

**Innovative Strategies for Addressing
Lead Hazards in Distressed and Marginal Housing:
A Collection of Best Practices**

Alliance To End Childhood Lead Poisoning

Table of Contents

Acknowledgments	i
Purpose and Introduction	ii
1. Integrating Lead Safety into Rental Property Maintenance: Vermont Essential Maintenance Practices	1
2. Low Cost Hazard Control: The St. Paul, Minnesota Weatherization Program	5
3. Building Broad-Based Coalitions: Campaign to Enact Milwaukee’s Lead Poisoning Prevention Ordinance	7
4. Targeting High-Risk Neighborhoods: The Milwaukee, Wisconsin Pilot Project for Lead-Based Paint Hazard Control in Residential Rental Properties	11
5. Low-Cost Window Abatements: The Milwaukee, WI Window Specification	15
6. Early Warning Systems for Deteriorating Properties: Neighborhood Knowledge Los Angeles	17
7. Enforcing Housing Standards: The Los Angeles County Systematic Code Enforcement Program	20
8. A Community-Based Initiative to Address Environmental Health Problems in Housing: The Los Angeles Healthy Homes Pilot Project Collaboration	24
9. Holding Property Owners Accountable: New Jersey Multiple Dwelling Registration and Inspection Program	28
10. Leveraging Medicaid Resources for Prevention: Rhode Island’s Window Replacement Program	32
11. Financial Incentives: Massachusetts Income Tax Credit	35
12. Purchase of Real Estate for Public Benefit: Land Trust, New York City	37
13. Unconventional Funding Sources: The Portland, Oregon Water Bureau Lead Hazard Reduction Program	40
14. Training and Employing Low-Income Community Residents in Hazard Control: The Manchester, New Hampshire “Healthy Home Services”	43

Acknowledgments

The descriptions of best practices contained in this guide were written by Jane Malone, Maria Rapuano, Ralph Scott, Nancy Tips, Ellen Tohn, and Anne Ziebarth, with significant editorial contributions from Don Ryan and Jane Malone. Editorial and project oversight were provided by Maria Rapuano.

The Alliance expresses our appreciation to all those whose work on the programs highlighted here has provided inspiration for this Manual. In particular, we would like to thank the following individuals for the time they took to discuss their work with Alliance staff, share their insights, and review drafts: [Emilia Belouin, Coordinator, Healthy Home Services, The Way Home](#); Gary Blasi, Professor of Law, UCLA School of Law; Bill Connolly, Director, New Jersey Division of Codes and Standards; [Michael Conway, Customer Service Coordinator, Massachusetts Department of Revenue](#); [Stacey Edwards, Outreach and Education Coordinator, Portland Water Bureau](#); Karen Garbarino, Children's Environmental Health, Vermont Department of Health; [Gilda Haas, Director, Strategic Action for a Just Economy](#); [Nancy Ibrahim, Community Health Program Director, Esperanza](#); Sharon Kernan, RN, MPH, Administrator, Community & Planning Services, Center for Child and Family Health, Rhode Island Department of Human Services; Danny Krouk (NKLA prototype developer); John Monahan, Assistant Director, Licensing and Inspection, New Jersey Bureau of Housing Inspection; [Amy Murphy, Lead Program Manager, Milwaukee Childhood Lead Poisoning Prevention Program, City of Milwaukee Health Department](#); [Sharon Pendleton, Director, Pilot Project Milwaukee Childhood Lead Poisoning Prevention Program City of Milwaukee Health Department](#); Bill Pitkin, Research Associate, UCLA Advanced Policy Institute; Neal Richman, Associate Director, UCLA Advanced Policy Institute; Elena Popp, Staff Attorney, Legal Aid Foundation of Los Angeles; Juan Carlos Ruiz, Lead Poisoning Organizer, Wisconsin Citizen Action; [Alberta Seierstad, Program Manager, Portland Water Bureau](#); [Mary Sliney, Executive Director, The Way Home](#); and Jim Yannarely, Department of Public Health, St. Paul, Minnesota.

This Best Practices guide was made possible by support from a project funded by a grant from HUD's Office of Lead-Based Paint Hazard Control, for which we are grateful.

The Alliance is solely responsible for the contents of this guide.

Purpose and Introduction

This Best Practices guide is designed to highlight innovative local models that can be adapted to meet the circumstances and needs of communities working to prevent lead poisoning in distressed and marginal neighborhoods. It is a work in progress; we know there are many other innovative projects and programs being implemented across the country and we would welcome nominations for additional best practices to be included in subsequent editions of this guide.

The best practices highlighted here demonstrate that obstacles to improving the condition of distressed and marginal housing can be overcome and illustrate the wide range of effective solutions now being implemented. Each profile contains information to make them as broadly replicable as possible, including descriptions of key policies and legal mechanisms, leading actors, obstacles that were met and how they were overcome, and the program to contact for additional information.

Not all of the best practices contained in this manual are lead-specific activities; in fact, many demonstrate how projects and programs designed to address related objectives, such as improving housing condition or revitalizing neighborhoods, can simultaneously help prevent lead poisoning. This guide also points out the opportunities to expand these related programs to explicitly address lead hazards. While a few of the best practices featured in this guide are only marginally related to lead hazard control, they illustrate the spectrum of innovative strategies that could be adapted to the fight against lead poisoning.

The Alliance hopes that these best practices will serve as inspiration to the many dedicated individuals across the country who are striving for innovative solutions to the complex challenges posed by lead hazards in distressed and marginal housing.

1. Integrating Lead-Safety into Rental Property Maintenance: Vermont Essential Maintenance Practices

Program Contact

Children's Environmental Health
Vermont Department of Health
108 Cherry Street
PO Box 70
Burlington, Vermont 05402-0070
(802) 863-7206

Program Summary

Vermont law requires owners of rental property and child care facilities built before 1978 to alert tenants/occupants of potential lead hazards and reduce lead hazards through building maintenance. Owners must: provide written material on preventing lead poisoning to tenants; perform a set of Essential Maintenance Practices (EMPs) designed to reduce a child's exposure to lead paint and dust hazards; ensure that any individual undertaking EMPs attend a three-hour training class or be supervised by a trained individual; and file an affidavit of performance with the state Health Department and their insurance carrier.

Background

Concerned over the high rate of lead poisoning in Vermont, a broad coalition, including the Vermont Apartment Association, the liability insurance industry, and lead poisoning prevention advocates, supported legislative changes to address the problem. (1996 lead screening results confirmed that nearly 10% of children tested for lead in Vermont had levels greater than the Center for Disease Control and Prevention's level of concern – 10 micrograms per deciliter ($\mu\text{g}/\text{dl}$).)

Program Description

In April 1996, the Vermont legislature passed Act 165 "An Act to Prevent Lead Poisoning in Children in Rental Housing and Child Care Facilities." Act 165 took effect on July 1, 1996. The legislation, which is largely based on the Title X Task Force's recommended lead hazard control standards, was crafted to take preemptive measures to control lead hazards in rental housing and child care facilities built before 1978. The Act was amended in 1997 to target specific lead activities (e.g., annual cleaning) to properties occupied by a young child, exempt units rented for transient occupancy from the requirements (e.g., hotels, motels), and modify other program elements. The pro-

gram is funded through general revenues and has been implemented by existing state health department staff.

The following requirements apply to all property owners and day care providers, except where a certified lead inspector has documented that lead-based paint is not present:

- provide written lead-based paint hazard information to current and prospective tenants;
- attend the EMP course developed by the Health Department or have a representative from their maintenance staff attend (anyone performing EMPs must also be trained or be supervised on-site by a trained individual);
- perform a visual inspection for interior and exterior deteriorated paint by July 1, 1998 and subsequently at unit turnover;
- complete specialized lead cleaning at unit turnover;
- install window well inserts in all units and common areas accessible to children by July 1, 1998;
- take reasonable precautions when disturbing paint to minimize lead-contaminated dust by avoiding unsafe practices and following recommended dust control procedures;
- post a notice asking building occupants to report deteriorated paint to the property owner; and
- perform annual specialized cleaning of window wells/sills in units with children age six or younger.

Discussion/Conclusion

The Vermont program has resulted in a number of positive results. First, Health Department staff estimate that the vast majority of the roughly 12,000 owners covered by the EMP program know about the requirements. Broad scale awareness appears to be the result of the combined outreach efforts of the Health Department, Vermont Apartment Association, Vermont Association of Realtors, and several active EMP training providers. The Health Department distributed over 40,000 copies of the lead information pamphlet "Protect Your Family From Lead in Your Home," 17,000 copies of the notification poster for deteriorated paint, and 23,000 affidavits to Vermont rental property owners since August 1996. The Vermont Apartment Association described the EMP requirements in its newsletter. Providers of the EMP course also distributed brochures describing the requirements and sponsored local radio advertisements prior to offering classes.

The program also has succeeded in implementing widespread training. In the nearly three years since the new law took effect, approximately 7700 people (more than half of those who are affected by the requirements) have attended the three-hour EMP course. The majority of attendees were property owners and managers, although a substantial

number of contractors (800) also completed the class. Reaction to the training course was almost universally positive, according to an independent evaluation of the program. A Health Department evaluation of the training during the initial year documented that the vast majority of students retained key information at least six months after course completion.

The program's focus on action at unit turnover has minimized property owner resistance; owners/managers were less receptive to performing lead-related work in occupied units. Owners/managers view the turnover treatments as feasible: the visual inspection at unit turnover requires little extra time and the specialized cleaning is estimated to add between two and three hours per unit to traditional turnover treatments. A majority of those interviewed during the program evaluation owned HEPA vacuums (either individually or collectively with a nearby owner). Many owners hired a contractor to perform specialized cleaning. In nearly half the cases, the cleaning contractor had taken the EMP class. If the cleaning contractor had not taken the class, the owner was willing to encourage them to do so or pay for them to attend.

In addition, there was little resistance to following the lead safe paint repair practices when working on interior surfaces. Most felt that wet misting the surface, laying down plastic, and cleaning after the work was completed were feasible and added little extra time or expense to the job.

At the same time, the program has experienced some problems. Several elements of the EMPs consistently touched a nerve with rental property owners/managers. For example, many owners and managers have grave concerns that the threshold spurring exterior paint stabilization is unrealistically low (1 ft²). This complaint was aggravated by their perception that the current recommendation to work wet on exterior surfaces is not practical.

In addition, the difficulties and added costs of installing window well inserts has generated resistance to this element of the EMP program. Some owners have indicated that they were not convinced that the public health benefit of such inserts was sufficient to justify the added time and money necessary to install them. Owners have also raised concerns about inserts accelerating window rot.

