Early Lessons Learned: New York State's Primary Prevention of Childhood Lead Poisoning Pilot Project

December 10, 2008

National Center for Healthy Housing

Prepared for the New York State Department of Health under Contract #C022621

Preface

Despite substantial progress, childhood lead poisoning remains a major problem, both in New York State and around the nation. Primary prevention (taking action before a child is harmed) is the best way to address the problem. This report describes how local jurisdictions in New York State, with financial and technical support from the New York State Department of Health, are implementing primary prevention programs in a pilot project that will enable other jurisdictions to effectively prevent children from being harmed.

The National Center for Healthy Housing (NCHH), formerly the National Center for Lead-Safe Housing, was founded as a nonprofit organization in October 1992 to bring the public health, housing, and environmental communities together to combat our nation's epidemic of childhood lead poisoning. As NCHH, the organization continues its important role in reducing children's risk of lead poisoning and has expanded its mission to help to decrease children's exposure to other hazards, including biological, physical, and chemical contaminants in and around the home.

In 2007, the New York State Department of Health's Bureau of Community Environmental Health and Food Protection (NYSDOH) contracted with NCHH to provide assistance to the State and its eight Local Health Departments during the first year of its Primary Prevention of Childhood Lead Poisoning Pilot Program. NCHH also engaged its for-profit subsidiary, Healthy Housing Solutions (Solutions), in this effort.

This report describes activities completed during the first three quarters of FY 2008 (October 1, 2007 through June 30, 2008) and recommendations for future activities.

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Acknowledgements

The authors wish to thank the work of many public servants, including the staff of the New York State Department of Health's Bureau of Community Environmental Health and Food Protection (BCEHFP) and the program staff of all eight County grantees. A local jurisdiction's progress depends on a diverse, talented, energetic, and creative team to support its primary prevention mission. We thank all the local and state teams for their assistance in assembling this report. In particular, we wish to thank the following individuals for their insights, advice, collaboration, and commitment to addressing childhood lead poisoning.

- Richard W. Svenson, Director, NYSDOH Division of Environmental Health Protection
- Mike Cambridge, Director, NYSDOH BCEHFP
- Thomas Carroll, Section Chief, Housing Hygiene Section, NYSDOH BCEHFP
- Kenneth Boxley, Public Health Representative V, NYSDOH BCEHFP
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- Kelly St. Clair, Public Health Representative III, NYSDOH BCEHFP
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- Dawn Hyde, Associate Public Health Sanitarian, Monroe County Department of Public Health
- Deborah Nagin, Director, Lead Poisoning Prevention Program, New York City Department of Health and Mental Hygiene
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- Inga Back, Program Coordinator, Onondaga County Health Department
- Robert J. Deitrich, Director, Community Health Outreach, Orange County Department of Health
- Frederick Morrissey, Director of Operations, Environmental Health Services, Westchester County Department of Health

Chapter 1: The New York State Primary Prevention Pilot

The National Perspective on Primary Prevention

Although lead poisoning is a preventable disease, it continues to be a major environmental health problem in the United States.[1] An estimated 250,000 children in the United States have elevated blood lead levels (EBLLs).[2] Lead exposure can result in neurological damage, including intellectual impairment, developmental delays, learning disabilities, memory loss, hearing problems, attention deficits, hyperactivity, and behavioral disorders. In extreme cases, lead exposure can result in organ failure, convulsions, coma, and death.

While lead is potentially harmful to individuals at any age, it is particularly dangerous to children under the age of six, because their nervous systems are especially vulnerable and because lead uptake is much higher in the early years. The monetary benefits to communities of preventing lead poisoning are enormous. For example, the benefit of preventing lost lifetime earnings due to IQ loss from lead exposure are estimated to be over $43 billion annually. This estimate does not include other benefits, such as avoided medical care, special education, crime, stress on parents and children, avoided attention deficit disorder, and many other avoidable adverse health effects.[3]

The most common source of childhood lead poisoning is lead-based paint (LBP) in older homes and the primary exposure pathway is the ingestion of lead-contaminated settled interior dust and bare contaminated soil.[4] [5] Although banned from use in residential paint and other consumer products in 1978,[6] there are still an estimated 38 million pre-1978 dwellings nationwide that contain LBP,[7] and 24 million have deteriorated (chipping, peeling, flaking) LBP and elevated levels of lead-contaminated dust.[8] [9] More than four million of these dwellings are homes to one or more young children.[10]

In 2000, the U.S. Environmental Protection Agency (EPA), U.S. Department of Housing and Urban Development (HUD), U.S. Centers for Disease Control and Prevention (CDC), and other federal agencies established the national goal of eliminating by 2010 lead paint hazards in housing where children under six live through enforcement of lead safety laws and regulations and other means.[11] *Healthy People 2010* defined the national objective as to "eliminate elevated blood lead levels in children," with the level of concern set at 10 micrograms/deciliter (µg /dL).[12]

In 2004, CDC's Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) called for a more aggressive housing-based primary prevention approach to eliminate lead poisoning in the United States. The ACCLPP stated, "To ensure successful elimination of EBLLs in children, programs must not rely solely on screening and secondary prevention but also focus on preventing lead exposure through the implementation of housing-based primary prevention."[13]

More recently, CDC has broadened its Health Protection Goals to include Healthy People in Healthy Places to promote:

1. Homes that are healthy, safe, and accessible;
2. Adoption of behaviors that keep people healthy and safe in their homes; and,
3. Availability of healthy, safe, and accessible homes.[14]

Lead Poisoning in New York State

Among the states, New York consistently ranks high on key risk factors associated with lead poisoning: large numbers of young children living in poverty, a large immigrant population, and older, deteriorated housing stock. The 2000 U.S. Census found that New York State (including New York City) had nearly 1.7 million children under six years of age, including 476,000 one- and two-year-olds.[15] The State also ranked third in the nation for families with young children living in poverty; 20.2 % of the State's families with children less than five years of age lived below the federal poverty level. New York State continues to experience population change driven by foreign immigration and high levels of domestic migration. In 2000, 23% of State's population was foreign-born, more than twice the proportion in the nation. The number of pre-1950 housing units in New York State dwarfed that of other states. In 2000, New York had the most pre-1950 housing units in the country: 43.1% of its dwellings, or over 3.3 million homes. This surpasses the next highest state, Pennsylvania, by over one million. In the 36 New York State zip codes with the highest incidence of children with EBLLs, over 50% of the housing stock was built before 1950.[16]

The 2004-2005 surveillance data on blood lead levels for New York City and the remainder of New York State indicate that the incidence and prevalence among children under age six has steadily declined from 1998 to 2005. Despite this progress, thousands of children are still at risk. [17]

Table 1a. New York State Incidence and Prevalence of BLL of 10 μg/dL, 1998 and 2005, excluding New York City

	1998	2005	Percentage decline
Incidence - Number of children newly identified with BLL of 10 μg/dL	5,198	2,283	56.1%
Incidence rate per 1,000 children tested	29.0	11.8	59.3%
Prevalence – total number of children with BLL of 10 μg/dL	10,155	3,666	63.9%
Prevalence rate per 1,000 children tested	53.3	18.6	65.1%

Source: *Eliminating Childhood Lead Poisoning in New York State: 2004-2005 Surveillance Report*

Table 1b. New York City Incidence of BLL of 10 μg/dL, 1998 and 2005

	1998	2005	Percentage decline
Incidence - Number of children newly identified with BLL of 10 μg/dL	10,817	3,190	70.5%
Incidence rate per 1,000 children tested	31.8	9.6	71.7%

Source: *Preventing Lead Poisoning in New York City: 2005 Annual Report*[18]

Furthermore, the incidence of childhood lead poisoning varied greatly across the state. In 2005, the majority of children outside of New York City newly identified with BLLs greater than 10 μg/dL (61.1% of new New York State cases) resided in seven upstate counties: Albany, Erie, Monroe, Oneida, Onondaga, Orange, and Westchester. [19]

Since projections for 2010 indicate that the State will have 1.65 million children under age six, including 471,000 one- and two-year-olds,[20] additional aggressive action to reduce children's exposure to lead remains a public health priority.

New York State Policy

New York State has undertaken a number of initiatives to advance the national 2010 goal. In 2004, the New York State Department of Health (NYSDOH) published its strategic plan for the elimination of childhood lead poisoning in New York State by 2010. This plan, which covers upstate New York and complements the New York City strategic plan[21] "…serve[s] as a roadmap to guide the work of the Department and partner organizations statewide in efforts to eliminate childhood lead poisoning over the next five years."[22]

The bulk of the 2004 State Plan's initiatives focused on expanding and strengthening surveillance and secondary prevention initiatives, including improvements in screening, and vigorous inspection and remediation of LBP hazards in the dwellings where children with EBLLs resided or spent significant periods of time. It also highlighted strategies to improve education for families whose children might be exposed to LBP hazards, build community awareness, and strengthen local coalitions to support for further prevention activities.

New York State Public Health Law section 1370-c, and the regulatory language in 67-1.2 requires all health care providers to conduct blood lead screening tests on all children at or around one year of age and again at or around age two. Health care providers also must assess all children aged six to 72 months at least once annually for risk of lead exposure and to order blood lead tests for all children found to be at risk based on those assessments. Local health departments must inspect for LBP hazards in all housing units where children with sustained BLLs of 20 µg/dL or greater reside. This inspection includes an exterior and interior visual assessment for deteriorated paint, administration of a comprehensive questionnaire to assess child risk factors for exposure, and sampling of paint, soil, and other media as required. Property owners receive a Notice and Demand (N&D) as outlined in NYS Public Health Law Section 1373 (3), that lists the lead hazards identified. The N&D specifies that owners must submit a detailed plan of work to correct the hazards within a fixed number of days as defined by the LHD (typically 30 days), employ trained workers to conduct the work, and show that that the unit achieved clearance according to federal dust wipe clearance test standards to demonstrate that no hazards remain after work is completed. Failure to comply with the N&D on a timely basis results in referral for prosecution. All of these important measures are best characterized as "secondary prevention," because action occurs only after a child's blood lead level has become elevated over the federal level of concern.

New York City's policy differs from the above in that environmental intervention and case coordination services are triggered by blood lead levels greater than or equal to 15 µg/dL. As will be discussed in more detail later, rather than the Notice and Demand procedure, the City uses its authority under NYC Health Code and issues a Commissioner's Order to Abate (COTA), requiring abatement of lead hazards using lead-safe work practices, trained workers, and dust wipe clearance testing. Failure to comply with the COTA triggers enforcement action, including

fines, and referral to the Department of Housing Preservation and Development's Emergency Repair Program (ERP). Work performed by the ERP is then billed to the landlord.

In addition to these measures, the State's 2004 strategic plan called for more intensive primary prevention strategies to reduce children's exposure to lead:

> …There is increasing consensus among researchers, health care providers, and policymakers that primary prevention strategies must be strengthened to achieve elimination of childhood lead poisoning. Educational strategies related to exposure avoidance and improved nutrition have been demonstrated to contribute to primary prevention, but alone are not sufficient to prevent lead poisoning. Residential lead hazard control measures, ranging from improved cleaning techniques to interim containment measures to complete lead abatement, are regarded as the most critical components of primary prevention...communities with more rigorous lead remediation laws, and more stringent enforcement of those laws, can be both cost-effective and successful at breaking the cycle of lead exposure and reducing blood lead levels among at-risk children. [23]

The 2007 Primary Prevention Pilot

In 2007, the State undertook a new primary prevention initiative, with the governor proposing and the New York State legislature approving $3,000,000 in new State dollars. Program support is expected to continue with the goal of adding additional counties and activities.

The 2007 legislation amended the language of Public Health Law Section 1370a to include a new subdivision 3, creating a Primary Prevention Pilot Project (the Pilot):

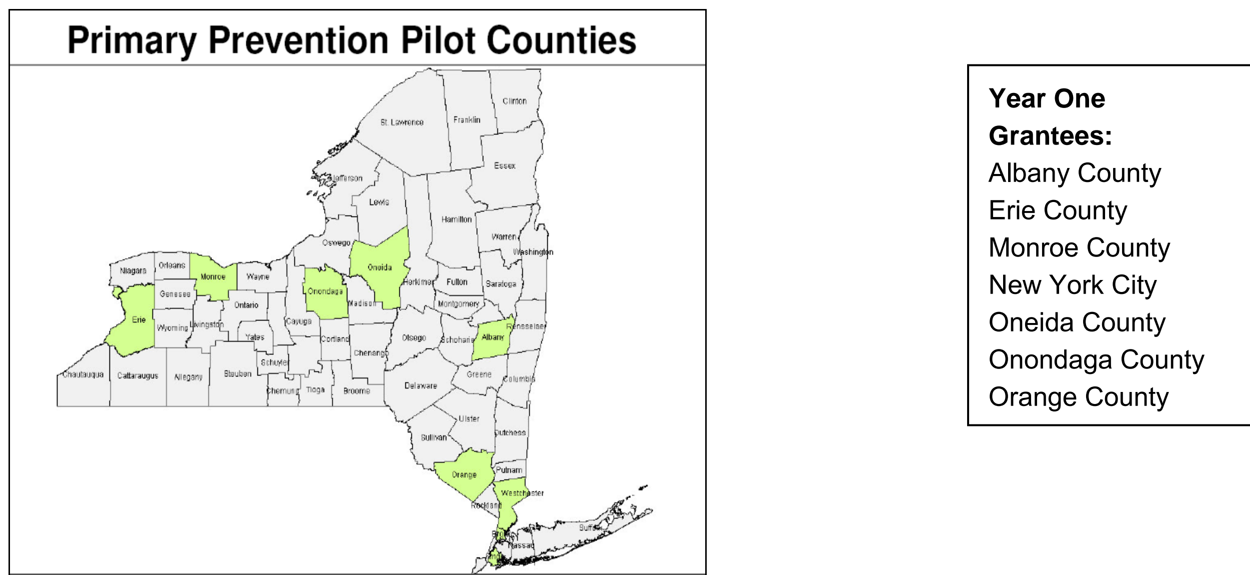
> The department shall identify and designate a zip code in certain counties with significant concentrations of children identified with elevated blood lead levels for purposes of implementing a pilot program to work in cooperation with local health officials to develop a primary prevention plan for each such zip code identified to prevent exposure to lead-based paint.[24]

In granting the New York State Commissioner of Health authority to designate zip codes as "areas of high risk," the State Health Department as well as the local health departments adopted a proactive approach to reducing children's exposure before harm occurred. Now, health departments could gain access to homes for the purposes of education and inspection, even if no child with an EBLL currently resided in the unit and even if the unit was not currently occupied by a child (but one day could be).

