



National Center for
Healthy Housing

New York State's Primary Prevention of Childhood Lead Poisoning Initiative

Implementation Report for Year Two
October 1, 2008 through
September 30, 2009



*Prepared for the New York State Department of
Health, Bureau of Community Environmental Health
and Food Protection, under Contract #C022621*

MARCH 5, 2010 FINAL



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EXECUTIVE SUMMARY

Despite substantial progress, childhood lead poisoning remains a major problem, both in New York State (NYS) and around the nation. Since there is no medical treatment that permanently reverses the neurodevelopmental effects of lead exposure, primary prevention (taking action before a child is harmed) is critical to address the problem. Primary prevention marks an important augmentation of the traditional approach of responding to children who have already been poisoned.

LPPP Year Two Goals

1. Identify housing at greatest risk for lead-based paint hazards;
2. Develop partnerships and community engagement to promote primary prevention;
3. Promote interventions to create lead-safe housing units;
4. Build Lead-Safe Work Practice (LSWP) workforce capacity; and
5. Identify community resources for lead-hazard control.

In 2007, NYS undertook a new primary prevention initiative, with the Governor proposing and the NYS Legislature agreeing to dedicate \$3 million in new State funding for a pilot Lead Primary Prevention Program (LPPP) under Public Health Law (PHL) 1370-a(3). Eight local health departments (Albany, Erie, Monroe, Oneida, Onondaga, Orange, and Westchester counties and New York City) received Year One funding. In 2008, the Governor proposed and the NYS Legislature committed to additional funds that brought the total LPPP funding to about \$5 million. This increased funding provided support for the eight renewing LPPP grantees and funds for four new ones: Broome, Chautauqua, Dutchess, and Schenectady counties. In 2009, based on the promising results of the pilot program, Governor Paterson successfully sought to make the LPPP permanent under an amendment to PHL 1370-a(3), and funding was

further increased to a total of \$7.7 million. With the addition of three new grantees in 2009-10 (Niagara, Rensselaer, and Ulster Counties), 15 grantees will implement the LPPP, potentially reaching up to 200,000 housing units in the next three years.

In its first two years, LPPP has made a significant difference in the lives of children and their families and in the infrastructure for primary prevention of lead-based hazards. Since its inception on October 1, 2007, almost 3,500 children have been directly affected by the LPPP through visits to their homes, and almost 2,000 have been referred for blood lead testing as a result of those visits. Over 6,000 housing units have been investigated, and almost 4,000 of them were found to have potential and/or confirmed lead-based paint hazards (see Chapter 5).

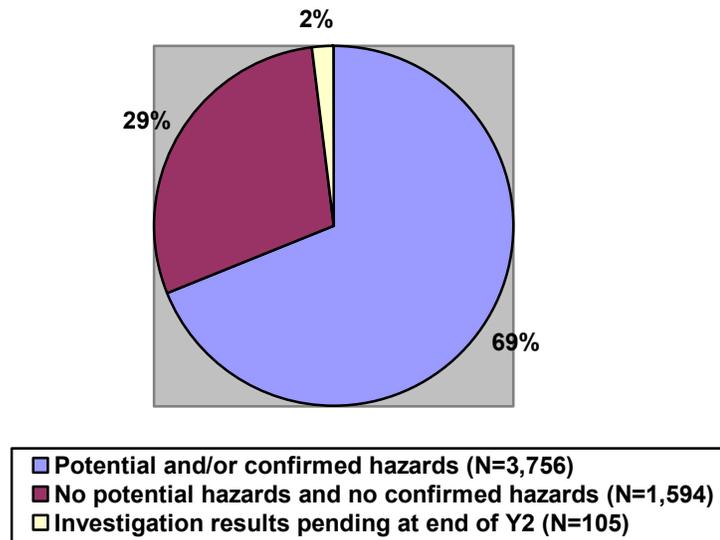
Over the past 2 years, LPPP-funded investigations and follow up to ensure remediation of identified hazards have produced 1,218 lead-safe housing units.

Work is underway in 2,691 more units that were found to have potential and/or confirmed hazards and have not yet been cleared of all hazards.

This report focuses on the LPPP's implementation in Year Two (October 1, 2008 through September 30, 2009). Grantees made dramatic progress including:

1. Met or exceeded Year Two benchmarks for outreach, units investigated, and number of individuals trained in Lead-Safe Work Practices.
2. Reached over 13 million individuals through news stories or paid advertisements, and reached over 54,000 through health fairs, letters, flyers, displays, and other forms of direct contact.
3. Conducted investigations or followed up to ensure remediation in homes with 2,651 children age six and under – those most vulnerable to neurodevelopmental damage.
4. Referred 881 children for blood-lead testing from homes with identified hazards.
5. Determined that 3,756 units had potentially hazardous conditions or confirmed lead hazards during Year Two (see Figure A).
6. Confirmed that remediation in 888 units had produced lead-safe housing during Year Two (see Figure B).

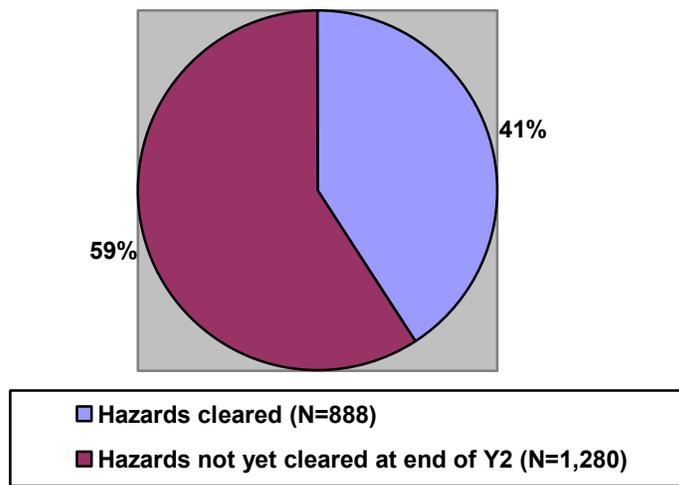
Figure A. Hazard Status of All Units in Year Two (N=5,455)



Source: Unit-based data.

Note 1: Units reported here include those first investigated in Year Two and units carried over from Year One.

Figure B. Clearance Status of Housing Units with Confirmed Hazards, Year 2 (N=2,168)



Source: Unit-based data.

Note 1: Includes those units begun in Year One that continued into Year Two until they were fully cleared and those first investigated in Year Two.

Increased marketing, direct outreach, and incentives for property owners and contractors created demand for lead-safe work practice (LSWP) training. Grantees funded 115 training sessions and trained 1,812 individuals. Increased visibility of the lead-safe work practice message in Year Two should help grantees transition to the certified Renovator training required under full implementation of the EPA’s Renovation, Repair, and Painting (RRP) Rule in April 2010.

The NYS Department of Health (DOH) encouraged grantees to tailor their programs to local needs and conditions and experiment with different approaches for education, outreach, targeting high-risk populations, and service delivery.¹ All grantees enhanced their partnerships with other local governmental agencies and community- and faith-based agencies in Year Two. Renewing grantees experimented with a variety of strategies to improve compliance with orders to eliminate lead hazards, coordinate with code enforcement, streamline policies and procedures, and leverage funding or activities with other community programs. New grantees generally began with less-developed infrastructures for primary prevention that did those who began in the first year. At the same time, they were able to benefit from approaches developed by grantees in the first year. Although they had start-up difficulties and delays in implementation similar to

¹ These strategies are highlighted in Chapters 2-8 of this report, as well as in the three reports NCHH has already issued on Year One of the LPPP, which can be found at http://www.health.state.ny.us/environmental/lead/exposure/childhood/primary_prevention/pilot_program/early_lessons/preliminary_results/.

those of the original eight grantees, most of the new grantees were able to put their investigation programs into operation by June 2009. By the end of the third year of the grant, DOH will compile a list of evidence-based strategies that will be helpful to future grantees.

The National Center for Healthy Housing (NCHH) provides ongoing technical and evaluation assistance to the DOH and to LPPP grantees. The observations and recommendations in this report are based on NCHH field investigators' review of work plans, quarterly reports and other program documents; interviews with grantees; joint site visits with DOH staff; and participation in conference calls and meetings hosted by DOH. NCHH has the following recommendations for new and continuing grantees:

1. Take full advantage of the authority granted under PHL 1370-a(3) to
 - a. Designate high-risk areas quickly when grant funds become available for the program;
 - b. Expand the high-risk designation to other areas as local conditions warrant, or fully utilize the tools already provided under local statutes, authorities, and interagency agreements;
 - c. Explore designation of the local housing code agency within a community of concern as an agency authorized to administer these provisions.
2. Continue to win the support of elected and appointed local, regional, state, and federal officials, especially to achieve cooperation in enforcement and funding for lead hazard control.
3. Understand and address property owner and resident resistance to investigations and remediation.
4. Strengthen the relationship between code enforcement and primary prevention by citing deteriorated paint under the New York State Property Maintenance Code or other local legal authorities.
5. Encourage localities to inspect all rental properties at least once every three years, cite deteriorated paint in pre-1978 housing as a condition conducive to lead poisoning, and issue a Certificate of Occupancy only when lead-based paint (LBP) hazards are addressed.
6. Continue to make LSWP training attractive to contractors and property owners by using incentives, scheduling training at convenient times, and building community demand for these services.
7. Increase coordination with public or private housing programs that fund or require lead-related repairs in order to keep pace with the demand the LPPP is expected to generate in Year Three.

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GLOSSARY AND ABBREVIATIONS

| | |
|-------------------|---|
| BLL | Blood-Lead Level, a measure of concentration of lead in blood. |
| BOCES | Board of Cooperative Educational Services. A state program that provides shared specialized educational programs and services to school districts in order to reach diverse populations and improve educational achievement. |
| CDBG | Community Development Block Grant, a source of federal funding for community and economic development and housing rehabilitation for low- and moderate-income families. |
| CDC | U.S. Centers for Disease Control and Prevention. |
| Clearance | Procedures to verify that no lead-based paint chips or dust particles remain after repairs have been completed. A visual clearance involves assessment of the work areas to determine that no paint chips remain. A dust lead clearance test requires analysis of dust samples collected according to federal protocol and analyzed by an EPA-accredited laboratory. Results of the analysis must comply with EPA/HUD hazard standards before the location is considered cleared. |
| CLPPP | Childhood Lead Poisoning Prevention Program. |
| <i>De minimis</i> | The amounts of painted surfaces to be disturbed during rehabilitation, maintenance, paint stabilization, or hazard reduction activity, below which safe work practices and clearance are not required. |
| DOH | NYS Department of Health. |
| DSS | NYS Department of Social Services. |
| EBL or EBLL | Elevated Blood-Lead Level. In this report, a BLL over the CDC level of concern of greater than or equal to 10 µg/dL is considered an EBLL. |
| EPA | U.S. Environmental Protection Agency. |
| HNP | NYS Healthy Neighborhoods Program. |

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| HPD | NYC Department of Housing Preservation and Development. |
| HUD | U.S. Department of Housing and Urban Development. |
| LBP | Lead-Based Paint. |
| LHD | Local Health Department. |
| LHC | Lead Hazard Control. |
| LPPP | NYS Lead Primary Prevention Program |
| LSWP | Lead-Safe Work Practices. |
| MOU | Memorandum(a) of Understanding. |
| N&D | Notice and Demand, the primary method by which local health departments notify property owners when lead-based paint hazards are identified during an investigation. |
| NCHH | National Center for Healthy Housing. |
| NYC | New York City. |
| NYS | New York State. |
| PHL | NYS Public Health Law. |
| PSA | Public Service Announcements. |
| RRP | Renovation, Repair, and Painting Rule (40 CFR 745.80, Subpart E). |
| Section 8 | Federal tenant-based rental assistance, or vouchers, given to low-income renters to subsidize rentals in market-rate apartments. |
| µg/dL | Micrograms per Deciliter. |
| XRF | X-Ray Fluorescence, a method for assessing the concentration of lead on painted surfaces in a field setting. |

1. INTRODUCTION

A National Perspective on Primary Prevention

Although lead poisoning is a preventable disease, it continues to be a major children's environmental health problem in the United States.¹ An estimated 240,000 children 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, behavioral disorders, and other health problems. Lead is particularly dangerous to children under the age of six due to the rapid growth and development of their nervous systems and their greater lead uptake from what they consume.

Communities that engage in lead poisoning prevention can reap large monetary benefits. In the U.S., lost lifetime earnings from IQ loss related to lead exposure is estimated at over \$43 billion. This does not include other social benefits, such as avoided medical care, special education, crime, stress on parents and children, behavior problems, and many other preventable 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 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 dust and/or soil hazards.^{8 9} More than four million of these dwellings are homes to one or more young children.¹⁰

Years of federal, state, and local activity have resulted in a decline in the number of children with elevated blood lead levels. From 1994 to 2006, the number dropped by 86 percent, from 890,000 to 120,000 (from 4.4 percent of all children to 0.6 percent).¹¹ Recognition that lead exposure affects IQ even when BLL levels are lower than 10 µg/dL has added new urgency to the call for primary prevention. The LBP exposure burden still occurs disproportionately in deteriorated or unsafely-renovated pre-1978 homes, with communities of color and low-income families disproportionately impacted. In 2004, CDC's Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) called for a more aggressive housing-based primary prevention approach: "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."¹² In 2009, the U.S. Surgeon General's *Call to Action to Healthy Homes* explicitly recommended "test[ing] houses occupied by children less than 6 years of age for lead and control or eliminate lead hazards..." as a necessary step to achieve national objectives.¹³ The U.S. Environmental Protection Agency (EPA) will fully implement its Renovation, Repair, and Painting Rule by April 2010, requiring contractors who disturb LBP in pre-1978 homes and child-occupied facilities to be certified as renovators and to follow specified work practices strictly to prevent lead contamination.¹⁴

Lead Poisoning in New York State

New York consistently ranks high on key risk factors associated with lead poisoning including many young children living in poverty, a large immigrant population, and older, deteriorated housing stock.¹⁵ Additional aggressive action to reduce children's exposure to lead remains a State public health priority.

2000 U.S. Census Data for New York State:

- Nearly 1.7 million children under age six;
- 476,000 children aged one and two years;
- Third in the nation for families with children under age five living in poverty;
- 23% of the population born outside the U.S.;
- Over 3.3 million homes built before 1950.

Although the overall incidence (newly diagnosed cases) of lead poisoning among New York State children under age six steadily declined from 1998 to 2007,¹⁶ thousands of children are still at risk because EBLL rates vary greatly across the state (see Figures 1.1 and 1.2).^{17 18} About 90 percent of the EBLL cases between 2005 and 2007 were associated with 18 counties and New York City.¹⁹

Figure 1.1. Incidence of BLL \geq 10 μ g/dL, 1998 and 2007

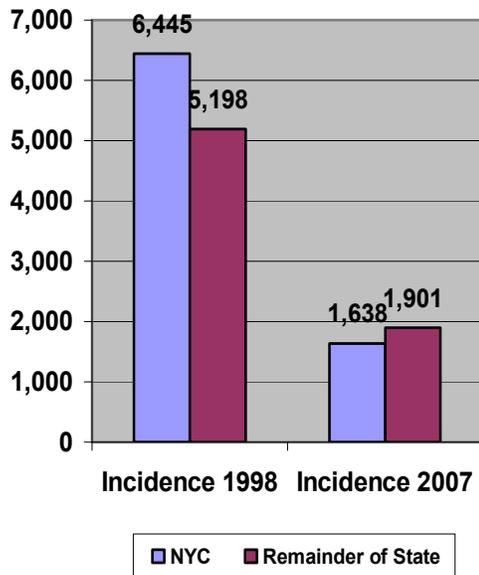
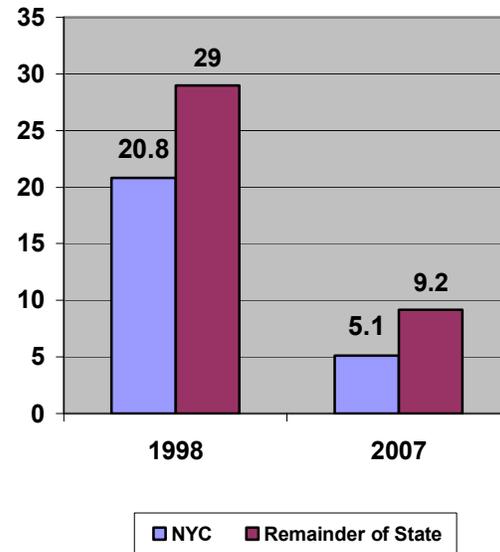


Figure 1.2. Incidence Rate* for Children Age 6 and under, BLL \geq 10 μ g/dL



* Rate per 1,000 children tested.

Source: New York State Task Force on the Prevention of Childhood Lead Poisoning: Preliminary Report 2009, p.4²⁰

Primary Prevention in New York State

Primary prevention has been a critical component of New York State's efforts to address childhood lead poisoning for many years.²¹ Local health departments (LHD) receiving state funding for Childhood Lead Poisoning Prevention Programs (CLPPP) incorporate primary prevention into their programs, including the following activitiesⁱⁱ:

1. Identify and partner with other local agencies, organizations and stakeholders to develop a shared local approach for primary prevention.
2. Identify local communities, neighborhoods and buildings with the highest need for primary prevention strategies.
3. Develop strategies, consistent with local resources, to provide primary prevention services to the areas of highest need.

Several localities have adopted primary prevention laws. For example, since 1982 New York City has had a local ordinance requiring investigation and remediation of LBP hazards in dwellings that house young children.ⁱⁱⁱ The City of Rochester's lead ordinance applies to all rental units, regardless of child occupancy.^{iv}

Other communities rely on a combination of state and local authorities to inspect and enforce remediation of homes or apartments. Funding for this remediation commonly comes from the property owner, federal lead hazard control grants, or other state and federal housing rehabilitation funds. Appendix A details the authorities and procedures, including blood-lead screening requirements that apply to CLPPP activities and local ordinances.

The 2007 Pilot Lead Primary Prevention Program

In 2007, Public Health Law Section 1370(a) (3) was amended to create a pilot Lead Primary Prevention Program:

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.

In granting the New York State Commissioner of Health authority to designate zip codes as "areas of high-risk," the DOH as well as the local health departments adopted a proactive approach to reducing children's exposure before harm occurred. Using the

ⁱⁱ Minimum required activities to be consistent with contractual obligations for CLPPP work plans.

ⁱⁱⁱ New York City's "Local Law #1 of 2004 – The New York City Childhood Lead Poisoning Prevention Act" and "NYC Health Code."

^{iv} City of Rochester's "Lead-Based Paint Poisoning Prevention Act."

legislation’s authority, health departments could gain access to homes for the purposes of education and investigation, even in the absence of a child or a child with an EBLL.

The legislation required Pilot-funded recipients to:

1. Use the “area of high risk” designation within “communities of concern” and the Notice and Demand or equivalent process to inform owners and require repairs 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 age six who had not received required lead screenings to their primary care providers 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 (MOU), 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, weatherization programs, and community groups with interest in lead poisoning prevention.
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 practice 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 DOH to evaluate the progress and effectiveness of the Initiative.

Pilot grantees targeted one or more of the state-designated zip codes and worked in other high-risk areas within the targeted county as resources permitted. DOH also encouraged them to tailor their work plans to the needs, resources, and capacities in their jurisdictions. Grantees could implement activities as part of an existing program, including their CLPPP or their NYS Healthy Neighborhoods Programs (HNP), or they could develop new infrastructure. An

The Eight Original FY 2008 Grantees
(October 1, 2007-September 30, 2008):
Albany, Erie, Monroe, Oneida, Onondaga, Orange, and Westchester counties and New York City.

NCHH study provides a detailed evaluation of the strategies, obstacles, costs, and accomplishments during Year One.¹

2008-2009 Expansion of the Program

In 2008, the Governor proposed and the NYS Legislature committed to additional funds for the LPPP, bringing the total funded amount for Year Two to approximately \$5 million. This increased the funding allocated to the eight renewing grantees and provided funds for four new ones: Broome, Chautauqua, Dutchess, and Schenectady counties. DOH asked renewing grantees to refine their outreach and inspection efforts, engage more community partners, and look for ways to build toward sustainability. DOH also expanded its technical support to grantees through its website, teleconferences, and a two-day conference during which grantees explored ways to increase partnerships with community-based organizations, housing agencies, and code enforcement.

**Year Two (FY 2009)
Additional Grantees:**

Broome, Chautauqua,
Dutchess, and
Schenectady counties.

In 2009, based on the promising results of the Pilot, Governor Paterson successfully sought to make the LPPP permanent under an amendment to PHL 1370-a(3) and funding was further increased to \$7.7 million. With the addition of three new grantees in 2009-10 (Niagara, Rensselaer, and Ulster Counties), 15 grantees will implement a housing-based primary prevention initiative, potentially reaching up to 200,000 housing units in the next three years.

**Year Three (FY 2010)
New Grantees:**

Niagara, Rensselaer, and
Ulster counties.

The 2009 amendments made a direct and positive impact on grantees' work plan activities and goals. The new law gave grantees the flexibility to define their "areas of concern" beyond the original high-risk zip code(s) and continued the requirement for grantees to contract with their housing code enforcement agencies. It also encouraged coordination between weatherization and other programs that could fund required lead hazard control work and ensured a mechanism for referral for lead testing of pregnant women and children encountered during an LPPP visit.

In June 2009, the New York State Health Commissioner issued a letter to health care providers on the importance of monitoring BLLs below 10 µg/dL, released new educational materials to help families understand the meaning of these lower levels, and required that the following comment be added to all laboratory reports for BLL values: "Blood lead levels in the range of 5-9 µg/dL have been associated with adverse health effects in children aged 6 years and younger. The term 'normal' should no longer be used to describe BLLs less than 10 µg/dL."²¹

In June 2009, the Governor also announced DOH's revised regulations to require comprehensive follow-up and environmental interventions for all children with BLLs of 15 µg/dL or greater (reduced from 20 µg/dL or greater). This latter change affected LPPP grantees by restricting their visits to those homes where children with EBLLs under 15 µg/dL resided.

Evaluation Design and Methodology

Under contract with DOH, the NCHH team:

1. Consults on how to implement the LPPP;
2. Provides training and hands-on consultation to grantees and their partners in coordination with DOH; and
3. Develops and implements a comprehensive evaluation of the LPPP for DOH.

The contract enables field investigators to work with each grantee to provide feedback on work plans, models for practice, and technical support on program design and implementation issues.

NCHH developed a standardized quarterly reporting form and a Microsoft Access database to capture data on the units enrolled by the grantees. Grantees could either use the database provided or import data into it from their own systems. Recognizing that grantees might have trouble collecting detailed unit-level data in the first year, DOH initially required seven measures for the quarterly report:

1. Total number of children age 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 LPPP;
5. Number of units where the investigation identified LBP or lead dust hazards;
6. Number of units where identified hazards were remediated; and
7. Number of units where clearance was achieved.

Grantees were also encouraged to provide quantitative data on other possible measures and to provide qualitative information on the strategies and challenges they faced in implementing their programs.

This report covers LPPP implementation from October 1, 2008 through September 30, 2009 (Year Two). The database includes a total of 5,455 units: 4,457 units first investigated in Year Two; 857 units first investigated in Year One but carried over to Year Two to complete remediation or clearance; and an additional 141 units where grantees provided incomplete information on investigation but reported information on hazards or clearance. The report also includes grantees' assessments of progress toward creating the legislative and administrative infrastructure necessary to sustain the LPPP.

Chapter 5 contains more information on methodology, and Appendix C contains additional detail on the decision criteria for unit-level data.

2. IDENTIFYING HOUSING AT GREATEST RISK FOR LEAD PAINT HAZARDS

This chapter addresses the following evaluation questions:

1. To what extent have grantees used the authority granted by PHL 1370-a(3) to designate a high-risk area?
 - a. To what extent did grantees cite or use additional local authority, or engage code or building inspectors to cite the New York State Property Maintenance Code as part of the designation of the high-risk area?
2. Within their target zip codes and communities of concern, what approaches have grantees used to identify the highest-risk units?
 - a. To what extent have grantees established voluntary investigation programs outside the zip codes that are the primary focus of the LPPP? How has that extension affected their primary efforts?
 - b. Which grantees have focused on units associated with a documented BLL? To what extent have they confined activities solely to those units? What BLL thresholds have they used?
 - c. How has the size and diversity of resettled refugee populations in high-risk zip codes affected grantees' design and implementation of their programs?
3. To what extent have grantees used maps or other visual representations of their target areas and units to plan their activities and/or communicate with others about lead risks and their program?
4. What other challenges did grantees face with program start-up in Year Two?

Using the “High-Risk Area” Designation

Grantees without a local lead ordinance used PHL 1370-a(3) to declare areas of high risk. After reviewing the issue internally, they publicly announced the declaration either through a press release or Commissioner's order. They referenced this authority in outreach materials to the target neighborhoods and notices to property owners as part of the investigation process. Monroe County and New York City continued to rely on their local ordinances (see Appendix A). Oneida County cited both NYS PHL and County sanitary code in its designation. Erie County took a two-pronged approach by (1) designating six Buffalo zip codes as “areas of concern” and (2) targeting a more limited area within each as “high risk.” The latter designation required notice to property owners about the LPPP activities and owner responsibilities, as well as outreach to parents on how to minimize exposure to LBP hazards. All four of the new grantees, Broome, Chautauqua, Dutchess, and Schenectady, also used the PHL authority to designate “high-risk” areas.

Grantees also expanded local authority to support implementation of PHL 1370-a(3) or their authorities under other existing statutes. Erie County continued its earlier efforts to modify its sanitary code to reflect federal lead standards and

address enforcement in areas of “concern” and “high risk.” New York City began to amend Article 131 of the NYC Health Code related to required signage in apartment buildings to promote awareness of the lead paint and window guard requirements and prohibitions on dry scraping and sanding.

In Year Two, some grantees expanded or continued their use of code inspectors for the LPPP. In Dutchess County, the City of Poughkeepsie’s code inspectors performed the bulk of the investigations for the program in the target area as part of their responses to complaints, requests for building permits, or Certificate of Occupancy inspections. If owners do not comply with notice of code violations, the case is then referred to the Health Department for a full lead-based paint investigation. Late in September 2009, Oneida County finalized a contract with the City of Utica enabling its code inspectors to be deputized to enforce PHL 1370-a(3) as part of their inspection activities in Year Three. Monroe County continued to use City of Rochester code inspectors to conduct the bulk of investigations for the LPPP, following the procedures specified in the local ordinance.

Overall, grantees had two concerns about use of the authority provided under PHL 1370-a(3) in Year One. First, they expressed concern that using the authority would expose their counties to more liability. Second, they were concerned that landlords and tenants would refuse entry for the purposes of investigation in the absence of a lead-poisoned child. By Year Two, these concerns were less prominent; no grantees reported any lawsuits and few reported refusals to entry. In fact, Westchester reported that no owners refused entry for the purpose of inspection, although some tenants might have cancelled scheduled visits after speaking to owners.

Several grantees expanded their authority to enter units or to expedite compliance with notices of hazards. In Monroe, the City of Rochester adopted new authority enabling inspectors to enter units with a court-ordered warrant, for the purposes of inspection, even when the property owner or tenants refused entry.²² The effort was challenged in court in September 2009,²³ but had no noticeable effect on the activities reported in this report. Disposition of the case continued into 2010, but, if upheld, the new authority should have positive effects for investigations for Year Three. Albany County’s Department of Law drafted a letter for non-compliant landlords. The letter, which was still under review by senior County officials at the end of Year Two, emphasized that possible criminal prosecution could occur if hazards were not remediated. Erie and Westchester counties also included more directive language in their follow-up letters to landlords, and both increased the number of cases sent to hearings. (See Chapters 4 and 5 for a detailed discussion of enforcement strategies.)

Defining Target Units

In Year Two, grantees began to define their target areas beyond the specific zip codes identified in Year One to include broader communities of concern, such as specific municipalities within their county. Because the zip codes and the high-risk areas included in their communities of concern include nearly 160,000 units, grantees used various data sources to further define the units targeted for intervention. Table 2.1 illustrates the

strategies grantees used to define target units, including zip codes, outreach to specific at-risk populations, and targeting services to the clientele of other agencies.

Table 2.1. Grantee Approaches to Defining Target Housing, Year Two

| Strategies | Renewing Grantees | | | | | | | | New Grantees | | | |
|--|-------------------|------|--------|-----|--------|----------|--------|-------------|--------------|------------|----------|-------------|
| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | Broome | Chautauqua | Dutchess | Schenectady |
| Re-inspect units with history of EBLL cases; extend inspection to other units in the same building. | X | X | NA | 3 | | X | | 3 | X* | X | | X |
| Concentrate on specific neighborhoods within designated high-risk zip codes. | X | X | NA | X | X | X | X | X | X | | | X |
| Visit the homes of at-risk newborns or pregnant women in the designated high-risk zip codes. | | | X | X | X | | NA | X | 3 | | | 3 |
| Inspect units where children with BLLs between 5-9 or 10-14 µg/dL (or both) reside or units adjacent to them | X | X | X | X | X | X | X | 3 | 3 | | | X |
| Inspect rental units before occupancy by resettled refugees or DSS-funded recipients (TANF, foster care). | 3 | | NA | NA | X | X | 3 | NA | 3 | | | |
| Inspect units at the request of owner or tenant (even if outside high-risk area). | X | | NA | X | X | X | X | X | X | | X | X |
| Other. ** | | | X | X | | 3 | 3 | | | | | |

X = Have done or are doing as of end of Year Two.;
 3 = Included in Year Three work plan (October 1, 2009 – September 30, 2010);
 NA = had no plans to do this in either Year Two or Year Three.

