely collecting 90+% of the vacuumed dust

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on a filter. The “missing” dust is hanging up in the deposition funnel; little or none is found on the inside of the pick-up hose. A new deposition funnel is being prepared that will provide a curtain of air along the walls of the deposition funnel, preventing the particles from attaching to the side. In the second approach, two or more devices that provide mechanical vibration to the sides of the funnel will be tested. The passive solution to the problem is preferred to an approach that requires some operating mechanism.

- The *City of Milwaukee* Public Health Laboratory discovered during a pilot test of the deep cleaning/decontamination that the red/green light vacuum was not effective or efficient. It took six hours to vacuum a 120 SF living room and assure that the green light came on. Based on this information, MHD and the Hmong American Friendship Association (HAFA) developed a new protocol based on information gathered from Consumer Reports, research on carpet cleaners and discussions with Stanley Steemer. A new Deep/Cleaning and Decontamination protocol is being developed. A pilot test to better understand how the deep cleaning works was conducted, using the Samurai Extractor, a commercial carpet cleaner to clean all horizontal surfaces. This has helped to understand the process, the timing of cleaning and the supplies needed and will also assist in a better protocol for clearance.

Capacity Building/Training

In Quarter 1, Healthy Homes grantees trained a total of 664 individuals, including owner-occupants, property owners, remodelers, contractors, enforcement officials, grantees and partner staff. Following is information about training activities in specific Healthy Homes grant projects:

- *The University of Alabama at Birmingham (UAB)* completed training and graduated the final group of Healthy Homes Interns this quarter. UAB invited homeowners, current Healthy Homes interns and those that had completed their internships to participate in ceremonies by giving testimonials of their experiences, discussing the challenges in helping individuals change behaviors to make their homes safer and healthier environments for their children. A homeowner shared her experiences having children with asthma and elevated blood lead levels and discussed what led her to work with the HUD project. Other new components included a session on case management, construction terms and lead sampling.
- *The Child Abuse Prevention Council* exceeded goals for all training workshops offered this quarter. One effective outreach format was the aggressive expansion of the trainings to AmeriCorps members in California Alliance for Prevention (CAP) counties. Another effective outreach format has been continued frequent and consistent communication directly with Family Resource Center site management. These communication efforts resulted in effective scheduling and an increase in trainings and home visits. The quarterly newsletter was distributed to 336 contacts including Family Resource Center staff and managers, home visitors, and parents in 18 California counties.

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- **Healthy Homes Network** has trained and employed 8 Healthy Homes Specialists to provide peer education, providing demonstrations and explaining health consequences of cleaning techniques and giving away cleaning supplies, which is very effective in motivating community residents to make behavioral changes.
- Health Science Students from the University of Missouri-Kansas City bring enthusiasm and a fresh perspective to these training sessions. This quarter, *HHN* also provided Safety in the Workplace training to the contractors who have qualified to provide remediation in this project.
- *The Medical Foundation, New England Asthma Regional Council* held 2 meetings to introduce its HUD grant to its Housing Committee and general **ARC** membership with the goal of developing strategic plans and obtaining commitments from key partners to support outreach efforts. The Housing Committee members include health and childcare providers as well as housing developers, financiers, and regulators. The **ARC** General Membership meeting reached health and childcare providers, housing developers, financiers, and regulators, school facility managers, and environmental health professionals.
- Site visits by the *Montana State University Extension Service* to 4 reservations conducted during this quarter served as an opportunity to bring together staff to discuss implementing projects on a local basis. The establishment of future partnerships with Head Start representatives, Community Health workers, school nurses, and teachers was discussed as well.
- *The Erie County Health Department Safe Our Streets Task Force – Landlord Training Program* provided a day-long seminar designed to provide information and assistance to property owners in the City of Buffalo on issues including crime prevention, housing codes, landlord and tenant rights, lead, and community policies. The program was well received by the 35 attendees, including rental property owners, landlord groups, block club representatives, and tenants.
- A two-hour training conducted by the *Erie County Health Department* for 25 Habitat for Humanity program participants provided information on home health and safety, asthma triggers, HHI and the Asthma program. Program staff also participated in the Buffalo Urban League Health and Wellness Fair, and staffed an exhibit booth providing information, promotional items, and a sign-up sheet for the program. At Cornerstone Manor, a two-hour training session was conducted for program participants in transitional housing, providing information on home health and safety, asthma triggers, asthma program.