The legislation authorized the New York State Commissioner of Health to enter into agreements or Memoranda of Understanding (MOUs) with, and provide technical and other resources to, local health officials, local building code officials, property owners, and community organizations. In the absence of a comprehensive state-level primary prevention law or local legislation, this authority enables local health departments to use the "high-risk" zip code designation as the first step to more vigorous primary prevention, while continuing to carry out

their ongoing secondary prevention activities. The Pilot also requires grant recipients to create and implement policies, conduct community outreach to address lead exposure, and detect and ensure risk reduction in selected zip codes, with particular focus on children under age six who live in the highest-risk housing in the zip code identified. Grantees must identify means to collaborate with other programs, such as weatherization assistance, to accomplish risk reduction.[25]

Local Health Departments (LHD) in eight counties (treating the five counties within New York City for these purposes as a single entity) with the highest number of annual incident cases of lead poisoning among children under age six received funding in the first year of the Pilot. NYSDOH provided each LHD with information on identified high-incidence zip codes within the county, specifically the zip codes in the top tenth percentile in 2005 for annual incident number of cases with EBLLs of 10 µg/dL or greater. NYSDOH first sorted the data by county and zip code, then identified all zip codes containing ten or more children with EBLLs, and finally rank-ordered counties by incidence of children with EBLLs within all high-risk zip codes. Collectively, these eight counties accounted for 79% of all known 2005 EBLL cases. Each County received a base award, which was then increased in proportion to its annual incidence of lead poisoning cases up to a cap of $500,000.



As a condition of grant funding, each grantee submitted a work plan and budget to the NYSDOH that described activities to develop and implement a local primary prevention strategy, and the specific steps it would take to identify and correct lead paint hazards in high-risk housing in the absence of a referral for a child with an EBLL. NYSDOH required grantees to target one or more of the designated zip codes, but authorized work in other high-risk areas within the targeted county as resources permitted.

The plan required grantees to address the following:

1. Use the "area of high risk" designation and the Notice and Demand process or equivalent enforcement mechanism, as appropriate to complete remediation work in targeted areas.
2. Identify geographic areas within high-risk zip codes that had a high prevalence of actual or presumed LBP hazards, based on lead surveillance data, prior case histories, demographic information, age and condition of housing, and other factors.
3. Refer children under six who had not received required lead screenings to their primary care provider and/or LHD lead prevention program for follow-up.
4. Develop a housing inspection program that included:
    a. Prioritization of dwellings within target areas for inspections;
    b. Inspection of high-risk dwellings for potential lead hazards;
    c. Correction of identified lead hazards using effective lead-safe work Practices;
    d. Appropriate oversight of remediation work; and
    e. Clearance by certified inspectors.
5. Develop formal partnerships, including formal agreements or Memoranda of Understanding, with other county and municipal agencies and programs. Prospective partners included code enforcement offices, local Departments of Social Services, local housing agencies, HUD Lead Hazard Control grantees, and existing lead poisoning prevention community groups.
6. Develop new or use existing enforcement policies and activities to assure safe and effective remediation of identified lead hazards.
7. Coordinate available financial and technical resources to assist property owners with remediation.
8. Develop and implement lead-safe work practices training for property owners, contractors, and residents and promote development and use of a certified workforce for lead remediation activities.
9. Collect and report data to NYSDOH to evaluate the progress and effectiveness of the Pilot.[26]

Work plans were based on specific needs, resources, and capacities in each jurisdiction. Grantees could implement activities as part of an existing program, including their Childhood Lead Poisoning Prevention Program (CLPPP) or Healthy Neighborhoods Programs (HNP), or they could develop new infrastructure as needed.

NYSDOH also contracted with the National Center for Healthy Housing (NCHH), a nationally-recognized nonprofit organization based in Columbia, MD, and its for-profit subsidiary, Healthy Housing Solutions (Solutions), to:

1. Consult with NYSDOH on implementing the Pilot project;

2. Provide training and hands-on consultation to LHDs and their partners, in coordination with NYSDOH; and,
3. Develop and implement a comprehensive evaluation of the Pilot project for NYSDOH.

NCHH and Solutions assigned Field Investigators to each grantee to provide feedback on work plans, models for practice, and technical support on program design and implementation issues. In addition, the team advised the NYSDOH on its work plan review and approval process, developed a quarterly reporting format and ACCESS database for grantees use to track unit level data for evaluation purposes, and provided support for grantee meetings and conferences.

The first grantee submitted a work plan in August 2007; the remaining grantees submitted work plans throughout the fall of 2007 and negotiated revisions throughout the spring of 2008. Westchester County and New York City began inspections in the first quarter of Year One. NYSDOH encouraged grantees to modify their approved work plans throughout the summer of 2008 to address specific issues they encountered throughout Year One's implementation.

Chapter 2: Early Lessons Learned

Grantees began designing their Pilots during the summer of 2007. The work plans reflected their assessments of local needs and capacity to achieve the State's five key Pilot Project goals:

Goal 1: Identify High-risk Housing.
Goal 2: Develop Partnerships and Community Engagement.
Goal 3: Promote Housing Interventions.
Goal 4: Build Workforce Capacity.
Goal 5: Identify Community Resources for Lead Hazard Control.

The plans are remarkable in their diversity. NYSDOH encouraged grantees to build on their strengths. Since the counties differ in their economic circumstances, administrative infrastructures, local statutory and regulatory authorities, partnerships with other agencies, and collaborations with community- and faith-based groups, the resulting mix of implementation strategies offers many models that other programs could adopt. This chapter describes implementation issues common to all jurisdictions in the early months of the Pilot. Subsequent chapters highlight issues grantees encountered as they implemented the primary goals of the Pilot, models for practice, and lessons to consider related to those practices.

Methodology

Since most grantees began full implementation of their programs from April to June 2008, it is too early to determine the effectiveness of the Pilot in achieving its five major goals, but it is possible to summarize grantees' early experiences in program implementation. *Early Lessons Learned* identifies issues that programs faced during initial implementation, the way they overcame those barriers, and promising models for practice.

This report reflects the Pilot's progress in implementation through June 30, 2008, the third quarter of the grant. Its observations and recommendations are based on NCHH Field Investigators' review of final work plans, quarterly reports, monthly progress reports and other program documents, interviews conducted in late May and early June 2008, joint site visits with NYSDOH staff, and participation in conference calls and meetings hosted by NYSDOH through September 2008.

Grantees began to report programmatic data in a standardized format as of the third quarter. Where possible, this report includes cumulative data on program activities through June 30. However, these data should be interpreted cautiously. Because grantees anticipated obstacles in linking their data with that housed in other agencies, NYSDOH specified six key measures as required for the quarterly report:

1. Total number of children aged six years or younger living in the unit;
2. Occupancy status of the unit (i.e., owner, rental, or vacant);
3. Age of the unit;
4. Number of LBP or LBP dust hazard investigations completed by the Pilot;

5. Number of units where the inspection identified LBP or lead dust hazards;
6. Number of units where identified hazards were remediated; and
7. Number of units where clearance was achieved.

Other measures were recommended but not required in Year One to give programs time to build partnerships with other agencies that might house the data. These include the number of program outreach events and their audiences, number of home visits completed, referrals for BLL testing, characteristics of the unit and the inspection process, number and kind of administrative actions triggered by an inspection, the training of the individuals who completed the required remediation, and the number of LSWP trainings offered. Each grantee reported on these measures as fully as they could in the third-quarter reports, recognizing that there would be a time lag on certain activities (i.e., a unit identified with LBP hazards in the third quarter might not be cleared until a later date).

Thus, the cumulative totals on Pilot activities, especially those that characterize the units or children served, may reflect incomplete data. To emphasize this, we describe the data as "at least" the total of units or audiences for key activities. Moreover, the reader should not expect that the cumulative totals reported equal the sum of specific items associated with that measure (e.g., sum of the counts for all the types of lead dust hazard investigations may not equal the total number of lead dust hazard investigations reported because some grantees lacked the ability to track the type of investigation by unit). The NCHH team is working with NYSDOH and the individual grantees to minimize these problems in future reports.

Early Lessons Learned: Setting up the Program

The design of any new initiative or program is time-intensive. The first grantee submitted a work plan in August 2007; the remaining grantees submitted work plans throughout the fall of 2007. Final approval of grantee contracts occurred during the spring of 2008. Implementation for most grantees effectively began in April of 2008. The section below identifies barriers encountered during early implementation and some possible solutions.

Grantees cited several important factors in program start-up, including:

1. **The length of time needed to design and locally approve the work plan.** NYSDOH announced the Pilot prevention program in May of 2007 with the expectation that grantees would submit work plans for NYSDOH approval by October 1. Because grantees usually plan their budgets and program activities for other Childhood Lead Poisoning Prevention grants in the early spring, the summer timing for work plan development represented a special challenge to counties whose staffs were already fully engaged in other ongoing summer prevention activities. In addition, the Pilot required partnerships with housing rehabilitation, code inspection, and other agencies that are not traditional partners with LHD. Finally, no work plan could be submitted to NYSDOH without approval by local legislative and executive officials. This meant that the plans and their subsequent revisions had to be placed on the officials' calendars, which are often booked a month in advance.

2. **The length of time needed for final approval of the work plan and contracts.** Obstacles to work plan approval included negotiating allowable expenses under the grant, ensuring that all programs had a proactive strategy (canvass) approach to gain access to units in high-risk areas, and differing interpretations on the authority to use the "area of high risk" designation. Once NYSDOH approved the revised work plans, final local approval sometimes took an additional month or more because of the local legislative calendar.
3. **Compliance with local requirements for contracting.** Several grantees reported the need to issue local Requests for Proposals (RFPs) for services. For instance, Onondaga County policy required that an RFP be issued even when a local agency contracts with another local agency. This delayed the start of the Pilot's free lead-safe work practice (LSWP) training, which planned to take advantage of the existing monthly training offered through City of Syracuse's Lead Hazard Control program. Since there is a "window of opportunity" for conducting such training (i.e., contractors are reluctant to send their workers to training during the prime summer months for construction), the local RFP requirements may have resulted in missed training opportunities.
4. **Hiring staff.** Because most local lead programs had limited staff, many grantees proposed hiring new staff to focus on the Primary Prevention Pilot. Civil service hiring requirements and concerns about whether funding for the position would continue for future years delayed the process of hiring new staff in New York City, Oneida, Albany, Onondaga, and Orange counties. Westchester County avoided this delay by assigning certified lead risk assessors to begin program operations on the first day of the grant program. Over time, new hires replaced these staff.
5. **Formalizing data-sharing and other relationships with other agencies.** Most grantees indicated they lacked the capability to fully track what occurred during remediation or enforcement activities because these operations fell under the auspices of another agency and joint databases did not exist. For example, Monroe County's Health Department contracted with the City of Rochester's housing code inspection program to piggyback onto existing efforts to enforce Rochester's Lead-Based Paint Poisoning Prevention law. It found that the other agency collected most of the data needed for the Pilot's quarterly report. However, not only did the health department lack direct access to data, but the data were not organized in a format that made it easy to track units with investigations that were funded by the Pilot. New York City faced similar problems: although a strong partnership exists with the Department of Housing Preservation and Development, getting feedback within the requested time frames and with all data elements has proved a challenge. Both cities have made progress in resolving these problems.

Lessons for New Grantees:

Based on grantees' experiences and its own expertise from more than 12 years experience in evaluation and technical assistance on lead poisoning prevention, NCHH has developed preliminary recommendations for implementation by new and continuing grantees.

1. **Start planning early.** Knowing it can take several months to design the program and secure local legislative approval, new grantees should start work plan development as

early as possible. Westchester County and New York City were the only grantees to begin Pilot home visits and inspections in 2007. If the County has a primary prevention strategic plan, this may reduce the time necessary to plan for the Pilot and help to take advantage of other funding opportunities that emerge during the period of performance. New York City's Plan to Eliminate Childhood Lead Poisoning was completed in 2005. Oneida County began primary prevention strategic planning in 2007, and Erie County began such a planning effort in 2008.

2. **Engage other agencies early in the process and formally assign roles and responsibilities**. Make a single entity/person responsible for setting timelines and ensuring that major milestones are met. Where possible, build these milestones into reimbursement for partners or subcontractors. If partners cannot be reimbursed through grant funds, try to identify other informal methods to assure progress.
3. **Build in the time to expand existing or build new relationships with community organizations.** Many communities already have local coalitions, task forces, or advisory groups, but the coalitions lack dedicated staff. In addition, primary prevention activities may need new or different partners with other skills and capabilities. Such coalitions may require ongoing investment of the Pilot's staff members' time until they become self-sustaining. In this context, NCHH recommends that new grantees:
    a. **Identify successful coalitions to serve as a model.** Rochester's Coalition to Prevent Lead Poisoning (CPLP) is a nonprofit organization with over 100 active members that receives funding from public and private sources. It consists of five volunteer committees: screening and professional education, finance, outreach and education, governmental relations, and science. It has dedicated staff, an independent website and newsletter, and a board. Among the CPLP members are parents, lawyers, doctors and nurses, community action agency representatives, educators, and accountants. Since its inception in 2000, CPLP has promoted the adoption of the Rochester lead ordinance, hosted a community forum attended by over 400 individuals, and secured funding for a "one-stop shopping" approach to funding lead hazard control. CPLP has increased its outreach in Western New York and may be a valuable advisor to new and current grantees.
    b. **Identify possible toolkits for building coalitions.** A University of Rochester Environmental Health Sciences researcher has 2008 grant funding from the New York State Health Foundation to support coalition-building in rural counties. The researcher is currently working with three communities, including Oneida County's Mohawk Valley Community Action Agency, to provide needs assessments and support for local coalition development. During the course of this grant, lessons learned and model practices related to the coalition-building process will be documented. Grantees may find these documents to be valuable tools for future endeavors.
    c. **Identify coalition-building experts.** The Alliance for Healthy Homes, a nonprofit organization based in Washington, D.C., has national expertise in coalition building, development of toolkits, and direct technical assistance in lead primary prevention. Its *Building Blocks for Primary Prevention,* compiled for

CDC, serves as the most comprehensive published analysis of successful models for primary prevention to date. NYSDOH or grantees individually may wish to consult directly with this organization.

d. **Pay special attention to strategies to bring housing-based organizations, especially landlord and tenant associations, to the table.** Recognize that some of these organizations may resist inclusion in existing coalitions, especially if they perceive those coalitions' purpose as policy advocacy. Provide other options to engage these groups' participation.