* Broome confines these investigations to units adjacent to current EBLL cases. It will begin to address units adjacent to those with a history of EBLL cases in Year Three.

**Monroe conducts ongoing lead primary prevention inspections as a method of enforcement of its lead ordinance; New York City does the same, but also uses its BLL registry data to identify housing where children under three years with BLL of 10-14 µg/dL reside and vital statistics data to identify the homes of newborns living in the same building but a different apartment as the under three year olds with BLL between 10-14 µg/dL; Orange County in Year Three plans to inspect rental units after occupancy by resettled refugees or DSS-funded recipients; encourage tenants from units inspected by the program to market to others in their building; and attend

Landlord Association and Tenant Association meetings in Newburgh in order to increase visibility and schedule inspections.

Specific housing units within communities of concern: Most renewing grantees continued working in the high-risk areas from Year One and added zip codes, census blocks, or neighborhoods in Year Two. For example, New York City increased its activities in Brooklyn while continuing to work in all of the high-risk areas identified by the state. In Year Three, it will try a new strategy to identify and conduct inspections in buildings where two or more apartments were issued Commissioner's Orders (to remediate or to abate) since 2004 and where the Commissioner's Orders have been closed for more than one year. Inspections will be offered in the units where children under six years of age reside. Buildings with the greatest number of units with previously ordered work will be given priority. New York City and Albany and Onondaga counties restricted their efforts to rental housing (except for voluntary inspections), and most other grantees investigated more rental than owner-occupied units this year (see Chapter 5 for more information).

Other at-risk units or populations: Several renewing grantees added elements to their programs to reach other at-risk housing units. Monroe and Westchester expanded efforts to investigate units with newborns in designated high-risk areas, building on the strategies that New York City and Oneida County had used in Year One. New York City and Albany, Erie, Monroe, Oneida, Onondaga, Orange, and Schenectady counties investigated homes where children with BLLs between 5-9 or 10-14 lived or the units adjacent to them; Broome and Westchester have included this approach in their Year Three work plans. (New York City confined these visits to homes where children aged three or under and the families of newborns lived in the same building.) New grantees Broome and Schenectady counties are following the Albany County model of re-inspecting units, or adjacent units, previously occupied by children with identified EBLLs of 15µg/dL or greater. Albany, Oneida, and Onondaga counties continued to offer voluntary inspections at the request of owners or tenants, and Schenectady adopted a similar effort.

Targeting services to the clientele of other agencies: Albany, Oneida, and Onondaga counties increased their efforts to reach units that housed families served by NYS Department of Social Services (DSS) through rental assistance or foster children placement and tenants served by Section 8 federally-assisted rental housing. Albany began to explore ways to partner with a community-based agency (Project Strive) that placed foster children and families in Section 8 housing. Onondaga secured an agreement with the DSS to refer properties receiving a subsidized security deposit if, upon visual inspection, the property was found to have areas of chipping or peeling paint. Oneida has worked with the City of Utica's Fire Department to identify units that were not registered in the City's Rental Occupancy Program. The list was provided to DSS and Section 8 programs to determine the impact on their respective units. Broome County is also developing a relationship with DSS-subsidized and foster care housing.

Meeting language needs: Grantees increased their outreach to individuals whose primary language was not English—especially Spanish-speaking residents--in Year Two.

All grantees made printed materials and advertising available in Spanish, and most had translators available for home visits and investigations. Grantees also conducted outreach at health fairs, festivals, or other activities targeted to the Spanish-speaking community. New York City and Oneida County conducted LSWP sessions in Spanish. New York City also modified the course testing procedures to address low literacy levels for Spanish- and English-speakers. Oneida County and the City of Utica offered one-stop seminars for property owners, with interpreters providing simultaneous translation in Spanish, Burmese, Karen, and Somali Maay Maay. Interpreters were available to assist with HUD housing renovation applications. Onondaga County's primary prevention brochure was translated into 9 languages.

Resettled refugees: Resettled refugee populations received additional attention by renewing grantees, but less so among the four newest grantees. Albany, Monroe, and Onondaga counties began additional outreach to refugee placement organizations and landlords. New York City continued its partnership with the NYS Bureau of Refugee and Immigrant Affairs. Erie and Westchester continued to reach out to organizations serving the larger Muslim community, which may include refugees. Erie will hold an outreach session for refugees in Year Three.

Grantees working with resettled refugees or recent immigrants noted that this work required additional staff time, coordination with multiple partners, and access to language services. Since the children from these families often appear in their CLPPP's EBLL caseload, they felt that primary prevention activities would have long-term benefits even when they could not see the immediate impact.

In Year One, Oneida had held puppet shows for families in their native languages, offered specialized training opportunities for landlords from the same ethnic groups, and contracted with the area refugee center to provide referrals. In Year Two it expanded its efforts by contracting with the Multicultural Association of Medical Interpreters (MAMI) to call refugee tenants to increase awareness and publicize the LPPP's offer of home inspections. Refugee landlords or landlords with limited English proficiency were also contacted as needed. The multiple contact efforts resulted in a June property owner seminar with 22 participants offered in multiple languages, including Spanish, Maay Maay, Burmese, and Karen. This seminar also provided "one-stop shopping" for landlords interested in taking advantage of the City of Utica's newly approved Federal Lead Hazard Control grant, the collaborative discount window replacement program Oneida had established with the GroWest community development agency, and the LPPP's HEPA vacuum loaner program. Interpreters simultaneously provided interpretation and then offered landlords individual assistance with completing Lead Hazard Control grant applications with GroWest intake staff.

Using Geographic Information Systems (GIS) to Identify Properties

In Year Two, nearly all grantees placed special emphasis on building capacity to produce or fine-tune displays on maps produced by GIS systems. Dutchess and Oneida counties posted their maps on their websites, and New York City's Annual Report continues to provide maps and neighborhood-based data on Environmental Intervention Blood Lead

cases.²⁴ New York City and Oneida and Onondaga counties produced these maps internally. Other counties partnered with their local offices of Community Development or Planning. The latter sometimes resulted in delays as interdepartmental negotiations occurred. Oneida County in Year Two and Chautauqua County in Year Three planned to link onsite data collection to GIS mapping systems.

Grantees reported using maps in several ways:

1. To provide a picture for external audiences (such as community groups, elected officials, or the media) of areas with high-risk housing and at-risk populations;
2. To identify neighborhoods for visual assessments of deteriorated exterior paint or door-to-door canvasses;
3. To plan expansion of their efforts through initiatives such as Westchester's use of GIS mapping/data analysis to identify the areas most densely populated with pre-1940 housing and expand outreach to housing units in that area; and
4. To build toward lead-safe housing registries by mapping earlier EBLI investigation data, the units investigated and cleared under the LPPP, and units remediated through Lead Hazard Control grants or other funding.

Few grantees, however, issue an annual report to their communities on the progress of the grants. This is an area where the GIS maps could be of particular benefit. To activate more community and elected official interest in the target neighborhoods and engage new partners for referrals, grantees could use GIS maps to overlay asthma, injury, or other data. Albany County plans to do this in Year Three.

Challenges and Setbacks

Although we anticipated an expedited process for renewing grantees in Year Two, since their policies, procedures, and staffing were largely in place, the economic crisis created several new obstacles:

1. Many cities and counties needed to implement hiring freezes or cut staff to address local budget shortfalls. This made hiring new staff difficult, even with state grant funding. Hiring new part-time staff or contractors was also problematic when full-time staff members from other programs were being terminated. Informal agreements to share information/services between departments became more difficult because each individual department was under pressure to demonstrate that it was using its staff as efficiently as possible for its primary mission. Staffing shortages were exacerbated by staff redeployments because of the H1N1 flu outbreak.
2. Many of the lead risk assessors newly hired and trained in Year One had a six-month provisional license approval. Re-certification took time and extra funding.
3. Travel was restricted under many budgets, limiting opportunities to present information about the LPPP at out-of-state conferences, or even for grantees from the same region to meet in person to share information.

4. Purchase or repair of XRF equipment or IT upgrades was postponed to save costs. Lease agreements were similarly restricted. One contractor for XRF equipment went out of business, delaying repair and replacement of older models.
5. Stricter scrutiny of all spending resulted in delays in purchasing incentive items for outreach activities.

New grantees experienced all the above challenges, without the infrastructure that renewing grantees had created in the first year. An important administrative barrier included delays associated with securing local legislative and executive approval to draft work plans and execute contracts with the State. Most new grantees did not secure final local approval of their contracts until after the first quarter of 2009. Due to these delays, hiring, training, subcontracting, program outreach, and marketing could not begin until spring, which in turn delayed progress through the end of their first year of implementation.

Despite Year Two start-up challenges, renewing grantees collectively met or exceeded the benchmarks for their activities by the end of the third quarter.

Implications for Program Design

Based on these experiences, NCHH sees the following areas where new and renewing grantees could concentrate efforts:

1. Continue to use PHL 1370-a(3) to designate high-risk areas and to rely on it along with other state and local public health laws and regulations, the New York State Property Maintenance Code, and local sanitary and housing code, as the basis for action. The broad combination of health and housing authorities, as well as decisions to deputize housing agencies to enforce the PHL (discussed in more detail in Chapter 4), assures a unified perspective toward housing-based primary prevention.
2. Explore opportunities to use increasing levels of sanctions, such as starting with lower penalties under code enforcement before moving to enforcement and application of the higher public health law sanctions, as a way to encourage compliance.
3. Continue to engage elected and appointed local, regional, state, and federal officials in support of the LPPP, especially to achieve cooperation in enforcement across all entities and funding for lead hazard control. Engage public officials in all steps of approval of the contract and work plans, and keep them apprised about how other local conditions impact the implementation of this unique initiative.
4. Explore strategies for overcoming local barriers to hiring permanent staff. These might include greater use of contractor and part-time staff and training existing staff to be able to cover a wider range of tasks.
5. Continue incorporating the homes of newborns in the designated high-risk areas into LPPP services. Recognize that targeting this population may be more labor-intensive due to the effort to identify these units through vital records and

- coordinate contact with other home visiting programs. Expand partnerships with physicians as a way to educate and reach new parents.
6. Increase efforts to investigate units with a past history of housing children with BLL in the 5-9 and 10-14 $\mu\text{g}/\text{dL}$ range.
 7. Continue attempts to encourage agencies that fund housing for children to ensure the housing they finance is lead-safe.
 8. Estimate the resources needed to reach resettled refugees and immigrant populations and develop plans for integrating these efforts into the LPPP.
 9. Budget, as necessary, for GIS and IT services provided by other agencies. Evaluate local IT capacity when defining target activities in the work plan.
 10. Take advantage of the state's simplified budget requirements in the annual work plans so that efforts can be concentrated on program activities rather than paperwork.
 11. Publicize maps through placement on department websites or publication in annual reports. Visual representation of the problem helps build sustainability and accountability for the LPPP.

3. MARKETING AND INCREASING COMMUNITY ENGAGEMENT

This chapter addresses the following evaluation questions:

1. What marketing and communication efforts have grantees used to raise awareness about their programs and the risks of lead exposure?
 - a. If the grantee has run a community-wide campaign as well as one targeted to high-risk neighborhoods, how did the grantee identify which messages to use in each campaign?
2. How have grantees engaged community groups and coalitions?
 - a. What are the best strategies to initiate these relationships?

Marketing and Media

All grantees sought to create countywide awareness and support for housing-based primary prevention, as well as engage participation of residents and property owners in target areas in LPPP services. Overall, grantees' work plans projected 127 outreach events, reaching 20,000 people.^v In fact, they conducted more than 23 times the number of outreach activities and reached more than twice the number of individuals expected, excluding the free and paid media. Collectively, the grantees reached more than 13 million individuals through their free and paid media, directly leading to the involvement of 2,000 units in the LPPP. (See Table 3.1 for a breakdown of media activities.)

One of the greatest changes between Year One and Year Two was the degree to which all grantees expanded community outreach efforts.

Several grantees (Chautauqua, Monroe, New York City) initiated or linked their messages to other ongoing media campaigns. Efforts to determine the impact of those campaigns are in the early stages, most commonly through the grantees' efforts to identify where the property owner or tenant heard about the LPPP when they were contacted to schedule an investigation. Chautauqua's and Dutchess' practice of tracking hits on websites, and Chautauqua's, Dutchess' and Monroe's practice of tracking calls to an 800 number (or 311 in those jurisdictions that have this service), might be promising strategies for more grantees to explore in Year Three.

^v Eleven of the grantees set benchmarks for the number of events, but only three set estimates for the number of individuals to be reached.

Table 3.1. Reported Number of Marketing and Outreach Activities,* Year Two

| | Renewing Grantees | New Grantees | All Grantees |
|--|-------------------|--------------|--------------|
| Free media | | | |
| Number of Events | 177 | 1,544 | 1,721 |
| Estimated Audience | 5,450,771 | 297,677 | 5,748,448 |
| Paid media | | | |
| Number of Events | 481 | 5,203 | 5,684 |
| Estimated Audience | 7,769,900 | 154,110 | 7,924,010 |
| Educational events for the general public | | | |
| Number of Events | 269 | 25 | 294 |
| Estimated Audience | 18,994 | 2,498 | 21,492 |
| Events to enroll tenants or property owners | | | |
| Number of Events | 192 | 5 | 197 |
| Estimated Audience | 11,052 | 775 | 11,827 |
| Direct outreach to individuals | | | |
| Number of Events | 3,078 | 5 | 3,083 |
| Estimated Audience | 21,264 | 9,968 | 21,232 |
| Other | | | |
| Number of Events | 634 | 2 | 636 |
| Estimated Audience | 12,096 | 0 | 12,096 |

Source: Quarterly Reports

***Definitions: Free Media** - print, radio, and television public service announcements, special program bulletins/newspapers. **Paid Media** - Paid advertisements in newspapers, TV, or radio; development and distribution of videos, billboards, bus signs. **Educational Events for the General Public** - Health fairs or community events outside the target high-risk areas; presentations to members of community- or faith-based organizations. **Events to Enroll Tenants or Property Owners** - Health fairs or community events in the high-risk areas; presentations to community- or faith-based organizations, landlords or landlord associations, tenants or tenant-rights associations, neighborhoods groups; other group events specific to landlords or tenants in target housing. **Direct Outreach to Individuals** - letters, handbills, flyers to individual housing units, target families, property owners for the purposes of scheduling home visits, inspections, or participation in LSWP training. **Other** - Information posted on websites; displays at hardware stores, libraries, building permit offices, et cetera.

LPPP activities generally do not appear prominently on grantees' websites. (Exceptions include New York City, Broome and Oneida counties, and the Lead Safe Orange and Lead Safe Westchester websites.) Even if residents of target neighborhoods do not use the Internet for information about services, there may be value to making that information accessible to the general community, including the landlords, property management firms, or community-based organizations who will be active in those areas.

Useful Information to Include on Websites:

1. Target neighborhoods, scope of activities, and incentives for participation;
2. Contact information for scheduling inspections;
3. Guidance for property owners and tenants about the inspection process, including tenants' rights information;
4. Resources for property owners to fund remediations; and
5. LSWP trainings available to owners, property managers, tenants, and do-it-yourselfers, with online registration if possible.

Counties identified a variety of innovative venues to publicize the LPPP:

1. Albany County scheduled a luncheon for community-based organizations, agency representatives, and public officials to build support. In Year Three, it will institute advertising at bus kiosks and on buses serving the target zip codes.
2. Broome County presented at the community “Juneteenth” celebration, the oldest nationally celebrated commemoration of the ending of slavery in the United States.
3. Chautauqua County negotiated a media buy that resulted in a free radio advertisement for every advertisement purchased, and over 300 radio announcements and 24 half-page ads in the local newspaper. Live broadcasts from such locations as area farmers’ markets, baseball tournaments, and a Friendly’s restaurant sustained program visibility in the target areas. A PSA “crawler” on the Weather Channel ran 200 times, and a cable TV commercial ran over 3,000 times.
4. Erie County leveraged funding from the Community Foundation of Greater Buffalo (CFGB) to carry out a “Wipe Out Lead” multimedia campaign. A CFGB board member has personally visited 31 churches in the past year to discuss lead poisoning issues. Erie County also held a “National Night Out—Get the Lead Out” event at its clinic in the target neighborhood.
5. New York City arranged for public service announcements in all five NY *MetroParent* newsletters, subways, sanitation trucks, hardware stores, and check-cashing stores. It also expanded the number of hardware stores enrolled in its Healthy Hardware Stores initiative that receive information about lead poisoning prevention and resources for remediation. Finally, they sent letters to the medical providers and parents of children more than 3 years old with BLLs between 10 and 14 µg/dL encouraging them to report peeling paint to the City’s 311 hotline if landlords do not make repairs.
6. Oneida County conducted specialized landlord seminars, previously described in Chapter 2. They also worked with area Head Start programs and Healthy Families organizations to publicize LPPP offerings in their newsletters and to send out information in their mailings to clients in the LPPP target areas.
7. Onondaga County placed information in the County’s Medical Society and Head Start bulletins, purchased radio and bus shelter ads, and conducted Spanish-language outreach through the *Nosotros* radio show.
8. Orange County sent an insert in the summer newspaper that reached 70,000 households and participated in the annual Migrant Workers Health Fair and classes for mothers enrolled in Child Protective Services’ Action toward Independence. It also presented to the County Perinatal Consortium and conducted information sessions at 51 pediatricians’ offices and at three Board of Cooperative Educational Services (BOCES) sites.
9. Schenectady County conducted presentations at neighborhood association meetings.

10. Westchester County joined the St. John's Episcopal Church farmers' market and flea markets on a weekly basis. It also presented at the Annual African American Men of Westchester environmental conference and the Yonkers' YMCA Healthy Kids Day.

Engagement of Community Groups

Community support and value for primary prevention is critical to the LPPP's success because it is the basis for sustainability. Most of the grantees already had an advisory board or community coalition to support their LPPP programs. In Year One, grantees focused on engaging community- and faith-based organizations as partners in an advisory capacity, as hosts or co-sponsors for events, and for outreach on behalf of the LPPP. In Year Two, they dramatically increased outreach to non-governmental groups and formalized contractual relationships for the purpose of recruitment of units (see Table 3.2). Most renewing grantees also acknowledged in interviews with NCHH that they better understood the value of these partnerships as they tried to expand their efforts in Year Two.

One long-term measure of the LPPP's success with engaging community organizations is community agencies seeking to partner with LPPP grantees, as occurred in Erie County. Overall, grantees reported little of this in Year Two but expected it to increase in Year Three.

An Example of a Community Partnership to Develop Lead Poisoning Prevention Messages

Last year, the Community Foundation of Greater Buffalo sponsored two focus groups to better understand residents' awareness and concerns about lead poisoning in homes on Buffalo's Westside. Both focus groups rated concerns about lead poisoning as secondary to other housing-related issues, such as safety. Moreover, the majority of participants expressed awareness of lead problems, yet felt helpless to address them and did not believe they would receive help from local agencies. Participants in the focus groups suggested that the following messages would have an impact:

1. "Don't risk your child's health by letting them eat poison."
2. "Getting rid of lead paint is the law. Don't get caught by surprise."
3. "Protect the value of your home by eliminating lead paint." (Participants felt that this would resonate with owners but not with renters.)

Participants identified community and neighborhood groups (rather than the health department, police, or elected officials) as trusted sources for information and also identified the primary television and radio stations that they watch.²⁵ This information continues to guide this year's media activities.

Table 3.2. Examples of New Partnerships or Initiatives Formed with Community-Based Organizations in Year Two

| County | Nature of Partnership |
|----------------------|--|
| Albany | <p>Partnered with Emmaus United Methodist Church Intervention project for recent immigrants and refugees to create a referral process for tenants and explore ways to build a lead-safe housing registry.</p> <p>Worked with the U.S. Committee for Refugees and Immigrants to establish referrals of units for inspections and host a meeting for community- and faith-based organizations, agencies, and public officials as the first step of a Primary Prevention community coalition.</p> <p>Held a luncheon with new and existing partners to establish a common referral process.</p> |
| Broome | Met with First Ward Action Council to discuss HUD grant applications. |
| Chautauqua | Will add the Hispanic Outreach Network and the Realtor Association to its current lead task force membership. |
| Dutchess | Created the Dutchess County Lead Coalition, which will meet quarterly. |
| Erie | Received request from Sister Care Center, a faith-based organization located in one of the high-risk zip codes and offering multiple services to the community, to develop a referral system between its new preventive health program and LPPP. |
| Monroe | Trained 240 individuals, including staff from the Catholic Family Center, Rochester City School District, Family Learning Center, Somali Community Outreach and Education Center; interpreters; and refugee visitors through a subcontract with the University of Rochester's Healthy Home. |
| New York City | Used its NYC Lead Poisoning Technical Advisory Committee (TAC), which is composed of representatives of governmental and nongovernmental agencies; health care providers; and community-based organizations, including those representing key low income neighborhoods in the target area and agencies that serve refugee and immigrant communities, as a sounding board for program planning. |
| Oneida | <p>Created a "Green Partnership" with the Workforce Investment Board, local colleges, BOCES, and business schools in a five-county area to develop a single platform for lead-related and green job trainings offered at all institutions in the region. Partnered with the Family Nurturing Center, Neighborhood Center, and Mohawk Community Action Agency to send out mailings and newsletters and host community events.</p> <p>Executed a contract with GroWest, a community development corporation, to conduct specialized cleaning in units LPPP investigated and found to have lead hazards.</p> <p>Extended the relationship to enable owners to take advantage of GroWest's discounts on replacement windows after additional GroWest training in lead-safe window replacement. Also partnered with Workforce Development Institute for LSWP training, as described in Chapter 6.</p> |
| Onondaga | Continued to participate in the Syracuse Lead Task Force (SLTF) monthly meetings and work with a consortium of community churches (Alliance of Communities Transforming Syracuse) on a possible lead ordinance. |
| Orange | Began public health detailing visits to area pediatricians and has engaged the Orange County Perinatal Consortium. LPPP also participated in a City of Newburgh open house to encourage tenants and property owners to buy city properties. The event was attended by City of Newburgh, Newburgh Office of Community Development, Section 8 staff, developer Jerry Sanchez, and Hogar, a community based group. |
| Schenectady | Presented at health fairs at Hometown Health, Bigelow Corners (a large day care center serving low income clients) and Mohawk Opportunities (serving the needs of physically and mentally disabled clientele). |

| | |
|--------------------|--|
| Westchester | Continued to partner with CLUSTER (a tenant/landlord counseling agency), WESTHAB (a provider of emergency housing and low-income units), and the Nepperhan Community Center (a community-based agency that provides youth activities and violence prevention programs and acts as a referral source for other needed services). Met with Westchester Community Opportunity Program (WESCOP) Weatherization Program and H.O.P.E. Inc. (Helping Out People Everywhere) to forge a partnership during Grant Year Three. |
|--------------------|--|

Implications for Program Design

Community partnerships require agencies to share decision-making and resources, something that is hard to do when faced with deadlines for production or pressure to justify the size of their staff in the face of budget cutbacks. To improve marketing and community engagement, new and renewing grantees may consider the following approaches:

1. Inventory the organizations that are most prominent in the target areas, using DOH instructions for work plan development (see Appendix D).
2. Invest time in educating community agencies and representatives about the lead poisoning problem, past activities, and future intentions. Focus on creating a path from their increased education to their active participation as partners.
3. Tailor meeting agendas to the topics of greatest mutual interest, rather than an overview of the LPPP and a generalized request for support.
4. Identify existing community resources to support media messages, and identify whether existing campaigns can be modified to accommodate primary prevention messages.
5. Collaborate with neighboring grantees to purchase media time on a regional basis.
6. Develop short-term contracts with clear performance objectives (e.g., for recruitment of property owners) to optimize the success and effectiveness of the partnership. Be prepared to provide ongoing technical assistance and commit to responding to inquiries in a timely manner. Be clear what the partner organization can expect in return from LPPP.

4. ENHANCING INTERGOVERNMENTAL PARTNERSHIPS

This chapter focuses on the following evaluation questions:

1. In what ways have grantees collaborated with other agencies, programs, and coalitions to promote primary prevention?
2. What changes, if any, to local codes or ordinances have grantees identified as needed or proposed to promote primary prevention?
 - a. What education has been provided to public officials, agency heads, judges, prosecutors, or the general public about the need for these changes?

Collaborations with Other Agencies: Policies and Procedures

The grantees started with very different institutional infrastructures to support housing-based primary prevention. Progress in developing these relationships is labor-intensive, and the benefits as far as housing units remediated may take several years to see clearly.

Communities served by grantees did not adopt new lead ordinances in Year Two, focusing instead on the enforcement of existing laws. Onondaga County was the only grantee to explore adoption of a new lead ordinance. As noted in Chapter 2, Erie and Dutchess counties worked to revise their existing Sanitary Codes, and New York City began amending Article 131 of the NYC Health Code in ways that benefit primary prevention as well as investigations of units where children with EBLs of 15 µg/dL or greater reside. Many grantees also began to work more closely with their jurisdictions' legal staff to improve access to units through the use of warrants or other legal notices to property owners. As will be discussed below, additional progress has been made in linking the LPPP to code enforcement activities.

Although successful agency partnerships can evolve without formal MOU, most grantees found over time that they needed to assign more specific responsibilities to partner agencies. Key partners included the Healthy Neighborhoods Program, other health department programs, housing agencies, and code enforcement. By the end of Year Two, most grantees also had formal contracts for LSWP training. Most relied on more informal means of coordination with other agencies for data collection or referrals (see Table 4.1). Joint visits or cross-training of agency staff continued to be an activity common to most grantees.

Healthy Neighborhoods Program. The Healthy Neighborhoods Program (HNP) continued to be an important partner program both for outreach and as a source of referrals. HNP conducts outreach in many of the same target neighborhoods as the LPPP on a variety of health and safety issues, including lead poisoning prevention. HNP outreach workers routinely conduct visual assessments of housing conditions and can make referrals to lead poisoning prevention programs if they observe deteriorated paint. Grantees reported that partnership with the HNP facilitated gaining entrance into target units, because outreach workers could offer a greater variety of incentive items (such as light bulbs, smoke alarms, and bait and gels for pest management) and address housing

conditions of most immediate interest to residents. Once these issues were addressed, residents were more receptive to lead poisoning prevention messages.

In Year One, seven grantees coordinated activities with HNP, a relationship that continued in Year Two. Albany County, for example, had contracted in Year One with the HNP outreach workers to canvass key streets specifically to compile a wait list for fall LPPP investigations. Due to delays between the time contacted and the scheduling callback, very few of these units had investigations and Albany discontinued the approach. Erie County found that their own inspectors were more successful in making the first visit into a unit because they already had examined the exterior and issued Notice and Demands based on those violations. They referred units to HNP for follow-up education. In Schenectady County, the HNP home visiting nurse trained as a lead risk assessor and conducted the LPPP investigations.

Other Health Department Programs. Grantees coordinated home visits and referrals with other health department programs, such as Maternal and Child Health and newborn home visiting programs. This coordination included funding staff of these programs to perform outreach and referrals, conducting joint training, and developing common referral forms. Grantees expanded their links with social service programs, including sharing mailing lists and publicizing the LPPP in mailings to clients, program newsletters, and displays of information brochures. Other local agency partners included community action agencies, child care resource and referral agencies, and community foundations.

Housing Programs. Coordination with housing programs increased, although not at the rate of partnerships with other agencies. Where HUD lead hazard control grant programs existed, counties referred LPPP units to them. (Details of grantee relationships with LHC programs are described in Chapter 7.) More grantees also reported efforts to coordinate with community-based development corporations for the purposes of education for new homeowners, referrals for investigation, emergency housing relocation when LBP hazards required remediation, and LSWP training. Many mentioned their local office of Neighborhood Housing Services as a partner, as well as the Rebuilding Together volunteer program to improve housing.

Table 4.1. Grantee Approaches to Building Collaborations with Other Agencies, Year Two

| Strategies | Renewing Grantees | | | | | | | | New Grantees | | | |
|---|-------------------|------|--------|-----|--------|----------|--------|-------------|--------------|------------|----------|-------------|
| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | Broome | Chautauqua | Dutchess | Schenectady |
| Changes in referral process, procedures, documentation. | X | X | X | 3 | X | X | X | X | 3 | X | X | X |
| Coordinated data collection with other agencies. | X | | NA | X | X | X | 3 | NA | 3 | X | X | |
| Joint visits with or referrals from the Healthy Neighborhoods Program. | X | X | NA | X | X | X | X | X | NA* | NA* | NA* | X |
| Joint visits with or referrals from Maternal and Child Health, Visiting Nurses, or other social service programs (DSS, foster care). | X | | X | X | X | X | X | X | X | X | 3 | X |
| Staff training with any of the above referral or home visiting programs. | X | X | NA | X | X | X | X | 3 | X | X | | X |
| Joint training or investigation with code enforcement, lead hazard control programs, or other home repair programs. | | X | NA | X | X | X | X | X | X | X | X | |
| Grantee referrals to code enforcement or HPD or referrals from code enforcement to the grantee, where those agencies conduct the initial investigations. | X | X | X | X | X | | X | X | X | X | X | X |
| Grantee referrals to lead hazard control programs or other home repair programs (HPD, CDBG, community development corporations, weatherization, et cetera). | X | X | X | X* | X* | X | X | X | X | X | NA* | X |
| Referrals from Lead hazard Control programs or other home repair programs to grantee | | | NA | NA | X | | X | 3 | X* | | NA* | X |

X = Have done or are doing by end of Year Two.