The program also learned early on that "cleaning" is a buzzword that owners and managers react to negatively. The owners/managers interviewed during the evaluation universally expressed vehement indignation at being required to "clean," which was viewed as "the tenant's job." However, when the term was cast aside and the specifics of turnover treatments to remove lead dust were emphasized, their reactions were significantly less negative. Owners appeared more willing to pursue vacuuming and wet washing when they were labeled as "dust removal" and characterized as the most cost-effective approach to reducing lead exposures.

Apartment owners and managers are most hostile to the annual cleaning requirements which they feel is the parent's job. In addition, none of owners/managers interviewed understood that the cleaning only applies to units with children six years old and younger and that only cleaning of window sills and troughs is required. Most wrongly assumed that the yearly cleaning meant vacuuming and mopping all horizontal surfaces in all units.

As for the requirement to post a notice for tenants, nearly every landlord or property owner stated that the poster was alarmist and ugly. The objections focused on the unreasonableness of displaying the poster, particularly in single family rental homes in very good physical condition that are unlikely to have deteriorated paint. Substantially less opposition existed to hanging notices in common areas of larger apartment buildings. Some property owners were confused about whether the poster must be displayed in all rental units or only in a prominent location in the building.

It appears that the initial wave of compliance may be slipping over time. Owners who attended early EMP classes and began to integrate unit turnover cleaning and window well inserts into their practices are becoming less diligent. This may be partly due to limited press coverage of lead poisoning concerns. Several property owners explained that because they were not familiar with any local lead poisoning cases, the problem still seemed abstract.

In addition, training classes are less available. Although roughly 25 trainers initially offered the class, 18 months later less than ten trainers consistently provide the training. This decline may represent a natural settling out in the marketplace and a response to the decline in the initial wave of demand.

A major obstacle to widespread and enduring implementation has been the lack of insurance industry support for the program. Although the insurance industry supported the Vermont state legislation, they have not encouraged policy holders to conduct EMPs or even tacitly endorsed such programs. This situation has severely undermined the widespread and continued implementation of the program. As of 1998, only two insurers had sent policy holders an announcement explaining the EMP standards. Several owners stated that their insurer had refused to accept the affidavit filed by the owner after completing unit turnover inspections. In 1998, the Health Department sent out a mailing to hundreds of insurance companies discussing the EMP program and received a tepid response. None of the property owners interviewed believed they were at any risk of losing their coverage if they did not conduct EMPs, or even that their insurer was anxious about lead claims.

Even with these limitations, the Vermont program is a good model for states considering legislative changes to address the problem of lead poisoning. The long-term effec-

tiveness of the program is unknown, but will likely be significant given the level of awareness and training among property owners and workers that has resulted. In addition, the focus of the program on turnover treatments and other measures that owners view as reasonable and feasible means that EMPs are likely to be incorporated into the way owners and maintenance workers conduct business. However, an EMP program will be most successful in states where there are some liability and insurance vulnerability concerns.

2. Low Cost Lead Hazard Control: The St. Paul, Minnesota Weatherization Program

Program Contact

St. Paul - Ramsey County Lead Hazard Control Program
Department of Public Health
555 Cedar Street
St. Paul, Minnesota 55101-2260
(651) 292-6525

Program Summary

The St. Paul Health Department supplements weatherization activities in pre-1978 housing with a child under age six to include targeted lead hazard control activities. Window wells are capped and a thorough cleaning of window sills and floors is completed using a wet wash and HEPA vacuum. Pre- and post-intervention dust samples are collected to document the decline in lead-contaminated dust and to verify that the unit meets dust clearance standards.

Background

The City of St. Paul and neighboring counties have an ongoing weatherization program, which is funded by local utilities and state programs. Several years ago the Health Department began to supplement the standard weatherization efforts in dwelling units built before 1978 with low cost window-focused lead hazard control steps. The program targets units in high-risk neighborhoods (i.e., neighborhoods with a high proportion of dwelling units constructed before 1950 and a low-income population).

Program Description

The lead component of the weatherization program entails capping the window well with aluminum coil stock and cleaning the sills and new well covering using a HEPA vacuum and wet wash (with TSP). Crew members are required to complete a two-day lead worker course so that they can perform both lead and weatherization work. Pre- and post-intervention dust wipe samples are collected on window wells and sills. All units are required to pass dust clearance tests before final re-occupancy. Lead loading is also measured at three and six months post-intervention to assess whether the treatments are effective in the longer term. All dust lead samples are collected by state-certified lead inspectors and/or risk assessors.

The additional cost of the lead supplement to the weatherization program is approximately \$450 per unit, which is funded through Minnesota's lead hazard control grant

from HUD. On average, units treated by the program have had between 7 and 15 windows. Health department staff estimate that the additional cleaning work takes approximately half a day for a two-person crew. To date, 61 units have been completed.

Discussion/Conclusion

Health department staff believe that this initiative has helped prevent elevated blood lead levels in units where work occurred. Although they have not analyzed data to document the benefit, there may be sufficient information available for such an analysis.

An additional benefit of the program is that the contractors performing weatherization now understand how to complete lead dust removal during final cleanup and recognize the importance of controlling lead-contaminated dust. Health Department staff believe these changes in cleaning behavior persist on jobs in older homes even when there is not a lead specification.

The St. Paul weatherization program is a good example of how easily lead hazard control activities can be incorporated into other housing rehab programs, for little additional cost. This program could be pursued by any community with an active weatherization program and access to additional funds for lead hazard control activities (such as funds from HUD, CDC, and state or local programs).

3. Building Broad-Based Coalitions: Campaign to Enact Milwaukee's Lead Poisoning Prevention Ordinance

Program Contact

Wisconsin Citizen Action
152 W. Wisconsin Ave., Suite 308
Milwaukee, WI 53203
[\(414\) 272-2562](tel:(414)272-2562)

Program Summary

Wisconsin Citizen Action (WCA) led a 20-month campaign which mobilized parents of lead-poisoned children and a broad range of community organizations to build public and political support for a new lead poisoning prevention ordinance. The campaign succeeded in getting a law passed establishing a three-year pilot project that requires all pre-1950 rental units in two high-risk neighborhoods to meet mandatory lead safety standards.

Background

Historically, Milwaukee has had a strong lead poisoning prevention program. While the screening rate over the past few years has only been about 30%, it was more than sufficient to document the severity of lead poisoning and the need for primary prevention in two neighborhoods at especially high risk. Milwaukee had compiled lead poisoning incidence and prevalence data by neighborhood since 1991, and thus could identify trends and make comparisons with other cities and between neighborhoods. In the near north side, a predominantly African-American community, 66% of children have blood lead levels ≥ 10 ; in the near south side, a primarily Hispanic community, the lead poisoning rate is 32%. Both neighborhoods have predominantly pre-1950 housing, about 75% of which is rental; together they contain a total of about 800 residential rental units. In addition to blood lead screening, the Milwaukee Health Department conducted extensive environmental sampling and research that conclusively documented lead paint on old windows as the most significant hazard. Specifically, windows were found to have high lead paint content and extensive paint deterioration and window sills, troughs, and surfaces adjacent to windows were found to have high lead dust levels.

The extensive experience of the health department and the thorough knowledge of the problem had not yet translated into effective prevention policy. Faced with ineffective state and local laws, weak code enforcement, and threats of abandonment by landlords, a strong community voice was needed to force landlords to make properties lead-safe.

It was against this backdrop that WCA became involved in lead poisoning prevention. WCA's commitment to lead poisoning prevention grew from a broader "Children First" initiative in 1995, based on priorities set by the community. With a broadly defined mission "to alter relationships of power to improve people's lives," Wisconsin Citizen Action has worked on a range of issues important to low-income communities in Milwaukee for many years.

Program Description

Since the mid 1990s, WCA had been involved in working with parents of lead-poisoned children. Given the political situation, WCA's initial efforts to address lead poisoning focused on education and counseling. In 1997, WCA hired a community organizer to work full time on childhood lead poisoning. The organizer's extensive interviews with parents and community leaders revealed frustration with "using children as lead detectors," as is the case with secondary intervention responses to already-poisoned children. WCA leaders and staff identified enactment of new local legislation to regulate high-risk rental housing as a top priority. Recognizing the need for a campaign with broad-based community support to achieve such a goal, WCA helped to organize "Parents Against Lead," a core group of parents of lead-poisoned children. Parents Against Lead developed and carried out campaign strategies, which attracted new support. At the same time, the Milwaukee Health Department (MHD) joined with WCA to establish community-based education events called "Lead Stops Here." This, in turn, evolved into the even broader-based, ongoing Lead Stops Here Coalition which was co-chaired by WCA and MHD. This Coalition ultimately grew to encompass more than 30 local organizations, including community groups, churches, health clinics, unions, teachers, nurses, the Black Health Coalition, lead abatement contractors, and others.

WCA made tough judgments about what they could achieve politically and then generated broad and vocal support to turn the political tide. Local advocates opted for a pilot program limited in both duration and scope – it would run for three years in the two communities at highest risk, which was viewed by most as addressing the core of the problem in a measured way. The ordinance's focus on lead abatement for windows and interim controls on other painted surfaces would keep compliance costs relatively low and was justified by the city's sampling and research that showed the disproportionate importance of windows as a lead-contaminated dust source. In addition, WCA agreed to not rely solely on the certified industry, which would have increased opposition because of higher compliance costs. While certified contractors would be required for window replacement, the ordinance gives landlords the option of using non-certified crews for interim controls – as long as units pass clearance tests. (See Best Practice #4 for a more detailed description of the ordinance's legal provisions.)

WCA recognized that the success of the campaign relied to a large extent on the support of the local government. Therefore, WCA set out to develop a good working relationship with local officials, especially the health department. The community coalition and

the health department were able to develop an ordinance that was satisfactory to both, and they cooperated extensively on getting the ordinance enacted. In addition, the Department's decision to seek a \$3,000,000 grant from HUD to subsidize a portion of rental property owners' rehabilitation costs under the ordinance was an essential ingredient in overcoming landlord opposition and thus winning support from key Common Council members. WCA's enthusiastic support for this grant application undoubtedly contributed to its approval by HUD.

In addition to working with local agencies, WCA accessed assistance and support from outside Milwaukee in three areas: 1) technical help in drafting the ordinance; 2) lobbying support from state professional associations and national groups at critical junctures; and 3) direct contact with HUD staff.

Once the ordinance was drafted, WCA and community leaders identified pressure points, enlisted support from a broad spectrum of groups, and employed a range of strategies to build political support: large rallies and special events; direct action against landlords; petitions and postcards; continuing coverage by local media; testimony by scores of groups at council hearings; and so forth.