Lessons for NYSDOH:

The NCHH team identified the following lessons for the NYSDOH:

1. **Simplify and clarify expectations for grantees' work plans**. The guidelines for Year Two work plans and standardized quarterly reporting are good examples of how the State has clarified its expectations. Grantees should also be encouraged to develop benchmarks and evaluation strategies for unique aspects of their programs and to collect cost data for all aspects of their program. However, NYSDOH must take care to prevent data collection from becoming a burden.
2. **Provide a "toolkit" for program materials**. Web-based model documents, policies, and procedures can expedite new grantees' efforts to develop work plans or support other NYSDOH efforts to implement primary prevention initiatives without Pilot funding.
3. **Make a public commitment to expedite the work plan review and contracting process**. Review and renewal of current grantees' work plans and contracts should take much less time in Year Two of the Pilot. However, new grantees may experience similar delays unless NYSDOH makes special efforts to expedite the process.

Conclusion

New York State should be commended on giving counties the flexibility to design programs consistent with their local needs and to take concrete steps to develop primary prevention capacity. Health departments across the state differ in their ability to take on this challenge. State and local community representatives must recognize that this initiative is more complex than many other programs, and will require more time to plan and implement. However, localities and NYSDOH can streamline the process by acknowledging potential barriers to work plan development and adjusting their approval processes accordingly. Westchester County successfully began operations on the first day of its grant period.

In early 2009, the NCHH team will submit a comprehensive evaluation report on the first year of implementation, including quantitative analysis of inspection, outreach, and remediation. The Year One report will elaborate on model practices and lessons learned, as well as overall program effectiveness.

Chapter 3: Model Practices for Identifying High-risk Housing

Knowing the location of housing units at greatest risk to the health of children is the first step toward implementing a primary prevention initiative. The zip codes identified by NYSDOH as the target for the Pilot contain more than 53,646 units[27]. Each grantee refined its target to the units and populations most likely to benefit from the Pilot's intensive effort, using census data, EBLL history, and housing data. Each also had to determine the best strategy to depict the areas of high risk to the community.

The most common implementation issues grantees faced in the first three quarters of Year One included how to:

1. Define the target area;
2. Use the authority provided under PHL 1370a; and
3. Improve GIS mapping capacity and dissemination of maps.

Implementation Issue: Defining Target Units

Some grantees identified target units based on housing characteristics (such as units that previously housed a lead-poisoned child), others focused on geographic location (such as census blocks or tracks), and still others identified those which housed specific at-risk populations (such as newborns and resettled refugees). Table 2 illustrates the strategies grantees used to identify target housing. Selected model practices for these and other implementation issues are described in more detail below.

Table 2. Grantee Approaches to Defining Target Housing*

Strategies	Albany	Erie	Monroe	NYC	Oneida	Onondaga	Orange	Westchester
Re-inspect units with history of EBLL cases; extend inspection to other units in the same building	x							
Concentrate on specific neighborhoods within designated high-risk zip codes		x	x	x	x	x	x	x
Visit the homes of at-risk newborns in the designated high-risk zip codes				x	x			
Inspect rental units before occupancy by resettled refugees or DSS-funded recipients (TANF, foster care)			x		x	x		

*Through the third quarter of Year One

<u>Practice 1 - Identifying Units Where Children with Elevated Blood Lead Levels Previously Resided: Example from Albany County</u>

Albany County focused its efforts on units within one zip code. This zip code contains a high percentage of pre-1970 rental housing units and a large number of children with confirmed BLLs of 20 µg/dL or greater. Many of these units received Notice and Demand orders in the past, and

the lead hazards should have been addressed and cleared. However, if the property owner had deferred maintenance on these units, children might still be at risk for exposure. The program began by inspecting the exterior and common areas and the interiors of units that had housed an affected child (having confirmed BLL of 20 µg/dL or greater between 2005-2008) and were still occupied by a child, aged six or younger. For multi-unit buildings, the inspection extended to child-occupied units appurtenant to that dwelling, but not to other buildings in the apartment complex unless they too contain child-occupied units with a history of an EBLL child. If resources permitted, the County planned to extend its inspections to dwellings where children with BLLs of 15 µg/dL or greater had been identified in 2005-2008 and continued to be occupied by children aged six or younger. In addition, in the third quarter of the grant, the County developed a small informational inspection program for property owners in this zip code.

> *Early lesson learned*: A focus on units where lead-poisoned children have previously been identified has strengths and weaknesses: it may limit the program's ability to identify other high-risk housing and make referrals to other housing programs but provide better access to buildings with known hazards. Since the building's components can be assumed to have similar paint histories, the existence of an early EBLL case can be used as strong evidence of the need to gain entry into the other units.

Practice 2 - Targeting Specific Census Tracks or Blocks: Example from Orange County

All grantees have identified targeted units or populations within specific zip codes. A few grantees, including Erie, Orange, Onondaga, and Oneida Counties, have narrowed the target area to census tracts or census blocks. The Orange County Primary Prevention Program originally identified several blocks within two census tracks as its main target area. Since the program planned to conduct inspections on all units within its target area, it intentionally narrowed the scope to the number of units it could address if a full EBLL investigation occurred. Since then, it has achieved economies of scale, and hopes to gain entry to more units in the planned time period. When the County issued its formal declaration of a high-risk area, citing section 1370a, the program identified a larger area to establish the authority to address units outside of their immediate target area when necessary. This gave the Program the flexibility to address more units without a work plan modification.

> *Early lesson:* Do not define a target area too narrowly. A small target area can help concentrate program efforts and may result in greater participation in the program. However, programs that restrict their area too tightly and do not allow for flexibility may have difficulty reaching the target number of units.

Practice 3 - Targeting At-risk Newborns: Example from New York City

Child health home visiting programs are important partners because they frequently visit families living in at-risk areas for lead poisoning and have a strong rapport with the families they serve. With limited training, their staff can identify peeling paint and other home hazards and then refer

to the Pilot for further environmental assessment. Both the New York City Department of Health and Mental Hygiene and the Oneida County Health Department chose to focus on at-risk newborns within targeted zip codes. New York City's program illustrates how this relationship can work. New York City built on an existing collaboration with the Brooklyn District Public Health Office's Newborn Home Visiting Program. The Pilot identified areas with high rates of lead poisoning; these overlapped with the catchment areas served by the home visiting program. Public Health Advisors of the District Office provide education to newborn families on parenting, well baby care, and environmental health education; they also conduct a visual assessment for peeling paint. When Public Health Advisors find peeling paint in the home, they refer the home to the Lead Program. In certain circumstances, a referral is made to the New York City Department of Housing Preservation and Development to inspect and order repairs where appropriate.

> *Early lesson*: The number of families in need of primary prevention services within a target zip code may far exceed the grantee's resources. Programs need to use their resources to maximum effect. This may require creative targeting to the highest of the highest-risk families, as well as collaboration with other programs already serving those audiences.

Practice 4 - Targeting the Housing of Resettled Refugees and Other Special Populations: Example from Oneida County

Oneida County has a large population of resettled refugees, most living in the target zip code areas. The County's experience with resettled refugees suggested that many of the children enter the target area without an EBLL, but develop one within a year of arrival. The program used some of its grant to work with the Mohawk Valley Refugee Resettlement Center to address the units that housed this at-risk population. Before the Resettlement Center signs a contract to rent a unit for a family with a child under the age of six within the target area, the Oneida program conducts a visual inspection and dust-wipe sampling of the unit. The program notifies the Resettlement Center to flag the unit on its "do not rent list" until the property owner complies with the Notice and Demand, and the unit passes clearance testing. It also provided training for Resettlement Center staff on lead poisoning issues.

In addition, the program built on an earlier effort to reach resettled refugee families by offering five on-site culturally appropriate education programs/puppet shows on lead poisoning.

> *Early lesson:* Working with refugee centers may provide access to high-risk housing where a difficult-to-reach population is forced to live due to limited economic resources. In addition, inspecting units prior to rental may alleviate the complications associated with working in occupied units.

Practice 5 – Building on Existing Efforts to Target High-risk Housing: Examples from New York City and Monroe County

Several communities have taken steps to build on existing authority to conduct primary prevention investigations in target areas. In 2004, New York City's Lead Poisoning Prevention Program and HPD instituted a routine referral system to address high-risk buildings, using the authority provided under Local Law 1. When the LPPP inspects the home of a lead-poisoned child and identifies lead paint hazards, the building's owner is ordered to abate the hazard. The LPPP then refers the building's address to HPD for building-wide action to assess its compliance with Local Law 1. HPD inspects buildings that are not in compliance and orders the owner to remediate the other apartments.

The City of Rochester's "Lead-based Paint Poisoning Prevention" law (Municipal Code of the City of Rochester Ordinance 2006-37) went into effect in 2006.This law covers most rental properties in the City; nearly 60% of occupied City housing is rental. Under the Ordinance, inspectors look for deteriorated paint in housing units at the time of the regular Certificate of Occupancy inspection or if the unit receives funding through the TANF (Temporary Assistance for Need Families) program. Under Section §90-55 and in Section 3, high-risk areas can be defined using data collected by the Monroe County Department of Public Health on children with elevated blood-lead levels and properties identified as having LBP hazards. An inspection may also be initiated in response to a tenant, neighborhood group, or medical doctor request.

> *Early lesson:* Communities that already have ongoing housing-based primary prevention strategies may serve as models for other grantees in the future.

Implementation Issue: Authority to Designate High-risk Areas

Grantees vary on how actively they rely on the authority granted by Public Health Law Section 1370a, subdivision 3 to designate a high-risk area. As part of the Pilot, five counties (Onondaga, Oneida, Erie, Westchester, and Orange) issued formal declarations of high-risk areas, citing this law to designate a high-risk area. Monroe County and New York City chose not to use state law to authorize the high-risk designation, relying instead on local law (City of Rochester's "Lead-Based Paint Poisoning Prevention Act" and New York City's "Local Law #1 of 2004 – the New York City Lead Poisoning Prevention Act" and "NYC Health Code," respectively). Albany County's legal staff has taken a very cautious approach to use of the designation, and limits the bulk of the program's activities to inspections of units in dwellings with a history of EBLL children and occupied by children age six or under. By the end of the third quarter, Albany had instituted an additional informational inspection process.

> *Early Lesson:* In the absence of a statewide primary prevention public health law, each county must evaluate its available tools to promote primary prevention. Because several health departments have been sued in the past for their lead inspection activities, some may be reluctant to enforce based only on local laws. Public Health Law Section 1370a, subsection 3 provides additional authority that can strengthen local enforcement. However, we will not be able to determine whether use of the authority increases the number of units inspected under the Pilot until later years.

Implementation Issue: Using Geographic Information Systems (GIS) to Identify Properties

NYSDOH asked grantees to develop maps or to build capacity to visually represent the target area. Many of the grantees do not have fully developed GIS capabilities, but Albany, Erie, Monroe, New York City, Oneida, Onondaga, and Westchester Counties all provided maps of target areas (see Appendix A). Most relied on partners outside the health department to produce the maps, such as their local Department of Community of Development. Onondaga County also contracted with Syracuse University's Geography Department to develop a risk index for all Syracuse block groups (i.e., a composite, weighted score based on property/tax rolls, vital statistics data, blood lead registry and lead inspections). Through multivariate regression based on these predictors, the program hopes to identify local areas with children most at risk for lead poisoning as the target for future intensive primary prevention activities, such as door-to-door canvasses.

Most grantees have used the maps in presentations to their communities and in newspaper articles.

> *Early lesson*: Regardless of who produces the maps, most grantees agree that graphic presentations of target areas can help communicate risk in clear and compelling ways to target audiences, and are likely to capture the attention of media, potential funders, advocates, and local politicians.

Conclusions and Recommendations

From October 2007 to June 2008, grantees employed many strategies to define and map their targets for primary prevention. To expand on this effort in future years, we recommend that grantees:

1. Use Public Health Law Section 1370a, subdivision 3 to designate high-risk areas and to expand designation to other areas as local conditions warrant, unless a local jurisdiction has such authority already. This will streamline primary prevention inspections. The State might facilitate this effort by providing a Question and Answer sheet for new grantees based on questions that have come up from Year One grantees.

2. Build local political and administrative support to expand use of Public Health Law Section 1370a, subdivision 3 to designate other high-risk areas, especially where the county does not have local authority to proactively address lead hazards.
3. Strengthen mapping efforts for the purposes of risk communication. Consider expanded mapping efforts to integrate lead poisoning prevention data with other health data such as childhood injury and asthma prevalence data. This can include partnering with the Healthy Neighborhood Program (if available), other health department and social service agencies that make home visits, Refugee Centers and other agencies that place families with young children in rental housing, and local housing and community development agencies to map overlapping service areas. This can help identify future partners for prevention and increase understanding of the health issues associated with the housing in the high-risk zip codes. Moreover, for those communities that lack a Healthy Neighborhoods Program, it may provide the impetus for developing this resource.

Chapter 4: Model Practices: Developing Agency Partnerships and Community Engagement

Strong partnerships with other municipal agencies and effective collaboration between grantees and community- and faith-based organizations are critical to successful primary prevention. In Year One, grantees were expected to establish the networks and collaborations necessary to support a self-sustaining program in future years. This required formal and informal agreements between agencies, engagement of community partners to deliver and build support for new initiatives, and increased community awareness of which housing is targeted for primary prevention. While each grantee made progress in this area, several developed strategies to overcome implementation issues that may be models for the future. Grantees concentrated on five key implementation issues in the first three quarters of the grant:

1. Building stronger partnerships and collaborations with other local agencies;
2. Providing training in visual assessment of paint hazards for staff of partnering agencies and developing protocols for the referral process
3. Obtaining formal letters of commitment or Memoranda of Understanding for specific program activities;
4. Expanding the role and membership of local coalitions; and
5. Using marketing and media to build community support.

Table 3 illustrates strategies grantees used to build partnerships with local agencies. Examples of model practices are described in more detail below.