3 = Included in Year Three work plan (October 1, 2009 – September 30, 2010).

NA = Had no plans to do this in either Year Two or Year Three.

* New York City and Oneida provide information on lead hazard control programs to every owner or landlord that receives a notice (COTR). Broome, Chautauqua, and Dutchess do not have HNP; Broome and Dutchess do not have LHC grants in Year Two, but may apply in Year Three

Code Enforcement. Most grantees have entered into discussions with their local code enforcement officials about how to improve coordination. Albany, Dutchess, Erie, Monroe, Oneida, and Orange counties, as well as New York City, had or developed MOU or other agreements with code agencies to inspect or to more vigorously enforce against occupied properties where hazards were found or to revoke rental certificates in vacant properties where prior investigations found hazards. The following Year Two code-related initiatives are particularly noteworthy:

1. Onondaga County applied to have the current EPA/HUD-approved eight-hour LSWP course authorized for continuing education credits to meet Code Inspectors' annual continuing education requirements. Approval was extended to the same course offered anywhere in the state. As a result, other grantees will have the opportunity to provide LSWP training to code enforcement officials and staff.
2. Oneida County instituted a coordinated process where City of Utica code officers and County lead inspectors used common software to document inspections and link inspection data between the programs. By the end of Year Two, the grantee had concluded a contract with the City whereby PHL 1370-a(3), with its substantially higher fines, will be included in citations issued by codes officers.
3. Dutchess County used an approach similar to Monroe County, but without the mechanisms to enforce required lead remediation provided by the Rochester ordinance. City of Poughkeepsie building inspectors perform visual assessments of deteriorated paint in the course of their inspections for renewal of Rental Certificate of Occupancy, building permits, and housing code violation complaint investigations. Under the City's contract with the grantee, the building inspectors will perform visual assessments of deteriorated interior and exterior paint for units in target areas they had already planned to inspect. They will note the deteriorated paint on the Property Maintenance Form provided to the owner (the statement of required repairs). The inspectors will also provide the owner with lead educational information and refer them to the grantee to enroll in LSWP training. The grantee will provide the building inspectors with the names of those trained, so that they can then observe whether LSWP were used during the required repairs. After final inspection, owners will be requested to contact the grantee to perform dust wipe clearance. Noncompliant owners will be referred to the grantee for a full LBP risk assessment, followed by issuance of a Notice and Demand.

In addition, many grantees commonly display literature on lead poisoning prevention at building permits offices; some have also begun to investigate ways to highlight the need for use of LSWP when electronically generating permits for pre-1978 units .

Table 4.2 provides more detailed examples of partnerships with governmental, social service, or housing development agencies.

Table 4.2. Examples of Commitments between Agencies, Year Two

| County | Nature of the Commitment |
|----------------------|--|
| Albany | Developed MOU for City of Albany Code Enforcement to revoke Rental Certificate of Occupancy if repairs to occupied units are not made in a timely manner. The Albany County Department of Law has approved letters to begin enforcement actions against landlords who have been unresponsive. The Albany and Schenectady grantees coordinate their monthly LSWP trainings, offering trainings at each location on alternate months. |
| Broome | Contracted with Cornell Cooperative Extension to administer HEPA vacuum loaner program. |
| Chautauqua | Tri-County Tobacco Control has agreed to promote LPPP in its Smoke-Free Multi-Dwelling Housing Programs for landlords. Chautauqua County Lead Task Force meets monthly and includes Chautauqua Opportunities, Inc., Jamestown Housing Authority, Joint Neighborhood Project (a community- and Hispanic-outreach and social service agency), Jamestown Department of Development, and Chautauqua Home Rehabilitation and Improvement Corp. Joint Neighborhood Project was contracted to provide cleaning classes to clients of the program. |
| Dutchess | City of Poughkeepsie Code Enforcement will cite deteriorated paint in pre-1978 housing and will require remediation. If a property owner fails to remediate the unit, it will be referred to LPPP for a full LBP risk assessment and Notice and Demand. The contract for services between City and County has been approved. |
| Erie | Trained administrators and staff of all Head Start programs on lead poisoning. HNP staff now follow up with home visits after LPPP has completed its block assessment. HNP staff report better access to units after LPPP has been in the area. HNP continues to refer to LPPP any units where deteriorated paint is observed and children aged six or under are present. Network agreements were established with Community Foundation for Greater Buffalo, Western New York Coalition to Prevent Lead Poisoning, Environmental Education Associates (EEA), Western New York Lead Resource Center, and Block Clubs & Neighborhoods Associations-EC Inc. |
| Monroe | Funds two City code inspectors in target areas to do visual assessments and dust tests. Contracted with Cornell Cooperative Extension Services to provide LSWP training. |
| New York City | Has pre-existing MOU with the City's Department of Housing Preservation and Development (HPD) and the City's Housing Authority (NYCHA) to identify Section 8 housing where LPPP has identified LBP hazards. Expanded existing collaboration with the Brooklyn District Public Health Office (DPHO) Newborn Home Visiting Program to the Bronx and Manhattan. Continues to collaborate with the Asthma Initiative, Nurse Family Partnership (NFP), and Window Falls Prevention Program. Developed a brochure of funding sources, including low-interest loans and a New York City tax incentive program in collaboration with HPD and Neighborhood Housing Services. Conducted training for 19 providers of the NYC Department of Health and Mental Hygiene Bureau of Child Care. |
| Oneida | Has MOU with City of Utica LHC grant that includes a faxed referral process that protects client privacy yet adds verified income-eligible rental units to the LHC wait list. City of Utica code officers and County lead inspectors used common software to document inspections and link inspection data between the programs. Oneida works with the City of Utica to insure that, when any housing units are sold through a foreclosure process, the prospective owner receives information on past lead hazards and information on LSWP and LPPP offerings, including the availability of the window replacement classes. |
| Onondaga | Extended to Child Protective Services and rent-subsidy programs the existing agreement with Department of Social Service (DSS) to place foster care children age seven or under in lead-safe homes. Code Enforcement has modified its inspection form for properties that require a security deposit from DSS to indicate interior/exterior chipping or peeling paint. This information allows the DSS to refer these units to the grantee for a lead inspection. Grantee has also secured continuing education credits for code enforcement officers who attend an eight-hour LSWP training. This approval has been extended statewide. |
| Orange | Code inspectors and grantee staff were trained as LSWP trainers and also conduct joint visits with outreach staff from Healthy Neighborhoods Program. Through Lead Safe |

| | |
|--------------------|---|
| | Orange/HUD LHC grant, the grantee secured MOU with the cities of Newburgh and Middletown (in anticipation of the Year Three expansion into Middletown). These reciprocal agreements let the grantee access the outcomes of referrals to Code Enforcement including properties abated correctly as well as those condemned. MOU with Middletown Community Health Center and the Greater Hudson Valley Family Health Center, Inc. in Newburgh to provide referrals from their patient bases who reside in the targeted census tracks, and provide a sliding scale fee schedule. |
| Schenectady | MOU underway with City Mission to provide emergency lead-safe relocation housing. |
| Westchester | Regular meetings with Lead-Safe Westchester (HUD-funded lead hazard control grant program). The Initiative also refers observed structural deficiencies to the Yonkers Building Department and observed fire hazards to the Yonkers Fire Department for further investigation. Has established a referral process for the Westchester County Nursing program and WIC for grantee to inspect units with newborns. |

Challenges and Setbacks

Grantees experienced some challenges and setbacks:

1. **Resource shortages.** Budget cutbacks and emerging public health threats led to coordination challenges. For example, in New York City, an increased demand for HPD response to complaints of lack of heat or hot water in the fall and winter left the NYC LPPP to shoulder more of the referrals for peeling paint from the DPHO Newborn Home Visiting Program. The onset of H1N1 flu forced many health department staff during the prime outreach months of May to June to redirect the activities of nurses, investigative staff, and outreach workers. Budget cutbacks in other related programs also meant that partner agency staff were not as available for meetings, planning sessions, or other efforts. Both Broome and Chautauqua counties eventually abandoned efforts to prepare HUD LHC grant applications this year when they found that they and their counterparts in other programs did not have the time to complete the application.
2. **Information technology.** One of the less obvious but ultimately critical ingredients for program success is the ability to share data effectively across agencies. This year, NCHH supported Monroe County’s efforts to migrate data on inspections paid for by the LPPP from the City Code Inspector’s data system into the Microsoft Access database. This enabled the County to show the full impact of its participation in the LPPP, rather than just the units where the Health Department collected the data itself. New York City also reported that their ability to retrieve data from the HPD system was time consuming and required additional effort. Many grantees reported difficulties tracking the units they refer to their local LHC grants.

Expanded Infrastructure and Efforts to Promote Sustainability

Year Two marked efforts to expand local infrastructure and increase sustainability through the development of lead-safe housing registries, increased access to data between programs, and efforts to engage local elected leaders, judges, and prosecutors in primary prevention (see Table 4.3).

Table 4.3. Grantee Approaches to Building Sustainability for Primary Prevention, Year Two

| Strategies | Renewing Grantees | | | | | | | New Grantees | | | | |
|--|-------------------|------|--------|-----|--------|----------|--------|--------------|--------|------------|----------|-------------|
| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | Broome | Chautauqua | Dutchess | Schenectady |
| Create a lead-safe housing directory. | 3 | NA | X* | NA | X | X* | NA | X | 3 | X* | 3 | X |
| Improve IT capacity to merge or create a unified database; purchase/use software to identify property owners from tax rolls. | | | X | X | X | | X | 3 | X | | | |
| Modify local health, housing, nuisance, or sanitary code to require use of LSWP; ban use of prohibited LSWP; or cite PHL regarding “conditions conducive to lead poisoning.” | | X, 3 | X* | 3 | 3 | | | NA | NA | | | |
| Modify rental Certificate of Occupancy/building permit process to address lead issues. | | | | NA | | | NA | | NA | | | NA |
| Make presentations to elected officials. | | | NA | | | | | | | | | |
| Make presentations to judges, prosecutors, hearing officers. | | | NA | | | | NA | | | | | |
| Initiate in-house evaluations of LPPP strategies through focus groups or additional research. | | | | | | | | | | | | |

X = Have done or are doing by the end of Year Two.

3 = Included in Year Three work plan (October 1, 2009 – September 30, 2010).

NA = Had no plans to do this in either Year Two or Year Three.

* The City of Rochester’s Lead Ordinance is evaluated yearly; Monroe County did not use grant funds for evaluation or the lead safe homes registry; New York City will offer one- to two-hour trainings for all owners/tenants who receive notices (COTR) to remediate and will consider making this training a mandatory part of COTR compliance; and Chautauqua County’s existing lead-safe housing registry was expanded to include units remediated under its HUD grant. In Year Two, Onondaga investigated creating a lead-safe housing registry but decided not to continue with this effort in Year Three.

Noteworthy strategies include the following:

1. **Lead-safe housing registries.** Most counties have developed or are considering methods to establish lead-safe housing registries: In Year Three, five counties that had registries in Year Two expect to continue them, and three counties expect to create new registries. Lead-safe housing registries enable renters and purchasers to identify units that are free of lead-based paint hazards. Such registries require plans for regular updates, and thus additional IT capacity. Jurisdictions must also evaluate their potential liability for the information provided, since conditions in the units may change after clearance has been documented. Nonetheless, this

provides a means of stimulating public demand for lead-safe units, and provides a valuable tool to community-based organizations to increase the supply of lead-safe housing.

2. **Certificates of Occupancy.** Many localities have rental Certificate of Occupancy programs. Some require routine inspections every three to five years; others may grant a Certificate of Occupancy that extends for a longer period, regardless of turnover. Antiquated record-keeping systems and local reluctance to invest in system improvements in the face of ongoing budget cuts present challenges to linking certificates of occupancy to lead-based paint inspections. Oneida and Erie counties have had success applying for grants for data-sharing and technology improvements through public and private funders.
3. **Outreach to elected officials and the legal community.** Grantees reported that in retrospect they would like to have made a more concerted effort to keep partner organizations and local officials briefed of the needs and outcomes of the LPPP throughout the year. Local prosecutors, legal departments, hearing officers, and judges often need additional time and briefings to understand the nuances of primary prevention, particularly in communities where lead litigation is frequent.

Implications for Program Design

The following are considerations for grantees as they develop their work plans for future years of the LPPP:

1. Conduct outreach and education to assure high level political will among department heads and elected officials to support the LPPP.
2. Encourage agency partners in housing and other areas to participate in creating lead-safe housing by fully exercising their own agencies' mechanisms to encourage or sanction owners to make their properties lead safe.
3. Continue to identify areas where they can streamline scheduling, training, and purchasing across partner agencies.
4. Identify where they will get the data required for inclusion in the Microsoft Access database or other state-required grant system.
5. Assess IT capacity to link and share data across agencies. If such capacity does not exist, explore using college interns or other staff to support existing IT staff in this regard.
6. Plan and budget for computer upgrades both internally and for partner organizations.
7. Identify private, local, state, or regional grants to upgrade equipment and software.

5. PROMOTING INTERVENTIONS

This chapter addresses the following general evaluation questions:

1. What issues did grantees encounter in gaining access to housing units and how did they address them?
2. What investigation protocols did grantees use and how did they address implementation issues they encountered?
3. How many housing units were investigated, determined to have hazards, and cleared of hazards?
4. What actions did grantees take to ensure remediation of identified lead hazards using lead-safe work practices and confirm clearance?
5. How were children in the housing units affected by activities of the LPPP? What actions have grantees taken to increase screening rates and follow up with children with EBLLs?
6. What actions have grantees taken to evaluate and report the costs and benefits of the housing interventions and, where analyses have been done, what have they found?

This chapter also includes a description of the cumulative activities and results over Years One and Two.

Methodology

This chapter's description of grantees' interventions to create lead-safe housing units is based on two general sources: (1) narrative descriptions in grantee work plans and quarterly reports and (2) unit-based quantitative data and quantitative summaries provided by grantees. Grantees used a Microsoft Access database to enter data about each housing unit. At the end of the third quarter and again at the end of Year Two, they sent that data base to NCHH for analysis. Grantees used the Microsoft Access database or a system of their choice to generate the quarterly summaries. NCHH provided a common set of definitions to ensure consistency.

Units described in this chapter include units first visited in Year Two and units that were first visited in Year One and carried over into Year Two for remediation or clearance. The 711 housing units that were investigated in Year One and found to have no hazards or were cleared of all hazards in that year are excluded from analysis in this report, except in the description of cumulative activities and results over the two years. Some analyses also include 141 units in the database that have incomplete information on investigation but are being monitored by grantees to ensure remediation and clearance. Table and figure notes describe these distinctions in more detail.

Readers should note that, in Year Two, NCHH revised the quarterly reports and modified the Microsoft Access database to reflect grantee feedback on data they felt they could or should collect. As a result, some of the questions are not comparable between years (e.g., whether educational materials were provided at a visit, type of investigation, type of hazards identified, and whether interior or exterior clearance was achieved). To address

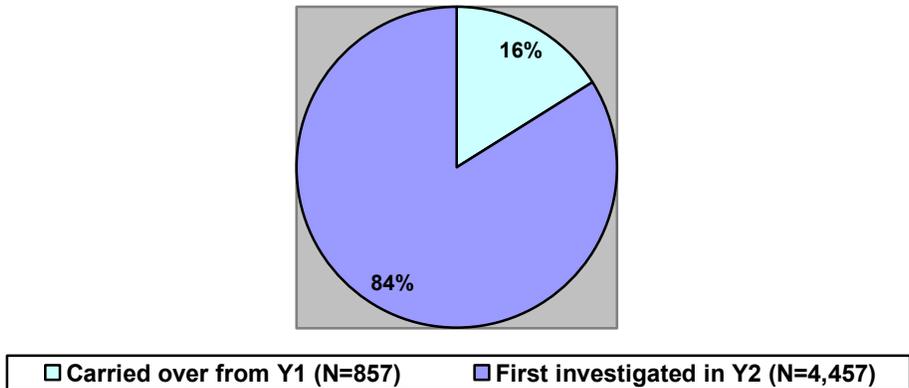
this issue, NCHH recoded data from Year One units with continuing activities in Year Two to fit with the new categories and gave grantees an opportunity to correct any coding errors.^{vi} Grantees were also encouraged to update the Microsoft Access database information previously supplied about units visited in Year One.^{vii}

Access to Units

Grantees first investigated or carried over from Year One a total of 5,314 housing units during this report period. Of these units, 4,457 were first visited in Year Two and 857 were carried over from Year One (see Figures 5.1 and 5.2). Of the 12 grantees, Monroe reported by far the most investigations: 2,411 (45 percent) of the total. Erie, Monroe, New York City, and Westchester together accounted for 4,436 (83 percent) of the units investigated (see Table C-1 in Appendix C).^{viii} Renewing grantees carried out most of the Year Two investigations. The number of units first investigated in Year Two by renewing grantees ranged from Orange County’s 102 units to Monroe’s 2,238.

Grantees investigated more than twice as many housing units in Year Two as they had anticipated being able to investigate.

Figure 5.1. Percentage of Units First Investigated or with Continuing Work in Year Two, by Year of Investigation (N=5,314)



Source: Unit-based data for all units first investigated in Year Two or carried over from Year One.

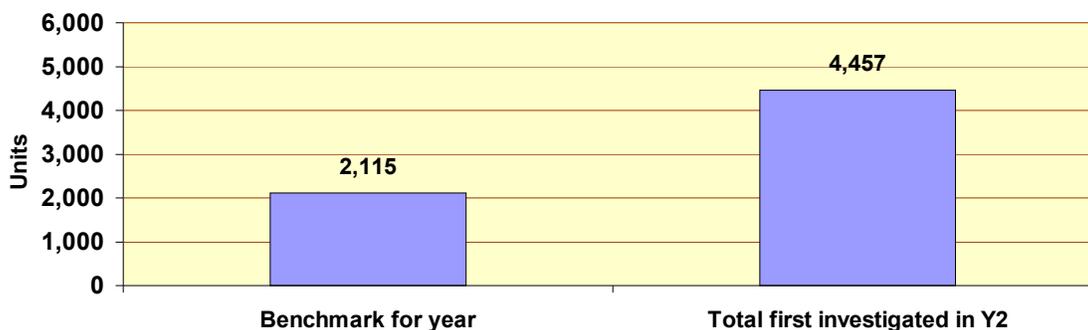
Note: There are an additional 141 units in the database with incomplete information on investigation. For those units, the year of investigation is unknown.

^{vi} Due to variations in the way that Year One units were re-coded into the Year Two database, it is possible that (1) a unit with confirmed hazards might not have been reported as having potential hazards and (2) a unit might have been reported with potential hazards but not confirmed hazards. Overall, the number of these cases is small; the units are included to give the most comprehensive perspective on Year Two activities. In addition, hazard information is available for 141 units where the grantee did not provide complete investigation information.

^{vii} Because of the updated information entered by grantees, current summaries of activities in Year One will not match data reported in the final Year One report. For that report, NCHH relied on data as it existed in the database as of September 30, 2008.

^{viii} New York City reported an additional 197 units referred to the Department of Housing Preservation and Development as a result of District Public Health Office visits coordinated with but not funded by LPPP.

Figure 5.2. Comparison of Investigation Benchmarks in Grantee Work Plans with Total Number Investigated, Year Two



*Source: Grantee work plans and unit-based data for units first investigated in Year Two.
 Note: Ten of the 12 grantees set a benchmark for number of investigations for Year Two.*

Some grantees chose a two-step process for gaining access to units: first, an informational home visit, and then a second visit for an LBP investigation. Others conducted the investigation at the first visit.^{ix}

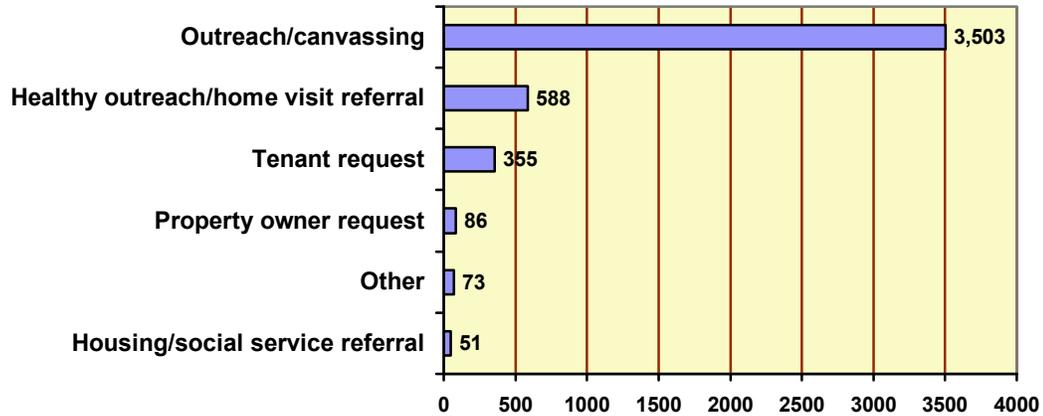
Seventy-nine percent (3,503) of the 4,457 units first investigated in Year Two were reached through the program's outreach and canvassing efforts.

Seven of the twelve grantees used incentives, such as cleaning supplies, educational coloring books and crayons for the children, and smoke detectors, as a way to facilitate access to units in some of their investigations. The overall number of units that received incentives, however, was not large: Of the 4,418 units investigated in Year Two for which grantees answered the question about incentives, 12 percent (518) of the units received incentives. Oneida and Westchester counties gave the largest number of incentives: Oneida gave incentives to 91% (150) of the units investigated, while Westchester gave them to 40% (198) of the units investigated. Of the two grantees that conducted the most investigations (Monroe and New York City), New York City gave no incentives and Monroe gave incentives to only 2% (58) of those investigated.

As Figure 5.3 shows, most of the units first investigated in Year Two were reached through the LPPP's outreach and canvassing efforts, while referrals and tenant requests were associated with relatively few of those investigated. However, referrals and tenant requests were associated with higher percentages of units with all confirmed hazards cleared than of all units investigated (see Appendix C, Figure C.1).

^{ix} Units that received only educational materials were not counted as investigated.

Figure 5.3. Number of Units First Investigated in Year Two as a Result of Different Initiatives (N=4,457)



Source: Unit-based data for units first investigated in Year Two.

Note: Multiple sources of referral could apply in any single investigation.

When asked specifically about the effectiveness of door-to-door canvass versus reliance on referrals or other means of outreach to gain access (such as letters, flyers, or advertisements), grantees had mixed reactions. A brief summary follows:

1. Monroe County dropped its Year One Lead-Safe Saturday canvass strategy.
2. Albany County expanded its canvass activities to an additional zip code.
3. Orange County employed a door-to-door canvass strategy in Year One in conjunction with other Lead Safe Orange partner organizations. This included efforts to schedule inspections on a more spur-of-the-moment basis for residents approached on street corners and bus stops whenever they were doing inspections on a street in the target area. In Year Two, canvassing continued to occur, but more effort was devoted to recruitment through regularly scheduled recruitment and information days held in partner agencies.
4. Westchester, Orange, and Erie counties continued to have their inspectors available in the neighborhoods whenever canvass by HNP occurred so as to take advantage of opportunities to investigate. Erie County also took exterior XRF readings while canvassing high-risk neighborhoods and required repair of all violations identified.
5. Onondaga County sent letters directly to the 200-300 property owners in the target census block, identifying their addresses through the electronic real property tax database. The letter requested owners to notify the LPPP if the units were owner-occupied (not part of the LPPP's target group) or already remediated through the efforts of the Syracuse LHC grant or the Home HeadQuarters community development corporation so that they could be removed from further contacts by the program. Ninety owners responded and 28 properties were referred for inspection, including a number of multifamily units.

An ongoing issue for grantees is how to get into units, especially for the purpose of additional inspection or follow up on work plan progress after notices were issued. Active refusal to allow entry does not appear to be the main problem; Chapters 2 and 4 have described new initiatives or authority to enter when grantees encounter refusal. The more common problem, however, is tenant or landlord failure to keep scheduled appointments. Several grantees note that this occurs more frequently during the fall and winter, when fewer residents are on the street and can be approached directly by LPPP staff to schedule or reschedule. Erie County noted that late afternoon appointments may help for those tenants who work during the day. Albany County attempts to notify property owners when inspections are scheduled. To avoid delays, however, the program worked with the Department of Law to allow inspections at the time of canvass activities with notification to owners as soon as the inspection has occurred. None of the grantees have indicated that tenant concerns about the threat of eviction by landlords if they cooperate with the LPPP were a major obstacle to entry, but Westchester noted that some tenants may have been reluctant to complete appointments after they spoke to their landlords.

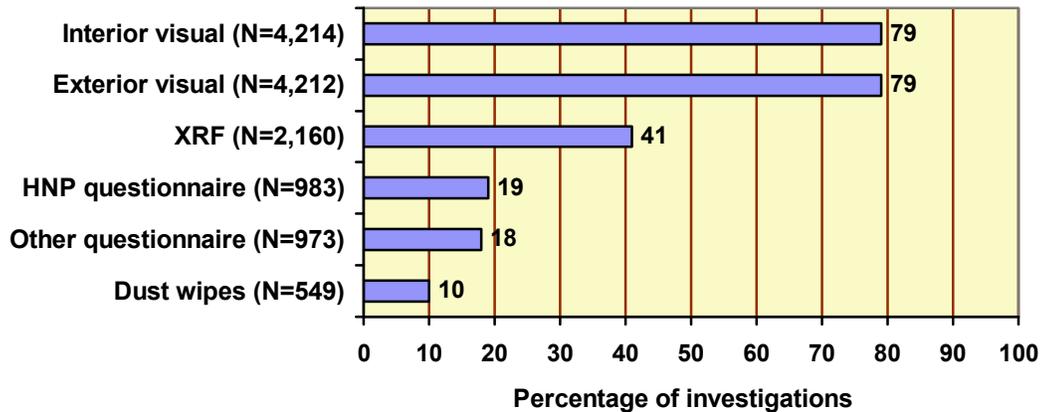
Investigation Protocols

Grantees used a variety of investigative techniques, with interior and exterior visual assessments most frequently mentioned (see Figure 5.4). The only units counted as “investigated” were those in which an assessment questionnaire or techniques such as visual assessment, XRF, or dust or soil sampling were used. If a unit received only educational materials, that unit was not counted as investigated. Most units that were investigated with an assessment questionnaire were also investigated using some other technique.^x

Counties differed in their investigation approaches. Most still used a visual assessment, followed by XRF readings or dust wipes. Erie County expanded its Year One strategy of performing block-by-block visual assessments: It now conducts XRF measurements on all deteriorated exterior surfaces whenever a visual assessment found deteriorated paint on the front of the unit and issues a Notice and Demand based strictly on the exterior assessment. Most counties (eight) cite any deteriorated paint. Four counties (Broome, Chautauqua, Monroe, and Onondaga) exempt interior deteriorated paint below a *de minimis* of two square feet. Dust wipe samples are rarely part of initial investigations, except for Broome, Oneida, and Monroe (as required under local ordinance); Onondaga began this practice in Year Two.

^x One unit in Orange County was investigated using only a Healthy Neighborhoods Program questionnaire.

Figure 5.4. Percentage of Investigations in Which Each Investigative Activity Was Used (N=5,314)



Source: Unit-based data for all units first investigated in Year Two or carried over from Year One.

Note: Does not sum to 100 percent because multiple investigative activities could be used in any single investigation.

XRF testing was reported for about a third (41 percent) of the units investigated. An XRF reading was much more likely to have been used, however, in units found to have hazards (72 percent) and in units cleared of all confirmed hazards (82 percent). (See Appendix C, Figure C-2.)

Investigation and Clearance Results

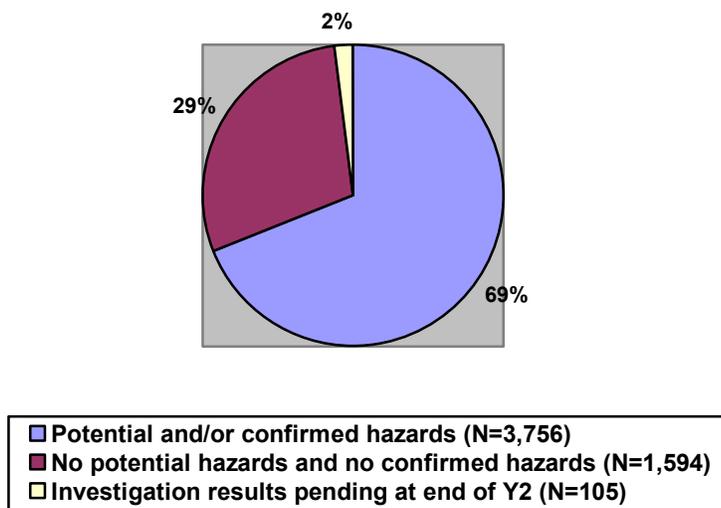
Of the 5,455 housing units that grantees first investigated in Year Two or followed from Year One to ensure remediation of hazards, 69 percent had potential and/or confirmed hazards (see Figure 5.5). Grantees reported 3,698 units with potential hazards^{xi} and 2,168 units with any confirmed hazards^{xii} (see Figure 5.6). Of all units carried over from Year One or investigated in Year Two, 888 units were cleared of all confirmed hazards.^{xiii} An additional 28 units were reported to be cleared of “potential” hazards without reporting whether the hazards were exterior or interior.