In February, 1999, following the intensive 20-month community organizing campaign led by WCA, Milwaukee's Common Council approved the new ordinance by a vote of 15-0. This innovative ordinance institutes a pilot program to control residential lead hazards in rental properties in two high-risk communities. The law requires all pre-1950 rental units in these neighborhoods to meet mandatory lead safety requirements and provides public subsidies (from a HUD lead hazard control grant) to underwrite landlords' cost of window lead paint abatement. Rental property owners are responsible for lead-safe maintenance of other deteriorated painted surfaces – a responsibility that continues for the full three-year duration of the ordinance.

The relationship WCA developed with the MHD remains important because the health department is now responsible for implementation, which reportedly is off to a good start.

Discussion/Conclusion

Although this ordinance enjoyed strong support from MHD, strong opposition from landlords needed to be overcome. The WCA-led advocacy and organizing effort prevailed by making some tough political choices (limiting the areas of the city covered by the ordinance and limiting the duration to three years) and by supporting city efforts to provide financial assistance to property owners.

The limitations of the approach taken by the coalition are obvious: the ordinance currently does not address other high-risk neighborhoods; the same battle may need to be

fought again when the pilot ends; and the ordinance's implementation is largely dependent upon continued funding to partially subsidize lead hazard control work. The WCA-led campaign demonstrates how important it is to work with a broad coalition and set achievable goals. Provided certain essential ingredients, a similar campaign could enact a comparable municipal law elsewhere. The key ingredients of this campaign were: 1) a strong direct action community organization with an experienced organizer and a solid commitment of resources for an extended campaign; 2) involvement of a core group of parents of lead-poisoned children; 3) strong support and close cooperation from key municipal officials (especially health department lead poisoning program staff); 4) a good surveillance system (so that the scope of the lead poisoning problem and highest risk areas could be identified); 5) research-based analysis of local housing conditions and development of an ordinance containing housing standards designed to address these local conditions; 6) the existence of an adequate infrastructure of inspectors and professional lead abatement contractors who could perform the lead hazard control work required by the ordinance; 7) strong media advocacy; and 8) a source of funding to provide partial subsidies to property owners to assist them with compliance.

4. Targeting High-Risk Neighborhoods: The Milwaukee, Wisconsin Pilot Project for Lead-Based Paint Hazard Control in Residential Rental Properties

Program Contact

City of Milwaukee Health Department
Milwaukee Childhood Lead Poisoning Prevention Program
1230 West Grant Street
Milwaukee, Wisconsin 53215
(414) 225-LEAD

Program Summary

The City of Milwaukee has enacted an ordinance establishing a three-year, proactive pilot project to prevent childhood lead poisoning and maintain the stock of affordable housing. The project targets approximately 800 units in two areas of the city found to pose the greatest threat of lead-based paint hazards with multiple strategies: landlord outreach and education; code enforcement; subsidies for lead hazard control; and a community registry for lead-safe housing.

Background

Milwaukee's Lead Pilot Project Ordinance¹ grew out of sustained community activism combined with authoritative data on local housing conditions and lead poisoning patterns. (See Best Practice #3 for a detailed description of the campaign that culminated in the adoption of the Ordinance.) Based on blood lead screening and research conducted by the Milwaukee Health Department (MHD), the ordinance targets two economically distressed areas of the City with exceptionally high childhood lead poisoning rates: in one area, the 1997 lead poisoning prevalence rate was 66%; in the other it was 32%.

Three quarters of the housing units in each area are rental properties (determined to be more susceptible to inadequate maintenance and deteriorating painted surfaces) and more than 99% of the homes were built prior to 1950 and therefore are highly likely to contain lead-based paint. Based on extensive environmental sampling and research, MHD conclusively documented lead paint on old windows as the most significant hazard. Specifically, windows were found to have high lead paint content; extensive paint

¹ Unless otherwise noted, information pertaining to the Ordinance was obtained from the Ordinance Relating to a Pilot Project for Lead-Based Paint Hazard Control in Residential Rental Properties and from the accompanying Overview of Grant Activities/Legislation.

deterioration; and window sills, troughs, and surfaces adjacent to windows were found to have high lead dust levels. The two areas contain a total of approximately 800 rental units.

Program Description

The pilot project is three years in duration. During the first year of the program, known as the compliance period, owners of rental properties built before 1950 in the project areas must obtain a lead-based paint hazard control certificate evidencing their property's compliance with the city's lead-safe housing requirements. Owners who fail to obtain valid certificates by the May 1, 2000 deadline are subject to fines up to \$5,000 per building. During the second and third years of the program, owners must employ essential maintenance practices in order to be re-certified as lead-safe. MHD has invested substantial resources in educating owners on their obligations under the Ordinance and in facilitating property enrollment, which is the first step in the process. (Phone conversation with Amy Murphy, Lead Program Manager, City of Milwaukee Health Department; November 29, 1999)

When an owner applies for a certificate, MHD conducts a risk assessment of the property to identify lead hazards and develops a scope of work. MHD then issues a work permit and monitors the work as it progresses to insure occupant and worker safety and compliance with the scope of work. Aside from ongoing maintenance, no lead hazard control work may proceed without a permit.

When the work is complete, MHD conducts a final re-inspection, including clearance dust testing, and issues a certificate of compliance for a period of one to three years, depending on the expected duration of the measures taken to control the lead hazards. Seven months into the program, every certificate MHD issued was one year in duration. (Murphy, December 22, 1999) If upon re-inspection MHD finds that the lead hazards have not been controlled adequately, it can require corrective action. Shortly before a certificate is set to expire, MHD will conduct another risk assessment to determine whether the property presents any lead hazards and, if necessary, will develop a new scope of work and issue a new work permit.

The Ordinance establishing the program sets forth permissible methods for lead hazard abatement and control. Windows are required to be lead-abated by state-certified lead supervisors and workers in accordance with MHD's window specification (See Best Practice #5). Interim controls may be undertaken by non-certified workers, for whom MHD "strongly recommends" voluntary training on lead hazard control, which MHD offers free of charge.

The Ordinance also sets forth essential maintenance practices, which are required to maintain certification. No permit is needed for preventative or ongoing maintenance.

Like interim controls, essential maintenance practices may be undertaken by non-certified workers, who are encouraged to undergo the free MHD training. Owners are required to perform essential maintenance practices at unit turnover and upon tenant notification of a suspected lead hazard. MHD has prepared a brochure for tenants informing them how to recognize lead hazards and how to report problems to the building owner and the Department.

When the compliance period ends on May 1, 2000, MHD is empowered to conduct inspections of units it believes have not complied with the Ordinance's lead hazard control provisions. (Murphy, December 22, 1999) If the Department determines that a lead hazard exists, it can order corrective action. In the event that the owner does not comply with the corrective action order, MHD can undertake the necessary remedial action itself and levy a special charge against the property for the cost to do so, up to a maximum of 40% of the property's assessed market value. If MHD finds a unit to be unsafe or a threat to human health, it can order the occupants to vacate, and can require the owner to keep the premises vacant until the unit conforms with good maintenance practices and standard treatments. MHD expects that in buildings with a history of unpaid fines and taxes, orders to vacate will stem non-compliance more effectively than fines. (Phone conversation with Sharon Pendleton, HUD Project Coordinator, MHD, March 22, 2000) The Ordinance itself makes no formal provision for tenant assistance in the event of evacuation. However, MHD believes that existing case management systems and community programs are adequate to cover assistance for any necessary evacuations. (Murphy, November 29, 1999)

The Ordinance also provides that tenants may deposit their rent into escrow in an amount proportional to the degree to which they have been deprived of the full normal use of the premises. The city has procured a legal opinion declaring that tenants may escrow 100% of their rent under this provision. (Murphy, November 29, 1999)

The Ordinance makes funding available to owners to help offset the cost of the lead hazard control work. MHD (using funds from a competitively secured HUD grant) will cover 100% of window abatement work (which must be performed by certified lead abatement contractors) or 50% of all necessary work, if performed by certified lead abatement contractors. In order to qualify for funding, the work must be conducted in accordance with MHD's scope of work, taxes must be paid and up to date, there must be no outstanding building code violations or major structural defects, and units must be made available to low- or very low-income tenants.

The pilot project is set to terminate on May 1, 2002, at which time all certificates expire.

Discussion/Conclusion

The availability of financial assistance, combined with the threat of financial penalties in the event of non-compliance, have worked effectively to induce property owners to undertake necessary lead abatement and hazard control measures. Six months into implementation, Milwaukee has achieved an impressive 80% rate of enrollment, with over one-third of the target units already certified as lead-safe. (Murphy, November 29, 1999) MHD anticipates that more than 85% of the units will be certified by May 2000, with the remaining units subject to the Ordinance's enforcement provisions. (Pendleton, December 1, 1999) The use of a certificate system to document owner compliance has been a very effective tool for determining whether a unit has controlled lead-based paint hazards.

Health Department officials have found the education and outreach necessary to enroll properties and enforce for noncompliance to be burdensome. However, the positive reactions of property owners subject to the ordinance has engendered optimism among staff that a system of voluntary compliance, employing liability incentives coupled with existing enforcement mechanisms, in a larger target area may be effective.² (Murphy, November 29, 1999)

The free training sessions offered by MHD for non-certified workers conducting interim controls or essential maintenance practices have not been very well attended. As a result, MHD has had to closely monitor interim control work conducted by owners as it progresses to ensure that it is performed in a lead-safe manner. (Murphy, November 29, 1999)

The Milwaukee ordinance has successfully and effectively targeted attention and resources on the two neighborhoods at highest risk for lead poisoning in the city through a combination of strategies: enforcement; outreach; technical support; and financial assistance. States and cities looking to Milwaukee as a model should especially take note of the certification requirements and post-work inspections, which help ensure quality control and monitor certification for the duration of the program.

At the same time, it may not be possible or advisable to replicate the Milwaukee program exactly given some of the problems they are experiencing. The purpose of a pilot project is to test approaches and use lessons learned to improve upon them. States and cities looking to implement similar programs need to determine if it is necessary and desirable to devote the level of resources Milwaukee is expending on landlord outreach and education. In addition, ways to increase participation in lead hazard control and lead-safe maintenance training programs should be explored.

² A law passed in 1991 enables MHD to order owners to correct lead-based paint hazards, even absent any elevated blood lead levels. (Murphy, December 22, 1999)

5. Low-Cost Window Abatements: The Milwaukee, Wisconsin Window Specification

Program Contact

City of Milwaukee Health Department
Milwaukee Childhood Lead Poisoning Prevention Program
1230 West Grant Street
Milwaukee, Wisconsin 53215
(414) 225-LEAD

Program Summary

Following a multi-year evaluation of various techniques for treating windows painted with lead-based paint, the Milwaukee Health Department (MHD) developed an efficient and effective specification for abating windows. The specification is mandatory in areas of the City subject to a recently enacted lead poisoning prevention pilot project (See Best Practice #4) and in residences housing children with elevated blood lead levels.