Table 3. Grantee Approaches to Building Collaborations with Other Agencies*

Strategies	Albany	Erie	Monroe	NYC	Oneida	Onondaga	Orange	Westchester
Changes in referral process, procedures, documentation	x	x	x	x	x	x	x	x
Coordinate data collection with other agencies	x		x	x	x	x	x	x
Joint visits with or referrals from the Healthy Neighborhoods Program		x	x	x	x	x	x	x
Joint visits with or referrals from Maternal and Child Health, Visiting Nurses, or other social service programs				x		x		
Staff training with any of the above referral or home visiting programs			x	x	x	x	x	x
Referrals to code enforcement or local lead hazard control programs	x	x	x	x	x	x	x	x
Joint training or inspection with code enforcement or local lead hazard control programs		x	x (City Code)	*initiated prior to Pilot start-up	*initiated prior to Pilot start-up			

*Through the third quarter of Year One

Implementation Issue: Building Agency Partnerships/Collaboration

Most grantees sought to enhance existing relationships with agency partners; some also created new relationships. As of June 2008, most had experienced success working within the health care and social service community. All counties with HUD-funded Lead Hazard Control grants took steps to assure that properties contacted through Pilot activities were referred to those programs, but efforts to forge partnerships with other housing-related entities were more problematic. (Barriers related to the development of these relationships are discussed in more detail in subsequent chapters.)

Practice 1 - Establishing Common Referral Policies and Procedures: Examples from Onondaga and Westchester Counties

Many grantees routinely refer clients to other in-house local health department or social service programs. The Onondaga County Pilot expanded its pre-existing referral relationship with the Healthy Neighborhoods Program, other DOH maternal and child health programs, Catholic Charities, and child care resource and referral agencies. At the outset of the Pilot, the County met with other agencies to identify common needs for training and intake forms. The County invited local governmental agencies and community- and faith-based organizations to a May kickoff event, where they received literature about the Pilot's services to deliver during their home visits. The program also developed a common set of referral forms for agencies and a common set of notification letters (see Appendix B). Home visitors from other health department programs also received training on Pilot services and use of the forms.

At the onset of the Pilot, Westchester County's Health Department re-affirmed its internal referral processes, and then expanded these referral commitments to the rest of the County and the City of Yonkers. It established partnerships with CLUSTER (a tenant/landlord counseling agency) WESTHAB (a providers of emergency housing and low-income units), and the Nepperhan Community Center (a community-based agency that provides youth activities, violence prevention programs, and acts as a referral source for other needed services).

Practice 2 - Joint Visits and Training with the Healthy Neighborhoods Program: Examples from New York City and Albany, Monroe, Oneida, Orange, and Westchester Counties

New York City and Albany, Oneida, Orange, Monroe, and Westchester Counties coordinate activities with the Healthy Neighborhoods Program (HNP) to improve access to target populations. New York City's Public Health Office Newborn Program is itself a Healthy Neighborhoods Program, with staff trained to identify lead and other home hazards. In Albany County, the HNP routinely conducts summer educational canvasses in at-risk neighborhoods, including the zip code designated as high-risk in the Pilot. Once these summer HNP visits were completed, the Pilot contracted for HNP outreach workers to canvass specific streets in the high-risk zip code to provide information on the Pilot and to make referrals for inspection. In Monroe County, HNP staff members provide education to families during "Lead-Safe Saturday" visits while the City's inspector conducts the visual assessment for deteriorated paint. Oneida and Orange Counties use teams of HNP and Pilot staff to conduct joint visits in the target areas, both

for efficiency and safety. Westchester County's sanitarians administer the HNP survey to the residents. All these grantees conducted joint training sessions for the Pilot and HNP staff before conducting the home visits.

Oneida County took this one step further by requiring all HNP and Pilot staff to be trained as Sampling Technicians to perform lead dust wipe tests during home visits. Each staff member also attended an eight-hour Lead-Safe Work Practices training and demonstrated knowledge and competency in a number of areas related to lead poisoning prevention and lead hazard control.

> *Early lesson:* It is too early to determine whether joint home visits will increase the number of units inspected and remediated for lead hazards, but grantees expect that access to target units will increase. HNP staff members are usually well known to the target community since they concentrate on a select set of neighborhoods each year. Pilot grantees can capitalize on this access and bring additional information and services regarding lead hazard control.

Practice 3 - Expanding the Relationship with the Department of Social Services: Example from Onondaga County

The Onondaga Lead Poisoning Control Program has a longstanding relationship with the Department of Social Services (DSS). The program routinely works with DSS' Homefinding Unit, Public Assistance, Child Protective Services, and Emergency Housing. The Homefinding Unit places children in foster homes and has collaborated with the Lead Program for many years to ensure children under age seven are placed in a lead-safe environment. The Lead Program inspects potential foster homes prior to placement and although the program cannot enforce correction of lead hazards, DSS has chosen not to place a child under age seven unless the hazards have been addressed. This inspection program is continuing under the Pilot. The Pilot is also soliciting referrals for inspections in properties receiving subsidized rent through DSS Public Assistance and for children receiving services through Child Protective Services. It is also exploring the possibility of developing a Memorandum of Understanding (MOU) with DSS.

> *Early lesson:* Building on an existing relationship is often less time-intensive than forging new relationships. However, even if there has been a longstanding relationship with an organization, the introduction of a new initiative still takes time to adjust policies and procedures.

Implementation Issue: Obtaining Letters of Commitment and Memoranda of Understanding (MOUs)

Most grantees are working with a large number of partners and interact with a variety of stakeholders to conduct the primary prevention project. Obtaining formal support and commitment from the various stakeholders can often be time consuming and challenging;

however, it also can help ensure success of the program. One way to obtain commitments is to develop MOUs to clarify the roles and responsibilities of all partners. For example, New York City has MOUs with Housing Preservation and Development and the New York City Housing Authority to identify Section 8 housing where the Lead Poisoning Prevention Program has identified LBP hazards.

As of June 2008, most grantees have either concluded that their relationships with other agencies do not require a formal statement or are engaged in negotiations. Table 4 provides examples of MOUs and letters of commitment. Other examples appear throughout this report and in the Appendices.

Table 4. Examples of Commitments between Agencies*

County	Nature of the Commitment
Albany	Contract with Cornell Cooperative Extension Service to conduct Lead-Safe Work Practice training on behalf of the Pilot.
Erie	Letter of Commitment between City Housing Court Judge and Pilot to hear cases at no-cost; speak at events; participate in revisions to Sanitary Code.
Monroe	Pilot funded activities of two City Code Inspectors in target areas to support Pilot activities.
NYC	Expanded existing collaboration with the Brooklyn District Public Health Office (DPHO) and Asthma Program; built new collaborations with the Manhattan and Bronx DPHO and the Queens Nurse Family Partnership (NFP). HPD also accepts referrals from home visiting programs. In addition, when LPPP orders the building owner correct the hazards and the owner fails to comply, LPPP refers the address to the HPD Emergency Repair Program (ERP). The landlord is billed for the work. LPPP also makes referrals to the NYC Window Falls Prevention Program to conduct follow-up inspections on all homes with window guard violations.
Oneida	Utica's Municipal Housing Authority and Rebuild Mohawk Valley, Inc. committed to rehabilitate 40 owner-occupied units in the target area with rehabilitation monies received from the Empire Development Corporation and the Division of Housing and Community Renewal.
Onondaga	DSS only places foster care children aged seven or under where homes with known LBP hazards are addressed; this agreement is being extended to Child Protective Services and rent-subsidy programs.
Orange	VISTA Neighborhood Watch workers to distribute primary prevention materials.
Westchester	Joint weekly and monthly meetings with Lead-Safe Westchester (HUD-funded lead hazard control grant program).

*Through the third quarter of Year One

Implementation Issue: Expanding the Role and Membership of Local Coalitions: Examples from Onondaga and Erie Counties and New York City

Most of the grantees already had an advisory board or community coalition to support their existing primary prevention efforts under their CLPPP grants. Table 5 illustrates additional efforts grantees took during the first three quarters.

Table 5. Grantee Approaches to Expanding Community-based Organizational Engagement*

Strategies	Albany	Erie	Monroe	NYC	Oneida	Onondaga	Orange	Westchester
Convene or attend meetings of existing coalitions/ advisory boards to present Pilot activities	x	x	x	x	x	x		x
Host a Community Forum or kickoff meeting specifically to solicit ways that community groups could support the Pilot		x	x			x		
Expand number or types of organizations represented in coalitions		x			x	x		

*Through the third quarter of Year One

The Syracuse Lead Task Force has existed for several years; most of its members were providers of direct services to children. With the advent of the Pilot and an EPA-funded Lead Education and Outreach grant, the membership of the Task Force expanded. Meetings are now held at a community service center in the heart of the target high-risk area. Representatives of nonprofit housing programs, interested landlords and property owners, and other community-based groups have started to attend. To increase membership and place greater focus on primary prevention, the Task Force distributed flyers to community- and faith-based groups, housing developers, and others (See Appendix B) and will engage in more active outreach to the Spanish-speaking community in the coming months. In September 2008, Syracuse University faculty and students supported the Task Force's efforts by sponsoring a community forum. The Task Force also placed high priority in 2008 on developing model language for a lead ordinance, similar to that adopted by the City of Rochester.

In March 2008, Erie County established a partnership with the Community Foundation for Greater Buffalo to move the grassroots agenda for lead poisoning prevention forward. The Foundation, one of the oldest and most respected in the County, agreed to incorporate lead poisoning prevention as part of its 2007-2011 Strategic Plan. One of the outcomes of this initiative was a community-wide forum, sponsored by the Foundation, Community Action Organizations (CAOs), Environmental Education Associates, and Neighborhood Legal Services, which over 150 individuals attended. The forum focused on lessons learned from the Rochester experience and next steps to promote primary prevention in the Western New York region. The Community Foundation agreed to support efforts to build a more effective city/county partnership and to find ways to leverage private sector funds. Erie County also established partnerships with Every Person Influences a Child (EPIC) and the Parent Resource Network to train parents from the target areas and encourage these organizations to make referrals into the Pilot program. Since the forum, the Community Foundation and the CAOs have held joint meetings and hosted working groups to identify strategies for resident education, community engagement, training for lead hazard control, and strengthening local lead laws.

Early lesson: It is easier to bring representatives from diverse organizations together for educational events than for sustained activities in support of primary prevention. The "legwork" for many coalition projects still comes from local health departments or other organizations with dedicated funding for this effort. Building an effective coalition requires identification of common interests and goals among all members, as well as the tools to achieve those goals. Both Erie County and the Syracuse Lead Task Force have made the effort to establish a common task/focus for their coalitions and to expand the coalitions' membership.

Short-term successes may be the key to building a more lasting and ambitious plan of action. In addition, the coalition may need direct funding for the coalition for its operations, either through community foundations or dedication of a substantial percentage of a staff member's time, to support specific policy or programmatic action.

New York City has had a Technical Advisory Committee (TAC) since 2004 that partnered with the Lead Poisoning Prevention Program to develop its strategic plan to eliminate childhood lead poisoning. TAC members represent government and nongovernmental organizations specializing in child and environmental health, housing, and cultural and immigrant affairs. Since its inception, the TAC has incorporated community organizations serving low-income and immigrant groups. The latter provides important support in reaching "hard to reach" populations. The TAC now advises the Program on its efforts to improve screening rates and primary prevention, including Pilot activities.

Implementation Issue: Use of Marketing and Communications to Build Community Support for Primary Prevention

A successful Pilot requires communicating with diverse target audiences. All grantees sought to identify the overarching themes of the local Pilot and tailor marketing and communications to support those messages. Many of the grantees benefited from the work of their earlier primary prevention-funded activities. For example, Oneida County displayed billboards with primary prevention messages. Monroe County, through an earlier HUD grant, developed a DVD on lead and lead safety for distribution throughout the county, including the target neighborhoods.

All grantees also sought to build county-wide awareness and support for the Pilot. Table 6 illustrates these media and community presentation strategies.

Table 6. Grantee Media and Marketing*

Strategies	Albany	Erie	Monroe	NYC	Oneida	Onondaga	Orange	Westchester
Press releases				x	x	x		x
Kickoff events, including participation by elected officials					x	x		
Radio or TV coverage, follow-up interviews about the program					x	x	x	
Public Service Announcements, special program bulletins/newspapers, paid advertisements	x			x	x	x	x	
Presentations to community groups or health fairs	x	x	x	x	x	x	x	x
Display of Pilot literature in libraries, building permit offices, hardware stores, etc.		x		x	x			
Written marketing/communication plan to coordinate all Pilot messages			x					

*Through the third quarter of Year One

As of June 30, 2008, grantees in New York City and Albany, Erie, Oneida, Onondaga, Orange, and Westchester Counties reported a total of 62 events, directly reaching an estimated audience of at least 4,303 people. Newspaper, television, and radio coverage of these activities multiply the scope of that outreach to the entire community. Examples of promising model practices are described in more detail below.

Practice 1 - Defining a Marketing Plan: Monroe County

The Monroe County Department of Public Health (MCDPH) convened a stakeholder meeting including faith-based and community organizations to develop a marketing/communications plan for the Pilot. The plan established the overall goals of the Pilot, the key audiences, messages, specific tactics, and tasks for partners. As part of the plan, MCDPH developed a joint press release, a flyer, and a door hanger. In addition, toolkits were created for the homeowners (see Appendix B). Although the project team made a concerted effort to create a marketing/communications plan, the implementation of the plan rested with multiple entities and was executed inconsistently.

> *Early lesson:* For any planning effort involving multiple stakeholders, it is important to have one entity/person responsible for ensuring that all of the activities are implemented, timelines are set, and major milestones are met.

Practice 2 - Using Specialized Media to Reach Target Audiences: Examples from Orange and Onondaga Counties and New York City

Grantees recognize that to reach target audiences they must rely on several types of media for advertising and raising community awareness. Most grantees announced the beginning of their Pilot activities through a press event (i.e., press release or press conference). Many took additional steps to reach key audiences.

Orange County's Childhood Lead Poisoning Prevention Program (CLPPP) and the Pilot collaborated to conduct advertising and outreach. The programs placed advertisements in a local newspaper distributed to approximately 70,000 households, prepared a press release, and distributed flyers. In addition, the Orange County Directors of Community Health Outreach and Community Development, and the Health Commissioner participated in a "guest spot" event on a local health-related radio program to discuss primary prevention in general and the Pilot program in particular. Program staff also conducted outreach to several community groups, including providing education at weekend screening clinics held at five local clinics. The LHD also featured the Pilot prominently in its summer newspaper insert delivered throughout the County.

Onondaga County program planned to use $10,000 for advertising on the radio. It will run approximately 1,000 30-second advertisements over a nine-week period on the local Clear Channel radio station, which has good penetration into target neighborhoods. One drawback to using Clear Channel is that this station often does not reach the Hispanic Community. However, there is limited (several hours on Saturday and Sunday) Spanish radio programming in Syracuse. The Onondaga primary prevention program plans to work with local weekend Spanish-language radio programs to offer public service announcements and/or schedule interviews.