^{xi} A unit was coded as having a potential hazard if XRF readings or samples had been taken but results were pending, where deteriorated paint was observed on the visual assessment, or where deputized code inspectors found “conditions conducive to lead poisoning.” Some of these units were subsequently confirmed as having exterior hazards, interior hazards, or both; some were later found not to have confirmed hazards. In addition, units first described in the Microsoft Access database used for Year One were coded as “potential hazards” until grantees updated the database to clarify whether the hazards were exterior or interior.

^{xii} A unit was coded as having a confirmed exterior hazard if deteriorated paint was determined to contain LBP by XRF measurement or where a positive lead paint chip sample or soil sample over federal hazard levels was obtained. A unit with a confirmed interior hazard was one in which deteriorated paint was determined to contain LBP by XRF measurement or where a positive lead paint sample, dust wipe, or water sample was obtained.

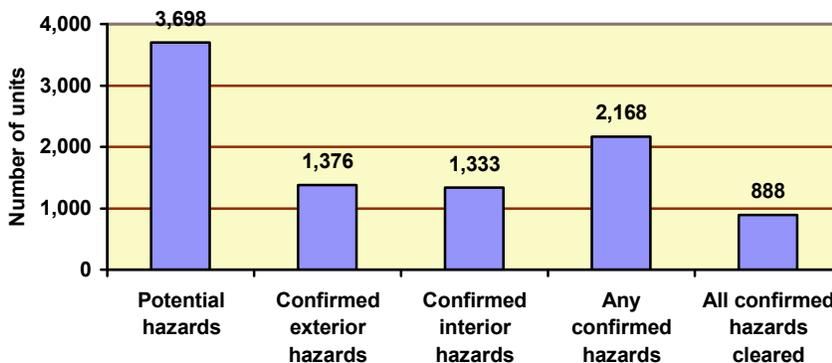
^{xiii} Many of the City-inspected units recorded in the Monroe County Year Two totals for investigations do not have associated clearance data. This represents a large number of all investigated units. The grantee will attempt to include clearance data in Year Three.

Figure 5.5. Hazard Status of All Units in Year Two (N=5,445)



Source: Unit-based data for all units in the Year Two database, including those where activity occurred in Year Two but information about the nature of the investigation activities is incomplete.

Figure 5.6. Potential and Confirmed Hazards and Hazards Cleared, all Units in Year Two (N=5,455)



Source: Unit-based data for all units in the Year Two database, including those where activity occurred in Year Two but information about the nature of the investigation activities is incomplete.

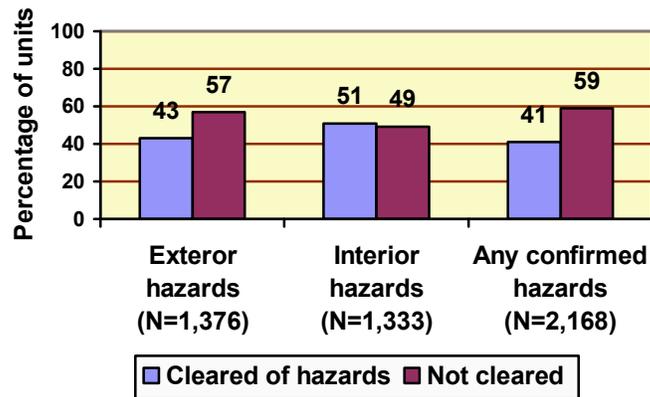
Note 1: Units not identified as having potential or confirmed hazards might have been coded “no,” “unknown,” or “not verified or still in progress” when data were provided.

Note 2: An additional 28 units in which hazards were not confirmed as either exterior or interior were reported cleared of hazards.

As Figure 5.7 shows, for all grantees combined, interior hazards were more likely to have been cleared during this period (51 percent) than were exterior hazards (43 percent). The combined grantee data, however, obscures large differences among grantees that may

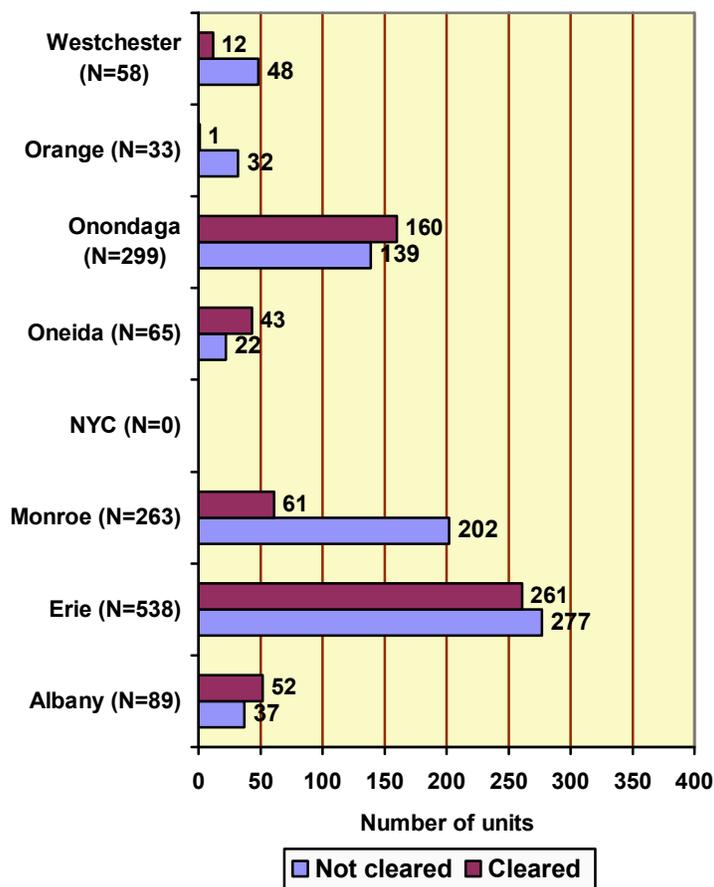
help to explain these differences. Grantees differed widely in the number of investigations conducted, the pattern of exterior and interior hazards identified, and their clearance rates for each kind of hazard (see Figure 5.8 and Figure 5.9 and Table C-1 in Appendix C). For example, New York City’s investigation protocol focused on interior rather than exterior hazards; it found, and cleared, the largest number of units with interior hazards. Erie County, on the other hand, focused more on exterior hazards and cleared the largest number of units with exterior hazards.

Figure 5.7. Percentage of Units with Exterior, Interior, or Any Confirmed Hazards by Clearance Status (N=5,455)



Source: Unit-based data for units in the Year Two database, including those where activity occurred in Year Two but information about the nature of the investigation activities is incomplete.

Figure 5.8. Clearance Status of Units with Confirmed Exterior Hazards, By Renewing Grantee, Year Two



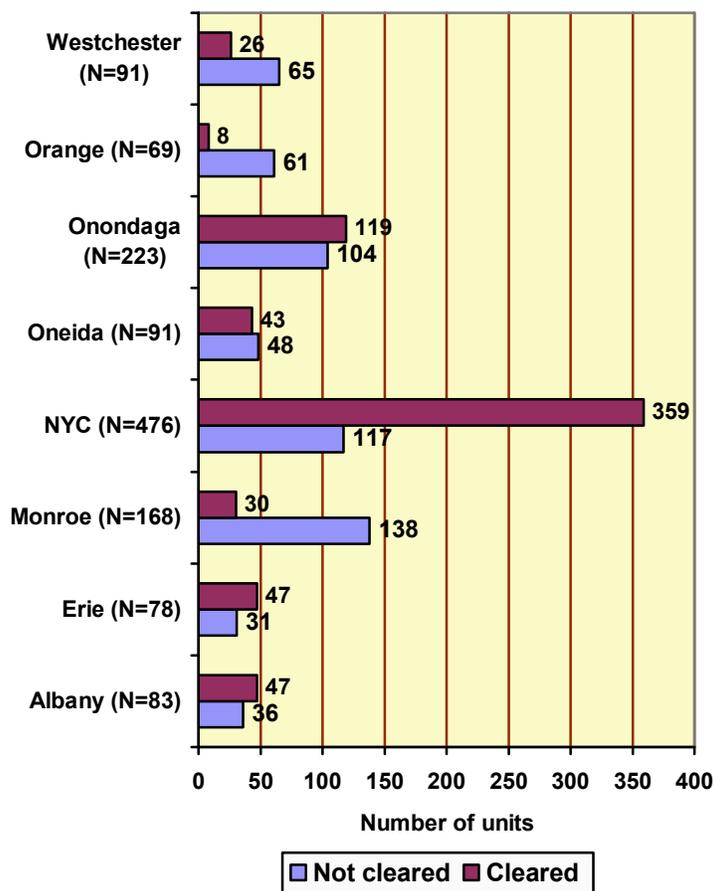
Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note 1: New grantees are not included in the figure due to the comparatively small number of housing units they investigated in Year Two.

Note 2: Some units not counted as having confirmed hazards at this time may be re-coded as having hazards later, once some hazards currently coded as “not verified or still in process” are resolved.

Note 3: The absence of exterior hazards in New York City is a result of their approach to investigations.

Figure 5.9. Clearance Status of Units with Confirmed Interior Hazards, By Renewing Grantee, Year Two



Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

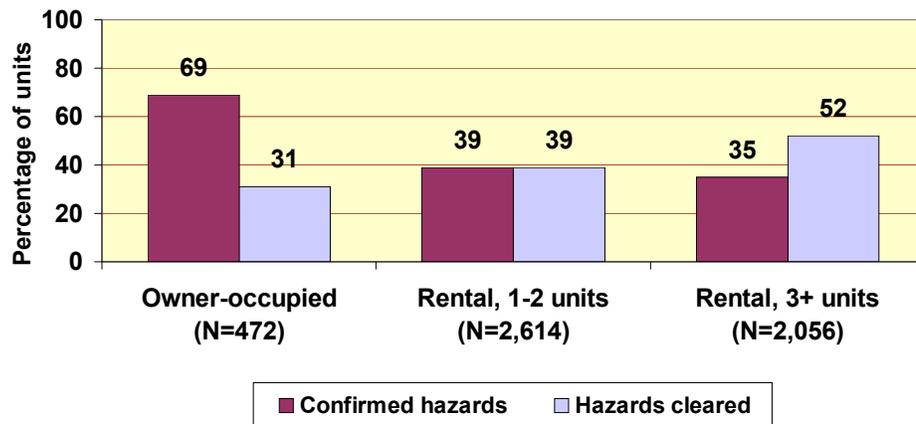
Note 1: New grantees are not included in the figure due to the comparatively small number of housing units they investigated in Year Two.

Note 2: Some units not counted as having confirmed hazards at this time may be re-coded as having hazards later, once some hazards currently coded as “not verified or still in process” are resolved.

Characteristics of Housing Units: Age, Occupancy, and Past History of EBLI Investigations

Most investigations occurred in rental properties: 91 percent (4,717) of the 5,189 investigated units for which tenure information was available. Erie County was an exception among the returning grantees: Almost half of its units investigated were owner-occupied. In Albany, Monroe, Oneida, and Onondaga counties, the largest percentage of units investigated was in rental properties of one or two units; New York City and Orange and Westchester counties reported more investigated units in larger rental properties (see Table C-2 in Appendix C). As Figure 5.10 shows, 52 percent of the units in the larger rental properties with hazards were cleared, compared to 39 percent of the smaller rental properties with hazards.

Figure 5.10. Percentage of Units Confirmed to Have Hazards and Cleared of Confirmed Hazards, by Building Type, Year Two

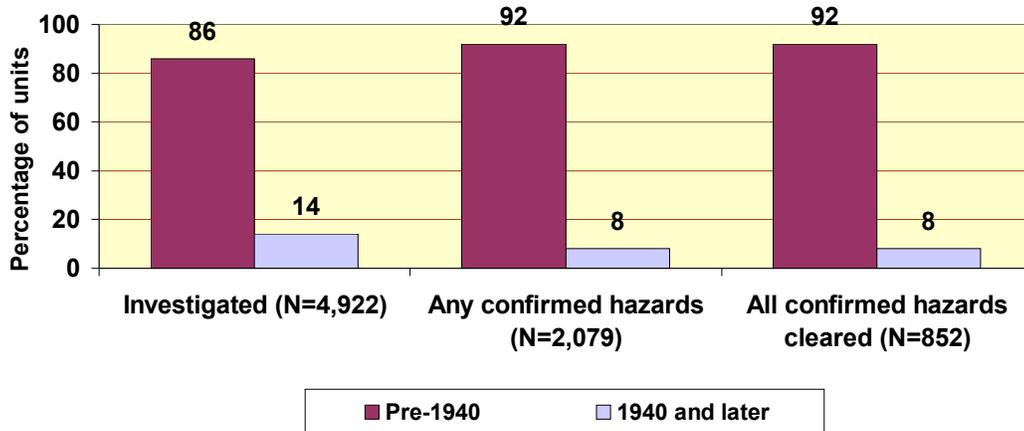


Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note: Excludes 47 investigated units in rental properties with an unknown number of units and 125 units for which building type was not reported.

Pre-1940 properties constituted the vast majority of properties investigated (86 percent) or found to have hazards and cleared (92 percent). (See Figure 5.11.) Few of those investigated (376, or 8 percent) had been built in 1960 or later.

Figure 5.11. Percentage of Units Investigated, Confirmed to Have Hazards and Cleared of Confirmed Hazards, by Building Age, Year Two



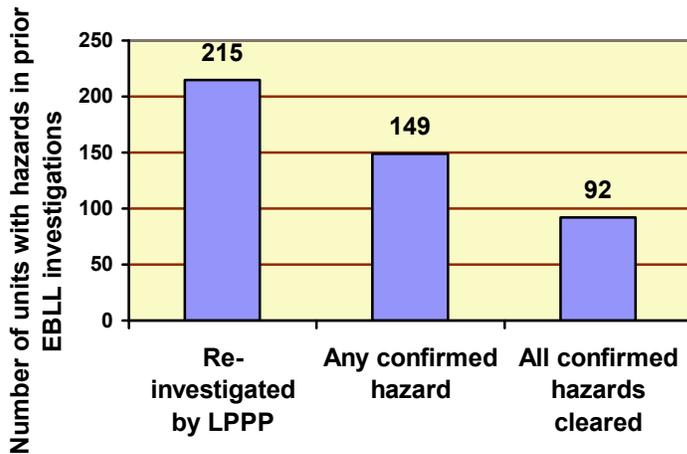
Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note: Excludes 392 investigated units where the age of property was unknown or not reported.

Relatively few of the units investigated (or their buildings) were known to have been the subject of a previous EBLI investigation where hazards were found (215 units, or 4 percent).^{xiv} Of those units where any confirmed hazards were found at the LPPP visit, previous EBLI investigations had found hazards in 149 units (or their buildings). These units or buildings were primarily in New York City (52), and Onondaga County (49). As of the end of Year Two, 92 of these had been cleared again (see Figure 5.12).

^{xiv} If the grantee did not know whether a specific unit had been the subject of a previous EBLI investigation, information about previous EBLI investigations at the rental property could be provided as an indicator of likely hazards at that unit in the past.

Figure 5.12. Previous EBLL Investigations that Found Hazards In Units Investigated, Confirmed to Have Hazards, and Cleared of Confirmed Hazards in Year Two



Source: Unit-based data. Includes all units (or their buildings) investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Since the LPPP requires grantees to perform or have the owner show evidence that dust wipe clearance tests were performed after remediation of interior hazards, this may result in a more lasting hazard reduction for children who live in these units in the future.

Notification and Enforcement

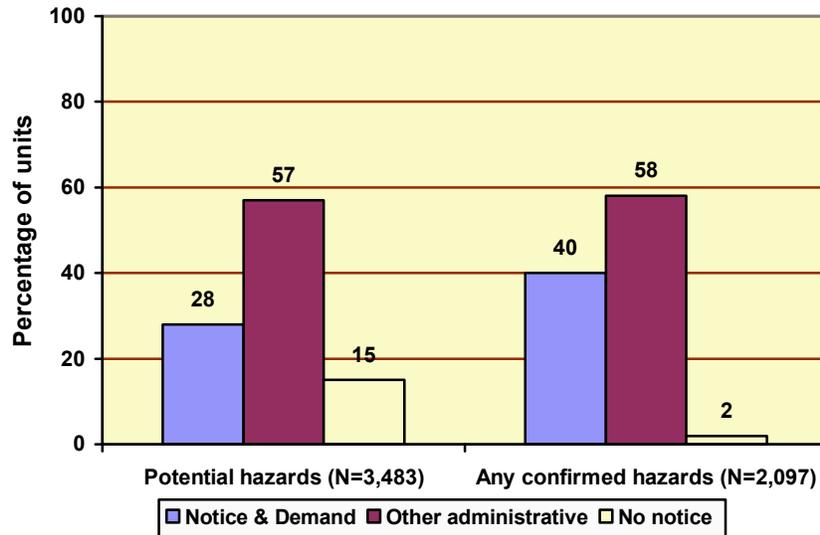
Grantees used different approaches to notifying owners of hazards that needed to be remediated (see Table C-3, Appendix C). Three of the four grantees with the largest number of units investigated (New York City and Monroe and Westchester counties) predominantly used administrative actions other than a Notice and Demand when potential hazards were found. Erie was the grantee that issued the most Notice and Demands for potential hazards.

In Year One, several grantees had experimented with first issuing a Notice of Information before moving to a Notice and Demand as a “gentler” means of bringing owners into compliance (e.g., Erie, Oneida, and Westchester counties). By Year Two, Erie had moved away from this strategy, and Westchester tightened the language of its enforcement letters. Another strategy to increase owner participation was to expand the period for compliance with LPPP notices. Onondaga County continued to experiment with the period of time given for compliance under its notice, extending the period from 60 days in Year One to 90 days in Year Two for properties where the owner voluntarily requested an inspection.

New Year Two grantees employed a variety of notification strategies. Only Schenectady used the Notice and Demand as its main form of notification. Broome and Chautauqua used a Letter of Notification as a first step; they will issue a Notice and Demand in subsequent attempts to achieve compliance, if necessary.

For all grantees combined, some administrative notification other than a Notice and Demand was most often used when potential hazards or confirmed hazards were identified (see Figure 5.13). The Notice and Demand mechanism was rarely used after the first notification of hazards.

Figure 5.13. First Approaches When Potential or Confirmed Hazards Were Found, Year Two



Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note: Excludes units for which information about first notice was not provided

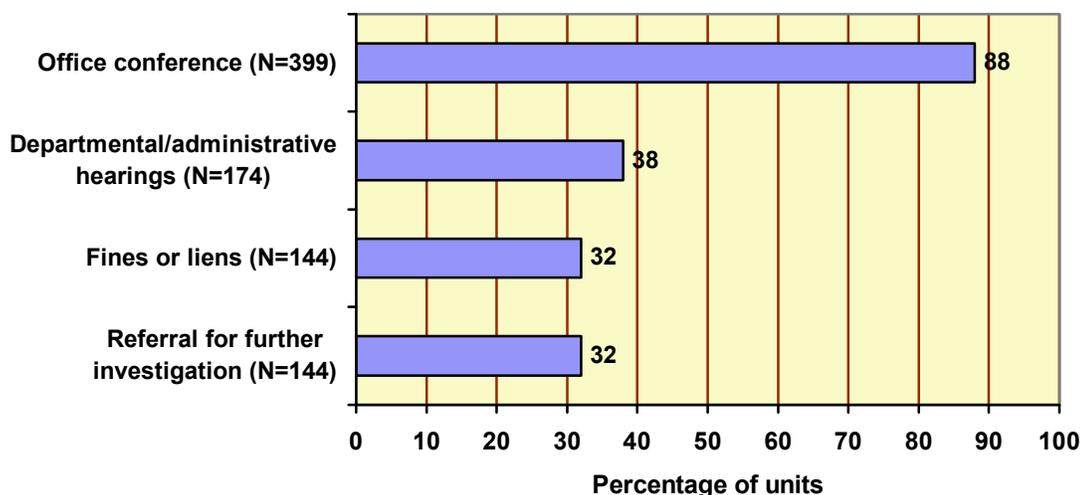
Grantees also used a variety of means to enforce requirements that owners remediate using lead-safe work practices, including a requirement that owner work plans state that LSWP will be used. Grantees reviewed the implementation of these LSWP practices when they monitored the job sites for compliance with work plans, and also when the owners received free LSWP training along with an incentive package of materials. Oneida instructed owners that if repairs are completed within 30 days using LSWP under their Notice of Information, they will avoid a fine for violating local codes, as well as further enforcement through Notice and Demand provisions. Albany County sent a revised Notice and Demand. If there was noncompliance, the grantee sent an “Order from the Commissioner.” If there was still noncompliance, owners were referred to the Albany County Legal Department, which would file an information sheet in criminal court if necessary. Many grantees offer free dust wipe clearance testing to the owners who remediate their units (e.g., Albany, Broome, Chautauqua, Erie, Monroe, Oneida, Onondaga, Schenectady, and Westchester; Orange does so for a limited group of owners eligible through an agreement with the Office of Community Development). Dutchess County plans to reimburse property owners for the cost of the first series of clearance tests. Free dust wipe clearances apply only to the first set of clearance tests performed. If the unit fails, the owner must cover the costs of additional testing.

Grantees mentioned several obstacles to enforcement:

1. **Lack of access to accurate lists of property owners and their addresses.** Many grantees expressed frustration about the delay posed when they needed to physically search property records or make calls to Tax Assessors or Property Clerks' Offices to get unit-by-unit information. Some grantees have begun use of electronic databases, such as Real Property. Westchester has begun to explore purchase of integrated systems, such as Lexis/Nexis, to track owners' addresses and other violations associated with the owner of the property.
2. **Perception that owners would abandon properties rather than make needed repairs.** Interviews with grantees indicated no increase in abandonment or arson in the target areas that could not be attributed to the declining economic circumstances of the community as a whole.
3. **Concern that primary prevention would add to the administrative costs for enforcement.** Grantees have not reported this as an issue so far. For the 888 units cleared of all confirmed hazards by the end of the year, about one-fourth of the units (245 units) required no further action beyond notification of the hazards. In order to enforce remediation and clearance in the 452 units that required further action, the most frequent actions were an additional office conference, a departmental or administrative hearing, referral for further investigation by code enforcement or other offices, or a fine or lien (see Figure 5.14).^{xv} Of these actions, grantees most frequently reported the need for additional office conferences (88 percent of those units that had additional actions). With Erie, Monroe, and Westchester counties and New York City having the largest number of cases, and with expansion of their communities of concern in Year Three, these grantees will have to monitor the administrative costs for enforcement carefully in Year Three.

^{xv} For 191 of the units with complete clearance (22 percent), grantees did not report whether additional actions beyond first notification were needed in order to achieve remediation.

Figure 5.14. Additional Enforcement Actions Needed to Achieve Remediation and Complete Clearance in Units With Confirmed Hazards, Year Two (N=452)



Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Time Required to Achieve Clearance of Hazards

The data suggest that the hazards in some units—perhaps those easiest to clear—have been addressed in timely fashion in Year Two, but some units—perhaps those where clearance is more of a challenge—are taking longer. For 867 cleared units with data on the time from investigation to clearance of all confirmed hazards, half were cleared within 80 days or fewer, with a mean of 108 days from investigation to clearance (see Table C-4, Appendix C). Of the 1,275 units with confirmed hazards that still had not been cleared of all hazards by the end of Year Two, 107 days had passed for half of the units since they had been investigated, with a mean of 140 days between the investigation and the end of the year. Thus these units are going to take longer to clear than the other units that cleared relatively quickly in Year Two.^{xvi}

For units with clearance and time data, the first notice about hazards was issued to half of the properties within two days after the investigation was conducted, with a mean number of days between investigation and notice of 11 days. There was, however, considerable difference across grantees in the length of time to notification (see Table C-5, Appendix C). Albany, Oneida, and Westchester took more days from investigation to first notice about hazards: medians of 13, 12, and 18, respectively, in comparison with the median of 2 days for all grantees.

^{xvi} Of all the returning grantees, Albany was the only one for which the length of time since investigation for units not yet cleared of hazards was less than the length of time for those cleared of hazards. The most likely explanation is that the cleared unit category contained units that were first vacant, and then re-occupied and cleared.

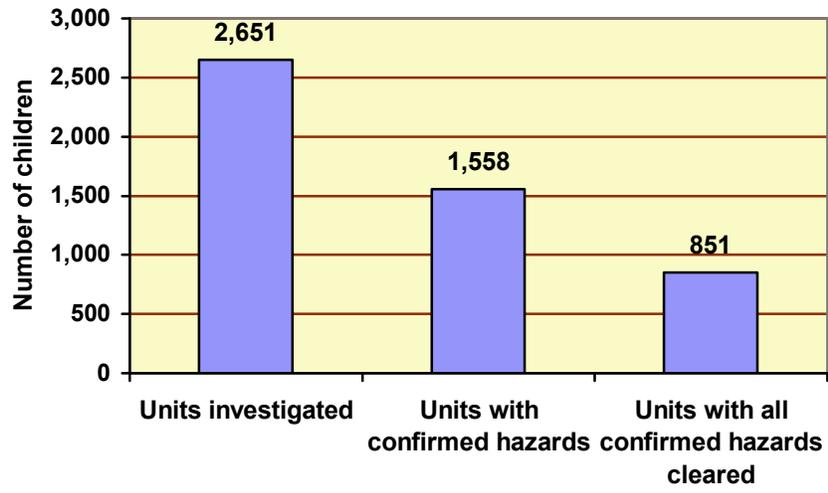
The time interval between investigation and clearance was slightly greater in situations where some additional enforcement action beyond the initial notice was required: a mean of 118 days and a median of 82 to clearance when additional actions were necessary compared with a mean of 96 days and a median of 84 when none were needed. There was little difference between units that were owner-occupied or renter-occupied: a mean of 113 and a median of 98 days to clearance in owner-occupied units, compared with a mean of 109 and a median 79 days in renter-occupied units.

Who Benefits: Children Affected by LPPP Activities

Children age six and under are those most vulnerable to neurodevelopmental damage from exposure to lead. The LPPP directly benefited 2,651 children six and under who lived in housing units that were investigated (see Figure 5.15). Of these, 1,558 lived in housing with confirmed hazards that needed action to prevent lead poisoning. By the end of the year, all hazards had been cleared from the units in which 851 children lived.

Year Two activities affected over 3,000 children through visits, investigations, and remediation efforts that made their parents or caregivers more aware of lead hazards and the need for remediation.

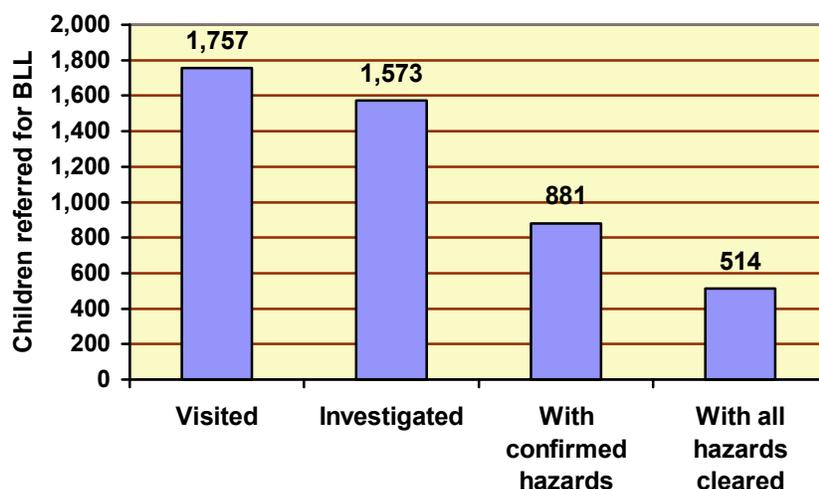
Figure 5.15. Number of Children in Units Investigated, in Units with Confirmed Hazards, and in Units with All Hazards Cleared, Year Two



Source: Unit-based data. Includes units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

In addition to the increased safety of the home, children benefited from referrals for BLL tests (see Figure 5.16). Grantees referred many of the children they encountered in the units for BLL tests; 57 percent of those children in units with hazards (881 of the 1,558) were referred for testing.

Figure 5.16. Number of Children Referred for BLL Test From Units with Different Characteristics, Year Two



Source: Unit-based data for units. Includes units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Most of the grantees rely on their Childhood Lead Poisoning Prevention Program (CLPPP) to follow up on children who have been referred for testing. Onondaga reported that, when it followed up to confirm whether children were tested, half of the 46 children referred had been tested. Additional efforts to follow up include Albany County’s Children’s Blood Lead Test Tracking Form that captures the child’s name, date of birth, recent lead test (yes or no), and elevated blood lead level (yes or no). The data captured are checked monthly to see if necessary testing is being performed; if not, letters are sent to the family reminding them to have the child tested. New York City uses its own lead registry, LeadQuest, to track the children’s blood lead levels.

In Year Three, some grantees have plans to use LeadCare II devices^{xvii} to increase screening rates in their community and referrals to the LPPP. Albany will complete an MOU with Koinonia Health Care, a community-based organization that would refer families that have a child with elevated lead levels, as condition of purchase of a LeadCare II. Oneida plans to use this approach in WIC clinics, to improve screening of high-risk children receiving WIC/Medicaid, and in other locations if funding can be obtained.