Background

Recognizing that old windows coated with lead-based paint are a major source of exposure in Milwaukee, MHD evaluated various approaches for treating them in the mid-1990s. The evaluation compared the effectiveness of a variety of methods: full window replacement; installing jamb liners and stabilizing sash faces by wet scraping and repainting; and cleaning to clearance levels without stabilization measures. Follow-up dust testing was conducted over a three-year period to determine the long-term effectiveness of each method.

Program Description

The specification requires the removal of all paint from sash faces using an electric planer with a HEPA-vacuum attachment. (In the pilot project areas, an inspection of the bare wood surface is required prior to priming and repainting.) The jambs must be wet-scraped and double jamb liners installed. Interior sills are stripped with a heat gun and repainted. Troughs are enclosed with vinyl or aluminum, and must be smooth and cleanable after treatment. When the work is complete, MHD conducts a final re-inspection, including clearance dust testing.

The window specification has become a critical component of lead hazard control activities in Milwaukee. Windows are a major source of exposure throughout Milwaukee, and MHD has carried out evaluations that confirm that windows are the most signifi-

cant source in the two pilot project areas. MHD has therefore incorporated its window specification into the pilot project in order to maximize the program's effectiveness. The specification is also followed in units where a lead-poisoned child resides. In the future, MHD plans to incorporate the specification into projects funded by federal block grants.

Discussion/Conclusion

Milwaukee's window treatment specification is effective largely due to the extensive research that guided its design. Years of study were devoted to determining why certain methods were ineffective in reducing lead hazards stemming from windows over the long term, and to devising effective solutions tailored to local conditions.

The approach mandated by the specification has several advantages. First, follow-up dust tests conducted one to two years after treatment have met clearance levels. Second, the treatments can be performed quickly – in approximately 1 ½ to 2 hours per window. (Window replacement may require waiting periods of several weeks, especially for odd-sized windows.) Third, salvageable sashes are retained, saving resources and costs for materials. Finally, the demand for window treatments has created a “specialty niche” for urban home improvement contractors with lead abatement licenses, strengthening their businesses. Contractors performing the window abatements under the specification profit reasonably, since labor costs comprise the bulk of the total expense (labor costs average about \$135 per window while materials average only \$14 per window). Their business also has become less erratic due to the increased availability of year-round work (window abatements are performed from inside a building so demand is not seasonal). (Phone conversation with Sharon Pendleton, HUD Project Coordinator, MHD, July 6, 2000; written communication from S. Pendleton, August 17, 2000)

6. Early Warning Systems for Deteriorating Properties: Neighborhood Knowledge Los Angeles

Program Contact

UCLA Advanced Policy Institute
3250 Public Policy Building
Box 951656
Los Angeles, CA 90095-1656
(310) 825-5435

Program Summary

Neighborhood Knowledge Los Angeles (NKLA) is a web site dedicated to preventing housing and neighborhood deterioration by tracking multiple data points for properties throughout the city and making the information publicly available. The web site concentrates on the types of information that indicate properties in danger of decline, such as code complaints, contract nuisance abatements (city-sponsored repairs to address public safety hazards), tax delinquencies, and utility liens.

Program Description

The Community Information Technology Center of the UCLA Advanced Policy Institute maintains the NKLA web site, which has been online since 1996.³ The web site has been translated into Spanish and is open to anyone interested, including city officials, residents, community organizations and policymakers. The project has sought to “bridge the digital divide” by creating computer-equipped community technology centers and providing free, hands-on training on how to use NKLA for community development workers, neighborhood and tenant organizations, high school students, and legal services providers. (NKLA Press Release, “Redesigned Interactive Web Site Debuts as Part of UCLA Effort to Bridge the Digital Divide,” September 16, 1999)

While some city and county agencies initially were ambivalent about the project, NKLA was able to generate support by assembling some preliminary data, creating a prototype, and using that to engender interest in the project. (Phone conversation with Danny Krouk, NKLA prototype developer, December 8, 1999)

The web site provides a wide breadth of information gathered from a number of city agencies. Code complaints, building permits, contract nuisance abatements, tax delinquencies, and utility liens are noted for each property in the database. The system also tracks the expiration of affordability agreements for government-assisted housing in

³ NKLA is patterned on Chicago’s Neighborhood Early Warning System (NEWS).

order to project risk of conversion from affordable to market-rate. The site may be searched by zip code, census tract, council district, address, or a specific criteria (e.g., properties with pending code complaint cases). Any of the site's datasets may be viewed area-wide on easy-to-read maps. This mapping function allows users to spot clusters of tax delinquencies, code complaints, or other problems indicating pockets of potential neighborhood decay.

NKLA also features 1990 census data on demographic characteristics, such as household income, educational level, and race and ethnicity and housing characteristics, including numbers of occupied versus vacant units, median gross rents, and tenure (rental versus owner-occupied units). Census data are available citywide and by zip code, census tract, and council district.

Since the project's inception, NKLA's creators and users have identified additional informational needs and the project's databases have been expanded. The City of Los Angeles contracted with NKLA to design a management information system (MIS) to support its new code enforcement efforts (see Best Practice #6). Housing inspectors in the field now enter information into pen-based computers, enabling community groups to track code complaints, inspections, and improvements using "real time" information. (Phone conversation with Bill Pitkin, Research Associate, UCLA Advanced Policy Institute, August 21, 2000; Web Site Isolates the Roots of Urban Decay," www.civic.com, October 1998)

In addition to tracking troubled properties, NKLA plans to expand its databases further to incorporate information on positive developments within communities. (NKLA Press Release, September 16, 1999) In addition, the project has undertaken a Regional Housing Needs Assessment, which calculates the level of local and regional housing development required in order to address population growth over the next five years. (NKLA web site, History)

A wide range of users find the NKLA web site useful. Community groups are able to identify property owners in trouble and provide proactive counseling services while their advice still may be effective. Local non-profit developers can locate properties headed towards abandonment and acquire them before they deteriorate. Residents can determine whether their landlords are complying with their obligations, and learn about conditions in their neighborhoods. NKLA's versatility is reflected in its popularity: as of September 1999, the site was registering 5,000 hits daily. (NKLA Press Release, September 16, 1999)

The cost to create the web site in its current form was approximately \$40,000. In addition, two people work full time on training and outreach, and one person works full time updating and maintaining the system. (Email communication with Bill Pitkin, December 8, 1999) NKLA has received its funding from city and federal governmental au-

thorities, as well as private foundations and corporations. While the project will continue to require funds to sustain itself, it is hoped that NKLA can move towards automated updating of information in order to reduce the resources necessary to maintain the databases. (Phone conversation with Neal Richman, Associate Director of UCLA's Advanced Policy Institute, December 6, 1999)

Discussion/Conclusion

NKLA has helped to improve housing conditions in Los Angeles in a number of ways, fostering policy change as well as assisting individuals to become homeowners. For example, the project worked to change ineffective city housing policies by focusing the attention of city council members on the severity of housing problems in their districts. (Richman, December 6, 1999)

In addition, NKLA has been useful to community-based organizations in their efforts to stem neighborhood deterioration. For example, Concerned Citizens of South-Central Los Angeles uses the database to identify properties that are delinquent on taxes or subject to foreclosure. The organization purchases troubled properties and assists first-time home buyers to acquire and improve them. ("Project Applies Power of Net to LA Housing Woes," Los Angeles Times, November 22, 1999)

In part, the success of this project's effectiveness and sustainability can be attributed to the fact that it is housed in a university. Universities are warehouses of technological expertise. As long-standing, neutral institutions they can draw a wide range of stakeholders to the table. (Richman, December 6, 1999)

Identifying properties likely to decline before they do so is key to preventing potential lead problems from becoming serious hazards. Making this information publicly available is a breakthrough. NKLA provides an effective, low-cost model for focusing attention on housing problems and making housing a priority for the public and decision-makers.

NKLA is "completely replicable" in other communities. As the information age moves forward, cities increasingly will be expected to make their data accessible, and universities and other research institutions will experience greater opportunities to collect and analyze the data and present it to the public in a useful format. (Richman, December 6, 1999)

7. Enforcing Housing Standards: The Los Angeles County Systematic Code Enforcement Program

Program Contact

Los Angeles City Housing Department
111 N. Hope Street
Los Angeles, CA 90012-2607
(213) 367-9278

Program Summary

This program is designed to ensure that tenants have a safe and habitable place to live by improving the condition of distressed housing and preventing marginal housing from becoming distressed. Under this program, all rental housing containing two or more units in the City of Los Angeles is routinely inspected.

Background

Historically, housing codes in Los Angeles (and most of the rest of the country) have been enforced weakly and then only reactively, in response to tenant complaints. This approach has contributed to the decline of housing condition since tenants often do not complain until physical conditions are fairly severe. In addition, some tenants (such as recent immigrants) are reluctant to report problems at all, no matter how severe. To make matters worse, housing inspections in LA were the responsibility of the city's Department of Building and Safety, which was notorious for its highly ineffective enforcement system (partially due to the lack of staff provided to pursue compliance). Tenants found it extremely difficult to navigate the complaint process or to receive prompt attention once complaints had been filed. (Vicki White, "UCLA Web Site Isolates the Roots of Urban Decay," www.civic.com, October 1998). Similarly, the health department was not conducting health and sanitary inspections in thousands of units, especially in poor areas, despite the fact that owners were required to pay inspection fees. ("Report Hits Apartment Inspections," Los Angeles Times, August 13, 1997)

Public concern over the significant deterioration of neighborhoods in Los Angeles over the last 20 years led to the creation of the Citizens Blue Ribbon Committee on Slum Housing. (Phone conversation with Rod Field, Los Angeles Housing Law Project, December 10, 1998). The Committee undertook a number of activities to stem the deterioration of housing, including drafting a new housing ordinance. When the ordinance was passed it was estimated that 150,000 units in the city had code violations and that approximately 30,000 of those units were "severely distressed." ("Help for Substandard Housing," Los Angeles Times, May 25, 1998)

Program Description

The new Los Angeles housing ordinance, which was provisionally passed in July, 1998, accomplished two things. First, it transferred the primary responsibility for housing inspections to the Housing Department. Second, it requires that every residential rental property with two or more units be inspected at least once every three years. To carry out this mission, the city has hired 67 new housing inspectors. The program is funded by a \$1.00 per unit fee paid by property owners, which, under the law, can be passed on to the tenant. Low-income tenants strongly supported the passage of this ordinance, including the monthly fee. The fee is expected to generate \$7-8 million per year. (Field, December 10, 1998) About \$1.6 million of this amount is designated for enforcement activities. (“Judicial Housecleaning,” Los Angeles Daily Journal, May 7, 1998)

It is estimated that it will take three years to inspect all units covered by the ordinance. Buildings in which multiple violations are identified will then be inspected annually and marginal buildings will be inspected every two years. All other units will be inspected every three years. (“Council OKs Apartment Inspection Reform Plan,” Los Angeles Times, July 1, 1998)

Housing inspectors now inspect for all violations of the Los Angeles Civil and Municipal Codes, which cover a wide range of issues, including fire safety, plumbing, and health. While lead is not specifically mentioned in the codes, there are a number of provisions that will improve maintenance and thus help prevent the creation of lead hazards. For example, the building code requires that all walls, floors, and ceilings be maintained in “good repair.” (Los Angeles Housing Department web site, www.cityofla.org, “Preparing Residential Property for the Housing and Habitability Inspection,” L.A.M.C. 91.8104.4, 91.8104.6 and L.A.C.C. 11.20.340/11.20.140 (b)3). Peeling and cracked paint, which signify potential lead hazards, would not meet this requirement. In addition, plumbing problems must be corrected. (Ibid, L.A.M.C. 91.8104 91.8104.9 and U.P.C. 302.801, 907). Plumbing leaks are a common cause of paint deterioration, which can cause lead hazards in pre-1978 housing.