New York City had developed a media campaign to promote lead poisoning prevention. For the Pilot, this campaign was tailored to lead poisoning prevention and "healthy homes" messages, with displays on subways, sanitation trucks, and check cashing stores in target neighborhoods.

> *Early lesson*: Using multi-faceted media campaigns can help ensure that a large number of individuals are reached. Evaluating how individuals, especially those enrolled in the Pilot, received their information about primary prevention can help distinguish which media most effectively reach the target population and inform the planning of future communication efforts.

Conclusions and Recommendations

Grantees appear to have had the greatest success forging partnerships with the Health Neighborhoods Program and other programs within their health departments. Efforts to achieve MOUs or formal partnerships with other agencies have taken more time. Most promising are the efforts to integrate inspections with DSS and Refugee Centers.

By the end of June 2008, grantees had introduced their Pilot activities to their communities and set the stage for more active outreach in the next quarter. Several had begun to strengthen and expand their links to community-based organizations and coalitions.

To expand this effort in future years, we recommend that new grantees:

1. Allow sufficient time to expand existing or build new relationships with community-based organizations and local agency partners. Increase efforts to engage community-based organizations in the target areas in outreach and recruitment.
2. Cross-train staff from all programs that conduct home visits in lead poisoning primary prevention issues. Staff from other programs can complete training for visual assessments of deteriorated paint and provide referrals to the Pilot for follow-up.
3. "Close the loop" on referrals so agencies that refer units into the Pilot also know the outcomes for their clients and what additional steps they could take to support prevention activities.

Chapter 5: Promising Model Practices: Housing Interventions

Despite a slow start, the Pilot has begun to have an impact on the target communities. At the end of June 2008, the Pilot had reached a cumulative total of at least 3,404 units through outreach and referral. The majority of units (n=3152) were reached through planned program canvassing and outreach visits, 38 though a tenant's request, five through property owners' requests, and 209 through referrals from other programs.

At least 820 units had a complete full home visit. Of those units, 361 housed at least one child aged six years or younger. This represents a cumulative total of at least 446 children aged six and under reached by Pilot activities. Of these children, 171 reported a prior blood lead test, and 90 were referred for testing as a result of their exposure to the Pilot. This suggests that the Pilot is contributing to secondary prevention in the target communities.

At least 850 units received some form of LBP inspection, and LBP hazards were identified in at least 278 of the units. Eighty-two units were reported as remediated as of June 30, 2008.
The vast majority of the units inspected were reported as renter-occupied (n=603). Twenty-seven of the units had been the subject of an earlier EBLL lead investigation where lead hazards were identified.

Grantees encountered four main challenges to implementation:

1. Gaining access to units in the designated high-risk areas;
2. Completing LBP inspections in those units;
3. Completing remediation on a timely basis using different enforcement strategies; and
4. Strengthening enforcement capacity through integrating housing and sanitary code enforcement.

Implementation Issue: Gaining Access into Units

Many of the grantees did not begin their home visits until May 2008. Based on prior experience, they recognized that gaining entry into units can be challenging. Table 7 illustrates strategies that grantees explored to improve access to units.

Table 7. Strategies for Gaining Access to Units *

Strategies	Albany	Erie	Monroe	NYC	Oneida	Onondaga	Orange	Westchester
Use community organizations in the target neighborhoods to enroll units	x	x		x	x	x	x	x
Landlord workshops or "owner's nights"				x	x			x
Letters, flyers, door hangers for property owners or tenants	x	x	x	x	x	x	x	x
Door-to-door canvass**		x	x				x	x
Provide information on tenants' rights			x	x				
Street fairs/health fairs in target neighborhoods		x		x			x	
Translation services, translated materials, special efforts to engage ethnic/language groups in Pilot	x	x	x	x	x	x	x	x
Incentives for residents to participate in the visits (such as cleaning supplies, etc.)		x	x		x		x	x
Saturday or late afternoon or evening visits			x		x			
Inspect units at the request of owner or tenant	x	x			x	x	x	x

*Through the third quarter of Year One.
**Most grantees began canvass activities by the end of Year One.

Practices of special note are described below.

Practice 1 – Working with Community- or Faith-based Organizations: Example from Erie County

In March 2008, the Erie County Department of Health and the West Side Neighborhood Housing Services held a Post-Purchase Homeowner Workshop in a Pilot target neighborhood to educate homeowners about lead poisoning and the Pilot. Of the 45 attendees, 13 were recruited for the program. This workshop proved to be one of the most successful outreach events conducted by the program thus far.

Erie County's outreach strategy for inspections also relies heavily on gaining access to target area families with children through tailored "receptions" focusing on lead poisoning prevention. The Pilot plans to identify community focal points, including childcare and learning centers, churches, block clubs, and community centers, to host small "receptions" for their constituents. Smaller than other general outreach events such as health fairs, receptions are usually stand-alone events focusing on 50 participants or fewer, allowing more time to educate them about the hazards of lead poisoning, discuss the project with potential participants, and create an avenue for the Pilot to receive referrals to primary dwellings of young children in the target area. The host venue serves as a partner, not only personalizing the reception but also identifying, pre-screening, and encouraging the attendance of the possible participating families. Lead prevention staff are available to field questions, collect contact information, and press for home visits, booked at the event whenever feasible.

> *Early lesson*: Engaging the community-based partners as hosts of more "intimate" gatherings may be more resource-intensive than health fairs, but may also be more effective. Grantees frequently track the number of individuals attending each outreach event. To identify successful outreach venues, grantees should consider creating a mechanism to track individuals enrolled in the Pilot as a result of attending an outreach event.

Practice 2 - Communicating with Rental Property Owners: Examples from Oneida and Orange Counties

Property owner understanding and support of the Pilot is critical to development of a community's permanent supply of lead-safe affordable rental housing. Programs had to address fears that the costs of complying with the Pilot could lead owners to abandon their properties rather than make repairs, although there is no evidence that this has in fact happened. Moreover, if owners send a signal of resistance to their tenants, tenants may be unwilling to allow the program into their units even for the purpose of resident education. Thus, property owners have a vested interest in making their units lead-safe and can be an important ally in implementing primary prevention.

The majority of grantees planned to mail notices to property owners in targeted high-risk areas before starting inspections. Before initiating inspections, Oneida County conducted seminars for rental property owners to introduce the Pilot and general lead-related requirements that apply to rental properties. The program sent invitations to over 700 rental property owners who received funding through the Department of Social Services or Section 8 (see Appendix C). The County held three seminars in May; additional seminars were scheduled for June, as well as a presentation to the area rental property owners association at the association's request. Fifty-four rental property owners attended the May seminars; the majority also signed up for free LSWP training. Of these "early adopters," most owned more than one multi-family building. Therefore, even with small attendance at the May seminars, the program anticipates that the effort will reach over 250 units. Oneida County recommended the following strategies for successful seminars:

1. Hold events at a "neutral" place, such as a community college. The college setting helped to emphasize the "seminar" or educational approach and served as a convenient, neutral location free of charge to County agencies. The college's cafeteria also provided catering services.
2. Emphasize a "we're all in this together" approach. Pilot staff focused on the health implications of lead exposure for young children. Telling the story of children's struggles after lead exposure helped increase the urgency/interest in the Pilot. The first group of rental property owners admitted a reluctance to attend because they suspected that this was a county "sting" operation to catch "slum landlords." When they had a positive experience with the seminar, they communicated this to others.

3. Emphasize the monetary benefits to the rental property owners of participating in the Pilot (e.g., free use of a HEPA vacuum, free LSWP training, free “Supercleans” after the unit was renovated, free air filter, and a free clearance test).
4. Implement a one-stop shopping approach. Rental property owners could sign up for the LSWP training, register for the free HEPA vacuum loan program at the same time, and learn about available funding sources for repairs. Program staff streamlined the registration process for use of the HEPA vacuum so registered rental property owners could reserve the vacuum and pick it up at an assigned time. The program also used the opportunity to build interest in the City’s proposed new lead hazard control program and took names of interested rental property owners to build a potential applicant list.

In Orange County, the Department of Health (DOH) mailed letters describing the Pilot in both English and Spanish to all rental property owners in the targeted community. Because the housing department had a strong relationship with rental property owners, particularly with an owner of 60 residential units, many of which were within the target area of the Pilot and the County’s HUD grant, collaboration between the housing and health departments was invaluable in reaching this population. Ongoing collaborations include identifying a location in the targeted community to hold a LSWP training and ways to encourage property owners to build awareness for the Pilot and recruit individuals for the LSWP training.

> *Early lesson*: Outreach to landlords may require cooperation across agencies and often takes considerable advance planning. Programs need to allow sufficient time to obtain mailing lists, assemble materials, gain county executive approval or other officials’ approval, and make reminder calls.

Practice 3 - Communicating with Residents: Examples from Erie, Westchester, and Monroe Counties

The majority of grantees have a mechanism to notify residents in target areas of the Pilot. Most sent a letter or postcard, as well as relying on news coverage. All counties developed education materials in English and Spanish; many have them in other languages as well.

Some grantees conduct specific outreach to Hispanic or other ethnic groups. Westchester County has a Spanish-speaking inspector who serves as a translator during its door-to-door outreach activities. Erie County also participated in a Hispanic Health Fair to increase its visibility. Onondaga County is exploring ways to advertise in Hispanic media markets.

Erie County identified an obstacle to door-to-door recruitment in predominantly Muslim communities, where women are reluctant to open the door to strangers. The County plans to reach out to Muslim leaders and community block club groups to identify ways to overcome this obstacle.

The Monroe County Department of Public Health implemented a Lead-Safe Saturday inspection program in its target area. Pilot funding will support up to 2000 home visits and dust wipe testing

where required. On Saturdays, Property Conservation Inspectors along with grantee staff conduct door-to-door lead education outreach and perform visual lead inspections in the target area. Staff demonstrate safe cleaning methods and provide cleaning kits to residents who volunteer for the visual lead inspections. Since the Lead-Safe Saturday inspections include both owner-occupied and rental units, the program has prepared a standard script for initiating contacts with residents in the target area and a set of Frequently Asked Questions, including issues specific to tenants. The team also provides a pamphlet on tenant rights. When residents are not at home, the program leaves a "door hanger" at the unit with information about the program.

After the first Lead-Safe Saturday in May 2008, the project team evaluated its success and made procedural changes to increase the number of homes where it gained entry. Monroe County has reported a 20% success rate in getting into homes. Planned changes include working with students affiliated with the "Healthy Model Home" situated in the high-risk target area, to "pre-canvass" the neighborhoods targeted for Lead-Safe Saturdays. These changes are expected to increase the rate of successful entry.

> *Early lesson:* Community groups known by residents can help bolster outreach efforts through pre-canvassing and participation in the door-to-door activities. Such partners should be compensated rather than expected to serve as volunteers. In addition, frequent evaluation of efforts can help identify whether changes to a current practice need to occur to ensure success in reaching goals.

Practice 4 - Conducting Door-to-door Canvass and Street Outreach Events: Examples from New York City and Westchester and Orange Counties

As of September 2008, all the grantees had begun door-to-door canvasses. Westchester County began its canvass activities October 2007, resulting in 2,340 units canvasses by June 30, 2008. Some of the Counties noted that "pre-canvassing" (i.e., door hangers, HNP outreach visits prior to visits by Pilot staff) encouraged participation in the Pilot home visit. Most conduct the canvass during the workweek between 10 a.m. to 4 p.m. Albany and Monroe Counties and New York City make Saturday visits; New York City and Oneida County also make visits later in the week. Grantees' reported success in gaining access to the unit to complete a full home visit ranged from 15% to 50%.[i] Reported time in the unit ranged from 15 minutes to 2.5 hours, depending on whether the visit was strictly educational or involved a full LBP inspection. Albany, Erie, Monroe, Oneida, Orange, and Westchester Counties provide lead-related clean-up supplies (such as mops, buckets, detergent, spray bottles, etc.), crayons, coloring books, and other educational items to residents during the visit; Onondaga is in the process of securing Health Commissioner's approval for this effort (see Table 8). Erie, Oneida, Orange, and Westchester Counties include other Healthy Homes items, most commonly fire extinguishers, smoke or carbon monoxide detectors and batteries,

[i] New York City reports that of 235 referrals received in Year One, it inspected 194 homes. Time in the unit ranged from 15 minutes to 4 hours, depending on the nature of the activities completed. Door-to-door canvass data were not available for the third quarter.

compact florescent light bulbs, and bait or gel pest control products. Funding for the latter items usually comes through the Healthy Neighborhoods Program.

Table 8. Incentive Items and Educational Materials Provided at Home Visits	
Monroe	Mr. Clean Summer Citrus, 28 oz.
	Rubbermaid 6435 12" steel-roller sponge mop
	Rubbermaid 2628 19-quart double compartment pail
Oneida	Sterilite 5-quart bucket
	Child-safe stove knob covers
	Duck adhesive tub treads
	Nuby bowl set
	Munchkin Safety Bath Ducky
	Dial Complete soap
	Safety First Cabinet drawers & latches
	Safety First outlet plugs
	Kelgar Tubbly Bubbly faucet cover
	Simple Green cleaner
	Rubbermaid mops
	Marcal paper towels
	Paint certificates and HEPA vacuum certificates for property owners
	2 oz. paint sample jar
	Foam paint brushes
	Fidelis pen lights
	Fidelis Band-Aid kits
	Nuby sippy cups, SIDS doorknob card and brochure
Orange	Marcal recycled paper towels
	Simple Green cleaner
	Flashlights with batteries
	Smoke detectors/carbon monoxide detectors
	Rags (wiping cloths)
	Scotch Brite scrub sponges
	Buckets
	Latex gloves
	Crayons—8-pack
	Baby bibs
	Burp pad
	Lion stuffed animal
	Totes/canvas bags
	Squeeze bottles
	Deep cleaning 2" x 3" floor mat
	Mood pencils
	Paint certificates and HEPA vacuum certificates for property owners
	How Adults Can Manage Asthma handbook
	Grow Up Lead Safe - growth chart (English/Spanish)
	My Book/Stay Safe Around Lead - coloring book (English/Spanish)
	Lead English/Spanish booklet
	Lead Poison: Is Your Child at Risk? (English/Spanish)
	Lead Poison (English/Spanish)
	Lead Safety for Children flier
	Lead Free coloring pad
	Help Yourself to a Healthy Home (English/Spanish)

Table 8. Incentive Items and Educational Materials Provided at Home Visits (continued)	
Westchester	8-quart bucket; imprint will be county logo, health dept., program name and number
	Sponge; imprint will be county logo, health dept., program name and number
	25' contractor tape measure; imprint will be County Logo, health dept., program name and number
	Pocket screwdrivers; imprint will be county logo, health dept., program name and number
	Duffel Bag; imprint will be county logo, health dept., program name and number
	Mini flashlight; Imprint will be county logo, health dept., program name and number
	Blue click-action pen; imprint will be county logo, health dept., program name and number
	Duct tape
	Fire extinguishers
	Small first-aid kits
	Simple Green
	CF light Bulbs
	Smoke detectors/carbon monoxide detectors
	Carbon monoxide detectors
	Bed sheets
	Surge protectors/outlet strips
	Glue traps for rodents
	Glue traps for cockroaches

Source: Data provided by grantees in preparation for September 9, 2008 conference call on strategies for gaining access to units.