Cost of Program Strategies

Grantees provided some limited information about the cost and benefits of specific housing intervention strategies. Because of the differences in ways grantees presented their data and the differences in program strategies, however, it is difficult to summarize

^{xvii} The LeadCare II blood lead test system is a portable device that delivers quantitative blood-lead results within minutes with only a finger-stick sample of blood.

the average cost of activities or draw conclusions about the relative cost-effectiveness of different strategies. Moreover, these costs reflect the direct costs of providing specific services, not the costs of building partnerships and infrastructure to support those efforts. The Year Three evaluation may include some quantification of those costs.

All grantees except Erie and Schenectady quantified the cost of housing investigations (see Table 5.1).^{xviii}

Table 3.2. Grantees' Estimates of the Cost of Housing Investigations in Year Two

| County | Cost Estimates |
|----------------------|--|
| Albany | Average cost of field personnel per initial inspection = \$625.60 If follow-up inspections were added, cost per visit to a residence would be significantly lower. This cost was described as higher than in Year One due to the time demands made on inspectors for paper work and phone calls, follow-up inspections, and canvassing for referrals. |
| Broome | Cost per inspection (only dust wipes and initial home visit) = \$102.50 Cost per inspection (including XRF) = \$328 |
| Chautauqua | Cost per inspection = \$561 |
| Dutchess | Cost per investigation by City of Poughkeepsie code staff = \$382.25 |
| Monroe | Three different costs: <ul style="list-style-type: none"> • City-conducted visual inspection = \$66 • County and City visual and healthy home inspection with incentive package = \$168.82 • County XRF and healthy home inspection with incentive package = \$174.82 to \$399.32 <p>Concluded that the LPPP strategy was cheaper than the current County costs for investigations of units where children with EBLs reside.</p> |
| New York City | Cost per inspection = \$494.23 Services included in this cost: <ul style="list-style-type: none"> • Environmental investigations for lead based paint hazards; • Risk assessment; • Risk reduction education; • Visual assessment for other home health hazards; • Referrals to other city agencies or programs for services; and • Packets of educational materials. |
| Oneida | Cost per investigation = \$832 Cost reflects the following: <ul style="list-style-type: none"> • Initial dust sample testing (\$80) • Bringing unit to pass clearance standards (\$700) • Incentives (\$52) <p>Does not include staff time to conduct educational visits, sampling, and re-inspections</p> |
| Onondaga | Cost per inspection = \$466 Cost includes follow-up activities such as field conferences, re-checks, dust wipes, and hearings. |
| Orange | Cost per investigation with XRF = \$602.43 |
| Westchester | Cost per inspection = \$316.97 Cost is averaged over initial and follow-up inspections Cost of incentives per inspection = \$19.95 |

^{xviii} Although Schenectady did not provide a cost estimate for investigations, it reported an overall cost of \$85.45/hour for the two primary employees engaged in the program, excluding administrative costs. Most of the staff time was reported to be devoted to program set-up.

Onondaga’s analysis (see Appendix E) also found that different methods for finding properties to inspect (i.e., advertising, outreach/education, and proactive inspections) were similar in terms of their cost per referral, with a range of \$185 to \$313 per referral. As a result, the LPPP intends to continue using multiple approaches to promote the program, as well as maintain referral numbers throughout the year. Their analysis also confirmed the value of a new strategy of “pro-active inspections,” which has led to a higher rate in getting into properties.

Orange followed the cost benefit model first developed by Westchester in Year One (see Appendix E). The County concluded:

1. The benefits to Orange County and the Newburgh Enlarged City School District due to avoiding disabilities related to lead-poisoning was a savings of \$147,482 per child, or a total savings of \$39,604,557 if a single child under age six in each of 162 homes investigated in Year Two avoided the need for Special Education.
2. The estimated costs were \$.086 per family reached through advertising or outreach by Public Health Educators with an invitation for an inspection or an invitation to participate in LSWP training.

Cumulative Activities and Results over Years One and Two

Since the inception of the LPPP, almost 7,000 homes have been visited, and over 6,000 have been investigated (see Table 5.2). Almost 4,000 units were found to have potential and/or confirmed hazards; of those, 1,218 had already been cleared of all hazards by the end of Year Two.^{xix}

Almost 3,500 children have been directly affected by the LPPP through visits to their homes, and almost 2,000 have been referred for EBLL testing. In each year of the LPPP, visits have been predominantly to renter-occupied units in properties built before 1960.

^{xix} The number of units cleared of all hazards includes those cleared of all confirmed exterior and interior hazards and those cleared of other hazards where whether the hazard was exterior or interior was not specified.

Table 5.2. Combined Year One and Year Two Data about Activities of the LPPP

| | Units First Visited in Year One | Units First Visited in Year Two | Units Visited with Date Unknown | All Units Combined by the End of Year Two |
|---|---------------------------------|---------------------------------|---------------------------------|---|
| Access to housing units and results | | | | |
| Initial visit | 1,982 | 4,805 | 103 | 6,890 |
| Investigation | 1,506 | 4,459 | 60 | 6,025 |
| Potential and/or confirmed hazards | 804 | 3,081 | 24 | 3,909 |
| Cleared of all hazards | 385 | 830 | 3 | 1,218 |
| Contact with children | | | | |
| Housing units with children | 914 | 1,566 | 37 | 2,517 |
| Housing units with children referred for EBLL testing | 521 | 1,189 | 8 | 1,718 |
| Children in units visited | 1,351 | 2,071 | 55 | 3,477 |
| Children referred for EBLL testing | 644 | 1,318 | 10 | 1,972 |
| Characteristics of housing units: age of units | | | | |
| Built pre-1960 | 1,056 | 4,207 | 34 | 5,297 |
| Built 1960 or later | 201 | 412 | 13 | 626 |
| Characteristics of housing units: occupancy | | | | |
| Owner-occupied | 438 | 398 | 22 | 858 |
| Renter-occupied | 1,504 | 4,284 | 77 | 5,865 |
| Vacant | 12 | 89 | 2 | 103 |

Source: Unit-based data.

Note 1: Units found to have hazards in Year One might have been cleared of hazards in that year or carried over and cleared of hazards in Year Two.

Note 2: The increase from Year One to Year Two in number of units visited and investigated is an overstatement of the actual increase. In Year One, about 2,000 units in Monroe were visited and investigated by Rochester City inspectors with funds from the LPPP, but information about those units was not included in reports from the grantee.

Note 3: Where the grantee confirmed whether a unit had exterior and interior hazards, a unit was considered cleared of all hazards only if all confirmed hazards were cleared.

Implications for Program Design

Renewing grantees made significant progress in conducting investigations throughout the year and in clearing units first identified with hazards in Year One. New grantees trained staff as risk assessors and developed policies and procedures. The following are noteworthy findings to date:

1. Grantees have not met significant resistance from landlords or tenants who refuse entry to units, but they have encountered challenges in completing scheduled visits. Incentives for gaining entry appear helpful, but not essential, to completing investigations.
2. Referrals from other agencies may be most helpful when the program is first getting started or when it is attempting to reach hard-to-reach populations.

3. The expanded community outreach discussed in Chapter 3 is having benefits in investigations completed and owners' willingness to make repairs.
4. Centralized scheduling for inspectors and outreach workers, booking future appointments while staff are in the unit, and having inspectors "on call" for quick response may be promising models for reducing time to inspections.
5. Units in smaller properties were less likely to be cleared of hazards than were units in rental properties with more than two units. Many grantees are struggling to find funding for repairs, and small rental properties are often overlooked, either because the application process is onerous or because the owners fail to understand the benefits they achieve by making the unit lead-safe.

6. BUILDING LEAD-SAFE WORK PRACTICE WORKFORCE CAPACITY

This chapter addresses the following evaluation questions:

1. How many LSWP training sessions did the grantee sponsor, and how many individuals were trained?
 - a. Do grantees have access to the certified trainers needed under the Renovation, Remodeling, and Painting Rule, and if not, what can they do to build this access?
2. What have grantees done to encourage individuals to participate in LSWP training and to tailor incentives and timing of courses to suit different audiences?
 - a. If interest in LSWP training has increased compared to last year, what factors do grantees see as responsible for this increase?
3. What have grantees done to increase market demand for LSWP-trained contractors and to link contractors with employment?
 - a. Are grantees promoting the training on their websites?
 - b. How are grantees informing consumers about who has been trained?
4. What actions have grantees taken to build partnerships with health departments and community organizations to assess the current demand and supply for LSWP and to develop the capacity to deliver LSWP training?

LSWP Training Accomplishments

Failure to use LSWP during home renovations and repairs has long been associated with increased risk of lead exposure for young children. Grantees' recognition of the importance of safe renovation and repair techniques is shown in their requirement that LSWP be used in remediation of hazards and their provision of training to increase the skills of those involved in remediation.

Grantees exceeded their work plan benchmarks for training. Ten grantees estimated that they would conduct 86 to 98 training sessions, and three grantees estimated that they would train 406 individuals; other grantees did not set benchmarks for sessions or individuals to be trained. In comparison with their estimates, grantees reported conducting 115 sessions in which 1,812 individuals were trained.

Most of the individuals (1,646 of the 1,812) were trained using the 2003 EPA/HUD curriculum for LSWP or other HUD-approved curricula (see Table 6.1). Of those trained in that curriculum, Erie, Monroe, and New York City provided the majority of the training sessions (59) and the majority of the individuals trained (1,040). However, by the end of Year Two, two sessions of the newly approved Renovator curriculum had been offered. Oneida was the only grantee to provide lead-safe weatherization and lead abatement worker/supervisor training (see Table C-6 in Appendix C).

Most grantees contracted or worked collaboratively with private trainers to offer LSWP training. Environmental Education Associates and Cornell Cooperative Extension Services offered the majority of training sessions.

Table 6.1. LSWP Training Sessions and Individuals Trained by All Grantees, Year Two

| Type of Training | Number of Sessions | Number of Individuals Trained |
|---|--------------------|-------------------------------|
| EPA/HUD LSWP curriculum | 92 | 1,646 |
| EPA Renovator curriculum | 2 | 28 |
| LSWP presentations not using EPA/HUD curriculum | 5 | 11 |
| Lead-safe weatherization | 12 | 48 |
| EPA-certified abatement worker/supervisor | 4 | 79 |
| TOTAL | 115 | 1,812 |

Source: Quarterly reports.

Note: Some individuals might have received more than one kind of training.

Actions to Increase Participation in Training

Grantees used a number of strategies to promote demand for the courses (see Table 6.2). Most provided notices and flyers to target property owners or residents, integrated information on training as a part of remediation enforcement efforts, advertised training on their websites, and shared information with other community partners. All of the grantees provided some or all of the training free of charge. Several offered evening and weekend sessions. For example, New York City provided training on weekends, in English and Spanish, using low literacy materials. Some grantees also provided incentives (such as plastic sheeting, disposable coveralls, and clean-up supplies) if participants completed the training and performed work on their units under review by the grantee. The value of these incentives packages ranged from under \$200 to \$500. Some grantees also offered use of vacuums equipped with High-Efficiency Particulate Air (HEPA) filters to participants. As noted in Chapter 5, several grantees offered free clearance dust tests.

Grantees attributed increased interest in LSWP to a combination of factors:

1. Increased awareness of primary prevention due to the LPPP's ongoing lead education efforts and especially its efforts to publicize free training for landlords and contractors;
2. Availability of incentives for training, although the vast majority of individuals trained did not receive incentives;
3. Classes offered at convenient times and locations for contractors and residents, including evenings and weekends; and
4. More classes in languages other than English.

Table 6.2. Miscellaneous Features of Training

| Strategies | Renewing Grantees | | | | | | | | New Grantees | | | |
|---|-------------------|------|--------|------|--------|----------|---------|-------------|--------------|------------|----------|-------------|
| | Albany | Erie | Monroe | NYC* | Oneida | Onondaga | Orange | Westchester | Broome | Chautauqua | Dutchess | Schenectady |
| Training providers | | | | | | | | | | | | |
| Contractors. | X | X | X | X | X | X | X | X | X | X | X | X |
| In-house staff. | | 3 | | 3 | X | | X, 3 | X, 3 | X | NA | | |
| Actions to increase participation in training | | | | | | | | | | | | |
| Maintaining lists of trained contractors; e.g., on website. | | X | X | X | X | | 3 | 3 | X | | X | |
| Providing incentives for completing training. | X | X | X | NA | X | X | X | X* | X | X | NA | X |
| Informing property owners about training; e.g., when notified of hazards. | | | | | | | | | | | | |
| Publicizing availability of training within the community through flyers/PSAs/website, et cetera. | | | | | | | | | | | | |
| Publicizing availability of training through agency partners/community organizations. | | | | | | | | | | | | |
| Scheduling training at times and places most convenient to potential participants. | | | | | | | | | | | | |
| Providing some or all training free to participants. | | | | | | | | | | | | |

X = Have done or are doing as of end of Year Two.

3 = Included in Year Three work plan (October 1, 2009 – September 30, 2010).

NA = Had no plans to do this in either Year Two or Year Three

*Monroe did not use grant funds for website or scheduling; Westchester policy forbids funding of refreshments.

Challenges and Setbacks

Grantees reported a number of challenges in scheduling and filling classes:

1. **Variations in interest during the year.** Spring and summer represent the prime construction season: Grantees found that contractors were reluctant to release staff for training during that time. They reported an increase in the number of individuals trained in the last quarter of the year.
2. **Difficulty in filling classes.** Even when grantees offered incentives to participate, considerably more people registered for training than actually attended. Attrition increased grantees' costs, since contract obligations for space and trainers had to be met whether trainees attended or not.

3. **Delays in approval of contracts with trainers.** Onondaga County was unable to begin its LSWP trainings in Year One because it needed to offer a Request for Proposal (RFP) for the training, even though these sessions would have been offered as part of the pre-existing cycle of training sponsored by the Syracuse Lead Hazard Control Grant program.
4. **Complexity of scheduling night and weekend classes, especially in target neighborhoods.** This may require overtime for staff from the community-based organizations, health department, and translator services, as well as special arrangements for food, transportation, or child care.
5. **Competition for available trainers.** The lack of trainers occasionally resulted in smaller class sizes or limits on when the class could be scheduled.
6. **Trainees' low literacy levels.** Literacy levels may make it difficult for individuals to pass the test required at the end of the training. New York City has developed an exam at the fifth grade literacy level for both English- and Spanish-speakers.
7. **Requirements for physicals and medical approval for the use of respirators.** These requirements may discourage contractors from advanced training, such as training for lead abatement workers or lead abatement supervisors. Many small contractors do not provide health insurance, and the cost of physicals may be prohibitive for low-wage or sporadically employed workers. In August 2009, Oneida County sponsored a multi-agency health fair that provided low-cost physicals, pulmonary function testing, respirator fit testing, and blood lead testing to area low-income contractors in order to help them gain employment in the lead abatement field.

Actions to Increase Market Demand for LSWP-Trained Contractors

All grantees built the lead safety message into their media campaigns. Many grantee websites carry information about LSWP, and their staff routinely distribute pamphlets on lead safety at community events and health fairs. Other strategies for generating demand include the following:

1. New York City incorporated information on LSWP in HPD's new homeowner education programs and through Neighborhood Housing Services. Erie County established a similar arrangement with its Westside Neighborhood Housing Services program.
2. Monroe, Oneida, and Onondaga offered online registration services in addition to those offered by the trainers.
3. Albany and Schenectady partnered on training, offering a class each month in alternative locations accessible by residents of both counties.
4. New York City contacted over 52 community-based organizations in Year Two to publicize the existence of free training. The program recruited participants by distributing flyers at subway stations and bus stops, posting flyers in hardware stores participating in the Healthy Homes hardware store campaign, mailing and e-mailing flyers to local libraries and community-based organizations,

telephoning other organizations, and sending a mass-mailing to 460 licensed contractors in the targeted zip code and 15 of the surrounding zip codes. By the end of Year Two, at least 475 hardware stores were participating in the Healthy Homes hardware store campaign.

Potential Venues for LSWP Messages:

- Health department websites
- Local media (paid advertisements, DVDs, PSAs, want ads, yellow pages)
- Schools, continuing education programs, parents' associations
- Social service agencies, WIC centers
- Workforce development and job training centers
- Libraries
- Building permit offices
- Hardware stores and real estate offices
- Bus stops
- Check-cashing stores
- Child care and Head Start centers
- Community centers
- Homeowner education programs
- Refugee resettlement centers

5. Erie County participated in training sessions with new hires from the City of Buffalo – Mayor's Summer Youth Employment Program to create awareness of lead. Many of these youth work in maintenance or painting in the summer. In Year Three, it will partner with AmeriCorps to train disadvantaged youth in LSWP and oversee their work. The AmeriCorps program will be available to property owners who have received Notice and Demands from the LPPP.
6. Orange County coordinated trainings with its Lead Hazard Control grant program. Onondaga's courses are offered directly by the Syracuse LHC grant staff.
7. Monroe County sponsors training directly, in addition to other trainings sponsored by community groups and the City's LHC grant program.
8. Oneida County continues to hold workshops for landlords at area community colleges and targets landlords likely to rent to refugees for additional services, including the opportunity for LSWP training. Oneida also maintains a list of LSWP-trained contractors on its website.
9. Oneida County continues to link LSWP training to workforce development by contracting with its DSS Employment Unit, NYS Workforce Development, and Women's Resource Center to schedule a training to accommodate low-income job-seekers. Attendance at this training counted toward the trainee's employment search time.
10. Onondaga County explored ways to strengthen the marketing power of LSWP training in want ads. LSWP training sessions were also promoted through Jobs Plus, CNY Works, local towns and villages issuing building permits, and hardware stores. Descriptions of the training were also mailed with Section 8 checks.

11. Broome County created a lead-safe contractor listing on its website and sent informational letters to contractors about the upcoming Renovation, Repair, and Painting Rule requirements.

One promising strategy for building demand is the development of HEPA vacuum loaner programs, available to contractors, property owners, or tenants for lead-safe clean-up. Six counties have or will have such programs by the end of Year Two.

Implications for Program Design: Impact of the New Federal Lead Renovator Course Requirements on Primary Prevention

Grantees are concerned about their communities' lack of awareness of the new requirements.

As of 2010, all grantees face a new challenge. In April 2008, EPA issued its final Renovation, Repair, and Painting Rule, which creates a new certified Renovator curriculum to replace the current LSWP offerings.^{xx} Trainers for the Renovator Course are required to be accredited through EPA, unlike trainers for the earlier LSWP trainings. Individuals trained through other LSWP curricula will need to take a four-hour “refresher course” to be qualified under the new rule.

As of August 2009, all grantees believed that their communities did not know the Rule’s requirements, which potentially could require over 10,000 trainings nationally in the next year. Only one of the current trainers, Environmental Education Associates, had received EPA approval as a certified training firm as of the end of August. (NCHH has also acquired this accreditation.) Since that time, Albany County’s Cornell Cooperative Extension has also applied for accreditation. New York City was the only grantee that believed it would be able to handle demand through its current infrastructure of trainers.

To support implementation of the Rule in their training plans for Year Three, grantees are considering:

1. Developing regional cooperative arrangements through community colleges, BOCES, and local workforce development initiatives;
2. Scheduling training far in advance to lock in available trainers; and
3. Hosting a combination of LSWP trainings and Renovator trainings in the next year.

Grantees also considered an educational campaign on the Rule targeted not only to contractors but to the community as a whole to be a high priority, and one where state and federal agencies needed to provide more support to them. Most expressed concern that they did not have the resources or knowledge to take on this issue on their own.

^{xx}For details of the Rule, see <http://www.epa.gov/lead/pubs/renovation.htm>.

7. SECURING LEAD HAZARD CONTROL FUNDS

Evaluation questions addressed in this section include:

1. What financing options or agreements with other agencies have grantees identified to help property owners with remediation efforts?
 - a. What barriers have the grantees encountered with respect to owners' willingness to apply for funding?
2. Have grantees begun to successfully partner with the housing and community development agencies to identify properties in the target areas that are on weatherization, CDBG, or Section 8 wait lists, and to see that these units are given higher priority for funding? What obstacles have they encountered in this effort?
3. How many grantees have partnered with workforce development or other agencies receiving economic stimulus funds?
4. To what extent have grantees obtained new sources of funding to support lead hazard control in their communities? How have they used the regional Consolidated Planning process to secure more funding?
5. What actions have the grantees taken—and with what success—in applying, alone or in partnership with other agencies or community-based organizations, for federal, state, or private funding?

Progress in Coordinating with Lead Hazard Control Grant Programs

Grantees continue to describe lack of funding for remediation as the greatest obstacle to clearing lead hazards in the units they investigate. In Year One, grantees focused on improving coordination with current HUD-funded Lead Hazard Control (LHC) grants as a way to obtain funding for remediation. Most of the Year Two grantees (renewing and new) continued to make this a priority.

Most of the grantees have LHC grants. All eight of the renewing grantees have LHC grants; Broome and Dutchess counties are the only new grantees that lacked LHC grant programs at the beginning of Year Two. The City of Schenectady had a grant at the beginning of Year Two, but it expired in 2009. It applied for another round of funding but was rejected. In Year Three, Broome applied for a HUD Lead Capacity Building grant.

Some grantees have attempted to gain priority for LPPP units in LHC funding. In Schenectady's application for funding renewal, it explicitly prioritized enrollment and inspection of units identified through the LPPP. Oneida co-authored a grant application with the City of Utica for the LHC grant it obtained in the spring of 2009. That grant specifies that units with CLPPP or LPPP children residing in them receive highest priority in the application process. As noted earlier, the LPPP, GroWest, and the City developed policies and procedures related to prioritizing service to these units.

All grantees whose communities had LHC grants reported informing owners of units with hazards about the LHC grants. For example, New York City distributed brochures to tenants and owners who are enrolled in the LHC program and to each owner who received a Commissioner's Order. LHC funds cannot be used on the unit that was the subject of a Commissioner's Order, but the owners can use those funds for other units in the building that were not investigated.^{xxi}

Grantees reported that few units received LHC funding to help with clearance of hazards.

To determine what impact LHC programs are having on LPPP-required remediation, grantees tracked whether each unit that had been cleared of all confirmed hazards had also been referred for and received LHC funding.^{xxii} While the totals may underestimate the relationship, since some grantees may not have been able to get the information from their LHC grants, grantees continue to report few housing units in the LPPP that benefited from LHC funds: Of the 888 units cleared of all confirmed hazards, grantees reported that 204 (23 percent) had been referred to the local LHC Grant Program for funding to help with remediation. Of these 204, grantees were only aware of 13 units that had been funded (6 percent of those referred and 1 percent of all those cleared of hazards).

Last year, Westchester County made significant progress in integrating its primary prevention outreach services with the Lead Safe Westchester LHC grant program. It increased efforts to enroll units in the program by assisting with grant applications, providing translators, serving as notary publics, and helping to mediate landlord/tenant disputes that might lead to incomplete applications. The County is now in the process of securing agreements with the County United Way 211 Help Line to assist owners with completion of applications. Orange County also provided translation and application assistance to the Lead Safe Orange Program.

In addition to informing grantees about the LHC programs, Broome, Oneida, and Onondaga counties and New York City developed informational brochures about other funding resources. Chautauqua County plans to do this in Year Three.

New York City's brochure may provide a model for other grantees. It is available at <http://www.nyc.gov/html/doh/downloads/pdf/lead/financial-asst-remove-lead.pdf>

Some communities have developed other ways to partner with LHC grants that ultimately benefit properties with which the LPPP works, but do not require grantees' direct involvement. For example, the City of Rochester established a one-stop shopping approach for all remediation programs at Action for a Better Community (a community action agency), using funds from the Greater Rochester Health Foundation. ABC also partnered with the City's LHC grant on a special remediation grant for a five-block area in zip code 14621, one of the Monroe County primary prevention target areas. This

^{xxi} These brochures can be found at www.nyc.gov/html/doh/downloads/pdf/lead/lead-owner-bro.pdg and <http://www.nyc.gov/html/doh/downloads/pdf/lead/lead-tenant-bro.pdg>.

^{xxii} NCHH only asked whether a unit had been referred to LHC for funding if the unit had been cleared of all confirmed hazards.

ongoing project provides grants or forgivable loans of up to \$15,000 to both owner-occupied and rental property owners who meet the federal income requirements of the LHC grant. If repairs greater than \$15,000 are needed for the property, the City's LHC grant funds additional repairs up to a set threshold. HomeHeadquarters in Syracuse, which administers the City's Community Development Block Grant program, has a similar relationship with Syracuse's LHC grant, and can help owners find additional funding to cover costs that the LHC grant cannot cover.

Challenges and Setbacks

Coordinating with local housing agencies, even lead hazard control programs, continues to challenge the LPPP grantees for many reasons, including the following:

1. Successful LHC programs often have a waiting list of pre-qualified units, limiting the number of units identified by the LPPP that can qualify for funding and complete remediation in a timely manner.
2. Units located in historic districts require even longer times for clearance due to issues related to replacement of windows.
3. Many LHC grants are perceived as more available to owner-occupied units than to rental properties. Although HUD sets no such restrictions, local grantees may choose to restrict services by property type.
4. Additional delays may occur in obtaining funding for renter-occupied units because of tenants' reluctance to provide the income information required for LHC grants.
5. The costs of necessary repairs may exceed the resources of the grant program or the value of the property, and owners may not qualify for other loans.
6. Owners may be unwilling to take on the forgivable loans that are part of many grant packages.
7. Successful enrollment in the LHC grant may delay final remediation and clearance of hazards beyond what was originally anticipated under the Notice and Demand or other notification requirements.

Progress in Securing Other Sources of Funding

Other sources of funding remain limited. No county or city government provided funds to LPPP grantees in Year Two for lead hazard control. New York City continues to use its authority under Local Law 1 and the NYC Health Code to refer properties that have not met remediation requirements to its Emergency Repair Program. The City's Department of Housing Preservation and Development makes the repairs through its contractors, and the NYC 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. New York City also refers units to the Window Falls Prevention Program. No other grantees capture funds collected through liens or fines to underwrite their LPPP activities.

Few grantees reported progress in building new relationships with other sources of federal support, such as Community Development Block Grants (CDBG) or

weatherization programs, even with the implementation of the federal economic stimulus program in spring 2009. Many grantees sought to build stronger relationships with their weatherization programs, especially for the purposes of window replacement. With an increase of over \$1 billion in funding for weatherization programs, grantees hoped to be able to direct owners to these services. As of the third quarter, however, no local weatherization program had agreed to conduct window replacement in owner-occupied or rental properties with fewer than four units, largely due to federal and state requirements pertaining to the savings to investment ratio for energy upgrades (windows tend to have a lower energy payback than other energy upgrades, such as insulation, weather stripping, and air sealing). New York City and Oneida and Onondaga counties have all begun to explore ways to leverage energy upgrades with lead-safe window replacement.

Coordination with other federal funding sources may improve in future years, since the LPPP was highlighted in the state's Consolidated Annual Performance Report (CAPR) for implementing federal funds for affordable housing. The CAPR represents one stage in increasing the visibility of lead poisoning prevention in the federal Consolidated Plan process, a method by which communities must establish targets for use of all federal funding received on a regional basis. These plans, issued every three to five years, must be reviewed annually for operational targets, including how units with high risks for LBP will be addressed. Orange County provides an example of how improved coordination of funding might work. The City of Newburgh's Community Development office received additional funding and contacted the LPPP on ways to use their funds to help homeowners. LPPP referred the Newburgh office to Orange County's Office of Community Development in order to discuss collaboration. The partnership may increase the amount of funding available per unit to address remediation in buildings where the cost of remediation would surpass the available funding from one program alone.

Grantees reported modest success with securing foundation funding, including grants for equipment, software, and evaluation. The Community Foundation of Greater Buffalo has pledged to help Erie County identify new sources of private remediation funding in future years. In Year Three, CFGB will sponsor an event where volunteers come to Buffalo to provide painting assistance to owners in the target area. CFGB and Erie County will dedicate resources to training the volunteers in LSWP. Some of the participating homeowners will have properties that have received a Notice and Demand.

Grantees have also engaged support from health care plans and foundations. Excellus Blue Cross/Blue Shield provided a grant for HEPA vacuums to Oneida for Year Two, and the program will apply for additional funding in Year Three. As noted above, the Greater Rochester Health Foundation (GRHF) has funded a one-stop shopping approach to packaging funding (federal, state, and private) for individual properties, using a local community action agency (Action for a Better Community) as the site for this service.

Implications for Program Design

Current grantees are well aware of the need for additional resources to support remediation. In fact, grantees have universally requested that DOH lift the restrictions on using grant funds for lead hazard control. In interviews with NCHH, grantees suggested

several strategies for the future, including setting aside a percentage of LPPP funding for planning purposes, providing greater assistance with identifying private sources of funding, allowing regional grant applications, and including more time to meet collectively with nearby grantees to explore other regional approaches. While all grantees made more efforts to build partnerships with housing-based organizations, they found these agencies the hardest to address and the least aware of the priorities of the LPPP. Recommendations for grantees include the following:

1. Identify the housing organizations that need to be part of primary prevention planning from the very beginning.
2. Understand how housing rehabilitation funding is allocated in their communities.
3. Document the expected costs of lead-safe repairs in order to reduce community apprehension.
4. Actively engage in the regional Consolidated Planning process to prioritize lead hazard control for funding.
5. Apply alone or in partnership with other agencies or community-based organizations, for federal, state, or private funding.
6. Secure additional revenues to support their operations (such as, recovering costs of repairs through liens or fines).