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- Given that many Head Start families are either participating, or have declined participation in their study, the *University of Wisconsin* offered the program to families enrolled in Early Head Start, targeted to either first-time parents, or those parents requiring additional educational and social support. The children in Early Head Start are under 3 years of age and will benefit greatly from an improvement in safety of the home. In addition, some of these children already have a diagnosis of asthma.
- The *City of Milwaukee* Housing Authority is providing training on Integrated Pest Management (IPM). The grantee's asthma case manager has also been trained by a Respiratory Therapist on how to teach parents and children to use the different asthma inhalers. The National Center for Healthy Housing (NCHH) provided training on the Data Management Protocol. Nine Community Health Advocates (CHAs) and community partner staff participated in extended training in support of expanded responsibilities for CHAs for IPM. The training program included a written, 60-question multiple-choice test and an observed field performance component. As an incentive to study, the CHAs were paid \$25 for a passing score and an additional \$25 for an exceptional score.
- *Alameda County* faced the challenge of ensuring that all lead-certified contractors have the skills necessary to address Healthy Homes housing interventions. The grantee also noted that, while attempting minor home repairs, more complex housing issues developed. This caused project delays and a marked increase in the projected costs of some projects. Aggressive recruitment strategies proved to be so effective that projects backed up and delayed the start of Full Interventions. Moreover, it was difficult to recruit participants into the Education-only arm of the project as participants wanted to receive either a Full or Limited intervention. In an effort to increase the project recruitment pool, staff has collaborated with two Alameda County Managed Care Plans, Asthma Start, and West Oakland Asthma Coalition and with private health providers.
- In order to assure assessor reliability, the *City of Phoenix* will subject the first 10 housing units assessed to an agreement test. The two staff from Phoenix Children's Hospital will evaluate the homes independently, using the baseline form, and their results will be compared. Any divergences will be analyzed and the best response documented. When the first five units were assessed in this manner, issues with assessor reliability identified were the developmental level of children in the home (with regard to choosing parameters for rating), care in reading the rating definitions, and occupants making changes during the assessment.

Assessment

Healthy Homes grantees contacted 1937 clients this quarter, enrolled 609 clients and completed assessments in a total of 606 units. Follow-up assessments and recruitment continued to be challenges for some projects. Grantees implemented new strategies to address these issues. Following is a summary of some of the grantee activities

- *Mount Sinai School of Medicine* project staff is beginning to review field data collection and pilot testing forms. A QC sample of between 2% and 6% of the forms has been selected for field audits. Quality Control checks will be performed during the three years of the program life. Data from the QC sample surveys will be then entered in the database and compared against the data collected by the Community Health Workers. The purpose

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of the audit is to determine the accuracy of the data collected by the Community Health Workers Control limits for error will be 5%, which includes difference in responses or uncompleted answers. If the errors exceed the control limits, training for data collection will be reinforced and additional training sessions will be scheduled as appropriate.

- The *Seattle-King County Health Department* mailed 150 recruitment packets to potential participants; 142 follow-up phone calls were made to assess interest; 36 participants were screened for eligibility by phone (20 of these were eligible); and, after the structural assessment was performed, 10 homes were determined to be eligible to enroll and were enrolled. Nine families received allergy control mattress and pillow encasements for their asthmatic child this period. Three potential participants completed the enrollment visit where grocery store gift certificates are given as incentive for completing the appointment. These 3 homes were randomized into the study, one into the "Earlier Remediation" Group, where work takes place right away. The recruitment mailings and follow-up phone calls were most effective means of recruitment this reporting period.

- *Duke University's* door-to-door recruitment team visited 169 homes in New Hanover County with a recruitment rate of 3.6%. This method relies on building relationships between community organizations and Duke University's door-to-door recruitment team, and because of this foundation, gaining access to participant's homes. This quarter, a relationship was established with SmartStart in Wilmington, NC and the Saint Mary Parish and School in Wilmington, NC in an effort to recruit Spanish-speaking participants. Forty-five percent of participants this quarter were recruited through this method.

- Connecticut state law mandates relocation of tenants when housing units are inspected and found to be unsafe. The *City of Stamford* has lost several program participants, especially those from illegal housing units occupied by the immigrant population, because they are, as a result, located to other, larger, more affordable cities in CT. The team has been working closely with the City Relocation Officer to secure appropriate, local housing. The Relocation Officer works with both private landlords and the Housing Authority and occupants are given priority status at the Housing Authority if their unit is condemned. The process is long and not always effective as HUD has strict requirements and often the occupants don't qualify.