The most common obstacles to door-to-door efforts encountered thus far include:

1. Fear that the inspection will lead to trouble with landlords, immigration, or Child Protective Services;
2. Lack of interest in lead hazards;
3. Landlord resistance to dust lead testing without an opportunity to clean the unit in advance; and
4. Failure to gain re-entry if an inspection is not completed at the first visit.

Several Counties have adjusted their strategies to address these concerns. Erie County noted that it had greater success with entry and education when home visitors started with other Healthy Housing issues residents faced (such as pest management) and then moved to the lead educational messages. Monroe County provides a pamphlet on tenant rights with each home visit, and other counties are taking steps to address this issue. Oneida County's strategies to reach resettled refugees and overcome landlord resistance were described earlier.

Orange County modified its outreach approach in an effort to reach its goal of inspecting every unit within a several block area. The program first sent letters to the property owners informing them of the Pilot and then delivered an informational flyer to every unit in the target area to encourage residents to make an appointment for a visit. The Pilot followed up with a door-to-door canvass to gain access to the units. To supplement this, the Pilot set up a stationary site in a well-traveled area within the targeted community as a base to provide resident education. The staff also approached residents on the street. If the resident agreed, the home visit occurred immediately; if not, the staff member made an appointment for a later date.

As of September 2008, the New York City Lead Poisoning Prevention Program will use door-to-door efforts for two new pilot interventions. The first, a joint project with LPPP and the New York City Department of Housing Preservation and Development, targets landlords of high-risk dwellings in order to make them aware of financial resources for lead hazard reduction. To identify these properties, sanitarians, were assigned in pairs to selected blocks in the 11212 zip code (Brownsville) to observe and record buildings with peeling paint, old windows, and other exterior signs of building deterioration. This generated a list of buildings. The Lead Program will identify the owners of these buildings and send them information on the HUD-funded, forgivable loan program, which supports lead hazard reduction in high-risk neighborhoods.

The second is a door-to-door effort to revisit homes where lead paint hazards were identified and corrected by remediation, or where that the Pilot's newborn home visiting programs had visited but not tested for lead. Sanitarians, working in teams of two, will educate families on lead poisoning prevention and healthy homes issues, administer a questionnaire, and when allowed, inspect homes for peeling paint and other home health hazards. The goal is to find out whether properties previously remediated have additional peeling areas that need to be fixed. When tenants agree to an inspection, the sanitarians will perform XRF paint testing. Remediation orders will be issued when LBP hazards are identified. The sanitarians will also administer a survey instrument developed by the Pilot to assess tenants' knowledge of lead poisoning, their experience with the lead remediation in their home, and learn if all young children in the home have been tested for lead poisoning.

Even when programs make the initial contact, further follow-up can still pose a challenge. Westchester County found that working with tenants to arrange for a third party (rental property owner or family member) to let staff into the unit while they are at work or school was an effective way to overcome this obstacle.

> *Early lesson*: Door-to-door recruitment is labor-intensive, and may involve security concerns. A multi-faceted campaign that engages several health education programs simultaneously in the same neighborhood may achieve economies of scale. Focus groups held in advance of the effort may help the grantee to better understand unique issues that a community faces, particularly for hard to reach populations such as resettled refugees. Putting a "face" on the door-to-door effort, through the use of a tent, mascot, or other attention-grabbing technique may stimulate community interest. Outreach workers or "ambassadors" from community- or faith-based groups may also reassure residents who are wary of contact with governmental agencies.

Practice 5 - Initiating Voluntary Inspection Programs: Examples from Albany, Erie, Onondaga, Oneida, Orange, and Westchester Counties

To increase interest in primary prevention throughout their counties, Albany, Erie, Onondaga, Oneida, Orange, and Westchester have all used a small percentage of their first-year grants to offer inspection services on request, including units outside of the initial targeted area or target population. Many report that requests for inspection increase with news reports about the program or successful word-of-mouth from contacts with residents in the target areas.

> *Potential lessons learned*: It is too early to determine whether requests for voluntary inspections will draw resources away from activities in the target neighborhoods. However, grantees need to have mechanisms in place to track the volume of requests and the costs of providing those services.

Implementation Issue: Inspection Protocols

Grantees implemented a variety of inspection strategies. Many are similar to those of the EBLL inspection. Albany County conducts a visual assessment of exterior and interior paint in the units with a prior history of housing a child with an EBLL. On the return visit, if the unit fails the visual assessment it receives a Notice and Demand. For units without this prior history, Albany County follows their EBLL inspection protocol; Erie County does the same. Onondaga County has modified its EBLL inspection protocol to use the federal *de minimus* standard (i.e., to not require lead-safe work practices if two square feet or less of LBP is being disturbed), rather than the one square foot required for EBL investigations. Orange County conducts a visual assessment and XRF testing of deteriorated paint. Westchester conducts a visual assessment, conducts XRF paint tests on deteriorated surfaces, and also evaluates selected components with intact paint for the lead content via XRF paint test.

Oneida County requires both a visual assessment and up to eight dust wipe samples, but no XRF testing as part of the Pilot visit. If the property owner does not respond to its Notice of Information (described below), it refers the unit to the County's Childhood Lead Poisoning Prevention Program for a full inspection. Monroe County follows the visual assessment/dust wipe protocol outlined in its Lead Ordinance (see below). If deteriorated paint is identified during its Lead-Safe Saturday visits, the Pilot refers the unit for a follow-up dust wipe test by Code Inspectors.

New York City's home visiting partners conduct a visual assessment, and refer units with deteriorated paint to its Lead Program for further inspection (see below). The Lead Program Risk Assessor conducts an environmental inspection that includes XRF paint testing of all painted surfaces in fair or poor condition and all painted window sills, regardless of condition. The City requires building owners to remediate LBP hazards cited on a Commissioner's Order to remediate (COTR) within 30 days of receipt of the order using an EPA-certified firm and trained workers using lead-safe work practices. An EPA certified Risk Assessor must take dust wipe clearance samples and submit them to the Lead Program at the end of remediation. Failure to

comply with these requirements results in a notice of violation and referral to the Department's Administrative Tribunal for adjudication and imposition of fines.

As of June 30, 2008, at least 850 units had received some form of LBP inspection. Only some of the programs reported their data by type of inspection; of those that did, 506 units had a visual assessment, 302 had a visual assessment and XRF paint testing of some or all deteriorated painted surfaces, four had a full risk assessment according to HUD and EPA protocol, and 38 reported a dust wipe test as part of the inspection.

> *Early lesson:* Grantees face trade-offs in designing inspection protocols for primary prevention visits: The less intrusive the inspection process, the more likely owners and tenants will agree to participate. More detailed inspection protocols take more time but confirm the presence or absence of a LBP hazard. Visual assessments accompanied by dust wipe testing may prove an effective compromise, provided that there is a mechanism for more comprehensive inspection if the dust wipes prove positive.

Implementation Issue: Enforcement

Enforcement is a key component of primary prevention activities. Outreach and education can only be effective if the target audience believes that there are consequences for not following through with recommendations. The Pilot's credibility may be compromised if program representatives identify LBP hazards and stress to families that removing such hazards is important to their children's health but then take no action to enforce State or local remediation laws. Programs should follow through on every case, even if the child no longer lives in the house. An effective primary prevention program requires that programs close the loop between outreach and hazard reduction.

As of June 30, 2008, of at least 278 units with identified lead hazards, 82 were remediated, 71 achieved clearance, and the rest were in progress. Grantees had issued 59 Notices and Demands and 132 other kinds of administrative actions, including the notices required under the City of Rochester's and New York City's lead ordinances.

Notice and Demand orders establish timetables for completion of remediation. Failure to demonstrate progress on remediation can result in a referral for court action. Except for New York City, no grantees had instituted these proceedings as of the third quarter of the grant.[ii] In New York City, building owners that do not comply with the COTR are given a Notice of Violation (NOV). The NYC DOHMH Administrative Tribunal adjudicates these NOVs and administers fines ranging from $500 to $2000 per violation. At the same time, the address is referred to HPD to complete the repair work and bill the owner through a tax lien.

Examples of other promising enforcement practices are described below.

[ii] By the end of Year One, 55 NOVs had been issued.

Practice 1 - Obtaining a Letter of Commitment between the City Housing Court and a Judge: Example from Erie County

Very few grantees have a formal Housing Court or other commitment from judges and prosecutors to support the Pilot. Erie County is the exception and has worked closely with the City of Buffalo Housing Court for many years. Since 2004, properties in non-compliance for any type of code violations have been taken to the Housing Court, presided over by Judge Henry Nowak. Judge Nowak has instituted several improvements in the Housing Court, including a system of receivership to address the abandonment of property. Representatives from the Neighborhood Housing Services appear in court to assist owners in their respective areas and identify resources to alleviate financial hardship that may be preventing properties from being brought into compliance. The Judge levies fines and even jail sentences for truly recalcitrant property owners.

The Erie County Pilot obtained a letter of commitment from Judge Nowak at the beginning of the program (See Appendix C), which states that the office had agreed to the following:

1. Hear cases from the primary prevention program at no cost to the Department of Health. (This includes waiving filing fees and 100 hours of in-court time and 200 hours of staff time for a given year.)
2. Provide materials and speaking at events to support training and community capacity-building efforts.
3. Participate in revisions to the Erie County Sanitary Code to reflect home-based health and safety hazards.

> *Potential lessons learned:* Strong enforcement mechanisms are essential for addressing LBP hazards. If noncompliant property owners receive fines and jail sentences for not addressing such hazards, other property owners receive a strong message. The possibility of court action may result in more property owners taking a proactive approach in addressing lead hazards.
>
> The Housing Court strategy is one option to achieve faster enforcement action. Another option is to encourage judges and prosecutors to assess the maximum fine of $2500 specified in the Public Health Law 1373 (3) authority whenever an owner who has received a Notice and Demand fails to comply with the order.
>
> A final option is to pursue use of the receivership remedies specified in Title 10, article 13, section 1374 for cases where all other strategies have been exhausted and owners are tempted to abandon the property without remediation.

Practice 2 - Enforcing Local Lead Ordinances – Examples from New York City and Monroe County

The City of Rochester and New York City are two jurisdictions in the Pilot that have local lead ordinances mandating remediation of LBP hazards. (The City of Syracuse is considering such an ordinance.) Key elements of the two cities' ordinances as they apply to Pilot activities are described below.

In 2004, New York City revised its Childhood Lead Poisoning Prevention Act, known as Local Law 1, to require landlords of three or more units built before 1960 – the year the City banned lead paint – or between 1960 and 1978 if the landlord knows that the building has lead paint, to identify and annually fix LBP hazards in every apartment occupied by a child under six or at each apartment's turnover, whichever occurs first. Owners of one- and two-unit family homes must fix LBP hazards at turnover. Landlords must use lead-safe work practices and trained workers for any work disturbing LBP. The City's Department of Housing Preservation and Development (HPD) is the primary enforcement agency for Local Law 1. Each year the landlord is required to determine whether there is a child under six years of age living in each apartment. If so, the landlord must inspect for and safely repair any LBP hazards. If hazards are not repaired, tenants can call the City's 311 number to request an HPD inspection. HPD will inspect and order the landlord to safely repair identified LBP hazards.

Under the Primary Prevention Pilot, when the Newborn Home Visiting Program (NHVP) staff finds peeling paint during a home visit, they refer the home to the Lead Program. EPA-certified risk assessors from the Lead Program conduct an environmental inspection that includes XRF paint testing. The risk assessor tests all painted surfaces in fair or poor condition and all painted window sills, regardless of condition. The family receives educational information on lead poisoning prevention, including information on Local Law 1, and a brochure on lead poisoning. Educational materials are available in multiple languages. If the Lead Program identifies LBP hazards, it issues a Commissioner's Order to Remediate Nuisance (COTR) and mails the COTR to the landlord or owner, along with instructions and guidance on how to do the work. The landlord/owner must hire an EPA-certified firm with workers who have EPA/HUD-approved lead-safe work practices training or EPA certified abatement worker training to perform the remediation. In keeping with the requirements under Local Law 1, the landlord/owner must complete the remediation of the violations within 21 days of receipt of the COTR. The inspector will re-inspect the home to determine compliance. The landlord/owner must submit dust wipe clearance tests after satisfactory remediation of the violations. If the landlord/owner fails to comply with the COTR within the 21-day timeframe, the Lead Program refers the home to the Emergency Repair Program (ERP) of the HPD to make the repairs. The landlord is billed for the service via tax lien.

In July 2006, the City of Rochester's "Lead-based Paint Poisoning Prevention" law (Municipal Code of the City of Rochester Ordinance 2006-37) went into effect. This law covers most rental properties in the City; nearly 60% of occupied City housing is rental. Under the Ordinance, inspectors look for deteriorated paint in housing units at the time of the regular Certificate of Occupancy inspection or if the unit receives funding through the TANF (Temporary Assistance

for Need Families) program. Under Section §90-55 and in Section 3, high-risk areas can be defined using data collected by the Monroe County Department of Public Health on children with elevated blood-lead levels and properties identified as having LBP hazards. An inspection may also be initiated in response to a tenant, neighborhood group, or medical doctor request.

As part of the inspection, a City inspector performs a standardized visual inspection for deteriorated paint and bare soil. All units inspected within these high-risk areas include a visual assessment for deteriorated paint above federal *de minimis* levels on the interior and exterior. If the visual inspection finds bare soil or deteriorated paint exceeding the *de minimis* levels, a 30-Day Hazard Notice and Order is issued to the property owner. The property owner must contact the City of Rochester within seven days and provide a work schedule within one week of this contact. All tenants must be notified no less than three days prior to the start of lead hazard control activities. All deteriorated paint in pre-1978 housing is assumed to contain lead, unless additional testing at the owner's expense proves otherwise. Owners must fix deteriorated paint using lead-safe work practices. For situations involving interior deteriorated paint violations, clearance testing must be provided by a third-party, EPA-certified Risk Assessor or Lead Inspector before the citations on the property can be removed.