8. CONCLUSIONS AND RECOMMENDATIONS

The data in this report show that the LPPP greatly expanded its outreach, built more community contacts, and increased the number of lead-safe units during Year Two. Since its inception in 2007, the LPPP has made at least 1,218 units lead-safe. Collectively in Year Two, grantees exceeded their benchmarks. NCHH is also coming closer to an understanding of what model practices may apply statewide.

Promising Year Three Strategies

1. Creation or expansion of primary prevention coalitions or task forces in Albany, Broome, and Orange counties.
2. Contracts between grantees and code enforcement offices in Oneida and Dutchess counties to finalize use of PHL 1370-a(3) or local authority to cite deteriorated paint as a condition conducive to lead poisoning. In late September, Oneida County announced a sizeable increase in the dollar amount of the fines for code violations.
3. Increase in the number of code inspectors who take LSWP as a continuing education activity.
4. Development of more window replacement discount programs for owners who need to comply with orders to remediate.
5. Regional strategies for securing funds for lead hazard control or LSWP training.
6. Dissemination of the training materials used by Oneida County to educate over 100 judges, lawyers, and agency representatives on strategies to improve code enforcement.
7. Evaluation of the relationship between exterior deterioration and interior hazards in New York City. The study should help all New York State counties improve the efficiency of the inspection process by targeting the units with the greatest potential for hazards within the highest-risk neighborhoods. This information, coupled with Erie County's strategy for issuing orders for remediation based on identified exterior hazards alone, may indicate a model for the future.
8. Publication of lead-safe housing registries.
9. Increase in the number of individuals trained in LSWP through partnerships with workforce development programs, BOCES sites, and community college partnerships.
10. Expansion of mapping efforts to include data on asthma and other conditions, as in Albany County.

Areas for Additional Research

Despite the increase in qualitative and quantitative information on the impact of the LPPP, there are still outstanding issues that will require more research in the next year:

1. What are the true costs to property owners to comply with the orders for remediation under the LPPP, and how can these costs be reduced?
2. What are tenants' experiences after required remediation? Do evictions increase?
3. What are the costs of key components of an effective lead-hazard primary prevention program, such as developing partnerships and infrastructure and increasing enforcement?
4. What are the advantages and disadvantages of requiring a dust wipe test in housing units that do not have deteriorated paint as a way of ensuring that the units are safe from otherwise undetected lead dust hazards? In what circumstances is that a cost-effective strategy?

Recommendations for Grantees

The following recommendations for grantees are grouped according to the LPPP goal with which the recommendation is most closely associated. Some of them, however, may relate to more than one goal.

Identifying housing at greatest risk for lead-based paint hazards

1. Take full advantage of the authority granted under PHL 1370-a(3) to
 - a. Designate high-risk areas quickly when grant funds become available for the program;
 - b. Expand the high-risk designation to other areas as local conditions warrant, or fully utilize the tools already provided under local statutes, authorities, and interagency agreements;
 - c. Explore designation of the local housing code agency within a community of concern as an agency authorized to administer these provisions.
2. Encourage localities to inspect all rental properties at least once every three years, cite deteriorated paint in pre-1978 housing as a condition conducive to lead poisoning, and issue Certificates of Occupancy only when lead-based paint (LBP) hazards have been addressed.
3. Strengthen the relationship between code enforcement and primary prevention by citing deteriorated paint under the New York State Property Maintenance Code or other local legal authorities.
4. Continue to explore ways to deliver services to specialized at-risk populations, such as newborns. Increase investigations targeted to units where children with BLLs of 5-9 or 10-14 $\mu\text{g}/\text{dL}$ have resided in the past in order to ensure that these units provide no ongoing risk to children.

5. Continue attempts to encourage agencies that fund housing for children to ensure the housing they finance is lead-safe.
6. Expand mapping efforts by integrating lead poisoning prevention data with other health statistics, such as childhood injury and asthma prevalence data. This approach may identify future partners for prevention and increase understanding of the health issues associated with the housing in the high-risk zip codes. For those communities lacking a Healthy Neighborhoods Program, it may provide the impetus for developing this resource.

Developing community engagement and partnerships

1. Continue to win the support of elected and appointed local, regional, state, and federal officials, especially to achieve cooperation in enforcement and funding for lead hazard control.
2. Allow sufficient time to expand existing relationships--or build new ones--with community-based organizations and local agencies that extend to their active participation as partners.
3. Increase efforts to engage community-based organizations in outreach and recruitment and involve community residents themselves in lead poisoning prevention efforts.
4. Encourage agency partners in housing and other areas to participate in creating lead-safe housing by fully exercising their own agencies' mechanisms to encourage or sanction owners to make their properties lead safe.

Promoting interventions to create lead-safe housing units

1. Understand and address property owner and resident resistance to investigations and remediation.
2. Address obstacles to re-entry for the purposes of investigation. 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.
3. Continue to reduce delays in remediation by exploring additional administrative strategies, such as housing courts, or agreements with local code enforcement offices, prosecutors, and judges.

Building Lead-Safe Workforce Practice (LSWP) capacity

1. Continue to make LSWP training attractive to contractors and property owners by using incentives, scheduling training at convenient times, and building community demand for these services.

Identifying community resources for lead-hazard control

1. Increase coordination with public or private housing programs that fund or require lead-related repairs in order to keep pace with the demand the LPPP is expected to generate. Strategies may include:

- a. Establishing agreements to give units identified by the LPPP high priority in funding with agencies that administer Community Development Block Grants (CDBG), Housing Choice Vouchers (Section 8), weatherization, and other state- and federally-funded programs.
- b. Allocating LPPP 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.
- c. 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.

Recommendations for State Agencies

- 1. Explore ways to promote community awareness about the EPA Lead Renovation, Repair, and Painting Rule.
 - a. Connect local contractors to state-funded job training and placement programs and EPA accredited training entities.
 - b. Provide technical assistance and guidance to LPPP grantees and other programs about how to incorporate the RRP rule into their inspection, hazard remediation, and dust clearance protocols.
- 2. Identify ways to alleviate grantee capacity issues by encouraging the relaxation of hiring and contracting restrictions where primary prevention funding is available to support these positions. This is especially critical for counties that do not have full-service health departments.
- 3. Support grantee efforts to coordinate with local housing agencies by modeling housing and health coordination at the state level.
 - a. Prioritize LPPP units for housing funding.
 - b. Streamline application and approval processes.

APPENDIX A – AUTHORITIES AND PROCEDURES

New York State has undertaken a number of initiatives to advance the national 2010 goal of eliminating childhood lead poisoning. In 2004, the New York State Department of Health (DOH) 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,²⁶ “...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.”²⁷

The bulk of the 2004 State Plan’s initiatives expanded and strengthened surveillance and secondary prevention initiatives, including improvements in screening and vigorous investigation and remediation of LBP hazards in the dwellings where children with EBLs 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 10 C.N.Y.R.R. 67-1.2 require 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 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 investigation 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), which lists the lead hazards identified. The N&D specifies that an owner correct the conditions conducive to lead poisoning within a fixed number of days as defined by the LHD (typically 30 days) and use lead-safe practices and/or knowledgeable workers to conduct the work and achieve clearance after work is completed in order to demonstrate that no hazards remain. 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.

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. ²⁸

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. 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.

The City of Rochester and New York City are two jurisdictions in the LPPP 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 LPPP 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 New York City banned lead paint) or between 1960 and 1978 if the landlord knows that the building has lead paint to identify and annually repair 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. New York 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 New York City's 311 complaint hotline to request an HPD inspection. HPD will inspect and order the landlord to safely repair identified LBP hazards.

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 non-intact 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 percent 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 inspections 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 LSWP. 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 LPPP has an inspector return to the unit to do the sampling and absorbs the costs of the dust wipe testing.) If more than 50 percent 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 percent 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.

APPENDIX B – DESCRIPTION OF PLANNED YEAR TWO PROGRAM ACTIVITIES, BY GRANTEE

Albany County Primary Prevention Program

Target area: Albany County has identified a specific target area within the city of Albany, encompassing zip code 12206. The main focus for Year Two will be a more localized area within the target zip code of approximately 1200 houses. Only homes where children who had a confirmed BLL of 20 µg/dL or higher had resided (15 or higher when the initial number is exhausted), and where children are currently residing or spending a minimum of eight hours per week will be eligible for inspection.

Housing intervention: Albany County DOH will:

1. Use an Area of High Risk Designation.
 - ACHD will identify dwelling units where children with EBLs resided, starting with 2005, and working backwards through 2002, (which cases have been “environmentally closed,” and where children under six years of age currently reside). Visual inspections will be conducted in these units.
 - ACHD will perform XRF inspections for tenants and/or landlords upon request as long as there are children age six or under currently residing there.
 - ACHD will accept referrals from established and new partnerships.
2. Conduct inspections of these adjacent/appurtenant residences, with the use of an XRF.
3. Issue Notice and Demands to the owners of these properties where lead hazards are identified.
4. Require clearance testing, including dust sampling, when the repair of identified hazards is completed.

If legal action is necessary, ACHD will use the established policies and procedures that it currently uses for unresponsive property owners in EBL cases (Albany County Court System).

Inspection protocol: An EPA-certified risk assessor from the county will perform a visual inspection of painted surfaces in unit(s), common areas, and exterior of residential building with prior XRF inspection. If no prior XRF inspection has been performed, the risk assessor will conduct an inspection of these areas with an XRF. The protocol for any additional sampling is being developed. Informational lead inspections are now being provided in the target zip code. The protocol for these inspections will be the same as other inspections conducted using an XRF.

Incentives: LSWP training classes and the use of HEPA vacuums will be offered free to those in the 12206 zip code performing lead hazard control activities.

Clearance testing: Dust sampling will be performed by EPA-certified risk assessors from ACHD once they have verified that all required repairs have been completed.

Building workforce capacity: ACHD will assess the adequacy of the current, local trained/certified workforce. ACHD will continue to partner with Cornell Cooperative Extension to offer educational/training programs such as five lead-safe work practices training sessions. ACHD will also partner with Cornell Cooperative Extension to have a partnership luncheon to build and strengthen partnerships.

ACHD will partner with Schenectady County to alternate LSWP training sessions to increase the availability of sessions to residents of both counties.

Identifying resources for lead hazard control: ACHD will assess existing funding programs and collaborate with other agencies and community groups to explore new funding sources.

Developing partnerships and community involvement: ACHD, Division of Environmental Health Services will collaborate with the Division of Nursing/Maternal Child Health, to evaluate blood-lead screening information of children residing in dwellings targeted for inspection, and for the provision of referrals for screening when appropriate. The division will also:

- Strengthen and continue our relationship with Albany County District Attorney's Office to build a mechanism for enforcement. Receive guidance from the Department of Law for informational inspections in high-risk zip codes. Obtain approval from Department of Law to send contact letters to landlords and tenants in targeted housing in targeted zip codes. Sent contact letters to landlords and hand-deliver contact letters to tenants.
- Continue partnership with Travelers Aid to ensure temporary lead-safe housing for displaced children and families.
- Continue partnership with Code Enforcement to receive referrals of housing with deteriorated paint.
- Continue partnership with Cornell Cooperative Extension. Conduct LSWP trainings.
- Continue to further partnership with HUD through Albany Community Development for possible grant assistance to landlords.
- Continue partnership with Albany County Planning Board to develop maps of our target area showing units inspected, single-family, two-family, and three-family buildings, and inspections (based on lead hazards previously found, informational inspections, et cetera)
- Develop a new partnership with the Albany Police and Fire Department to assist us in finding landlords.

- Develop a new partnership with the Project Strive located in our Target Zip Code to provide us with referrals.

Additional highlights: Informational lead inspections will be offered to residents and property owners who are concerned about the possibility of lead hazards in their residences. Individuals who request such an inspection will receive information regarding LSWP and are encouraged to attend a LSWP training class.

Broome County Primary Prevention Program

Target area: Broome County has two high-risk designated zip codes, 13091 and 13905, and further defined their target area to Census Tract 3 in 13905.

Housing intervention: Properties eligible for inspections include multiple-unit dwellings where children with EBLLs of ≥ 15 ; referrals from Early Intervention and codes; and DSS-identified foster homes, child care facilities, and rental assistance units. All eligible properties must have a child under the age of six residing in the unit.

Inspection protocol: Visual inspections by health department personnel along with dust wipe sampling will be conducted at self-referred properties and DSS rental-assistance properties. Property owners whose units have chipping and peeling paint and/or lead dust hazards will receive a letter providing them the opportunity to bring the property into compliance voluntarily before a Notice and Demand is issued. Property owners will be required to attend a free LSWP training. Failure to complete repairs in a timely manner will result in a full risk assessment with XRF testing and issuance of a Notice and Demand, if applicable.

XRF inspections will be conducted on all units in a multi-unit dwelling in which a child with an EBLL ≥ 15 is found to be living. (This part of the work plan was in effect only prior to the June 2009 legislative amendments.) The property will be declared an area of high risk and a Notice and Demand will be issued. All work will need to be conducted with LSWP. An XRF inspection will be conducted at all DSS-referred foster homes. Voluntary compliance will be sought; if not obtained, a potential Notice and Demand will be issued.

Incentives: Tenants whose units are inspected will receive a cleaning kit, CO detector, smoke detector, bleach to combat mold issues, and batteries. Property owners will be offered free LSWP training and some remediation supplies for compliance. They will also receive one free dust wipe clearance sample.

Clearance: Clearance will be offered free to property owners who voluntarily comply with the remediation of the hazards.

Building workforce capacity: LSWP trainings will be offered to property owners and tenants. Will explore the need for the two-day lead worker and four-day lead contractor courses will be offered for contractors to build capacity to perform abatement work.

Identifying resources for lead hazard control: Will prepare a summary of available funding for property owners in the target area, as there are no visible lead hazard control resources.

Developing partnerships and community involvement with City of Binghamton Codes Enforcement, Tioga Opportunities, Opportunities for Broome, Broome County Department of Social Services, and Binghamton University.

Chautauqua County Primary Prevention Program

Target area: Chautauqua County has identified the zip code 14701 in the City of Jamestown as the target. Zip code 14701 will be declared an area of high risk.

Housing intervention:

1. Eligible households are pre-1978 rental or owner-occupied properties in which a child under age two spends a minimum of six hours per week.
2. Households may be referred through partner agencies or through door-to-door outreach in program-identified “hot spots.”

Inspection protocol: CCHD will conduct a lead hazard risk assessment taking XRF measurements on at least one wall per room. They will conduct a dust wipe sample if no lead paint is detected with XRF to determine if external dust hazards are intruding. A Letter of Notification will be issued for the property regarding the hazards. Property owners are provided information on LSWP and trainings, referrals for financial support, and information on EPA-certified contractors. If property owners do not comply within 30 days, a Notice and Demand will be issued.

Incentives: Incentives for home assessment completion include smoke alarms and carbon monoxide detectors. Incentive package for property owners includes LSWP supplies.

Clearance testing: Clearances testing of properties will be required when the repair of identified hazards are completed. This will be paid for by the program.

Building workforce capacity: Support local property owners, managers, and tenants to attend LSWP training. Notification of these free trainings will be included with each Notice of Violation and will be advertised in the target communities.

Identifying resources for lead hazard control: Will refer to Chautauqua’s HUD Lead Hazard Control Grant administered by Chautauqua Home Rehabilitation and Improvement Corp. and the HUD LEAP Grant administered by Chautauqua Opportunities, Inc.

Developing partnerships and community involvement: Chautauqua County’s Primary Prevention Program has collaborated with the Chautauqua Home Rehab and Improvement Corp., Chautauqua Opportunities Inc., Jamestown Housing Authority, Joint Neighborhood Project, and the Jamestown Department of Development.

Dutchess County Primary Prevention Program

Target area: New York State has identified zip code 12601 as the zip code with the highest annual incidence of elevated BLLs greater than or equal to 10 µg/dl among children under age six in Dutchess County. The U.S. Census Bureau identifies the City of Poughkeepsie as representative of 55 percent of 12601 zip code. Of the 13,153 eligible (“eligible” signifies all units within the City of Poughkeepsie) housing units in the designated target area, 63.2 percent are rental, while the remaining 36.8 percent are owner-occupied.

Housing intervention:

1. The City of Poughkeepsie is identified as an area of high risk based on GIS mapping. DCDOH mapping documents the greatest concentration of unconfirmed and confirmed elevated blood lead levels greater than or equal to 15µg/dL in located in the City. DCDOH has maps of the City’s confirmed and unconfirmed EBLLs for 2006-2007.
2. A City of Poughkeepsie building inspector will use housing complaint and building permit inspections to access residences for visual assessments of residences, taking note of characteristics and conditions, as well as determining occupancy of identified high-risk houses/units. The building inspector will conduct a visual inspection of the painted surfaces in the subject residential unit and make a determination whether paint conditions and dust conditions are in compliance with the NYS property maintenance code.
3. If not in compliance, the building inspector will provide the owner with written notification requiring the property owner, landlord, or contractor eliminate the deteriorated paint films, following lead-safe work practices. The notice will specify the observations, the required corrective actions, the methods for corrective action, and a timetable.

Inspection Protocol: The building inspector will conduct a visual assessment of all accessible interior and exterior areas, assessing for any deteriorated paint films. LSWP educational materials will accompany written notification. The property owners or designee will provide documentation of LSWP training or demonstrate the ability to conduct the activity using LSWP. LSWP training will be offered to the property owner or designee, arranged through the Health Department.

The building inspector will be responsible for all follow-up inspections until compliance is met. If compliance is not met, the case will then be referred to the Health Department for enforcement procedures (via a stipulated agreement or through the formal Administrative Procedures and documentation that is currently in place).

Incentives: LSWP training classes will be offered free to property owners (or designees) whose residence(s) require remediation. We are working on developing specifics regarding other incentives.

Clearance testing: Once the property owner/landlord corrects the potential lead paint hazards in accordance with lead-safe work practices, an inspection will be conducted to document completion of work. Then third-party clearance dust wipe samples will be obtained. The Primary Prevention Program will reimburse the property owner for the cost of the initial series of clearance dust wipe samples. The property owner will pay for any subsequent dust sampling, if necessary.

Building workforce capacity: Dutchess County will offer LSWP training to property owners, landlords, and contractors, thereby increasing our local workforce capacity. DOH proposes to contract with a third party to provide a regular schedule of LSWP training classes.

Identifying resources for lead hazard control: Dutchess County will work with the Housing Consortium to identify the full range of current and potential resources available to property owners that will assist with elimination or remediate of conditions conducive to lead exposure.

Developing partnerships and community involvement: DCDOH will be lead agency for this project and will partner with the City of Poughkeepsie as well as other County Department (Departments of Social Services, Planning and Development, and the Health and Human Services Cabinet). The Department of Social Services will provide information to their Section 8 clients. Additional potential partners will include the Poughkeepsie Housing Authority, Hudson River Housing, the WIC program, the Healthy Families program, as well as the members of the Dutchess County Housing Consortium, a partnership of housing and human services providers. These partners will provide referrals when appropriate and also help spread the word by educating about lead prevention, lead testing, and that residents may bring complaints about deteriorated paint to City's building inspectors.

Erie County Primary Prevention Program

Target area: Six zip codes in the City of Buffalo will be designated as “areas of concern.” Within each area of concern, one or more block groups will be designated as “high risk.”

Housing intervention strategy:

1. All property owners will receive notification of the high-risk designation via U.S. mail. Occupants will be notified by postcards left at each property.
2. Exterior visual assessments of potential lead-based paint hazards within the larger “areas of concern” will be coordinated through the Healthy Neighborhoods Program. Owners will receive letters notifying them of the survey results (i.e., areas of deteriorated exterior paint), as well as information on available resources.
3. The Neighborhood Intervention Strategy within designated high-risk areas follows below:

- a. *Step 1—Community Outreach:* In cooperation with community groups, LPPP will sponsor receptions as well as other targeted events to raise awareness among residents about lead poisoning and to gain access to dwellings within the high-risk area.
- b. *Step 2—Initial Block Survey:* Surveys noting building characteristics, physical condition, and occupancy status will be conducted for each block within a designated high-risk area.
- c. *Step 3—Assessment:* In conjunction with exterior risk assessments of all paint on the exteriors of properties within the designated high-risk area, staff will attempt to identify and gain access to units where young children reside. Upon gaining access, staff will conduct an assessment of the paint condition of the interior of the dwelling unit, educate the resident about lead poisoning and ways to protect their family, determine if all children have received blood-lead level testing, and provide cleaning supplies to help ensure a lead-safe environment.
- d. *Step 4—Full NYS EBLL Risk Assessments:* Dwelling units within the high-risk area that have been determined to have deteriorated interior paint and which are occupied by children under 72 months of age will be selected for a full NYS EBLL risk assessment.

Inspection protocol: Exterior risk assessments of all paint on the exteriors of properties within the high-risk areas, as well as a limited number of full NYS EBLL risk assessments, will be completed. Owners will be notified of the intention to conduct a full risk assessment. If a property is determined to have a lead-based paint hazard, owners will be issued a Notice and Demand seeking remediation in accordance with lead-safe work practices. Owners who fail to bring a property into compliance will receive a summons to Housing Court.

Incentives: Property owners and maintenance workers who submit proof of LSWP training will be eligible for a lead-safe work practices supply kit, which includes Tyvek suits, disposable gloves, 6-mil gauge plastic sheeting, primer, and other painting supplies.

Clearance testing: Upon completion of the required work, owners will be required to contract for a clearance examination and submit clearance results.

Building workforce capacity: Expand workforce capacity by contracting with Environmental Education Associates to provide at least 10 LSWP trainings to do-it-yourself property owners, maintenance workers, and unit occupants. Provide two LSWP trainings to staff of municipalities, school districts, and community organizations.

Erie County LPPP will work with the Western New York Coalition to End Lead Poisoning and other program partners to identify the full range of current and potential resources available to property owners to assist with elimination or remediation of conditions conducive to lead exposure.

Developing partnerships and community involvement: Erie County LPPP will actively engage with community groups in the target area and agencies that serve the residents in the target areas to partner with the LPPP Program. A minimum of six “Train the Trainer” Classes will be held for staff of partnering agencies.

Partners: Partners of Erie County’s program include Environmental Education Associates, Buffalo Municipal Housing Court, City of Buffalo Division of Citizen Services, Western NY Coalition to End Lead Poisoning, Belmont Shelter Corp (County and City HUD grantee), Independent Health Foundation, Neighborhood Housing Services, Buffalo Community Centers, Community Foundation of Greater Buffalo, Buffalo Perinatal Network, City of Buffalo Board of Block Clubs, Citizen Action Organization, Holy Cross Head Start, CAO Head Start, EPIC/Ready Set Parent Program, Western New York Lead Poisoning Prevention Resource Center, FEHR – Family Environmental Health Resources, local city officials, county legislators, and state representatives.

Monroe County Primary Prevention Program

Target area: All four designated zip codes 14621, 14609, 14611, and 14605 in the city of Rochester will be utilized as the target area for Year Two. Two “high-risk” populations living in these zip codes will also be targeted. The first population being targeted is 200 families of children with venous blood lead levels between 5 and 9 µg/dL. The second is low-income first-time pregnant women who are part of the MCDOPH Nurse-Family Partnership program (NFP).

Housing intervention:

1. Expand the City of Rochester’s existing Certificate of Occupancy (C of O) activities and enhance efforts by adding qualified staff to conduct inspections. During Year Two of the grant, the City will retain these staff and will be required to continue to perform the additional lead visual inspections (2196) and lead dust wipe test sampling (1275).
2. A MCDOPH Lead Program public health sanitarian will visit the homes of the 200 families who have children with venous levels between 5 and 9 µg/dL. The sanitarian will conduct an EPA lead visual assessment and will provide a healthy home inspection and education. Properties found to have deteriorated paint will be referred directly to the City of Rochester Lead Program for inspection and enforcement through the lead ordinance. Those properties that do not have deteriorated paint will also be referred to the City of Rochester Lead Program for performance of lead dust wipe testing.
3. A MCDOPH Lead Program public health sanitarian will visit the homes of the 50 women participating in the NFP program, conduct a Lead inspection, and provide a healthy home inspection and education. Properties found to have conditions conducive to lead poisoning will be designated an “area of high risk” under Public Health Law and have a Notice and Demand issued to the property owner.

Inspection protocol: All units inspected by the City of Rochester will be subjected to a visual inspection for deteriorated paint above de minimis levels on the interior and exterior or if bare soil is found. A 30-Day Hazard Notice and Order is issued. The property owner is required to contact the City within seven days and then provide a work schedule within one week from contact with the City. Tenants are required to be notified no less than three days prior to the commencement of control activities. Clearance testing must be provided by a third party.

Additional dust wipe sampling is required in all units that pass the initial visual inspection. (A Dust Sample Violation is cited upon a failure of a property owner to timely cause dust samples to be taken and certified test results to be submitted.) If more than 50 percent of the wipe samples exceed EPA standards, or if any wipe is found to have 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 percent 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 will result in the issuance of a Notice and Order for a Lead Dust Violation.

The properties for the 50 pregnant women in the NFP program will be inspected by EPA-certified risk assessors, who will conduct lead inspections using EBL protocols. Properties found to have conditions conducive to lead poisoning will be designated an “area of high risk” under Public Health Law and have a Notice and Demand issued to the property owner. The Monroe County Department of Public Health EPA-certified risk assessor will conduct clearance testing upon completion of the lead hazard control work.

Incentives: Residents will be provided with a cleaning kit (bucket, mop, detergent) and fire safety supplies as an incentive to allow the MCDOPH sanitarian and property conservation inspector into the unit to conduct lead inspections.

Building workforce capacity: Free LSWP training provided by the Monroe County Department of Public Health. The City of Rochester’s website contains a list of local EPA certified Risk Assessment and Abatement firms.

Identifying resources for lead hazard control: The following is a list of available programs within the community to assist property owners and tenants in funding rehabilitation efforts and lead hazard control programs:

1. Monroe County Department of Public Health—HUD Grant for investors and owner-occupants for up to \$5,000.
2. City of Rochester—Approximately \$4 million awarded in October 2008 to HUD Lead-Based Paint Hazard Reduction Demonstration Grant.
3. Lead Connections—Materials and reference assistance for tenants and owner-occupants.
4. Healthy Home—Reference assistance for tenants and owner-occupants.

5. Greater Rochester Health Foundation Grant—Lead Hazard Control grants of up to \$15,000/unit for City of Rochester properties in the 14621 zip code.
6. One Stop Lead Resource Center at Action for a Better Community—Funded by the Greater Rochester Health Foundation provides lead outreach and assistance to target area homes.

Developing partnerships and community involvement: MCDOPH has partnered with the City of Rochester, Rochester’s Lead Coalition, NYS Coalition of Property Owners and Businesses Inc., and the University of Rochester Environmental Sciences Center’s Healthy Home. Evaluation of the Ordinance has occurred in conjunction with the Center for Governmental Research (CGR), the National Center for Healthy Housing (NCHH), University of Rochester’s Environmental Health and Sciences Center, and the City of Rochester.

New York City Primary Prevention Program

Target areas: NYC has three primary intervention activities reaching different target areas.

1. *Intervention 1* provides primary prevention inspections using several methods to identify target housing. These inspections will impact the following target areas:
 - Referrals from the Brooklyn District Public Health Office (DPHO) Newborn home visiting programs. The target areas are zip codes 11205, 11206, 11207, 11212, 11216, 11221, 11233, and 11237 (Community Districts 3, 4, 16 in Brooklyn).
 - Referrals from the Asthma Initiative (AI). The AI’s target area is the entire city of New York, with a focus on low-income children living in high-risk neighborhoods.
 - Homes of children younger than three years old with blood-lead levels (BLLs) of 10-14 µg/dL and newborns less than three months old living in the same building. The target area encompasses all of New York City, targeting high-risk housing with young children).
2. *Intervention 2* provides more intensive education and outreach on lead poisoning prevention and safe work practices, focusing on one high-risk zip code, 11212 in Brooklyn.
3. *Intervention 3* focuses on development and city-wide dissemination of financial resource information to support lead hazard reduction.

Intervention descriptions: Detailed descriptions of each of NYC’s interventions, including alternate strategies, appear below.