Property owners are given a 30-day advance warning that a periodic inspection will be taking place. Owners are cited for violations unless tenants are found to be responsible, in which case inspectors can cite them instead of or in addition to the owner. Legal action is taken against owners who fail to make corrections. (Los Angeles Times, July 1, 1998) When tenants are cited, they may also have legal action taken against them to gain compliance.

To complement the Systematic Code Enforcement Program, the city has dedicated 27 inspectors to deal with interim complaints. The complaint response program will help minimize building deterioration and respond to existing emergency situations.

An important ingredient which will affect the long-term success of the program is the public availability of information on code violations. Code inspection data is easily attainable on the Neighborhood Knowledge Los Angeles (NKLA) web site (see Best Practice #5), which is currently updated every six months. However, NKLA is designing a new management information system that will help make updating the information available on the web site easier and faster. In fact it may be possible that multiple updates per day will be made by inspectors in the field carrying pen-based computers. (White, October 1998) (See Best Practice #5.) Timely access to such information can spur compliance advocacy, targeting high-risk neighborhoods for blood lead screening, and reduce the marketability of substandard units.

In addition, the city has established another complementary program, with the cooperation of a handful of financial institutions, to provide small loans to apartment owners to help them finance repairs. This program is necessary because large lending institutions do not normally provide such small loans (owners can apply for as little as \$1000). One aspect of the program that the city is concerned with is ensuring that large slumlords, who have the means to finance repairs, do not benefit from this program. (Los Angeles Times, May 25, 1998)

Discussion/Conclusion

By changing its approach from a haphazard, complaint-driven housing code enforcement system to a centralized, tri-annual, periodic inspection program, Los Angeles already has improved code compliance among property owners. ("Project Applies Power of Net to LA Housing Woes," Los Angeles Times, November 22, 1999). Ninety-six percent of property owners cited by inspectors correct violations. This is likely due to the awareness among property owners that the City can strictly penalize non-complying owners. (Task Force Report, LA Housing Crisis Task Force, November, 1999).

A number of ingredients bode well for the program's continued success. First, the new program is based on a full understanding of the housing problem and the flaws of the enforcement system it replaced. Second, the inspection and complaint processes have been streamlined by lodging responsibility in one agency, the Housing Department. Third, the new emphasis on inspections is complemented by a variety of measures. For example, for the first time significant resources are being dedicated to enforcement. In addition, strict enforcement has been coupled with a loan program to provide additional resources to property owners needing financial assistance to correct code violations. Finally, communities are able to track code violations through the NKLA web site, which will contribute to making the program publicly accountable.

Unfortunately, by not specifically addressing lead, the program is missing an important opportunity to correct lead hazards and ensure that violations are repaired in a lead-safe manner. Many of the corrective measures being taken can generate significant lead

dust hazards, yet no clearance dust testing is performed. The program could be improved significantly by amending the building code to include lead or by developing and enforcing a lead-specific law.

Cities and states considering replicating the Los Angeles model should include measures to address lead hazards directly, such as training and certifying all inspectors as clearance technicians (one-day training) and taking limited dust tests upon initial inspection and for clearance after repair work has corrected violations.

8. A Community-Based Initiative to Address Environmental Health Problems in Housing: The Los Angeles Healthy Homes Pilot Project Collaboration

Program Contacts

Strategic Action for a Just Economy
2636 Kenwood Ave.
Los Angeles, CA 90007
[\(323\) 732-9961](tel:(323)732-9961)

Esperanza Community Housing Corporation
2337 Figueroa St.
Los Angeles, CA 90007
[\(213\) 748-7285](tel:(213)748-7285)

Program Summary

The LA Healthy Homes Pilot Project is a community-based, collaborative effort to identify and address housing conditions related to children's environmental health, including lead poisoning, asthma, allergies, and cockroach infestation, as well as the conditions of poverty that perpetuate these problematic conditions in the Maple-Adams and Hoover-Adams communities of LA. The project has six main components: 1) training and hiring low-income community residents; 2) conducting door-to-door health surveys, education, and visual inspections; 3) screening children for lead; 4) organizing tenants; 5) reducing environmental hazards in housing; and 6) organizing and advocacy to establish new city policies for prevention via housing code enforcement.

Background

In 1998, Los Angeles tenant and housing rights activists won the approval of a new city code enforcement ordinance which greatly increases the number of housing inspectors and, for the first time, mandates periodic, proactive inspections in addition to complaint-based inspections. (See Best Practice #6) However, the Housing Department has resisted advocates' demands to incorporate lead hazard identification into routine housing inspections or to subject properties with lead hazards to enforcement actions – or even to refer potentially hazardous units to the LA County Health Department for lead hazard assessments.

Recognizing that substandard housing in many LA neighborhoods poses health threats to children, two community-based groups, Strategic Action for a Just Economy (SAJE)

and Esperanza Community Housing Corporation (Esperanza), were troubled by the resistance of the Housing Department to address these hazardous conditions. At the same time, SAJE and Esperanza also recognized the need for residents of these communities to gain marketable job skills and meaningful employment. To confront these concerns the Healthy Homes Pilot Project, a collaborative project spearheaded by SAJE and Esperanza, was launched in late 1998.

SAJE's work on this project grew out of a workers' cooperative the organization created to provide immigrant domestic workers with a living wage alternative to exploitative domestic worker agencies and another similar project for immigrant day laborers. Esperanza came to the project through a bilingual training program which has trained 80 community residents as health promoters.

Program Description

The LA Healthy Homes Pilot Project is a collaborative effort spearheaded by SAJE and Esperanza, with assistance from St. John's Well Child Center; LA County's Childhood Lead Poisoning Prevention Program; Legal Aid Foundation of LA; and Occupational Knowledge, a private environmental contracting firm. The residents in the targeted neighborhoods are primarily Latino and more than half are low-income. Sixty-four percent of the 2,134 housing units were built before 1960; 91% of these are rentals owned by absentee landlords.

Through their workers' cooperative, SAJE trains day laborers in lead-safety and domestic workers in lead-safe post-remediation cleaning. Domestic workers are also trained to teach families cleaning techniques that are effective in removing lead-contaminated dust. Five of the 80 health promoters working for Esperanza have received training and state certification in lead abatement work.

Esperanza health promoters go door-to-door in target neighborhoods to conduct health surveys, resident health education, and preliminary visual inspections for unhealthy housing conditions. These workers classify each dwelling as good, fair, or poor based on a checklist developed for the project. All families are given a coupon for free blood lead tests at St. John's Well Child Center, free transportation to this clinic, and other incentives to get their children screened. As a result, most families have had their children tested.

SAJE work crews then visit homes classified as poor or fair by the health promoters, giving priority to households with young children and pregnant women. The work crews identify hazards that need to be addressed, take dust samples, and develop a work plan and/or risk assessment.

If the home is owner-occupied, environmental interventions are offered at no cost in exchange for permission to use the home as a training site and an agreement to allow follow-up inspections and testing. In rental properties, SAJE provides landlords with a basic risk assessment and offers a cost estimate for SAJE to do the needed work. (SAJE Healthy Homes Repair Crew workers are qualified to do everything from cleaning and stabilization to full lead abatements.) In multi-unit rental properties, a tenant organizer holds building-wide meetings to enlist tenant involvement in negotiations with the owner about making needed improvements.

SAJE staff assist cooperative landlords with securing financing from the city and/or banks. If an owners is not cooperative, SAJE assists tenants in reporting the building to the city's code enforcement system, exercising their legal right to "repair and deduct," among other advocacy strategies.

The project anticipates performing health surveys, resident health education, and initial inspections in more than 1700 dwellings, of which 90% are rental. More than 740 young children are expected to receive blood lead tests. Project staff estimate that environmental interventions to reduce health hazards will be performed in more than 280 units, with nearly 150 of these involving cooperative landlords and about 50 more involving units where city code enforcement forces the owner to act.

Discussion/Conclusion

The project has been designed strategically to accomplish multiple objectives: identify and remediate unhealthy housing conditions; provide training and meaningful employment for low-income community residents; educate community residents about housing-related environmental health hazards; and create a sustainable community business that can carry out this project in the future and expand it to other similarly-situated LA neighborhoods.

The project hopes to move LA County beyond reacting to already-poisoned children and toward prevention, initially through the pilot project and later as a matter of policy. For example, by convincing Housing Department staff that "minor" code violations (e.g., deteriorated paint in older homes, mold and moisture problems) have important implications for children's health, the pilot project aims to get housing inspectors to refer hazards to health agencies for action and train code inspectors on identifying health hazards (including routinely taking dust wipe samples).

In addition, the project seeks to target the city's lead hazard control financing program to cooperative landlords with a real financial need and whose buildings have significant hazards. At the same time, the project will contribute to making the city's code enforcement system a more effective "stick" to wield against recalcitrant landlords.

While the potential beneficial results of this approach are very great, challenges to the program's long-term sustainability remain and could limit its replicability elsewhere. For example, even the organizers do not expect property owners to pay for project services in a very large percentage of the targeted dwelling units. Thus, it will probably be difficult to make this project self-sustaining, and subsidies will almost certainly be needed for the foreseeable future. Most likely this project will not thrive without foundation grants; contracts with local health agencies; support from local government through CDBG or HOME funds; or dedicated resources, such as a HUD Healthy Homes grant.