Units that pass the visual inspection in the high-risk areas must have additional dust wipe sampling. Property owners may receive a citation for a Lead Dust Sample violation if they fail to have dust samples taken on a timely basis or fail to submit the certified test results to the City's NET Lead Inspection Unit. (For the Lead-Safe Saturday units, the Pilot has an inspector return to the unit to do the sampling and absorbs the costs of the dust wipe testing.) If more than 50% of the wipe samples exceed EPA standards or if any one dust wipe contains a lead level greater than twice the EPA standard, a 30-Day Hazard Notice and Order is issued immediately for a Lead Dust Hazard Violation. If fewer than 50% of the samples fail, and none are twice the EPA standard, a second sampling cycle is performed on the area that failed. Any failure on this second cycle results in the issuance of a Notice and Order for a Lead Dust Violation.

> *Early lesson*: Local ordinances may have the greatest utility in supporting the Pilot when they are targeted to specific locations, address specific work requirements, and have strong penalties associated with noncompliance. Adoption of an ordinance is a time-consuming, costly activity requiring a high level of political consensus. If adoption of a local ordinance is not practical, localities need to carefully evaluate existing health and housing code regulations to determine how they can promote primary prevention more directly.

Practice 3 - Using Alternatives to Notice and Demands: Example from Oneida County

Most grantees anticipated using the Notice and Demand as the primary enforcement mechanism once lead hazards were identified during Pilot inspections. As described previously, alternative enforcement mechanisms are built into the New York City and Rochester Lead Ordinances.

At the start of the Pilot, Oneida County lacked a HUD-funded Lead Hazard Control grant to support remediation activities. The grantee planned to conduct visual inspections and offer free dust wipe sampling as part of its home visits. Concerns that property owners might abandon their units and reduce the already limited supply of affordable, lead-safe housing stock in the target areas led the grantee to develop a short-term alternative enforcement strategy. In Year One, owners of units where Pilot inspections find chipping and peeling paint and/or lead dust hazards first receive a Notice of Information letter. This Notice of Information letter outlines the work that must be completed and specifies that property owners are required to attend a free LSWP training. If property owners respond and act quickly, they receive an incentive package at the end of the training that provides materials to help them fix their properties in a lead-safe manner. Failure to complete repairs in a timely manner as defined by the LHD results in a full risk assessment with XRF paint testing and issuance of a Notice and Demand if applicable. The grantee adopted the Notice of Information strategy as a means to promote interest in its free LSWP training and incentive program for landlords and to quickly build a supply of lead-safe units. In Year Two, the grantee will move toward a more aggressive use of Notice and Demand orders in target area properties that failed to take advantage of its grace period. Oneida County has also applied for a HUD lead hazard control grant for 2009.

> *Early lesson*: In communities with a large stock of deteriorated housing and a history of noncompliance with Notice and Demands, grantees may opt to use flexible enforcement strategies to engage property owners in lead hazard reduction activities. However, owners must understand that these alternatives are temporary measures, not permanent “passes” from standard enforcement.

Implementation Issue: Integration with Housing and Sanitary Codes

Housing codes are an additional tool to address lead hazards within a home. New York State is one of the few in the nation to adopt the International Property Maintenance Code (IPMC) for all jurisdictions. Some counties also have local property maintenance or sanitary codes that prohibit chipping, peeling paint conditions. Enforcing these codes is essential for primary prevention since the codes affect a larger housing supply than that targeted under the Pilot. Many of the grantees have existing relationships with the local agencies responsible for code enforcement and are working toward more systematic integration. However, there are a number of obstacles to building that relationship, including:

1. Lack of a “common language” between health departments and code officers;
2. A limited number of code officers and a high volume of required inspections in most jurisdictions; and
3. Absence of a common referral protocol.

Onondaga County requested that local code inspectors refer cases of chipping and peeling paint to the Lead Program for additional inspection, but the code inspectors rejected this idea. Other grantees, such as Westchester, have had much greater success in conducting joint code inspections with their HUD Lead Hazard Control grant programs or piggybacking inspections onto DSS inspection of units. Westchester also uses its authority under the IPMC to conduct

visual inspections for exterior chipping and peeling paint. If chipping exterior paint is identified, the unit also receives a visual inspection of the interior paint.

Practice 1 - Strengthening the Local Sanitary Code: Example from Erie County

Erie County is revising the Housing section of its sanitary code to reflect current federal lead standards and address enforcement in both “areas of concern” and “areas of high risk.” At this time, the Law Department is reviewing the first draft of this revision.

In addition, as part of the door-to-door canvass in selected neighborhoods, the County performs a visual assessment of all hazards consistent with the Healthy Neighborhoods Program survey. When performing the visual inspection, staff members document any imminent health hazards, including venting problems, no heat, no water, raw sewage, and lack of smoke detectors. They then prepare warning notices for imminent health hazards and refer the home to the Environmental Health program for follow-up. Staff members also provide information and referrals for additional services, such as rodent control, asthma, or other non-imminent health concerns.

> *Early lesson*: The IPMC is one tool for addressing deteriorated paint. However, deteriorated paint is only one of many hazards addressed by the IMPC; so grantees may have difficulty convincing code inspectors of the importance or priority that should be given to deteriorated paint.
>
> Local codes have the potential to mandate this coordination, clarify inspection protocols, and reduce concerns about authority to impose penalties for noncompliance with citations.

Conclusions and Recommendations

Grantees have begun to gain entry to units, but the process from entry to completion of remediation is long and complicated. There are multiple sources of resistance to the inspection process, and the strategies needed to address them will differ depending on the source. Similarly, there are multiple factors that produce delays in enforcement, and multiple strategies to strengthen that effort. We recommend that grantees:

1. Address obstacles to gaining entry for inspections posed by property owners’ resistance through approaches such as:
    a. Using incentives for LSWP training and remediation.
    b. Engaging landlord/rental property associations in how to address landlords’ concerns about costs and liability and identifying a few landlords who will support the program and discuss it with their peers.

c. Framing the issue of lead poisoning in human terms: stress the physical, social, and emotional costs to the child and the community of lead poisoning. Also highlight for owners the risks and costs of noncompliance. If possible, document costs of voluntary participation in the Pilot and compare this to landlords' costs when prosecution occurs.

2. Address obstacles to gaining access to units by gaining resident cooperation through approaches including:
   a. Beginning education with issues of greatest concern to the resident, even if they are not lead-related. Provide appropriate lead-safe incentives (such as clean-up supplies) during home visits.
   b. Reinforcing tenant protection messages and providing referrals to local tenants' rights or legal services organizations.
   c. Using culturally diverse and mixed gender teams when conducting home visits to reduce residents' apprehension about letting strangers into the home.
3. Address obstacles to re-entry for the purposes of inspection. Grantees report that they encountered problems re-entering the unit if lead inspections do not occur at the time of the initial home visit. Even if the purpose of home visits is education, an inspector should be on standby to conduct an inspection if the resident gives consent. This will reduce the number of visits made to the home.
4. Reduce delays in remediation by exploring additional administrative strategies, such as Housing Courts, or agreements with local code enforcement offices, prosecutors, and judges. Ensure swift referral to the Pilot for inspections when lead hazards are suspected or identified and rapid citation of deteriorated paint when housing code violations are identified. If local authority exists, grantees may also wish to explore options such as New York City's Emergency Repair Program, which repairs hazards in the units owned by noncompliant landlords and then bills them via tax lien.

Chapter 6: Model Practices: Building Lead-Safe Work Practice (LSWP) Workforce Capacity

One of the major Year One grantee goals was to increase the supply of owners, tenants, do-it-yourselfers, and contractors trained in Lead-Safe Work Practices (LSWP) and EPA-certified lead abatement techniques. As of June 30, 2008, grantees reported a total of 34 LSWP trainings reaching 667 individuals. In addition, many grantees benefited from pre-existing primary prevention programs and agreements with local HUD Lead Hazard Control grantees to increase the number of trained workers. For example, New York City's Fiscal Year 08 activities to implement its primary prevention law include an MOU with HPD and $389,000 in funding to support lead-safe work practice training for contractors, building owners and building superintendents. HPD also integrates these classes into its existing housing education program.

Since most grantees did not begin to implement LSWP trainings until the beginning of the third quarter, and contractors are reluctant to take time off for training during prime construction season, it is reasonable to expect the number of individuals trained to increase significantly by the end of the Year One. Building capacity includes more than providing an increased number of trainings: it requires communities to build demand for lead-safe work as well. Most of the grantees had successfully developed partnerships for delivery of free LSWP training by the third quarter of Year One. Key implementation issues that the grantees addressed included:

1. How to increase capacity to deliver LSWP training at the local level;
2. How to increase the number of individuals who received LSWP and EPA-certified abatement training; and
3. How to build demand for LSWP workers in the wider community.

Implementation Issue: Building Health Department and Community Capacity to Deliver LSWP Training

Most grantees do not deliver LSWP courses directly, but a number contracted with other organizations to provide LSWP training under the Pilot. For example, Albany County has engaged the Cornell University Cooperative Extension of Albany County to provide training and disseminate LSWP for property owners, contractors, and residents. The Cooperative Extension has obtained an additional EPA grant that targets zip code 12206 for education and training of rental property owners and the community. Onondaga County is in the process of contracting with the City of Syracuse's Lead Hazard Control grant program to cover the cost of LSWP training for the contractors and do-it-yourselfers enrolled by the Pilot.

As another example, Oneida County plans to work with Environmental Education Associates (EEA) in 2008-2010 through EEA's HUD Healthy Homes Lead Elimination Action Grant (LEAP) to expand its Contractor Connections program to Oneida County or to develop a similar program.

Both Albany and Oneida Counties also requested "Train the Trainer" services from NCHH in order to build Health Department capacity to deliver the eight-hour EPA/HUD-approved "Lead Safety for Renovation, Repair, and Painting" curriculum to community-based organizations and do-it-yourselfers.

> *Early lesson*: Relying on other organizations to deliver LSWP trainings gives grantees little control over when and where trainings are offered. However, creating letters of commitment or MOUs that outline specific agreements may help ensure that needs are met. Grantees also need to understand the local market for LSWP training. Training for EPA-certified lead abatement workers and supervisors requires use of accredited trainers, and most LDH do not have that certification. EPA's April 2008 Renovation, Repair, and Painting Rule requires accreditation of trainers for Renovator classes for contractors beginning in 2010.

Implementation Issue: Increasing the Number of Individuals Receiving LSWP Training

To encourage contractors, rental property owners, and homeowners to attend LSWP trainings, several grantees offer additional incentives to those attending the training. Grantees anticipate that these incentives will increase participation.

Practice 1 - Offering Incentives to Attend LSWP Training: Examples from Albany, Erie, Onondaga, and Oneida Counties

Albany County's CLPPP has a HEPA loaner vacuum program that it expanded for the Pilot. Erie, Onondaga, and Oneida Counties all offer a package of LSWP-related materials to individuals who attend LSWP trainings funded through the Pilots. The value of the incentives packages range from under $200 to $500. The packages generally include personal protective equipment (e.g., painter's hats, Tyvek suits, etc.), set-up and clean-up supplies (e.g., six-mil plastic, gloves, buckets, etc.), painting supplies, and small amounts of primer. Recipients of these incentives must complete the full LSWP training and assure the grantee that the materials will be used for lead hazard remediation in units in the target area.

Oneida County also provides free "Supercleans," free use of a HEPA vacuum, a free furnace filter, and free clearance tests to landlords who complete the training. Tenants in units remediated by these landlords will receive a clean-up kit, as well as education on simple home maintenance practices. Oneida and Onondaga Counties also offer free lead dust clearance tests.

Early lesson: Grantees have observed that the distribution of incentives is subject to local regulations and other factors. Some must issue a Request for Proposal before awarding the contract to a specific vendor. Some have chosen to purchase supplies but face issues with storage. NYSDOH requires that grantees follow up with individuals who receive incentives to ensure that the items are used appropriately. This follow-up may prove challenging for the grantees that train a large number of property owners and could possibly deter individuals from accepting the incentives.

Practice 2 - Supporting Workforce Development of Certified Workers in the Target Communities: Example from Oneida County

EPA-certified lead abatement workers and lead supervisors are in short supply in many communities and especially in low-income, high-risk target areas. Most grantees provide the eight-hour EPA/HUD LSWP training with Pilot funds. However, EPA's 2008 Renovation, Repair, and Painting Rule creates a new certified Renovator discipline. Current grantees may need to readjust LSWP training plans in Year Two to address the new requirements.

Oneida County is one of the few grantees that planned to use some of its Pilot funds to pay for slots for the EPA Certified Lead Abatement Worker and Lead Supervisor training (40 in all), provided that the participants or their employers agree to pay the licensing fee. The County plans to negotiate an agreement with a local workforce development agency to pay for LSWP training for 24 low-income and day laborers enrolled in the agency's program, provided that EPA-certified firms agree to hire them after they complete the rest of the workforce agency's program.

Early lesson: Missing work for an extended period is difficult for many contractors. However, if the contractors believe that their businesses will be enhanced and potentially grow from several days of training, they may be willing to make the sacrifice. Grantees offering contractors incentives such as the ones described above should develop a plan to evaluate the effort.

Implementation Issue: Creating Demand for Workers Trained in LSWP

Educating consumers about the need for LSWP is an important part of building community capacity. As more individuals recognize the importance of working lead-safe in older homes, the demand for trained contractors will increase and fewer potential lead hazards will be created.

Practice 1 - Using a Healthy Homes Hardware Store Campaign to Raise LSWP Awareness: Example from New York City

New York City's Healthy Homes Hardware Store Campaign is an educational outreach program aimed at increasing awareness of home health hazards among contractors, building owners, superintendents, and do-it-yourselfers. The campaign provides practical information on environmental hazards in the home, such as lead, mold, pests, and household chemicals. Currently, 395 New York City hardware and paint retail stores are members of the campaign, and participation continues to grow. As part of the Pilot, DOHMH plans to expand the presence of the Healthy Homes Hardware Store campaign into the targeted zip code 11212.

DOHMH provides materials for display and distribution at the stores. Signs advise contractors and workers that New York City law prohibits dry sanding and dry scraping and that wet methods and safe work practices should always be used. Other materials discuss facts about mold, how to control pests safely, and safe use of household chemicals.