Interventions

This quarter Healthy Homes grantees performed interventions in 606 units; 1476 interventions were for respiratory hazards, 1538 for safety hazards, 268 for lead hazards and 171 for other hazards. Specific information about the kinds of interventions that grantees facilitated is provided below.

- The documented need as well as the availability of necessary funds has permitted the *Boston Public Health Commission* to increase enrollment in the expanded construction phase to select families who have completed the standard intervention protocol. To date, five additional families have been referred for interventions including carpet removal, additional IPM, installation of bath fans, electric stoves or stove vents, worth up to \$2,500. To date a total of 142 families are receiving construction interventions.
- When families move, they are retained in the *Boston Public Health Commission* program whenever

possible. Once a family moves, all interventions are conducted at the new residence, even if some had already taken place at the previous one. Nonetheless, a total of 80 sites have been dropped because of moves or loss of contact. Of these, 61 had interventions completed. Some families are now in their third residence since beginning in the study.

- The *University of Wisconsin* project team completed work on three outstanding lead hazard control projects and all houses passed final clearance. One of the projects (in Monroe, WI) represented collaboration between WHHI and a local weatherization agency, Project Home. Jointly, they removed windows posing a significant lead-based paint hazard and replaced them with energy efficient ones. Both entities contributed funds to the project.
- The New York Times published a story on a worker trained in lead safe work practices by the *Mount Sinai Healthy Homes* grantee. (NY Times Job Market section - 10/19/03).
- In order to ensure that the project results in positive change around issues of health and public housing, the *Harvard School of Public Health* project team developed an outcomes and product-oriented policy agenda to guide the work for the coming year. The agenda includes products such as a health specification for use in energy services contracting and developing a program model for IPM assistants as part of a regular program of pest management. These tools are being developed in the context of the Boston Housing Authority with a view to developing and testing models that can be expanded to other housing authorities in the future.

Education/Outreach

In the 1st quarter, Healthy Homes grantees reached a total of 10,496 individuals in activities that included health fairs, community events, recreational activities, presentations, radio broadcasts, conferences and exhibits. Sustainability of recruitment continues to be an issue for a number of grantees and these grantees have developed innovative strategies to address recruitment issues, as presented below.

- The *City of Stamford* provided several in-services during the past quarter to educate school nurses, public health nurses, dental hygienists, parents and day care providers to encourage referral to the Breath of Fresh Air Program. They provided flyers to school nurses to make available to parents and children seeking asthma resources. This quarter they targeted Northeast Elementary School, sending 135 letters. They also attended two Health Fairs.
- In October, the *City of Phoenix* Health Educator and Home Assessor prepared a "Safe House Pumpkin" for entry in the Phoenix Children's Hospital Halloween pumpkin decorating contest. The two-story pumpkin, complete with windows and occupants, called attention to the existence of the Healthy Homes Demonstration Program and reminded hospital staff to refer children who have been injured at home, so that their homes can be assessed for health and safety hazards.
- On November 20, 2003, an Asthma presentation was given to parents and children at a local middle school in *Alameda County*. There were a total of 50 parents and children in attendance. This training was provided in collaboration with The West Oakland Asthma Coalition, Oakland Kicks Asthma, Alta Bates Hospital, The American Lung Association, and the

Community Action to Fight Asthma (CAFA). The objectives of the presentation were to improve asthma management, reduce asthma triggers and to find simple, low cost methods to prevent the incidence of asthma in the schools and in the community.