The LA Healthy Homes pilot project offers a model for addressing both unhealthy housing conditions and the training and employment needs of high-risk communities. It also demonstrates how effective broad-based collaborations can be.

Essential ingredients for the success of this project are: 1) a sponsoring organization whose mission and expertise is broad enough to include community organizing, community health education, housing development or construction, job training and employment services, and enterprise development; 2) a pool of community people who want to work as health educators, environmental hazard inspectors and lead abatement workers; 3) a funding source to support salaries of the workers and other project costs; 4) an organizing strategy that identifies the steps necessary to move from providing resident education, performing environmental interventions and organizing tenants in specific properties to reforming city housing and health policies; 5) support from additional partners such as local health agencies and groups that provide civil legal assistance for low-income people. In particular, the LA County Health Department has been a strong supporter of the pilot project, providing funding, materials and other support.

9. Holding Property Owners Accountable: New Jersey Multiple Dwelling Registration and Inspection Program

Program Contact

New Jersey Department of Community Affairs
Division of Codes and Standards
Bureau of Housing Inspection
Housing Code Administration Section
Post Office Box 810
Trenton, New Jersey 08625-0810
(609) 633-6219

Program Summary

Identifying and locating owners of poorly maintained multi-family dwellings in some cases can prove difficult and burdensome for governmental authorities as well as tenants. New Jersey has sought to facilitate the identification of owners and maintenance of its housing stock by requiring that multiple dwellings be registered and periodically inspected.

Background

While many registration programs have not proven effective, New Jersey's program, in place since 1905, has worked to identify and locate individuals responsible for problem properties. (Phone conversation with John Monahan, Assistant Director of Licensing and Inspection, Bureau of Housing Inspection, December 8, 1999) The program is administered by the Bureau of Housing Inspection (BHI), which is part of the Division of Codes and Standards in New Jersey's Department of Community Affairs (DCA).

Program Description

Under the Hotel and Multiple Dwelling Law, owners of buildings containing three or more units must submit a certificate of registration and a \$10 fee for each building owned.⁴ In addition to providing personal contact information, the owner also must designate an agent residing in the county where the property is located who is authorized to accept notices from tenants and to receive service of process on the owner's behalf. This minimizes problems associated with contacting absentee landlords. If the owner resides in the county where the property is located, he can designate himself.

⁴ Except where otherwise indicated, information on the registration and inspection processes was obtained from the New Jersey Hotel and Multiple Dwelling Law (N.J.S.A. 55:13A-1 et seq., Section 46:8-28 of the Property Code) and the Certificate of Registration form and informational pamphlet.

The registration form also requires disclosure of any person aside from the owner who exercises control over the property.

If the property is owned by a corporation, the company must be registered to do business in New Jersey. Corporate owners also must indicate the name and address of the corporation's registered agent and identify the corporate officers. If the property is owned by a partnership, the registration form must disclose the names of all general partners. (If necessary, this information may assist in piercing the corporate veil.)

Owners also must provide the name and address of the managing agent of the property, if any, as well as the name and address of any superintendent, janitor, or other person responsible for the ongoing maintenance of the property. In addition, the owner must designate someone who has the power to authorize expenditures for emergency repairs, and provide the name and address of every holder of a recorded mortgage.

Upon submission of a completed certificate of registration, the owner receives a validated copy of the certificate from DCA, which must be posted in a conspicuous location in a common area in the building. When a building is sold, the new owner has 20 days to file a certificate of registration with BHI.

If an owner fails to register, DCA notifies the owner of the violation and orders him to register within 30 days. If the owner still neglects to comply, the Department imposes a penalty of \$200 per violation, and certifies the debt to the superior court. The clerk of the court immediately docket a judgment against the owner, which makes it difficult for him to obtain credit cards, financing, etc. (Monahan, December 8, 1999) A further incentive for compliance is that fact that tenants in a non-registered building may not be evicted for any reason, including nonpayment of rent. (Connolly, July 14, 1998)

BHI uses the information it gathers during the registration process to assist in its inspection program. The registration process ensures that persons with responsibility and authority to maintain buildings can be located and served with legal notices. Multiple dwellings (defined to include buildings with three or more units), hotels, and motels must be inspected at least every five years. Inspections are carried out systematically, as they come due; few inspections are undertaken in response to complaints. The program inspects 150,000 - 180,000 units annually using approximately 120 inspectors - 70 of whom are employed by the state, and 50 of whom are employed by municipalities that have contracted with BHI to perform inspections. Buyers routinely request to see certificates of inspection upon purchase. (Interview with Bill Connolly, Director, Division of Codes and Standards, July 14, 1998)

If upon inspection BHI determines that the dwelling units comply with the state's construction and maintenance requirements, the Bureau issues a certificate of inspection. However, BHI inspectors often discover at least one violation, in which case they issue a notice informing the owner of the violation and indicating the date by which the problem must be corrected. (Connolly, July 14, 1998) An owner has 15 days from the date of

the notice to request a hearing at which he may contest the citation. If no hearing is requested, the owner is deemed to admit to the violation. Ordinarily, the owner is given 60 days to remedy the violation, but extensions routinely are requested and granted. In situations where an owner must address numerous violations, BHI will allow the owner to undertake necessary repairs in accordance with a pre-agreed compliance schedule. (Connolly, July 14, 1998)

BHI re-inspects non-complying units when the time allotted for compliance has elapsed. If the owner has corrected the deficiencies, BHI issues the owner a certificate of inspection. If the owner has failed to remedy the problems noted during inspection, BHI refers the matter to its Code Compliance Section for enforcement action. (State of New Jersey web site, www.state.nj.us/dca, Division of Codes and Standards) The Code Compliance Section imposes a penalty and establishes a new deadline for compliance with the owner. If the owner corrects the violation within the new time period, the penalty may be reduced.

If an owner fails to bring a building into compliance or pay the penalty, the enforcement action moves to the courts. The owner no longer may contest the violation – BHI need only prove that the owner was notified of the penalty and failed to pay. All but the most recalcitrant of owners come into compliance at this stage. (Connolly, July 14, 1998)

If the matter goes to judgment, a lien is filed against all of the owner's property, both personal and corporate. With a judgment in place, the Bureau can conduct discovery in order to identify assets and attempt to pierce the corporate veil, if one exists, using information obtained through the registration process. Occasionally, piercing the corporate veil poses an insurmountable obstacle, but more often previously recalcitrant owners are drawn to the table out of uncertainty over their chances of evading liability. (Connolly, July 14, 1998)

BHI has experimented with using tenant rents to pay for repairs at properties held by uncooperative owners. However, in most cases, rents are not adequate to cover the costs of repairs. The Bureau also has placed properties into receivership, but with very little success. In extreme cases of noncompliance, BHI has the authority to put owners in jail. (Connolly, July 14, 1998)

Discussion/Conclusion

One reason New Jersey's registration program has proven effective is that it has been tied to the state's construction code since the 1970s. Owners may not obtain certificates of occupancy for newly constructed buildings without first procuring a certificate of registration. (Monahan, December 8, 1999) Another reason for the program's efficacy is its efficient enforcement provisions.

The inspection program, on average, has a statewide compliance rate of 95%, although the rate of compliance is slightly lower in distressed urban areas. Over the last thirty years, the rate of abandonment in the state has declined and housing quality has improved. (Connolly, July 14, 1998) The inspection program recently has been enhanced by increasing registration fees and by tying future registration fees to the state's cost to run the program. In 1998, violations in 7045 buildings were corrected prior to penalty, as compared to 4816 corrections prior to penalty in 1993, before the fee increase took effect. Approximately 17,350 buildings were inspected in each year. (Monahan, December 8, 1999)

By making it possible for housing code enforcement officials to identify and locate rental property owners, the New Jersey rental licensing helps hold landlords accountable for the condition of their properties (including conditions which could pose a lead hazard). The program's collection of certain types of information can also help determine whether property owners are eligible for subsidy programs. States and localities looking to reduce lead hazards in housing through a combination of enforcement and incentives should seriously consider implementing an effective rental licensing program.

10. Leveraging Medicaid Resources for Prevention: Rhode Island's Window Replacement Program

Program Contact

Rhode Island Department of Human Services
600 New London Avenue
Cranston, RI 02920
(401) 462-3392

Program Summary

The Rhode Island Window Replacement Program was designed to address the most common lead hazard – badly deteriorated old windows – in units repeatedly exposing children to dangerous levels of lead. Under this program, window replacement is a Medicaid-reimbursable service in units where poisoned children have been identified. The program not only protects already-poisoned children from further exposure, but prevents the poisoning of siblings and future occupants.

Background

Young children in Rhode Island are more than twice as likely to be lead-poisoned as other U.S. children. As a result of years of health-department tracking of lead-poisoned children, the staff of the Rhode Island Department of Human Services had compelling evidence that certain urban neighborhoods and particular housing units within them were “repeat offenders” in exposing children to dangerous levels of lead. They decided on an innovative approach to bring about a long-term reduction of lead hazards.

The RI Department of Human Services houses the state Medicaid agency. In concert with the federal Health Care Financing Administration (HCFA), it provides health benefits to low-income Rhode Islanders through Medicaid and RItE Care, a program that mandates the use of managed care for its beneficiaries and expands Medicaid's child health benefits to Rhode Island's working poor families. Together, Medicaid and RItE Care cover the majority of severely lead-poisoned children in the state.

Program Description

In 1998, the RI Department of Human Services asked HCFA's permission to create a new benefit for children covered by RItE Care. The new benefit would use Medicaid funds to pay for replacing or refurbishing windows in the homes of lead-poisoned children, focusing on a lead hazard control technique that is associated with substantial reductions in lead exposure. Medicaid can pay for this hazard control measure under

highly controlled circumstances, as one of several services available from a newly created type of service provider, the “certified lead center.”

The certified lead center program was created in 1998 by the RI Department of Human Services to provide comprehensive, non-medical follow-up care for all lead-poisoned children in RIte Care. Included among the Medicaid-reimbursable services provided by certified lead centers are case management, coordination and facilitation of both housing inspection and any necessary family relocation, lead education and training for the families of lead-poisoned children, and environmental interventions to halt exposure. Window-replacement or refurbishing is one among a wide array of available services. (Medical follow-up care for lead-poisoned children in RIte Care is provided by managed care providers, while environmental inspection is provided by the health department. Medicaid pays for both services.)