1. *Intervention 1:* NYC will provide primary prevention inspections to identify and correct lead paint hazards in the homes of young children. High-risk housing with young children will be identified using the following strategies:

- *Strategy A—Peeling paint referrals from home visiting programs:* NYC will continue its successful partnerships with DOHMH Brooklyn DPHO Newborn Home Visiting Program and the DOHMH Asthma Initiative. LPPP will provide environmental inspections, including XRF testing, in response to referrals from these two home visiting programs. Where lead paint hazards are identified, LPPP will order the landlord to safely correct hazards. Homes with serious housing hazards in addition to peeling paint will be referred to the NYC Department of Housing Preservation and Development (HPD) for appropriate follow-up. If lead paint hazards are identified, the property owner will be ordered to repair the hazards within 21 days. If an owner fails to comply within this timeframe and/or conduct the repairs appropriately, the property will be referred to HPD’s Emergency Repair Program (ERP) to complete the repairs safely. The property owner will be billed for the cost of the repairs. LPPP continues to provide training on visual assessment for lead paint hazards for new home visiting staff and will provide refresher training as needed to existing staff.
 - *Strategy B—Using the Lead Poisoning and Vital Records Registries to identify high-risk housing with young children:* NYC will pilot a new strategy to identify high-risk housing with young children. Using the DOHMH Childhood Lead Poisoning Registry, LPPP will identify children less than three years of age with a blood-lead level of 10-14 µg/dL. An environmental inspection that includes XRF testing will be offered to these families. If lead paint hazards are identified, the landlord will be ordered to correct the hazards safely. Using the DOHMH Vital Records Registry, LPPP will match the “10-14” child’s address against the Vital Records Registry to determine whether a newborn child (less than three months old) lives in the building, but in a different apartment than the “10-14” child. An environmental inspection, including XRF testing, will be offered to the newborn families in the building. If lead paint hazards are identified, the landlord will be ordered to correct the hazards safely.
 - *Strategy C—Using exterior conditions to target high-risk housing:* NYC will pilot a new inspection protocol which includes observation for specific exterior building conditions. This protocol will be added to all LPPP inspections. Inspection data will be analyzed to determine if exterior conditions can be used as a predictor of high-risk housing.
2. *Intervention 2:* NYC LPPP will continue to promote awareness about lead poisoning prevention, safe work practices, and financial resources for lead hazard reduction targeting residential building owners in the high-risk zip code of 11212 in Brooklyn. In Year Two, NYC will conduct surveys of tenants, building owners, and community leaders to identify the perceived barriers to the safe repair of lead hazards and building maintenance. Also in Year Two, NYC will conduct free LSWP training in zip code 11212 on weekends. Based on the Year One response to classes, expansion to other high-risk areas is planned. LPPP also will continue to participate in tenants’ nights and owners’ nights with property owners.

3. *Intervention 3:* NYC LPPP will continue its efforts to promote building owners' awareness of financial products to support lead hazard reduction and encourage utilization.

Inspection protocol: EPA-certified risk assessors from LPPP or HPD will perform the XRF inspections and the follow-up inspections of the homes in which the staff of the home visiting agencies has observed possible lead hazards. The inspection will include visual inspection for lead and other home environmental hazards, lead risk assessment interview, and education.

Incentives: NYC will promote awareness of currently available funding sources, including HUD grant programs, to property owners to assist in financing lead hazard control efforts. In addition, property owners will be provided with a list of EPA-certified contractors. When requested, NYC will refer property owners to HPD for information on certification classes. LSWP training will be offered at no charge and on weekends at community sites.

Clearance testing: When work is completed, clearance dust wipe sampling by a certified, independent third party is required for all Commissioner's Orders to repair lead paint hazards.

Building workforce capacity: In Year Two, NYC LPPP will provide free training on LSWP in an effort to increase the workforce capacity of persons trained in conducting safe lead hazard repairs.

Identifying resources for lead hazard control: NYC will continue to research financial resources for lead hazard control. In Year One, NYC assessed existing HUD grant financial assistance programs, the J-51 tax abatement program, HPD's and Neighborhood Housing Services' (NHS) programs for availability for lead hazard repair. In Year Two, NYC will promote available loan programs and financial resources for lead hazard repair to residential building owners.

Development of partnerships and community involvement: NYC LPPP will continue to collaborate with other DOHMH home visiting agencies, HPD and other NYC agencies, NHS and other community partners, local associations, homeowner focus groups, HUD, and others to implement these interventions.

Oneida County Primary Prevention Program

Target area: Oneida County will identify specific census tracts and block groups in zip codes 13501 and 13502 as "areas of high risk," based on GIS mapping that includes age of housing stock, income level, and rental units.

Housing intervention: Properties eligible for inspections will sub-target infants born in 2008 - 2010, children under age of three, or units that will house refugee families with children under the age of six in the first year of the pilot. Oneida County will conduct a mass mailing to select landlords to invite them to a meeting to discuss the "new high-risk

designation” label to convince them to participate. This will include education on state, county, and City of Utica laws that pertain to housing maintenance and codes, Federal Disclosure Rule regulations, maintaining tenant records. The Healthy Neighborhoods staff will work with Lead Primary Prevention staff to perform joint home visits in support of pilot outreach activities.

Inspection protocol: Visual inspections by health department personnel along with dust wipe sampling. Property owners whose properties are found to contain chipping and peeling paint and/or lead dust hazards will be given a Notice of Information letter. They will be provided the opportunity to fix their properties in a lead-safe manner if they respond and act quickly. Property owners will be required to attend a free LSWP training. Failure to complete repairs in a timely manner will result in a full risk assessment with XRF testing and issuance of a Notice and Demand, if applicable. Those rental units housing children identified as high-risk per the pilot will receive free professional specialized cleaning after the work is completed, and free clearance testing will be provided to support the development of a lead-safe housing registry in the future. A HEPA vacuum loaner program will be available to other landlords in the target area and one free clearance testing will be offered, up to the limits expressed in the grant for units housing children.

A message will be conveyed that property owners may decrease liability claims due to lead poisoning incidence in their rental units, avoid issuance of Notice and Demand, avoid rental income being held up until repairs are completed, avoid a codes fine if they fixed it a lead-safe manner and if repairs are completed within 30 days of official contact or at a date to be negotiated depending on extent of repairs. Non-compliant property owners will be subjected to a full risk assessment and Notice and Demand, as well as referral for codes violations.

Incentives: Participating tenants receive a free cleaning kit consisting of a mop, small bucket, cleaning solution, spray bottle, and paper towel and cleaning instructions. They also receive a free primer touch-up kit consisting of primer, foam brushes, and instructions on touching up additional chipping paint after landlord repairs to prevent contact with lead-based paint until landlord can repair it. Child will be followed for up to two years to insure blood-lead level remains under lead poisoning levels of concern. The HEPA vacuum program has been expanded to the entire county with the help of a grant from Excellus Blue Cross.

Clearance: Clearance will be offered free to property owners who comply with the Notice of Information letter or to landlords who plan to rent to refugee families prior to them occupying the unit, up to the limits expressed in the grant.

Building workforce capacity: LSWP trainings will be offered to property owners and tenants. Two-day lead worker and four-day lead contractor courses will be offered for contractors to build capacity to perform abatement work. Slots for one-day lead worker will be offered to support low-income employment in the target community. Contractor firms have agreed to hire these workers if training is provided. Health Department staff will receive additional training to

increase capacity in risk assessment and sampling technicians. Working in partnership with GroWest, window replacement training will be offered to property owners. The training will demonstrate how to properly measure and install windows and then offer cost discounts on windows to property owners who attended training.

Identifying resources for lead hazard control: A memorandum of understanding was developed for \$125,000 between the City of Utica and the Safe Housing Coalition to fund repairs on homes with known lead hazards. An additional \$150,000 was added by the City of Utica to this MOU in September 2007. This MOU will be updated in November. The Utica Municipal Housing Authority (MHA) was the recipient of DHCR funds in the amount of \$300,000.00 and an Empire Development Grant in the amount of \$840,000. The Lead Primary Prevention Program collaborated with the City of Utica to obtain a HUD Lead Hazard Control Grant for over \$2 million dollars to renovate 190 units over the next three years.

Developing partnerships and community involvement: Oneida County developed partnerships with the Safe Housing Coalition of Central New York, GroWest (a local renovation contractor), Hope VI, Mohawk Valley Community Action, Utica Municipal Housing Authority, Cosmopolitan Center, Mohawk Valley Community College, Oneida County Health Coalition, Oneida County Department of Social Services, Office for the Aging and Continuing Care, United Way, City of Utica Codes Enforcement, Department of Urban and Economic Development, Utica Fire Department, Utica Police Department, Mid York Library Systems, Workforce Development of Oneida County, Mohawk Valley Refugee Resettlement Center, Adirondack Bank, Excellus Blue Cross, St. Elizabeth Community Design Team, Contractor Connections, Workforce Development Institute, Oneida County school districts, and Oneida County and local city clerks.

Onondaga County Primary Prevention Program

Target area: Onondaga County has identified the entire City of Syracuse as the target area, with a focus on zip codes 13208, 13205, and 13204.

Housing intervention:

1. Eligible households can be characterized as homes built before 1950, with chipping and peeling paint, is located in the target area, is a rental property, or a home in which a child aged six years or under resides or regularly visits or a pregnant woman resides.
2. Referrals for home-based inspections will be accepted from code enforcement, community partners, DSS, health department programs, and tenants.
3. OCHD will also conduct door-to-door outreach in several of the highest-risk census block groups. An attempt to inspect all units will be made. Property owners and tenants will be notified of the planned door-to-door outreach.

Inspection protocol: OCHD will conduct a lead hazard risk assessment using the HUD *de minimis* standards. A Notice of Violation (tantamount to NYS Notice and Demand) will be issued for the property. Property owners receive information on LSWP and

trainings, programs providing financial support, and information on EPA-certified contractors.

Incentives: An incentive package is available for owners, managers, or tenants of properties *cited under the program* to attend LSWP training. The package includes cleaning supplies and LSWP materials.

Clearance testing: Clearances testing of properties will be required when the repair of identified hazards are completed. The program will pay for the tests.

Building workforce capacity: Support local property owners, managers, and tenants to attend LSWP training. Notification of these “free” trainings will be included with each Notice of Violation and will be advertised in the target communities.

Identifying resources for lead hazard control: There are no local ordinances regarding lead paint. The LPPP has identified the need for enhanced lead legislation and will work with the Syracuse Lead Task Force to develop ideas for this to present to a local city councilor. Units identified through the LPPP are referred to the City of Syracuse’s HUD Lead Hazard Control Grant and HUD Lead Demonstration Grant.

Developing partnerships and community involvement: OCHD partners include Code Enforcement, Local Department of Social Services – Foster Care Program, Public Assistance, Syracuse Lead Task Force, City of Syracuse HUD Grant, community-based organizations, child care providers, and health care providers.

Orange County Primary Prevention Program

Target area: Orange County has identified a specific target area that includes Census Tracts 3, 4, and 5 within zip code 12550, which is located in the city of Newburgh. The target area includes 6013 properties (78 percent rental, 84 percent pre-1970). In addition, there is a focus area within this zone consisting of several blocks that overlap two of the three census tracts. There are approximately 200 properties within this focus area.

Housing intervention: Orange County DOH will:

1. Declare the target area an “area of high risk.”
2. Go door-to-door in the target area, inspecting *all* residences with the use of an XRF. The same inspections will be conducted based on referrals from DSS, local code enforcement, and community development, as well as from other programs in the LHD.
3. Respond to inspection requests from tenants, property owners, and other interested parties.
4. Accept referrals from Community Health Outreach Childhood Lead Program for children residing in the target area with blood lead levels from 10-19 µg/dL.
5. Issue Notice and Demands to the owners of property where lead paint hazards are identified.

6. Initiate legal action by referral of the case to the Newburgh Code Enforcement Office if property owners do not respond to the Notice and Demand.
7. Require clearance testing, including dust sampling, when the repair of identified hazards is completed.

Inspection protocol: An EPA-certified risk assessor from OCHD, aided by an XRF, will inspect the interior and exterior of all residential buildings in the target area.

Incentives: As an incentive to allow for an inspection of their apartment, tenants will be offered cleaning supplies, including cleaning solution, paper towels, buckets, sponge mops, cleaning cloths, sponges, latex gloves, and garbage bags. Children's buckets and shovels, along with playground balls with the OCHD/HNP logo, will be offered as well.

Homeowners who do their own remediation will be encouraged to complete LSWP training, as provided by the Orange County Office of Community Development. Homeowners who complete the LSWP training and who will do the work themselves will receive a prescribed set of supplies, such as plastic sheeting and painting supplies (including rollers, paint brushes, roller pans/buckets, primer, and other associated materials), with a \$300.00 limit of supplies per property owner. The sanitarian will directly supervise remediation to ensure that these items are used for the intended purpose and conduct and complete clearance testing (including dust sampling) when repairs are completed. Several local retailers have been approached to supply these incentives.

Clearance testing: Dust sampling will be performed by EPA-certified staff from OCHD or other EPA-certified individuals once the property owner has verified that all required repairs have been completed.

Building workforce capacity: A list of local certified contractors has already been developed, and the adequacy of this work force will be assessed. Additionally, the County's Office of Community Development is offering LSWP training to property owners and contractors throughout the County, as well as locating training sessions within the target area.

Identifying resources for lead hazard control: The county Office of Community Development already has several grant programs available for property owners to remediate hazardous lead conditions, including a HUD community block grant that specifically targets the repair of lead paint hazards. A list of these funding sources is included with the notice and demand. The LHD will work with other county agencies to obtain additional funding sources for homeowners.

Developing partnerships and community involvement: The Orange County DOH, Division of Environmental Health, and Lead Program will continue to collaborate with other DOH Divisions and programs, including Community Health Outreach. The program will also continue to collaborate with the Newburgh Building Inspector's Office. The program also plans to partner with other county agencies including Real Property,

Finance, Community Development, and Social Services. We plan to meet with Department of Social Services representatives in the near future to work out a procedure for them to consider lead paint hazards prior to authorizing housing for recipients.

The Division of Community Health Outreach will initiate a media campaign to bring this initiative to the attention of the public. This will consist of press releases, outreach to community groups, tenant advocacy groups, landlord associations, and civic groups. We are also seeking a contract with an entity to provide “public health detailing” to various individuals and organizations, including faith-based organizations, medical providers, and home remodeling businesses serving the Newburgh area.

Schenectady County Primary Prevention Program

Target area: Schenectady County has identified the 12307 and 12304 zip codes within the City of Schenectady as its “high-risk” target areas. Combined, the two zip code areas have approximately 12,831 residential housing units. Seventy-four percent and 41 percent are rental properties in the 12307 and 12304 zip codes, respectively. Approximately 81.4 percent of residential units in the zip code areas are pre-1970 housing.

Housing intervention: Schenectady County DOH will:

1. Issue a “high risk” designation within the target zip code areas, and notify property owners through press releases and print materials.
2. Accept referrals of properties from a various partners, including the County’s Healthy Neighborhoods Program, other County DOH programs (Maternal and Child Health, Schenectady Healthy Families), the City of Schenectady’s HUD Lead Hazard Control grant, community-based organizations, as well from tenants and property owners.
3. Conduct visual and XRF inspections of referred units, starting with:
 - Residential units that were occupied by a lead-poisoned child with a confirmed EBL greater than or equal to 20µg/dL (which cases have been “environmentally closed” and are presently occupied by a child six years old or younger).
 - Units that were or are occupied by a lead poisoned child with a confirmed EBL of greater than or equal to 10µg/dL, and is presently occupied by a child no older than six years of age.
 - Units identified through the HNP grant with potential lead paint hazards.
4. Conduct visual and XRF inspections of all adjacent residential units in the same property in an effort to make whole properties lead-safe.
5. Issue Notice and Demands to property owners of residential units where lead hazards are identified. The grant will work with property owners to secure funds to complete lead remediation work, if possible.
6. Conduct clearance inspections, including dust sampling, of these properties.

7. When necessary, pursue legal actions against property owners with the assistance of the Schenectady County Attorney's office, using existing enforcement procedures.

Inspection protocol: Referrals of units with defective paint condition made by one of the above sources will then be inspected by Environmental Health staff working in the grant program. Visual and XRF inspections of properties within the target area will be conducted by an EPA certified Risk Assessor. Interior and exterior painted surfaces as well as all common areas of the properties will be checked for lead hazards.

Incentives: Schenectady County will not provide direct incentives to assist in lead paint remediation; however the grant will offer LSWP training to property owners and contractors conducting lead remediation within the target area. Additionally, HEPA vacuums will be made available free to parties conducting lead remediation work for both the Primary Prevention and the City of Schenectady Lead Hazard grants.

Clearance testing: Dust sampling will be performed by EPA-certified Risk Assessors working in the grant, upon completion of lead hazard remediation work.

Building workforce capacity: Schenectady County Environmental Health will work with the City of Schenectady Lead Remediation Grant to offer educational training programs targeting both property owners and contractors performing lead remediation projects in the 12304 and 12307 zip codes. Three trainings will be scheduled during the grant period.

Identifying resources for lead hazard control: Schenectady County Environmental Health will work closely with property owners of residential units that have been identified with lead hazards to give them information pertaining to the City of Schenectady lead remediation grant. This information will be made available to them when Notice and Demand notification is sent out in an effort to accelerate application and acceptance into the City's grant. If income-eligible, the City's grant will provide property owners with an available funding source for lead remediation activities.

Developing partnerships and community involvement: The Schenectady County Environmental Health Unit will collaborate with several existing Schenectady County Public Health Services programs, including the Healthy Neighborhood Program, the Childhood Lead Poisoning Program, the Schenectady Healthy Families program, and the Maternal Child Health program. It is also partnering with the City of Schenectady Lead Remediation Program and the Schenectady County Planning Department. Additionally, the grant will seek to build partnering opportunities with other community-based agencies through outreach and education about the grant.

The Schenectady County Environmental Health Unit will collaborate with the Schenectady County Public Health Services Maternal Child Health program to evaluate blood lead screening data of children living in the target zip codes areas and refer those children that have not yet been screened for blood lead testing. Families living in the target area having children with EBLLs of 10-19 µg/dL will be offered inspections of their residences to check for lead hazards.

Westchester County Primary Prevention Program

Target area: Westchester County has identified a specific target area, zip code 10701 in Yonkers, which includes 23,763 residential units (72 percent rental, 71 percent pre-1970). In an effort to serve the population most in need of attention within the 10701 zip code, LPPP staff has focused efforts in a neighborhood known as “Nodine Hill.” Nodine Hill is a region of the 10701 zip code with a dense concentration of previous lead poisoning cases. During the 2008-09 grant period, canvassing efforts are focused primarily in Nodine Hill.

Inspectors are conducting inspections in every multifamily and single-family residence in the target area built prior to 1978 to investigate for potential lead-based paint hazards. When a hazard is detected, the landlord or owner is required to remediate it, though not to EPA standards. The remediation must be completed using safe practices and following an approved work plan, after which the WCHD will conduct a final clearance inspection. The work doesn't need to be performed by an EPA-certified contractor unless the landlord applies and receives grant money from Lead Safe Westchester to abate lead-based paint.

Housing intervention: Westchester County DOH will take the following action:

1. Conduct inspections of residences using an XRF, based on referrals from WCHD Healthy Neighborhood Program, Lead Safe Westchester Program, Yonkers Building Department, and other partners. WCHD will also go door-to-door in the target area, conducting inspections of residences with an XRF.
2. Issue letters of notification of lead hazard and Notice and Demands when necessary to the property owners where lead paint hazards are identified.
3. Initiate Notice of Hearing appearance tickets if property owners are not responsive to the Notice and Demand.
4. Require clearance testing, including dust sampling, when the repair of identified hazards is completed.

Inspection protocol: Once defective paint conditions are observed during a visual inspection of a residential building by a program partner (noted above) an EPA-certified Risk Assessor from the WCHD lead program will perform an XRF inspection of the interior and exterior of the residential buildings.

Incentives: Property owners are notified of all funding sources, including HUD grant programs, currently available to assist in financing lead hazard control efforts. In addition, property owners, contractors, and other interested parties are being made aware of LSWP certification classes, offered through Westchester County DOH. Based on the tenant's or landlord's needs, LPPP staff distribute such incentives as smoke detectors, fire extinguishers, cleaning products, buckets, sponges, energy-efficient light bulbs, CO detectors, reducing injury risks and increasing the likelihood of gaining entry to units and

successfully conducting lead-risk assessments. Many of these items have the program name and contact information on them to assist in promotion.

Specially-designed door hangers with contact information and an explanation of WCHD's program are being used during door-to-door outreach have generated some inspections.

Clearance testing: Dust sampling/clearance testing is being performed by WCHD's LPPP EPA-certified Risk Assessors once they have verified that all required repairs have been completed.

Building workforce capacity: WCHD and Westchester County Department of Emergency Services have partnered to offer the LSWP training course. WCHD staff has been trained to conduct this hands-on approach to working lead-safe.

Identifying resources for lead hazard control: WCHD is working with WC Planning Department to inform homeowners of available funding sources.

Developing partnerships and community involvement: The Westchester County Lead Primary Prevention Program is collaborating internally with the Childhood Lead Poisoning Program, Healthy Neighborhood Program, Lead Safe Westchester Program, and Westchester County DOH Community Health Outreach. It has also partnered with other county agencies, including the Planning Department, Yonkers Building Department, CLUSTER, WESTHAB Inc., and the Nepperhan Neighborhood Community Center. Some new partners include the Yonkers YMCA for outreach and community education, the Education Opportunity Center (EOC) of Westchester Community College for outreach and LSWP training and WCDOH WIC at 20 S Broadway for outreach. Also, WCHD is forging partnerships with Saint John's Episcopal Church for outreach at the Farmer's Market on Thursdays and with Saint Joseph Family Health Center for outreach to prenatal and postpartum clinics. Additionally, WCHD is using the Healthy Neighborhood Model to establish rapport with community-based organizations in the target area, and eliciting their support in raising awareness of the LPPP and achieving its goals.

Highlights: WCHD has initiated a HEPA vacuum lending program, with approved instructions and agreement forms in both English and Spanish. WCHD inspectors can provide families whose homes contain lead dust and paint chips an opportunity to address the immediate hazard and institute interim measures while work plans for remediation are submitted.

APPENDIX C – ADDITIONAL DATA TABLES

The overall methodology for describing grantees' interventions to create lead-safe housing units is described in Chapter 5. The rules below describe in more detail how the quantitative analyses were conducted.

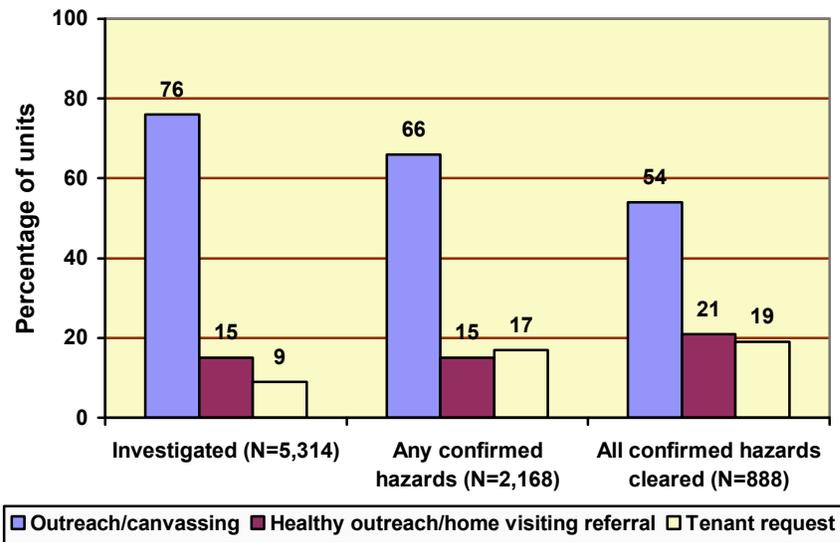
1. Exclude units investigated in Year One (i.e., before October 1, 2008) that required no additional follow-up by the grantee. This rule excluded (1) all units that the grantee had investigated in Year One and determined to have no hazards and (2) all units investigated in Year One in which all hazards found had been cleared.
2. Exclude units that had no initial visit or investigation. This rule also excluded units that had data, such as number of children, but where the unit was never visited by staff of the LPPP or staff of other agencies paid by the LPPP.
3. Include only activities that occurred before the end of Year Two (i.e., September 30, 2009). For example, if a unit was investigated before September 30 but cleared of hazards after that date, the unit was included in analyses related to the investigation but not in analyses related to clearance; if both the initial visit and investigation occurred after September 30, that unit was excluded from all the analyses.
4. Conduct some analyses using only those units first investigated in Year Two and others using those units plus the units first investigated in Year Two and not excluded as a result of Rule 1 above. Some analyses also included 140 units for which insufficient information about investigative activities was included to be able to classify them as investigated in Year One or Year Two. Tables and figures in the report are annotated to show which data set was used.
5. Include only activities that the grantee reported funding. Activities performed by partners or referral agencies that did not receive LPPP funding were not supposed to be included in the data set. For example, if the investigation was conducted by, and funded by, another organization but the unit was referred to the grantee to follow up for confirmation of remediation and clearance, the hazards found at that unit and the actions taken by the grantee were included in the analyses but the unit was not counted as investigated by the grantee.
6. Exclude cases as missing if the unit lacks data for any one variable in a set of comparisons (e.g., if a unit was identified as having a clearance, but no hazards were reported as identified in the unit, then the clearance was treated as missing for discussion of units with hazards that had received clearance).
7. For cases where the grantee could report the occurrence or nonoccurrence of an activity as well the date when it occurred, "no" answers were recoded as "yes" if a date was provided.
8. For cases where the grantee could report the occurrence or nonoccurrence of an activity as well provide additional detail about the activity, "no" answers were recoded as "yes" if additional information was provided. For example, if a grantee reported that a second visit was not made to a unit but then described activities

that occurred at a second visit, the question about a second visit was re-coded as “yes.”

9. Where a grantee could respond to a question by choosing one or more of the available answers (i.e., where the instruction was to “check all that apply”), if any response was chosen, that response was coded “yes” and all other response possibilities were coded as “no.”
10. Where clearance dates had not been provided for all confirmed hazards and a grantee provided information about a unit that was only valid if a unit had been cleared of all hazards, the additional information provided by the grantee was excluded from the analyses.
11. For table cells that did not apply to a particular grantee, “NA” was used to show that the cell did not apply (e.g., if the grantee had no units that were cleared of hazards and the cell described the length of time to clear hazards). NA was also used in some cases where data were missing in order to distinguish absence from a valid zero.

While the reader might expect that the summary data generated from NCHH analysis of the unit-based data would be equivalent to the summary data provided in the quarterly reports, numbers in the quarter reports might be either larger or smaller than numbers from the analysis of unit-based data. There are several reasons why the reports might differ. First, the summary data NCHH generated from the unit-based dataset includes units carried over from Year One, while the data grantees provided in the quarterly reports on investigations and potential and confirmed hazards would reflect only units first investigated in Year Two. Second, grantees sometimes included in their quarterly reports data on additional units other than those being tracked by the evaluation (such as housing units visited by Healthy Neighborhood Program staff but not investigated with funds from the LPPP).

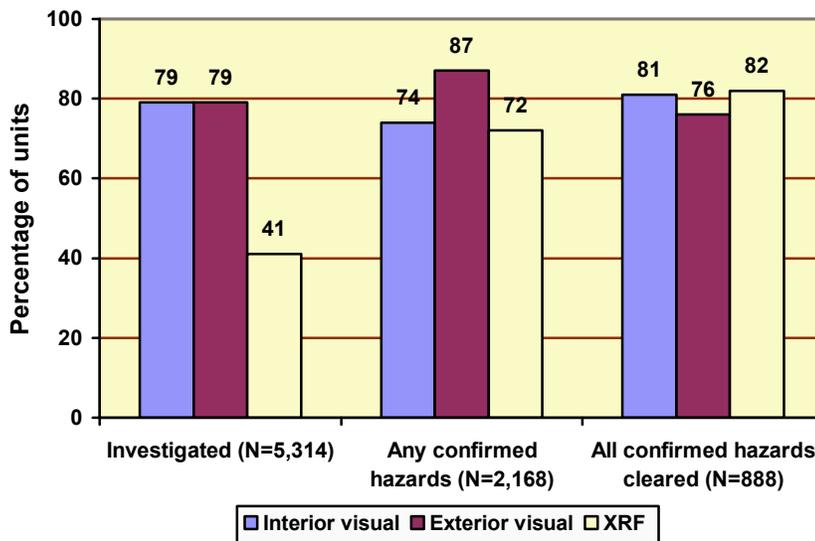
Figure C.1. Units Investigated, Confirmed to Have Hazards, and Cleared of Hazards, by Initiative for Investigation, Year Two



Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note: A single unit could have had more than one trigger for investigation.

Figure C.2. Investigative Procedures Used in Units Investigated, Confirmed to Have Hazards, and Cleared of Hazards, Year Two



Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note: A single unit could have had more than one investigative procedure.

Table C-1. Investigation Results as of the End of Year Two

| | Renewing Grantees | | | | | | | | New Grantees | | | |
|-----------------------------------|-------------------|------|--------|-------|--------|----------|--------|-------------|--------------|------------|----------|-------------|
| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | Broome | Chautauqua | Dutchess | Schenectady |
| Units investigated | 156 | 602 | 2,411 | 931 | 185 | 319 | 146 | 492 | 19 | 30 | 12 | 11 |
| Potential hazards | | | | | | | | | | | | |
| Number of units | 141 | 552 | 1,188 | 1,030 | 147 | 306 | 121 | 155 | 15 | 27 | 6 | 10 |
| Confirmed exterior hazards | | | | | | | | | | | | |
| Number of units | 89 | 538 | 263 | 0 | 65 | 299 | 33 | 58 | 14 | 12 | 0 | 5 |
| Number cleared of hazards | 52 | 261 | 61 | NA | 43 | 160 | 1 | 10 | 0 | 0 | NA | 2 |
| Percent cleared of hazards | 58% | 48% | 23% | NA | 66% | 54% | 3% | 17% | 0 | 0 | NA | 40% |
| Confirmed interior hazards | | | | | | | | | | | | |
| Number of units | 83 | 78 | 168 | 476 | 91 | 223 | 69 | 91 | 15 | 29 | 0 | 10 |
| Number cleared of hazards | 47 | 47 | 30 | 359 | 43 | 119 | 8 | 26 | 1 | 0 | NA | 5 |
| Percent cleared of hazards | 57% | 60% | 18% | 75% | 47% | 53% | 12% | 29% | 7% | 0 | NA | 50% |
| Any confirmed hazards | | | | | | | | | | | | |
| Number of units | 89 | 546 | 382 | 476 | 120 | 307 | 74 | 120 | 15 | 29 | 0 | 10 |
| Number cleared of all hazards | 51 | 189 | 44 | 359 | 43 | 166 | 6 | 25 | 0 | 0 | NA | 5 |
| Percent cleared of all hazards | 57% | 35% | 12% | 75% | 36% | 54% | 8% | 21% | 0 | 0 | NA | 50% |

Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note 1: The data in this table may not be directly comparable to the data that appeared in grantees' quarterly reports for Year Two. See explanation at the beginning of Appendix C.