- A three-day Healthy Homes class entitled: Mold: Inspection, Assessment, and Control was provided by *Alameda County* project staff to students enrolled at the University of California, Berkeley Extension. The presentation introduced students to the Healthy Homes concept and provides some simple remedies for allergen control and home safety. The class of 25 students consisted of Industrial Hygienists, contractors and consultants.
 - A manuscript, "Integrated Pest Management Improves the Health of Urban Children with Asthma" was submitted to the journal *Pediatrics*, by researchers associated with the *Boston Public Health Commission*. An IPM abstract was accepted for oral presentation at the 2004 National Asthma Conference, in Atlanta on April 14-16, 2004.
 - A presentation by *University of Massachusetts Lowell Research Foundation* entitled "Healthier Homes: To Be or Not to Be" was made to the Board of Directors at the Merrimack Valley Housing Partnership (MVHP), an organization that promotes home ownership opportunities for low-income and moderate-income earners. This presentation assessed the physical healthiness of homes in the greater Lowell area.
 - *The Mount Sinai School of Medicine* Principal Investigator conducted a live web cast presentation on "Controlling Asthma Exacerbations Through Home Remediation and Educational Reinforcement" on October 7, 2003.
- The web cast presentation is archived and can be accessed through Clinical Directors Network website at www.cdnetwork.org. She also presented at the North East Regional Conference on Mold, Lead, Healthy Homes on October 29, 2003 at Tarrytown, New York.
- *The University of Wisconsin, School of Pharmacy* Principal Investigator addressed the "Look Out for Lead 2003 Conference," held in Madison, WI on November 17th. His talk was entitled "Approaches to Complete Environmental Health Interventions". He also participated in a panel discussion sponsored by HUD in Washington DC on December 1 -2, 2003 to begin planning for American Healthy Homes Survey, a follow-up to the First National Survey for Lead and Allergens in Housing.
 - The Reach Out and Read Literacy Volunteer group in the *City of Stamford* donates books that are distributed, along with an asthma video, on the 3-month visit. The asthma video called "Natalie Says", was directed and produced by the Public Health Educator and features a nine years old Hispanic female program graduate. The video offers simple explanations on proper management of asthma. Topics covered include how to live with pets, how to identify and avoid your asthma triggers, how to deal with second hand smoke and what to do if you are having an asthma attack. The solutions that are talked about in the video are clear and provide a child's point of view in dealing with asthma daily. They also have plans to distribute the video in Spanish in the near future.
 - *The University of Alabama at Birmingham* implemented a new method to educate and recruit families living in low-income government housing communities. Educational fliers were distributed door to door in

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housing communities. Of the 50 families reached, 10 requested applications to be considered for the Healthy Homes Initiative and two were enrolled this quarter.

- The *Harvard School of Public Health* investigators have been invited to present a session at the 2004 APHA Conference entitled “A Community-City-University Collaboration for Healthy Public Housing”. This session will cover the development of and research outcomes and policy recommendations from the Boston-based Healthy Public Housing Initiative. The HPHI is in its third year and has completed focus groups, a cross-sectional survey, an energy pilot study and an asthma intervention study in three public housing developments. Work on policy recommendations has begun. Experience and data from all aspects of the project will be presented. The session will emphasize the potential for community-based participatory research to produce both immediate benefits to the affected community and to produce findings that influence policy directly.
- The Medical Foundation, New England *Asthma Regional Council* interviewed a participant in the program. The interview was aired on radio and on cable TV, and, afterward, over 250 families called for information about the program and were recruited.
- In December, *Duke University* researchers presented “Using GIS Models to Improve Children’s Environmental Health” to the Guilford County Health Department, the Greensboro Housing Coalition, the City of Greensboro Lead Program, and the Greensboro Information Services Department. The grantee also presented “Mapping for Prevention: GIS Models for Directing Childhood Lead Poisoning Prevention Programs”

to the Forsyth County Health Department in Winston Salem, NC.

Assessing Grantee Performance

Government Technical Representatives (GTR) evaluate grantee performance on a quarterly basis relative to the core programmatic elements of the Healthy Homes Program, as applicable to an individual grant. GTR evaluations are used to help OHHLHC determine the technical assistance needed to improve performance.

Lead Technical Studies and Outreach Grant Program

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To improve the technical means for achieving HUD's strategic goal of eliminating childhood lead poisoning by 2010, HUD conducts research on specific topics related to the evaluation and subsequent mitigation of residential lead hazards, known formally as Lead Technical Studies grants. The findings of lead research grants have been used for developing guidance for the Lead Hazard Control Grant Program, providing the basis for technical elements of the Lead Safe Housing Rule, and updating HUD's Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing ("the HUD Guidelines," additional revised chapters of which will be issued in 2004).

Another portion of the overall Lead Technical Studies program is the design, implementation and evaluation of outreach activities related to lead safety issues. As part of its lead hazard reduction program, the Office has conducted outreach and public education initiatives through Lead Outreach grants. Lead Outreach grantees work to increase the effectiveness of lead hazard control programs through enhancing public awareness of lead as a health issue for children, particularly in high-risk communities. (Outreach is also an element of the Lead Hazard Control Grant program. Lead hazard control grantees' outreach activities are discussed in that section of this quarterly report.)

Status of Performance. The Office has 10 active research grants and three active outreach grants.