A crucial aspect of Rhode Island’s window-replacement strategy is that it was conceived within the context of other cost-effective approaches, making it easier to sell to cost-conscious HCFA officials. Paramount among these approaches is RIte Care itself, which uses managed care to provide high quality health care and expanded access to care at a reasonable cost. The certified lead center program was developed to improve care and make better use of existing resources through careful planning and integration of care components. Window replacement or refurbishing is projected to save long-term expenditures by lowering the prevalence of severely elevated blood lead levels among children in the most hazardous dwellings. Lowered prevalence means lower treatment and hospitalization costs for poisoned children.

Importantly, Rhode Island was able to request permission to add the window replacement benefit as part of a HCFA program known as the 1115 waiver. This program, under which RIte Care was created, encourages states to develop demonstration programs to reduce Medicaid costs and allows them to apply cost-savings to innovative health strategies.

Late in 1998, HCFA gave Rhode Island permission to use Medicaid funds for replacing or fixing windows in the homes of lead poisoned children, a landmark decision that represents the first time HCFA has expressly approved Medicaid reimbursement for structural lead hazard reduction in homes. Rhode Island anticipates spending an average of \$1,830 per unit in 100 to 200 units in which a child’s lead poisoning is linked to exposure to lead-painted windows.

Discussion/Conclusion

The major challenge in securing Medicaid resources is the funding pressure faced by the Medicaid program, with both the federal and state governments chafing at the costs. In fact, Congress has been reexamining the benefits package provided in Medicaid’s Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program of preventive

benefits for children. Some in Congress believe that EPSDT benefits are overly generous and not comparable to private sector plans. Under particular scrutiny is the treatment aspect of EPSDT, where lead hazard control measures would undoubtedly fall. Thus, the additional costs associated with expanding benefits (to include lead hazard control in addition to environmental investigation, for example) may be hard to sell politically. A further challenge is the reluctance of some key child health allies to press for expansion because of concerns about spreading Medicaid resources too thinly.

Nonetheless, Medicaid costs have an important link to distressed housing. There are many reasons to pursue Medicaid reimbursement for hazard control as part of follow-up care for lead poisoned children:

- Medicaid pays for medical treatment of the vast majority of severely lead-poisoned children.
- These children are most likely to have received their lead exposure as a result of living in deteriorating housing in distressed communities.
- In many places it is possible to estimate reliably the number of children likely to be affected, so service needs are both finite and predictable.
- The medical rationale for hazard control is strong: preventing exposure is not only the most important “treatment” for a lead poisoned child, but it is also a necessary condition for treating a child with chelation therapy, a common medical treatment for lead poisoning.
- An increasing body of research confirms that hazard control measures less intensive than previously believed necessary can be both effective and affordable.
- In many states, Medicaid already covers several key parts of non-medical follow-up care, including environmental investigation.

By carefully constructing evidence, rationale, and program standards, it is possible for communities to achieve the worthwhile goal of leveraging Medicaid resources to permanently reduce lead hazards in distressed housing and bring about primary as well as secondary prevention of childhood lead poisoning.

11. Financial Incentives: Massachusetts Income Tax Credit

Program Contact

Lead Paint Tax Credit Program
Department of Revenue
Commonwealth of Massachusetts
P.O. Box 7010
Boston, MA 02204
[\(617\) 887-6261](tel:6178876261)

Program Summary

The tax credit program provides a monetary incentive to control lead hazards. Any Massachusetts resident who has an income tax liability and controls lead-based paint hazards in a housing unit can qualify for a credit toward the state's personal income tax which is equal to the amount spent, up to \$1500 for complete removal of paint or up to \$500 for controlling lead hazards.

Background

The Massachusetts statute requiring lead hazard control is one of the most far-reaching lead laws in the U.S. Since 1971, property owners have been required to permanently control specified lead hazards in any housing unit where a child under six resides. The law was amended in 1993 to permit owners to use interim controls for up to two years before completely containing or abating the hazards. Aiding the owners and renters of pre-1978 housing units in financing the cost of complying with this mandate has been the subject of several programs. The tax credit program was established in a 1987 amendment to the lead law to permit those who have an income tax liability to subtract the cost of the lead work from the amount of taxes owed at the end of the year.

Program Description

Anyone, including owner-occupants, renter-occupants, or rental property owners, who has an income tax liability and pays for measures to control or abate lead hazards qualifies for the credit. The taxpayer process of qualifying for the credit consists of three steps: 1) obtaining an inspection from a certified inspector to document the lead hazard; 2) hiring a certified contractor (known as a "deleader" in the statute) to perform the work; and 3) scheduling a re-inspection to establish compliance. The scope of the work can include window replacement if it is done for the purposes of lead hazard control. Work performed by uncertified personnel cannot be deducted.

After the end of the calendar year, copies of the inspector's letter demonstrating compliance and the contractor's paid invoice are attached to the personal income tax return, and the amount spent on both de-leading and inspection is entered on the tax return as a deduction from the amount of taxes owed. As for all other tax filings, if after this deduction the net amount owed is a negative number, the taxpayer may receive a refund. For abatement activity, up to \$1500 can be deducted per housing unit; the lesser of \$500 or one-half of the total amount spent can be deducted for interim control work. Unused portions of the maximum credit can be carried over and applied to subsequent expenditures for up to seven years.

Some 4300 Massachusetts taxpayers claimed the credit in 1994, resulting in a tax expenditure of \$5.3 million. (Post-1994 statistics are not available because the revenue department no longer tracks personal income tax credits by cause.) More than half of the households benefiting from the credit in 1994 had an annual income of less than \$50,000, which demonstrates that the credit is likely benefiting occupants of marginal (and possibly even distressed) housing.

Discussion/Conclusion

The Massachusetts tax credit program has two limitations that should be addressed by those seeking to replicate it, especially for the purpose of maximizing the reach of such financial assistance to the highest-risk housing. First, the program's reliance on the certified industry minimizes the Commonwealth's administrative costs for this financial assistance program (since no inspections are necessary) and maximizes quality assurance. However, this approach can inflate the total cost of the tax expenditure, limit the pool of contractors for whose work credit can be claimed to a small subset of the building trades industry, and complicate the integration of lead safety into larger rehab projects.

Second, the lack of an income criteria for eligibility gives the same level of taxpayer-supported assistance to all owners and tenants who participate, regardless of need. In addition, the benefits are skewed toward higher-income individuals and corporations since there must be a personal income tax liability from which to deduct the tax credit. Low-income families often do not earn enough to owe income taxes. More than 40% of the credits were received by households with income above \$50,000.

This program can be easily replicated by any state or locality that levies an individual income tax. However, the program could be improved upon by targeting higher dollar amounts in income tax credits to tax payers with lower incomes. In addition, since this program does not provide assistance to individuals who do not have an income tax liability, this program should be complemented with grants and other direct assistance to very low-income owners and tenants who cannot qualify for such a credit. In addition, states and localities devising tax credits should consider broadening the definition of

eligible work and who can do it, with greater reliance on clearance dust testing as a quality control check.

12. Purchase of Real Estate for Public Benefit: Land Trust, New York City

Program Contact

Trust for Public Land
666 Broadway
New York, NY 10012
(212) 677-7171

Program Summary

This project was undertaken in response to the recognized social value of community gardens in New York City. Users and supporters of the gardens mobilized to preserve them, and as a result individuals and private foundations donated \$4.2 million to the Trust for Public Land and the New York Restoration Project to purchase 114 lots for use in perpetuity as community gardens.

Background

Vacant publicly-owned lots were transformed into community gardens and parks in the 1970's by New Yorkers seeking respite from the concrete jungle and a way to rid their neighborhoods of trash-filled eyesores. At the time the properties had no viable prospects: they were owned and reserved by city government for future affordable housing development. Nominal lease agreements with a city agency were offered to neighborhood associations which would coordinate volunteer upkeep and oversee the use of the land. For more than two decades, hundreds of community gardens provided families, pre-school and elementary classes, retired persons, transplanted farmers, and others with the opportunity to plant and harvest. Other users observed, celebrated, and respected these oases. The lots also became neutral territory and common ground for diverse populations.

In 1998, New York's economy resurged and the gardens contributed to rising property values and neighborhood revitalization in adjacent communities. As the land that the gardens occupied became more valuable, Mayor Giuliani and other leaders determined that neither green fields nor affordable housing (the purpose for which the lots were originally designated) were any longer on the public sector's agenda for this real estate. The City decided to market some of the lots for commercial development and sell them to the highest bidder.

The Trust for Public Land (TPL) is a national nonprofit organization that conserves land to improve the quality of life in communities and to protect natural and historic resources for future generations. Founded in 1972, TPL works with private landowners,

communities, and public agencies in real estate conservation, and brings negotiation, public finance, and legal resources to the table. To date, TPL has protected more than one million acres of land in 1700 locations nationwide, valued at \$1.4 billion. Since 1978, TPL's New York City Program has: helped gain permanent protection for over 300 acres of scarce city land; provided organizational, outreach, real estate, and construction assistance to hundreds of community groups to create and sustain community-managed parks, playgrounds, and community gardens in disadvantaged neighborhoods; provided environmental education to young people; and conserved natural areas.

Program Description

Users and supporters of community gardens in New York City mobilized over a six-month period to campaign for their preservation. As a result of the campaign, individuals and private foundations donated \$4.2 million to the Trust for Public Land and the New York Restoration Project (under the leadership of entertainer Bette Midler) to purchase 114 lots for use in perpetuity as community gardens.

Discussion/Conclusion

U.S. society commits vast resources to important social objectives that are uneconomic in the marketplace. The millions of dollars raised by the TPL community gardens campaign is an example of how many individuals and corporations contribute to efforts to preserve open space through non-profit entities. These contributions, which are recognized and encouraged by the tax code, are leveraged many times over through innovative financing.

At the same time, participants in the New York City campaign caution that privately funded intervention has limits: another 600 NYC community gardens remain at risk of sale, and there are not resources for private donors to preserve marketable open space. (Letter to the Editor, Mother Jones, November-December 1999, page 16, from Susan Clark, Public Affairs Manager, TPL) TPL uses existing federal, state, and local government funding programs for preservation wherever they are available. According to TPL, full appropriation to support authorized funding levels (\$900 million) for the federal Land and Water Conservation Fund would enable more acquisitions and free up private resources. Another potential funding mechanism, the "Better America Bond," would create \$10 billion in federal bond authority under which investors would receive a tax credit in lieu of interest payments and communities would have the bond proceeds interest-free for 15 years, after which repayment would begin.

It is time to recognize the reality that the bottom tier of low-income housing is simply not economic. Yet the continued availability of affordable housing is as vital to our well-being as a nation as open space. Low-income housing advocates and providers

should take lessons from the open space protection movement and engage innovative investment bankers to create new financing and leveraging mechanisms. Changes in the federal tax code may or may not be needed to facilitate accessing billions of additional dollars for affordable housing in this way.