Note 2: Some units were counted as having hazards even though they were not counted as investigated because the grantee did not provide complete data on the investigation activities. Thus, the number of units with potential or confirmed hazards could be higher than the number investigated.

Note 3: Some units not counted as having confirmed hazards at this time may be re-coded as having hazards later, once some hazards currently coded as "not verified or still in process" are resolved. Units could not be considered cleared of all hazards if some hazards were not verified or still in process.

Note 4: In addition to these units shown as cleared of all hazards, 28 units (27 in Albany and one in Erie) were cleared of hazards but whether the hazards were exterior or interior was not specified.

Table C.2. Building Type of Units Investigated, Found to Have Hazards, and Cleared of All Hazards by the End of Year Two

| | Renewing Grantees | | | | | | | | New Grantees | | | |
|--|-------------------|------------|--------------|------------|------------|------------|-----------|-------------|--------------|------------|----------|-------------|
| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | Broome | Chautauqua | Dutchess | Schenectady |
| All units investigated | | | | | | | | | | | | |
| Owner-occupied | 7 5% | 259 49% | 82 3% | 0 | 30 17% | 28 9% | 7 5% | 45 9% | 6 43% | 7 25% | 0 | 1 10% |
| Rental, 1-2 units | 129 86% | 243 46% | 1,613 68% | 178 20% | 105 58% | 224 70% | 49 34% | 40 8% | 3 21% | 19 68% | 3 75% | 8 80% |
| Rental, 3+ units | 14 9% | 32 6% | 688 29% | 728 80% | 45 25% | 67 21% | 83 58% | 390 82% | 5 36% | 2 7% | 1 25% | 1 10% |
| Units with any confirmed hazard | | | | | | | | | | | | |
| Owner-occupied | 3 4% | 240 50% | 6 2% | 0 | 21 18% | 25 8% | 2 3% | 18 16% | 3 30% | 7 26% | NA | 0 |
| Rental, 1-2 units | 79 93% | 216 45% | 253 68% | 122 27% | 69 60% | 219 71% | 28 38% | 2 2% | 3 30% | 18 67% | NA | 8 89% |
| Rental, 3+ units | 3 4% | 26 5% | 114 30% | 341 73% | 25 21% | 63 21% | 43 59% | 89 81% | 4 40% | 2 7% | NA | 1 11% |
| Units with all hazards cleared | | | | | | | | | | | | |
| Owner-occupied | 1 2% | 91 50% | 0 | 0 | 3 8% | 5 3% | 0 | 1 4% | NA | NA | NA | 0 |
| Rental, 1-2 units | 44 92% | 87 48% | 29 73% | 82 23% | 28 70% | 117 70% | 1 17% | 0 | NA | NA | NA | 4 100% |
| Rental, 3+ units | 3 6% | 4 2% | 11 28% | 269 76% | 9 22% | 44 27% | 5 83% | 23 96% | NA | NA | NA | 0 |

Source: Unit-based data for units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note 1: The data in this table may not be directly comparable to the data that appeared in grantees' quarterly reports for Year Two. See explanation at the beginning of Appendix C.

Note 2: Shading shows housing type most frequently investigated by each grantee..

Table C.3. First Approaches when Potential or Confirmed Hazards were Found, Year Two

| | Renewing Grantees | | | | | | | | New Grantees | | | |
|-----------------------------------|-------------------|------|--------|-------|--------|----------|--------|-------------|--------------|------------|----------|-------------|
| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | Broome | Chautauqua | Dutchess | Schenectady |
| Units investigated | 156 | 602 | 2,411 | 931 | 185 | 319 | 146 | 492 | 19 | 30 | 12 | 11 |
| Potential hazards | | | | | | | | | | | | |
| Units | 141 | 552 | 1,188 | 1,030 | 147 | 306 | 121 | 155 | 15 | 27 | 6 | 10 |
| Notice & Demand | 137 | 420 | 14 | 0 | 0 | 268 | 115 | 3 | 0 | 0 | 0 | 10 |
| Other notice | 0 | 121 | 1,051 | 501 | 113 | 33 | 0 | 114 | 14 | 21 | 6 | 0 |
| No notice | 0 | 3 | 6 | 529 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| Confirmed exterior hazards | | | | | | | | | | | | |
| Units | 89 | 538 | 263 | 0 | 65 | 299 | 33 | 58 | 14 | 12 | 0 | 5 |
| Notice & Demand | 87 | 389 | 7 | NA | 0 | 261 | 31 | 0 | 0 | 0 | NA | 5 |
| Other notice | 0 | 100 | 250 | NA | 35 | 33 | 0 | 57 | 13 | 9 | NA | 0 |
| No notice | 0 | 40 | 1 | NA | 1 | 0 | 0 | 1 | 0 | 0 | NA | 0 |
| Confirmed interior hazards | | | | | | | | | | | | |
| Units | 83 | 78 | 168 | 476 | 91 | 223 | 69 | 91 | 15 | 29 | 0 | 10 |
| Notice & Demand | 82 | 23 | 7 | 0 | 0 | 194 | 67 | 1 | 0 | 0 | NA | 10 |
| Other notice | 0 | 51 | 153 | 476 | 86 | 24 | 0 | 82 | 14 | 23 | NA | 0 |
| No notice | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | NA | 0 |
| Any confirmed hazards | | | | | | | | | | | | |
| Number of units | 89 | 546 | 382 | 476 | 120 | 307 | 74 | 120 | 15 | 29 | 0 | 10 |
| Notice & Demand | 87 | 391 | 7 | 0 | 0 | 268 | 72 | 1 | 0 | 0 | NA | 10 |
| Other notice | 0 | 106 | 364 | 476 | 86 | 33 | 0 | 111 | 14 | 23 | NA | 0 |
| No notice | 0 | 40 | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | NA | 0 |

Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note 1: The data in this table may not be directly comparable to the data that appeared in grantees' quarterly reports for Year Two. See explanation at the beginning of Appendix C

Note 2: Some units were counted as having hazards even though they were not counted as investigated because the grantee did not provide complete data on the investigation activities. Thus, the number of units with potential or confirmed hazards could be higher than the number investigated.

Note 3: Some units not counted as having confirmed hazards at this time may be re-coded as having hazards later, once some hazards currently coded as "not verified or still in process" are resolved.

Note 4: Information about notification may not total number of units because grantees did not respond to the question or reported "unknown."

Table C.4. Number of Days from Investigation to Clearance of All Confirmed Hazards and from Investigation to End of Year Two (for Units Not Cleared of all Confirmed Hazards), Returning Grantees and all Grantees Combined

| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | All grantees |
|--|--------|------|--------|-----|--------|----------|--------|-------------|--------------|
| Cleared of all confirmed hazards in Year Two – Days from investigation to clearance | | | | | | | | | |
| Mean | 137 | 119 | 28 | 94 | 109 | 105 | NA | 331 | 108 |
| Median | 143 | 101 | 21 | 69 | 60 | 92 | NA | 382 | 80 |
| Minimum | 23 | 0 | 0 | 18 | 8 | 1 | NA | 51 | 0 |
| Maximum | 362 | 414 | 126 | 536 | 443 | 448 | NA | 647 | 647 |
| N | 46 | 183 | 43 | 359 | 42 | 161 | 5 | 23 | 867 |
| Not cleared of all confirmed hazards in Year Two – Days from investigation to end of Year Two | | | | | | | | | |
| Mean | 89 | 122 | 137 | 106 | 164 | 150 | 194 | 253 | 140 |
| Median | 66 | 85 | 146 | 55 | 125 | 73 | 186 | 176 | 107 |
| Minimum | 6 | 0 | 1 | 0 | 13 | 1 | 6 | 0 | 0 |
| Maximum | 351 | 468 | 268 | 652 | 442 | 579 | 406 | 687 | 687 |
| N | 38 | 356 | 338 | 117 | 77 | 138 | 68 | 94 | 1,275 |

Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note 1: NA is used for cells with data for fewer than 10 units.

Note 2: Returning and new grantees are included in the total of “all grantees,” but none of the grantees new in Year Two had data on enough units to analyze separately.

Note 3: As noted in Chapter 5, there are limitations to the data provided by Monroe County for investigations conducted by City of Rochester code inspectors on the grantee’s behalf. Monroe County reported a total of 2,411 investigations in the Year Two database. However, the grantee could provide data for only 1,669 units as to whether the unit had confirmed exterior hazards and for only 908 units regarding whether they had confirmed interior hazards. Even fewer units had information about the dates when events occurred.

Table C.5. Number of Days from Investigation to First Notice about Hazards Needing Remediation, Returning Grantees and all Grantees Combined

| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | All grantees |
|---|--------|------|--------|-----|--------|----------|--------|-------------|--------------|
| Cleared of all confirmed hazards in Year Two – Days from Investigation to First Notice | | | | | | | | | |
| Mean | 14 | 9 | 1 | 7 | 30 | NA | NA | 86 | 11 |
| Median | 13 | 4 | 0 | 0 | 12 | NA | NA | 18 | 2 |
| Minimum | 0 | 0 | 0 | 0 | 2 | NA | NA | 0 | 0 |
| Maximum | 57 | 258 | 29 | 21 | 370 | NA | NA | 363 | 370 |
| N | 45 | 147 | 43 | 359 | 22 | 0 | 6 | 20 | 647 |
| Not cleared of all confirmed hazards in Year Two – Days from Investigation to First Notice | | | | | | | | | |
| Mean | 16 | 6 | 1 | 7 | 14 | NA | 15 | 48 | 9 |
| Median | 13 | 2 | 0 | 0 | 7 | NA | 13 | 4 | 0 |
| Minimum | 2 | 0 | 0 | 0 | 3 | NA | 1 | 0 | 0 |
| Maximum | 52 | 91 | 52 | 21 | 77 | NA | 57 | 423 | 423 |
| N | 25 | 335 | 326 | 117 | 60 | 0 | 33 | 87 | 1,014 |

Source: Unit-based data. Includes all units investigated in Year Two or carried over from Year One, even where investigation data were incomplete.

Note 1: NA is used for cells with data for fewer than 10 units.

Note 2: Returning and new grantees are included in the total of “all grantees,” but none of the grantees new in Year Two had data on enough units to analyze separately.

Note 3: As noted in Chapter 5, there are limitations to the data provided by Monroe County for investigations conducted by City of Rochester code inspectors on the grantee’s behalf. Although Monroe reported 2,411 investigations in the Year Two database, the grantee could provide data for only 1,669 units as to whether the unit had confirmed exterior hazards and for only 908 units regarding whether they had confirmed interior hazards. Even fewer units had information about the dates when events occurred.

Table C.6. LSWP Training Sessions and Individuals Trained in Year Two by Grantees that Entered in Year One

| | Albany | Erie | Monroe | NYC | Oneida | Onondaga | Orange | Westchester | TOTAL for Year One Entrants |
|---|--------|------|--------|-----|--------|----------|--------|-------------|-----------------------------|
| EPA/HUD LSWP training | | | | | | | | | |
| Number of sessions | 3 | 14 | 28 | 17 | 7 | 8 | 1 | 2 | 80 |
| Number of individuals trained | 130 | 229 | 366 | 445 | 114 | 117 | 17 | 3 | 1,421 |
| EPA renovator training | | | | | | | | | |
| Number of sessions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of individuals trained | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LSWP presentations not using EPA/HUD curriculum | | | | | | | | | |
| Number of sessions | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 5 |
| Number of individuals trained | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Lead-safe weatherization training | | | | | | | | | |
| Number of sessions | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 12 |
| Number of individuals trained | 0 | 0 | 0 | 0 | 48 | 0 | 0 | 0 | 48 |
| EPA-certified abatement worker/supervisor training | | | | | | | | | |
| Number of sessions | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| Number of individuals trained | 0 | 0 | 0 | 0 | 79 | 0 | 0 | 0 | 79 |

Source: Quarterly reports

Table C.6 (continued). LSWP Training Sessions and Individuals Trained in Year Two by Grantees that Entered in Year Two

| | Broome | Chautauqua | Dutchess | Schenectady | TOTAL for Year Two Entrants |
|---|--------|------------|----------|-------------|-----------------------------|
| EPA/HUD LSWP training | | | | | |
| Number of sessions | 6 | 1 | 2 | 3 | 12 |
| Number of individuals trained | 49 | 5 | 38 | 133 | 225 |
| EPA renovator training | | | | | |
| Number of sessions | 0 | 0 | 0 | 0 | 2 |
| Number of individuals trained | 0 | 0 | 0 | 0 | 28 |
| LSWP presentations not using EPA/HUD curriculum | | | | | |
| Number of sessions | 0 | 0 | 0 | 0 | 0 |
| Number of individuals trained | 0 | 0 | 0 | 0 | 0 |
| Lead-safe weatherization training | | | | | |
| Number of sessions | 0 | 0 | 0 | 0 | 0 |
| Number of individuals trained | 0 | 0 | 0 | 0 | 0 |
| EPA-certified abatement worker/supervisor training | | | | | |
| Number of sessions | 0 | 0 | 0 | 0 | 0 |
| Number of individuals trained | 0 | 0 | 0 | 0 | 0 |

Source: Quarterly reports

**APPENDIX D – BUILDING PARTNERSHIPS WITH LOCAL GOVERNMENTAL AGENCIES
AND COMMUNITY ORGANIZATIONS
(As included in DOH instructions for work plans**

| Potential Agency Partners for Primary Prevention: | Possible partnerships | | | | | |
|--|--------------------------------------|--|---|--|--|---|
| | Referrals For LBP Inspections | Outreach , Education, Participant in Canvass activities | Visual or other home assessments | LSWP Training | Enforcement | Shared mailing lists, Equipment/Joint staff training |
| Healthy Neighborhoods Program | x | x (also as source for incentive items) | x | | | x |
| Maternal and Child Health Home Visiting Programs | x | x (also as source for incentive items) | x | | | x |
| Newborn services | x | x (also as source for incentive items) | x | | | x |
| Department of Social Services, Foster care | x | x | x | x (for foster care families) | x (secure local commitment to test rental apartments before placement of children) | x |
| Refugee Resettlement Agencies | x | x | x | x (for rental property owners renting to resettled families) | x (secure local commitment to test rental apartments before placement of children) | x |
| Women's Infants' and Children's (WIC) and nutritional services | x | X (also serve as site for additional BLL screening) | | X (host site for trainings in target neighborhoods) | | |

| Potential Community Partners for Primary Prevention | Referrals For LBP Inspections | Outreach , Education, Participant in Canvass activities | Visual or other home assessments | LSWP Training | Enforcement | Shared mailing lists, Equipment/Joint staff training |
|---|--|--|---|---|--|---|
| Community- and faith-based social services | x | x | | X (host site for trainings in target neighborhoods) | x (secure local commitment to test rental apartments before placement of children) | x |
| Child care and Head Start centers | x | x | x (licensing agencies must conduct home assessments – could train to administer HNP assessment) | offer CEU credits for training in visual assessment and LSWP work practices | x offer voluntary LBP assessments to providers seeking accreditation | x |
| Health care providers and clinics | x | Pilot could conduct public health detailing visits at clinics; provide Grand Rounds at hospitals, seek funding for activities through HMOs | | | | |
| Municipal Housing authorities (required to be free of lead hazards) | x (should be MOU for reciprocal referrals) | x | x | x | Submit list of all cleared units to Pilot for entry into housing registry | x (shared databases) |
| Section 8 (tenant-based rental assistance (required to be free of deteriorated paint) | x (should be MOU for reciprocal referrals) | x | x | x (sponsor training for section 8 owners, property managers, tenants) | X (should be MOU for reciprocal referrals) | x (shared data bases) |
| Fire inspectors (often involved in certificate of occupancy inspections) | x (should be MOU for reciprocal referrals) | x | x | x – host training at local fire stations | Deputized to administer PHL 1370 (a)(3) | x |
| Building permits and code inspectors | x (should be MOU for reciprocal referrals) | | | | Deputized to administer PHL 1370 (a)(3) | x |
| Vista/AmeriCorps | | x | x | | | X (can be supplemental program staff) |

| | Referrals For LBP Inspections | Outreach , Education, Participant in Canvass activities | Visual or other home assessments | LSWP Training | Enforcement | Shared mailing lists, Equipment/Joint staff training |
|--|--|--|---|---|--|---|
| Community development corporations (must use LSWP and/or certified workers if using federal home rehab. Funds) | x | x | x | X (as part of homeowner education; training for contractors) | X (Submit list of all cleared units to Pilot for entry into housing registry) | x |
| Community action agencies (weatherization programs required to use LSWP where hazards are known) | x (should be MOU for reciprocal referrals) | x (also as source for incentive items) | x | X (as part of homeowner education; training for contractors) | X (Submit list of all cleared units to Pilot for entry into housing registry) | |
| Schools and parent outreach services | x | x | | X (sponsor LSWP) | | |
| Child safety and injury prevention programs | | x (also as source for incentive items) | | | | |
| Emergency housing services | | x | | | X secure local commitment to test rental apartments before placement of children | |
| Tenants-rights organizations | x | x | x | | Serve as dispute mediator | |
| Workforce development programs | | x | | X MOU to employ workers trained in LSWP by Pilot | | |
| Community Foundations | | | | | | |
| Community Colleges | | | | Provide CEU, host site for training | | |
| Legal services | | x | | | Serve as dispute mediator | |
| Landlord Organizations; realtors; home-builders associations | | x | | Provide CEU, host site for training | Serve as dispute mediator; Secure agreements to submit lists of cleared units to housing registry | |

APPENDIX E – SAMPLE COST-BENEFIT ANALYSES FROM ONONDAGA AND ORANGE COUNTIES ^{xxiii}

ONONDAGA COUNTY

INTRODUCTION

During Year Two of the Primary Prevention Project, the Lead Poisoning Control Program (LPCP) continued and expanded upon Year One activities. The following new initiatives were included in the work plan for Year Two:

- Expansion of the high-risk area to include the entire City of Syracuse (although a more targeted approach was used during certain activities such as door-to-door inspections).
- Development of the capacity for mapping blood lead data in-house.
- Hosting of community receptions with partners in order to promote the project.
- Expanded coordination with DSS to receive referrals for properties requiring a security deposit that were inspected and found to have chipping and peeling paint.
- Implementation of a revised approach to proactive inspections.
- Creation of a lead-safe housing registry (this activity was ultimately not conducted—it is still pending further investigation).

This report attempts to summarize costs for existing and new initiatives in Year Two and evaluate their effectiveness. The evaluation criteria for this report include the following:

- Breakdown of direct costs for project activities.
- Analysis of the number of children referred for testing vs. those tested.

SUMMARY OF COSTS

| | |
|--------------------------------------|-----------|
| Total Budget | \$308,132 |
| Administrative Costs ^{xxiv} | \$93,637 |
| Direct Costs | \$214,495 |

BREAKDOWN OF DIRECT PROJECT COSTS

Mapping

In Year One, the LPCP used a student from Syracuse University to map elevated blood lead level data. This year, the Onondaga County Health Department’s Bureau of Surveillance and Statistics Director mapped the 2008 blood lead data and assisted with using U.S. Census data to identify the highest risk census tracts in the City to be targeted for proactive inspections.

Cost to the grant: \$ 0

^{xxiii} The narratives and data in this appendix are those provided by the grantees.

^{xxiv} Administrative costs include: salaries for the Program Coordinator and clerical, fiscal and computer support staff; phones; travel; general supplies; administrative costs as defined in the budget.

Advertising

The LPCP spent a considerable amount of funds on advertising. Of the sources for initiating investigations, advertising generated 19 requests plus an additional 47 callers who cited “word of mouth” as their source of information about the program. It is well known that multipoint advertising creates a level of overall community awareness that is reflected here in the number of direct advertising and word of mouth referrals.

Cost^{xxv}: \$12,204 for advertising during Year Two (\$4,941 Bus Shelter Ads, \$7,263 radio ads)

Cost per inspection generated: \$185/referral

Outreach/Education

Outreach/education consists of a variety of activities including distribution of educational materials, participation in community events, summer door-to-door outreach, incentives, community receptions, and coordination with community partners to promote our program. During Year Two, 132 inspections were generated as a result of LPCP outreach activities.

Cost: \$41,300

Cost per inspection generated: \$313/referral

Pro-Active Inspections

Using the blood lead data along with other demographic and housing variables (number of young children, rental housing, pre-1950 housing, poverty status), census block group 39.05 was identified as one of the highest risk areas in Syracuse and was the area targeted for proactive inspections during Year Two. In order to improve the rate of success of the proactive inspections, the LPCP conducted three focus groups (two tenant – 14 total participants, one landlord – 13 participants) to obtain feedback from tenants and landlords about the Primary Prevention Program, their views on door-to-door inspections, and suggestions on our approach to getting in the door to do these inspections. The main finding was that landlords much preferred that they be contacted directly, rather than asking the tenant.

In preparation for proactive inspections, a letter was sent to 237 property owners in census block group 39.05. These letters notified landlords of our intent to inspect all <1950 rental units in the area and to encourage them to call in advance for an inspection. Conservation kits were purchased as an incentive for landlords to request an inspection in advance of door-to-door outreach and LPCP policies were changed to give landlords 90 days (instead of 60 days) to complete any required lead hazard reduction work.

^{xxv} Note an additional \$34,207 was encumbered during Year Two for an advertising campaign to run from September-December 2009 (\$4,872 Bus Ads, \$6,835 radio ads, \$22,500 television ads). . The success of this campaign will be evaluated during Year Three.

During the same time, letters were also delivered to approximately 200 tenants in 39.05 by the Healthy Neighborhood Program during their canvassing of this area. The letters notified tenants that we were working with their landlord to inspect the property and that if we don't hear from the landlord, we will be coming to their door to inspect the property.

We received calls from owners of 92 properties. Several of these properties were owner-occupied or had recently been remediated by the City of Syracuse Lead Program, and were not referred for inspection. In addition, 44 units at 28 properties were referred to the environmental inspectors for inspection. As of the end of Year Two, 27 units in 21 properties were inspected. The next step to this initiative is to go door-to-door to reach units where both the tenant and the landlord have not responded to our requests for inspection. Due to a backlog of cases pending inspection, this will be conducted in October and November 2009.

Cost: \$6,513

Cost per inspection generated: \$241/referral

Inspections/Follow-up/Clearance/Enforcement

This category analyzes the direct costs involved in inspecting 225 properties in Year Two and includes follow up activities such as field conferences, re-checks, dust wipes, hearings, et cetera.

Cost: \$104,753

Cost per inspection generated: \$466/unit inspected

Lead-Safe Work Practice Trainings

In Year Two, 117 individuals were trained in LSWP under a contract with the City of Syracuse Lead Program. The cost involved in this activity includes extensive promotion and training fees (\$20 per person).

Cost: \$15,518

Cost per individual trained: \$133

BLOOD LEAD TESTING OUTCOMES

The table below shows outcomes of blood lead testing of children associated with primary prevention properties.

| | |
|--|-----------|
| Number of children < age 7 associated with units that were inspected | 272 |
| -Number of children < age 7 not in need of a blood lead test | 226 |
| -Number of children < age 7 referred for a blood lead test | 46 |
| -Of those referred, the number of children tested and test results | <u>23</u> |
| ≥10 µg/dL | 0 |
| 5-9 µg/dL | 6 |
| <5 µg/dL | 17 |

Half of the children referred for testing received a blood lead test. Of the six children found to have blood lead levels ≥ 5 µg/dL, all were associated with homes that were found to have lead hazards upon inspection. These findings are similar to last year.

SUMMARY AND FUTURE DIRECTIONS

Cost analysis indicates that the different methods for finding properties to inspect (advertising, outreach/education, proactive inspections) were similar in terms of their cost per referral with a range of \$185 to \$313 per referral. During Year Three of the Primary Prevention Pilot Program, the LPCP will continue to use multiple approaches to promote the program. This is particularly important in order to maintain referral numbers throughout the year.

Results of the new strategy conducting proactive inspections in CT 39.05 show considerable improvement from Year One. With just using letters, the LPCP has already inspected 27 units in 21 properties (an approximate success rate of 12%, compared with a 1% success rate last year). As the actual door-to-door canvassing begins next quarter, the success rate will continue to improve.

Thus far in the two-year project, 61% of properties cited with lead hazards have been risk reduced (this does not include resource homes that are not required to be risk reduced). This approaches our projection in our grant application that estimated that 70% of the properties inspected would be risk reduced at the end of the grant. An evaluation will be completed in Year Three to determine whether primary prevention properties are being risk reduced in a timely manner, compared with properties inspected on behalf of a child with an elevated blood lead level or if primary prevention properties are more likely to become vacant than other properties.

ORANGE COUNTY

- I. The following is an analysis of the cost of lead paint investigation in the target area vs. the cost of Special Education services for lead poisoned children.
- A. Cost of lead paint investigations:
1. 162 XRF inspections in Newburgh target area (2009).
 2. \$97,593 – Salary and benefits of Steve Collins, Public Health Sanitarian (2009).
 3. \$602.43 per XRF inspection.
- B. Cost of Special Education for children in Newburgh:
1. \$4,800/year/child – Early Intervention Services (EIS) Orange County Department of Health (two years).
\$10,000/year/child – Pre-school Special Education Orange County Department of Health (two years).
 2. Cost to educate a Special Education Student Grades K-6: \$19,811.
Cost to educate a non-Special Education Student Grades K-6: \$3,236.
Increased cost per child in Special Education Grades K-6: 16,575
($\$19,811 - \$3,236 = \$16,575$).
 3. Cost to educate a Special Education Student Grades 6-12: \$20,529.
Cost to educate a non-Special Education Student Grades 6-12: \$3,954.
Increased cost per child in Special Education Grades 6-12: \$16,575
($\$20,529 - \$3,954 = \$16,575$).
 4.

| | |
|--------------|---|
| \$116,025. | K-6 cost/child |
| 20,000 | Pre-school Special Education cost/child |
| 99,450 | Grades 7-12 cost/child |
| <u>9,600</u> | EIS cost/child |
| \$245,075 | Increased cost/child through Grade 12 |
- C. Benefits to Orange County and to the Newburgh Enlarged City School District due to children avoiding lead poisoning disabilities:
1. $\$245,075 - \$97,593 = \$147,482$ savings/child.
 2. $\$16,819,320 - \$97,593 = \$16,721,727$ savings if one child in each of 70 homes if child under six years of age avoids Special Education services.
 3. $\$39,702,150 - \$97,593 = \$39,604,557$ possible savings in Special Education services if one child per home receiving lead paint XRF investigations (162) avoided lead poisoning disabilities.
- II. The following is an analysis of the cost of Primary Prevention Program (PPP) advertising vs. the benefit associated with advertising to residents:
- A. Cost of advertising (2008 – 2009 grant year):

1. 25% of the Public Health Educators (Monica Braverman) salary and fringe = \$10,207
 2. Direct cost (*Times Herald Record, Las Noticias, Hudson Valley Press*) = \$8,778
 3. Total = \$18,985.
- B. Estimated residents/families researched in circulation: 220,000.
- C. Cost per copy articles/advertising: .086 per person/family.
- D. Benefits:
1. \$.086 for a family to receive the message of lead testing at ages one and two.
 2. \$.086 for a family to receive the invitation to have lead paint analysis of home.
 3. \$.086 for property owners, residents, and contractors to receive knowledge and the invitation for LSWP training and RRP rule
 4. \$.086 to avoid the cost of one child receiving Special Education services by being tested early and having parents/property owners recognizing and correcting lead paint hazards = \$245,075 per child savings EIS through grade 12.
- III. The following is an analysis of the cost of visits by community health workers (CHW) in the Healthy Neighborhood Program (HNP/PPP) vs. benefit of said visit:
- A. Cost of CHWs visit and assessment.
1. Salary and fringe = \$118,273 (CHWs in PPP and HNP).
 2. Cost of cleaning kit is \$27 x 519 distributed = \$14,013.
 3. Total: \$132,286/519 = 254.88 per assessment visit.
- B. Benefits:
1. 519 families received healthy homes and visual lead assessment.
 2. 240 families/homes were referred for XRF paint assessment by the Public Health Sanitarian.
 3. 152 families with an asthmatic were referred to their primary care provider for a control plan.
 4. 286 families took the Orange County Department of Health Smoke-Free Homes and Car Pledge.
 5. 81 homes were provided with smoke detectors.
 6. 161 children were referred for lead testing.
 7. Savings/child tested and avoiding lead poisoning and cost associated with EIS – Grade 12 Special Education services: \$245,075
 8. 519 families received cleaning kit and instructions.

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¹⁹ Carroll, TJ and Slade S. "Lead Poisoning Prevention: A Comprehensive Public Health Response to an Environmental Problem", presentation at the September 17, 2007 *Public Health Live* broadcast from the School of Public Health, University of Albany. The last previously-published geographic data on high incidence zip codes can be found at 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/section_2/table_3.htm.

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