Discussion

Core activities of the lead research grants relate to the following topics:

- *Research on Lead Measurement and Sampling Methods*, in order to provide more accurate and lower-cost methods

of lead paint, soil and dust measurement and sampling.

- *Research on Lead Hazard Assessment Methods*, in order to assess lead-based paint hazards, particularly those in complex housing environment situations.
- *Lead Hazard Control Research*, in order to develop and validate more effective and lower-cost methods of lead hazard control.
- *Research on Longer-Term Effectiveness of Lead Hazard Control Interventions*, in order to determine the duration of effectiveness of various types of interventions in various building environments.

Core activities of the lead outreach grants relate to the following topics:

- *Increasing enrollment of low-income housing units* for treatment via the HUD lead hazard control grant program or another lead hazard treatment program.
- *Raising public awareness of childhood lead poisoning*, its prevention and proper lead hazard identification and control methods among at-risk communities.
- *Encouraging housing occupants to identify potential lead-based paint hazards and report them* to property owners and managers, and public health and/or housing officials as appropriate.

Significant Project Accomplishments:

Lead Research Grants

Research on Lead Measurement and Sampling Methods:

- *Developed a Method to Measure Residential Soil-Lead Using a Portable XRF Analyzer.* Existing

methods and protocols were adapted to develop a method for analyzing residential soil for lead using a portable X-ray Fluorescence (XRF) Analyzer. A draft protocol was employed by trained employees of state or local lead hazard control programs, the results of which were used to develop a final protocol. **Research Triangle Institute.**

- Analysis of Dust Wipes Using Portable XRF Analyzers. The objective was to develop a standard methodology to assess the performance of portable XRF Analyzers in measuring lead in dust wipes. Relationships of XRF performance to standard dust wipe analysis by laboratories indicated that XRF Analyzers could be used for this purpose, with suitable, statistically-based safety factors. **University of Cincinnati.**
- Use of Portable Lead Analyzers to Reduce Clearance Dust Wipe Failure Rates. The feasibility of using field portable lead analysis methods (X-ray fluorescence analyzer, portable anodic stripping voltammetric analyzer) to screen clearance dust wipe samples was assessed in the field, with the goal being to reduce the rate of clearance failures. **University of Cincinnati.**
- Bioethics of Housing-Related Environmental Research Involving Children. With the ethical issues of its housing-related research being of high interest to HUD, the Office awarded a grant to the Congressionally-chartered National Academy of Sciences to study the ethical issues of conducting this research, in order to clarify issues and develop any protocols and procedures that may be appropriate. A study board has been convened, with the first meeting scheduled for March 2004. **National Academy of Sciences.**

Research on Lead Hazard Assessment Methods:

- Reducing Lead Levels in Urban Sidewalk Dust. The recipient, in partnership with the University of Cincinnati, assessed ways to reduce levels of lead in dust on inner-city sidewalks. Methods examined included a combination of treatments to stabilize deteriorated lead-based paint on building exteriors, combined with regular sidewalk and street cleaning. Research was also conducted on the reaccumulation of lead in previously abated soils and on the use of phosphates as a soil amendment to reduce lead bioavailability (measured using an in vitro assay). **City of Cincinnati.**

Research on Longer-Term Effectiveness of Lead Hazard Control Interventions:

- Evaluation of HUD Lead Hazard Control Grant Program. This research assessed the efficacy of various interim control and abatement techniques (based on blood lead and dust-lead levels) as employed by 14 state and local grantees in about 2,900 units. All units were followed to 12 months post-intervention with a subset followed through 36 months. Most intervention methods retained their efficacy through this period. Major reporting on the Evaluation will be published throughout 2004. **National Center for Healthy Housing, University of Cincinnati.**
- Support for Outreach by Grassroots Organizations. This grant supports a grant competition for small grassroots non-profit organizations and parents groups to conduct locally-based outreach programs. This hierarchical effort reduced the paperwork for the grassroots organizations, and provided them with training by the grantee in

- implementing outreach activities.
Tides Foundation.

Community Health Environmental Resource Center. This grant identified hazards in about 2000 housing units throughout the nation and hazards were controlled through this project in about 650 of them, through a series of sub-

grants to locally- based non-profits. Personnel of sub-grantees have been trained to identify lead and other environmental hazards in housing, and techniques have been identified for controlling these hazards at low cost using community-based workers. *Alliance for Healthy Housing.*

QUARTERLY REPORT