13. Unconventional Funding Sources: The Portland, Oregon Water Bureau Lead Hazard Reduction Program

Program Contact

Portland Water Bureau
2010 N. Interstate Avenue
Portland, OR 97227
(503) 823-4900

Program Summary

Lead levels in Portland's drinking water periodically exceeded EPA standards due to the relatively soft water causing corrosion in the lead solder in the water supply system. In recognition of the fact that lead-based paint hazards in low-income housing pose a far greater risk than lead in water, and in response to environmentalist's resistance to changing the drinking water's pH level, the Portland Water Authority responded by funding lead hazard control in housing units occupied by low-income families. Even though the water authority subsequently met drinking water standards, it continued to provide funds for lead hazard control in high-risk housing.

Program Description

In 1992, the Portland Water Bureau conducted water supply monitoring in compliance with the EPA Lead and Copper Rule, a drinking water regulation required by the Safe Drinking Water Act. While Portland's source water contains no detectable lead and Portland has no lead distribution pipes, the water's low alkalinity can leach lead, copper, and other metals into water left standing in home plumbing systems. Portland was required to optimize the treatment of its drinking water for maximum reduction of the source water's ability to leach lead and copper from home plumbing systems. Data from its Corrosion Control Study resulted in the recommendation that Portland raise the pH of the source water from its natural range of 6.5 to 7.0 to a pH of approximately 9.5.

In recognition of the fact that water is not typically the primary source of a child's exposure to lead, and in the face of other environmental arguments against drastic alterations in the water supply's pH level, the Portland Water Bureau worked with staff from regional health departments, community organizations, and other stakeholders to develop a proposal for an alternative course of action that features a risk-based, multi-media approach to lead hazard control.

The Lead Hazard Reduction Program consists of four components, each of which has distinct objectives for reducing exposure to lead and copper and providing an alterna-

tive strategy for compliance with the Lead and Copper Rule. A prime component is the Home Lead Hazard Reduction Program (HLHRP),⁵ which was developed in 1997 as a joint effort by the Portland Water Bureau, the Multnomah County Health Department, and the Oregon Health Division. The purpose of HLHRP, which is managed by the health department, is to prevent children from being exposed to lead-based paint and dust hazards in the home environment. The program operates as a Community Lead Education and Reduction Corps (CLEARCorps) affiliate, with annual funding of approximately \$500,000 from the Portland Water Bureau and \$100,000 from the Corporation for National Service's funding for CLEARCorps. Target neighborhoods are selected based on where children are at greatest risk. Particular housing units are selected through health department referrals of families with a poisoned child, referrals from the city's rehab program, and inquiries resulting from program outreach.

CLEARCorps team members conduct assessments, perform interim lead hazard control activities, and refer units needing lead abatement work to Portland's HUD grant program, which is also operated by the Multnomah Health Department under contract with the city's housing office.

The total program duration was originally expected to be five years starting in mid-1997, based in part on the extent of the local officials' commitment of \$2.6 million over the five-year period. With the subsequent infusion of other lead hazard control funds from a HUD Lead Hazard Control grant and HUD's funding of CLEARCorps, the term of the program is expected to be extended.

In November 1997, the Oregon Health Division approved the Lead Hazard Reduction Program "as optimal corrosion control treatment for lead and copper at the customer taps throughout the regional distribution system," affirming that the Portland Water Bureau is now in compliance with the Lead and Copper Rule. The plan was also considered a strong candidate for EPA's Project XL, which fosters the demonstration of excellence(X) and leadership(L) in employing alternative strategies to achieve superior environmental results while not technically achieving full compliance with existing regulations.

In its first year, the program's focus was on Portland's Humboldt neighborhood: 55 homes were evaluated for lead paint and dust, 38 of which received lead hazard control interventions by CLEARCorps. Using the knowledge gained in the pilot, the program has expanded into other neighborhoods in Portland and Multnomah County; the second year goals anticipate 70 evaluations and 35 remediations.

The Lead Hazard Reduction Program is a community-driven process: environmental justice advocates, local health agencies, community groups, regional health departments, and other stakeholders have participated to help define program objectives,

⁵ The other three components are Water Treatment and Water Quality Monitoring; Stakeholder Involvement, Public Education and Outreach; and Lead-in-Water Testing Program.

provide advice and assistance to best implement the programs in the Portland service area, and determine where the program efforts should be focused. These efforts have also resulted in the formation of a coalition of community organizations and public agencies working under the leadership of the Urban League to develop comprehensive and effective lead hazard reduction strategies for the Portland metropolitan area, which address exposure to all environmental sources of lead.

Data gathering protocols are designed so that results, including the cause and effect relationships, are measurable. All of HLHRP's activities (work in homes, follow-up testing, etc) are subject to evaluation, as are the Outreach and Public Education program components. Information and data collected in the formative year (Year 1), are being used to produce a model for implementation in subsequent years. It is anticipated that the evaluation efforts will be instrumental in producing a model which can be effectively used to design and implement similar program elsewhere.

Discussion/Conclusion

The Portland Water Bureau was motivated to explore other sources and pathways of children's lead exposure by a cost-benefit analysis triggered by noncompliance with national drinking water standards. Under pressure to comply with drinking water standards, Portland concluded that far greater health benefits could be achieved through the water authority's support for controlling lead-based paint and dust hazards in high-risk housing than by additional drinking water treatments. This process directed community attention to the serious, untreated lead hazards in low-income housing. Even though the Portland Water Bureau subsequently met national drinking water standards, sufficient community support had developed to sustain this investment of the local water utility's funds, approved each year by the Portland City Council, to control serious lead hazards in housing.

Communities need to explore unconventional sources of funds for controlling lead hazards in high-risk housing, including resources generated by other environmental programs. Providing the maximum protection to children's health requires taking a larger view to identify exposures of greatest concern and at least considering how resources can be put to best use. EPA's Project XL promotes the use of creative inter-disciplinary strategies such as Portland's. In other cases, the enlightened enforcement of environmental laws may generate resources for controlling lead-based paint and dust hazards through Supplemental Environmental Projects (SEPs).

14. Training and Employing Low-Income Community Residents in Hazard Control: The Manchester, New Hampshire “Healthy Home Services”

Program Contact

Healthy Home Services
The Way Home
20 Merrimack St., Suite B
Manchester, NH 03101
[\(603\) 627-3491](tel:6036273491)

Program Summary

Healthy Home Services is a program of The Way Home (TWH), a non-profit tenant rights and social services agency based in Manchester, NH. The program trains and employs low-income community residents, including some parents of lead-poisoned children and children at high risk, to provide environmental health services to their communities.⁶ These services primarily consist of: low-cost hazard control; cleaning; peer education; and the provision of products that reduce environmental health hazards. Some of these services are provided free-of-charge to tenants, while others are offered for a fee to rental property owners.

Background

TWH is a non-profit agency dedicated to helping low-income people obtain and keep safe, decent, and affordable housing. One of TWH’s earliest and most durable programs assists low-income renters with move-in and move-out inspections to document the physical conditions in their apartments. This documentation helps tenants get security deposits refunded properly and is an advocacy tool for getting necessary repairs made. Over the years, TWH became involved in assisting tenants with identifying and addressing lead paint hazards.

Program Description

Healthy Home Services specializes in lead dust removal, safe pest management, second-hand smoke control, and reduction of asthma triggers. Program services are offered anywhere within a 60-mile radius of Manchester.

⁶ This summary of Healthy Home Services focuses on the lead poisoning prevention component of the program.

The program targets apartments largely through TWH's security deposit move-in/out inspection program. This program collects information from tenants on the age of their building, the condition of the paint and other housing components, whether pre-school age children reside in the unit, the results of any child blood lead tests that have been performed, and whether anyone in the household suffers from asthma. Other target apartments are identified when parents or property owners are referred to the program after a child is identified with an elevated blood lead level or asthma. School nurses also refer units for evaluation by the program under the city-funded head lice program.

Healthy Home Services staff visit referred apartments to determine the age of the structure; perform a visual inspection; and, if deteriorated paint is present, perform lead dust tests. When lead hazards are identified in a unit occupied by a child with an elevated blood lead level (greater than or equal to 10 µg/dl), Healthy Home Services attempts to market its lead hazard control services, which include paint stabilization, lead dust cleaning, and encapsulation (such as encasement of window wells with vinyl siding), to the landlord. As an added incentive, owners are informed that Healthy Home Services will provide education, cleaning kits, and tenant access to the program's HEPA vacuums free-of-charge. Even when an owner is not willing to pay, under certain circumstances Healthy Home Services will provide most of their package to tenants free-of-charge.

To date, only a handful of owners have been willing to pay for the lead hazard control services, but this number has been steadily growing. TWH's goal is to fund this program in the future through a combination of grants and income from fees for service. If more income can be generated from fees, TWH may consider spinning off Healthy Home Services as a for-profit business.

In addition to hazard control work, Healthy Home Services conducts peer education and provides products such as mattress covers, air cleaning devices, HEPA vacuums, dehumidifiers, encapsulant coatings, and cleaning solutions. The program also assists families with obtaining access to off-site child care during hazard control work. In addition, the program has held a series of problem-solving meetings with landlords and low-income tenants to help gain landlord cooperation.

In 1999, approximately 125 low-income families received training on lead safety methods and 20 homes received lead hazard control interventions. Usually, landlord cooperation, if not payment, is secured for these activities. The program has evidence that their work has lowered the blood lead levels of children in the buildings where they have worked.

Discussion/Conclusion

The Healthy Home Services of TWH simultaneously addresses unhealthy housing conditions and the need for job training and employment in high-risk communities. Among the limitations of this program are its reliance on grant funding, which makes its long-term sustainability questionable. Without dedicated grant funding or sufficient income from fees for service, such a program will not thrive. This program is very new and is evolving rapidly, so it is far too soon to make conclusions about its prospects for generating income from selling services to property owners.

The Healthy Home Service program uses resources available in communities throughout the US and is designed to address needs that exist in nearly every low-income US community. TWH has demonstrated that such a program can be created and run by low-income community residents – which is probably the program’s most innovative aspect. Thus, it is reasonable to conclude that housing, health, tenant rights, or social service agencies in other communities could create similar programs.

To create such a program, an organization would need to have staff trained in lead safety. The upcoming Clearance Technician course and new EPA training being developed for safe paint repair will help lower barriers to entry. Staff would also need proficiency in peer health education and have the skill needed to train low-income community residents who often have low literacy and/or numeracy.