> *Early lesson:* Paint and hardware stores are strong partners for primary prevention activities since clients turn to them for advice about how to do repairs. Grantees need to be sensitive to the needs of the partners they hope will promote LSWP. In New York City, merchants were concerned about space required to advertise and display the Healthy Homes posters. DOHMH held focus group meetings with hardware store owners and adjusted the program materials to address their concerns.

Practice 2 - Advertising LSWP Trained Contractors: Examples from Onondaga and Oneida Counties

Community demand for the use of LSWP may encourage contractors to attend LSWP training. Onondaga County is considering advertising in its local *Pennysaver* weekly newspaper about the importance of using LSWP when renovating pre-1978 housing. The program is also trying to work with the newspaper's advertising department, so that any contractor who completes the eight-hour LSWP course funded through the Pilot can add a free tagline to advertisements stating the contractor is trained in LSWP. The grantee is still considering whether contractors that received LSWP independent of the Pilot project should also receive the same benefit.

Oneida County provides a countertop sign and pamphlet holder advertising LSWP for use in City and County Clerk's offices and branches of the public library. In addition, clerks' offices receive an envelope, a return form to indicate average number of building permits issued annually and how many pamphlets they require, and a faxable order form to receive additional handouts.

> *Early lesson*: Increasing market demand for LSWP-trained contractors is an important part of building community capacity to address lead poisoning. Grantees may wish to consider other ways to increase demand, such as advertising trainings on their websites or providing links to videos such as the New England Lead Coordinating Committee's *Don't Spread Lead*.

Conclusion and Recommendations:

Grantees have begun to build a LSWP-trained workforce, but still have much to do. EPA's 2008 Renovation, Repair, and Painting Rule requiring by 2010 that all LSWP-trained renovators participate in a new Renovator Refresher course, take an exam, and pay a licensing fee gives new urgency to grantees' efforts. To expedite this, we recommend that grantees take additional actions to explore ways to make the LSWP training more attractive to contractors and property owners by using incentives, scheduling training at convenient times, and building community demand for these services. This could include:

1. Securing trainers and training venues so that LSWP training can be offered year-round.
2. Exploring ways to build demand for LSWP-trained contractors by listing the individuals trained through the Pilot on their websites.
3. Exploring ways to build a pool of contractors willing to conduct required repairs in the units identified through Pilot inspections. One promising model is the City of Syracuse's Lead Hazard Control Grant program. The program pre-certifies abatement contractors to bid on jobs. Contractors must submit qualifications and references, comply with City bonding and insurance requirements, agree to keep costs confined to the parameters set by the program, and agree to be available to perform work as scheduled by the program. In exchange, they are assured of work during the period of the agreement. In a period of economic uncertainty, contractors may value the predictability associated with the Pilot program, as long as the grantees can assure that there will be steady work.

To prepare for implementation of the Renovation, Repair, and Painting Rule, grantees should also consider:

1. Expanding the number of certified trainers available to deliver the new EPA Renovator course, including supporting the certification of their current trainers; and
2. Considering ways to subsidize the cost of Renovator licensing fees to maintain the current supply of trained workers when the EPA Renovation, Repair, and Painting Rule goes into full effect in 2010.

Chapter 7: Model Practices: Identifying Community Resources for Lead Hazard Control

Implementation Issue: Obtaining Funding for Remediation

Most grantees need additional funding for lead hazard control. Though many of the grantees rely on HUD grants to provide funding, if a property owner does not qualify for a HUD grant or if a HUD grant is not available, it can be more difficult to find funding for remediation.

Lack of funding for rehabilitation of rental units has been one of the largest obstacles faced by many grantees. Much of the currently available rehabilitation funding is spent on owner-occupied units. Oneida County reports the misconception that most rental property owners who own property in the high-risk area are absentee landlords when 87% actually live inside the county. These misconceptions contribute to the attitude that rental property owners should not receive assistance for repairs. Albany County also faced challenges in funding remediation in rental properties through its lead hazard control grant.

Most grantees reported some progress in securing additional funding for lead hazard control in the first year of the Pilot. If a community had a HUD-funded Lead Hazard Control grant, the grantee referred the property owners to the program, and took steps to expedite completion of the application where possible. Several grantees with current HUD funding received FY 2009 approval for new grants; one grantee applied but was unsuccessful. No grantee reported a new source of local funding, such as a tax credit or privately-funded loan or grant program.

Practice 1 - Expanding the Partnership with HUD-funded Lead Hazard Control Activities: Examples from Westchester and Albany Counties

All but one of the grantees has HUD-funded Lead Hazard Control grant programs in their counties or largest city. Some have more than one HUD grant. Most routinely provide information to tenants and property owners about the existence of the grant programs through pamphlets or links to the lead hazard control program's website. Many also follow Westchester County's practice of directly referring all buildings found with lead violations to the HUD program (Lead Safe Westchester). In addition, Lead Safe Westchester now requires joint landlord/tenant conferences as part of the effort to qualify for HUD funding, a level of tenant involvement not commonly found with other HUD grantees.

Albany County has begun to consider methods to verify the effectiveness of this referral process. It plans to keep track of the properties it inspected in its target zip code and referred to the Albany Lead Hazard Control Program. Later, the Pilot will query the Lead Hazard Control Program as to the status of the referrals, and how many have or are in the process of being evaluated for grant funding.

> *Early lesson:* Lead hazard control grant funding is an important step in "closing the loop" between identification of lead hazards and remediation, especially for small low-income property owners. However, the complexity of the income-qualification process may intimidate some owners. Primary prevention programs cannot assume that referral to the grant program automatically results in successful enrollment. It is important for grantees to track the effectiveness of referrals and to assist clients, where necessary, in preparing the documentation needed to qualify for grant funding.

Practice 2 – Develop Funding Resource Directories: Examples from New York City and Onondaga County

New York City is developing a brochure that describes existing funding resources for lead hazard reduction. Brochures for owners and tenants were developed to describing grants available through the HUD grant program. Onondaga County also developed new resource funding directories for property owners.

Practice 3- One-stop Shopping for Funding: Examples from Rochester, Syracuse, and New York City.

Rochester's Coalition to Prevent Childhood Lead Poisoning and Syracuse's Home Headquarters have also adopted another strategy to support applicants for funding: a "one-stop shopping" location housed in a community-based agency where individuals can qualify for a variety of funding sources. New York City uses its relationship with home visiting programs to do outreach to landlords and tenants on funding opportunities.

Practice 4- Developing an Agreement with the Municipal Housing Authority to Rehab Homes: Example from Oneida County

The City of Utica's Municipal Housing Authority and Rebuild Mohawk Valley, Inc. received $1.1 million in funding from the Empire Development Corporation and the Division of Housing and Community Renewal to rehabilitate housing units. Lead poisoning prevention staff met with the organizations in March 2008. Because of the meeting, the organizations agreed to use some of the funding to rehabilitate 40 owner-occupied housing units in the high-risk area.

> *Early lesson*: Grantees need to identify and communicate with other housing-based programs that are at work within their communities, especially those that administer Community Development Block Grants (CDBG) and weatherization programs. These other programs may have a significant amount of funding available that could be used to help promote lead-safe housing.

Practice 5 - Using Commitments from Property Owners as Leverage: Examples from Westchester and Oneida Counties

Grantees recognize that their relationships with property owners can significantly affect the amount of lead hazard remediation that takes place. Although some programs have found that publicizing "problem property owners" can improve housing conditions and raise awareness of lead poisoning prevention efforts, highlighting positive relationships may also have the same impact. After its first round of inspections under the Pilot in the summer of 2008, the Westchester County program received a letter of intent from a rental property owner to begin remediation in all 65 of his units, not simply the one where hazards had been found.

Oneida County conducted specialized seminars for rental property owners to introduce the primary prevention Pilot and general lead-related requirements for rental property owners. (The seminars were described in more detail under Goal 3.) The County obtained commitments to address lead hazards from a small group of rental property owners that operate more than 250 units in the target zip codes.

> *Early lesson*: Publicizing commitments obtained from property owners may help engage other property owners in the Pilot. These property owners may also encourage other property owners to take action on their own.

Practice 6 - Providing Links to Other Emergency Repair Programs: Example from New York City

In New York City, one of the key programs administered by the Department of Housing Preservation and Development (HPD) is the Emergency Repair Program (ERP). Whenever a risk assessor from the Lead Poisoning Prevention Program identifies LBP hazards in a property, the owner is ordered to remediate the lead hazards within 21 days of the notice of violation. If the owner fails to perform the work, the property is referred to the ERP. HPD makes the repairs through its contractors. The Department of Finance bills the owner for the cost of repairs. If the owner fails to pay the bill within 60 days, the Department of Finance places a lien on the property. The Pilot's staff has also begun to research additional funding options that may be available to assist property owners lacking resources to respond to abatement orders.

> *Early lesson*: Emergency housing repair is an important asset in the overall effort to make housing lead-safe. It provides the assurance that if owners are unable or unwilling to abate or remediate LBP hazards, the work will nevertheless be completed.

Conclusions and Recommendations

Grantees have begun to identify ways to coordinate with other public or private housing programs that can fund or require lead-related repairs, but this effort must increase markedly in Year Two in order to keep pace with the demand we expect the Pilot to generate. We recommend that current and new grantees increase efforts to coordinate with other public or private housing programs that fund or require lead-related repairs to keep pace with the demand the Pilot is expected to generate. Strategies may include:

1. Establishing agreements to give units identified by the Pilot high priority in funding with agencies that administer Lead Hazard Control grants, Community Development Block Grants (CDBG), Housing Choice Vouchers (Section 8), weatherization, and other state and federally-funded programs. This may also involve participating more actively in the local CDBG annual public hearing process on funding allocation.
2. Allocating Pilot funding for outreach staff to assist property owners with completing applications for available federal, state, and local funding, such as CDBG and NYS Energy Research and Development Authority's programs for energy conservation and renovation.
3. Approaching local housing programs, community development corporations, and lenders about establishing a "one-stop shopping" site for grant and loan programs that can fund lead hazard reduction for rental and owner-occupied units.
4. Applying (alone or as part of a consortium of counties) for additional funding, including HUD Lead Hazard Control Grants, NYS Urban Initiatives grant, and NYS Affordable Housing Corporation programs.

Chapter 8: Next Steps

NYSDOH has made considerable progress in a short period of time. By June 30, 2008, grantees made direct contact with at least 3,404 units and completed some form of LBP inspection in at least 850. Of the latter, 278 units had LBP hazards, and 82 had remediation completed by the end of the third quarter of the grant period. Westchester County accounted for the bulk of inspection activity in the first three quarters of grant period, a testament to its ability to start work October 1, 2007. However, the Pilot's reach extends well beyond these individual units – through media coverage, expansion of the contractor base, and via outreach to other agencies, grantees have multiplied the effect of this effort.

In the first three quarters of Year One, grantees struggled with how to define target areas, build partnerships, and gain entry into units for the purposes of inspection. This report has identified many model practices that other communities can adopt. NCHH's final Year One Evaluation will include detailed data through the fourth quarter and will be available in 2009. That report will:

1. Update and expand on the grantees' implementation experiences described in *Early Lessons Learned*;
2. Present detailed unit-level analyses of the types of dwellings that have been visited and inspected and the enforcement actions needed to achieve remediation; and
3. Compare grantees' strategies and outcomes, including grantees' reported costs and benefits for particular activities, to identify approaches with the greatest future promise.

The greatest challenge grantees will face in Year Two is how increase the unit of housing units that become lead-safe. Such an effort will require them not only to expand the presence of the Pilot in the community, but also to secure community support for remediation funding and enforcement.

NCHH plans to explore with NYSDOH how to translate well-tested practices into templates for other programs to use. This should increase the speed of implementation of primary prevention efforts, even when additional state funding is not available. In addition, NCHH will seek to identify strategies that are effective with more than one target population to help new programs achieve economies of scale.

Endnotes

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[14] CDC, Healthy People in Healthy Places. See:
http://www.cdc.gov/osi/goals/places/placesHomes.html.

[15] New York State Department of Health. *Eliminating Childhood Lead Poisoning in New York State by 2010*, "III. Environmental Scan." See:
http://www.health.state.ny.us/environmental/lead/exposure/childhood/finalplanstate.htm.

[16] Ibid.

[17] New York State Department of Health. *Eliminating Childhood Lead Poisoning in New York State: 2004-2005 Surveillance Report*, Figure 6: Incidence of Blood Lead Levels ≥ 10 mcg/dL Among Children Under Age Six Years; 1998 to 2005 Blood Lead Test Data, New York State Excluding New York City; and Figure 16: Prevalence of Blood Lead Levels ≥ 10 mcg/dL Among Children Under Age Six Years; 1998 to 2005 Blood Lead Test Data, New York State Excluding New York City.
http://www.health.state.ny.us/environmental/lead/exposure/childhood/surveillance_report/2004-2005/

[18] New York City Department of Health and Mental Hygiene. *Preventing Lead Poisoning in New York City: 2005 Annual Report,* Figure 1. http://www.nyc.gov/html/doh/downloads/pdf/lead/lead-2005report.pdf.

[19] New York State Department of Health. *Eliminating Childhood Lead Poisoning in New York State: 2004-200 Surveillance Report*, New York State Department of Health. Eliminating Childhood Lead Poisoning in New York State: 2004-2005 Surveillance Report, Table 3: High Incidence ZIP Codes by County, 2005.
http://www.health.state.ny.us/environmental/lead/exposure/childhood/surveillance_report/2004-2005/

[20] New York State Department of Health. *Eliminating Childhood Lead Poisoning in New York State by 2010*, "III. Environmental Scan." See:
http://www.health.state.ny.us/environmental/lead/exposure/childhood/finalplanstate.htm

[21] New York City Health Department of Health and Mental Hygiene. December 2005. *New York City Plan to Eliminate Childhood Lead Poisoning*. See:
http://www.nyc.gov/html/doh/downloads/pdf/lead/lead-plan.pdf.

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[22] New York State Department of Health. *Eliminating Childhood Lead Poisoning in New York State by 2010*, "I. Statement of Purpose: The Elimination of Childhood Lead Poisoning in New York State by 2010." See: http://www.health.state.ny.us/environmental/lead/exposure/childhood/finalplanstate.htm**.**

[23] *Ibid.* "III. Environmental Scan."

[24] New York State Department of Health (NYSDOH), Primary Prevention of Childhood Lead Poisoning: Proposal for 2007 Pilot Program DRAFT Updated 6-28-07

[25] *Ibid.*

[26] *Ibid.*

[27] The totals are based on the number of units grantees identified in their work plans as in their target zip codes.