National Center for Healthy Housing

Summary Report for New York State's Childhood Lead Poisoning Primary Prevention Program

Implementation Report:
October 1, 2011– March 31, 2012

Prepared for the New York State Department of Health
Bureau of Community Environmental Health and Food Protection
Contract #C027566

Draft: May 1, 2013

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INTRODUCTION

Childhood lead poisoning remains a significant public health problem in the United States with over 500,000 children affected. New York State (NYS) consistently ranks high on key risk factors associated with lead poisoning including many young children living in poverty, a large immigrant population, and an older, deteriorated housing stock.[i] Additional aggressive action to reduce children's exposure to lead remains a state public health priority. This report summarizes the progress of fifteen NYS jurisdictions in implementing the Childhood Lead Poisoning Primary Prevention Program since its inception in 2007, with a particular focus on the October 1, 2011 to March 31, 2012 time period.

BACKGROUND

National Landscape

Despite a 1978 federal government ban of lead in residential paint,[ii] there are still an estimated 38 million pre-1978 dwellings nationwide that contain old layers of lead-based paint (LBP) that become hazardous when a home is in disrepair or when the paint is disturbed by repairs or renovation.[iii] Approximately 24 million homes have lead-based paint (LBP) hazards (soil, dust, or peeling paint),[iv] [v] more than four million of which house young children.[vi]

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 rate of lead absorption in their bodies.

In May 2012, the U.S. Centers for Disease Control and Prevention's (CDC) announced that due to evidence showing negative health effects at very low levels of lead exposure, it would revise its lead exposure terminology. For 20 years, CDC referred to 10 micrograms per deciliter (ug/dL) of lead as its "level of concern." For blood lead levels under this threshold, clinicians typically considered the test result "negative" and no further action would be indicated for the child. CDC adopted a new "reference value" based on population blood lead levels. Children with blood lead levels (BLLs) higher than 97.5% of the population are considered above the reference value. The current reference value is 5 ug/dL, and it will be recalculated by CDC every four years.[vii] More than 500,000 U.S. children ages 1-5 have BLLs greater than 5 µg/dL.[viii] In announcing the new policy, CDC and its advisory committee highlighted the importance of primary prevention, "a strategy that emphasizes the prevention of lead exposure, rather than a response to exposure after it has taken place."[ix]

Lead Poisoning in New York State

The overall incidence (newly diagnosed cases) of lead poisoning among NYS children under age six steadily declined from 1998 to 2008.[x] However, thousands of children are still at risk

because elevated blood lead level (EBLL) rates vary greatly across the state.[xi] [xii] In NYS between 2006 and 2008, 80 percent of children under age six years with newly identified BLLs of 10 µg/dL and above resided in the thirteen highest incidence counties (ordered from high to low): Kings, Queens, Erie, Bronx, Monroe, New York, Onondaga, Westchester, Oneida, Orange, Nassau, Albany, and Richmond. New York City is composed of five of these 13 counties – Kings (Brooklyn), Queens, Bronx, New York (Manhattan), Richmond (Staten Island).

NYS Childhood Lead Poisoning Primary Prevention Program

In 2007, the legislature passed and the Governor signed into law a new pilot program to dramatically curtail childhood lead poisoning in NYS. The Childhood Lead Poisoning Primary Prevention Program authorized health departments to gain access to high risk homes for the purposes of education and inspection. Previously, health departments were only able to gain entry to a home if a child with an elevated blood lead level resided there. The new approach enabled a more proactive and effective approach.

The legislation required pilot-funded recipients to:

1. Identify geographic areas[1] 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.
2. Designate "areas of high risk" within "communities of concern" and to use a Notice and Demand or equivalent process to inform owners of the risks and to require repairs.
3. Refer children under age six who had not received required lead screenings to their primary care providers and/or local health department lead prevention program for follow-up.
4. Develop a housing inspection program that included the following:
   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 (LSWP);
   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.
6. Develop new or use existing enforcement policies and activities to assure safe and effective remediation of identified lead hazards.

[1] "*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.*" Public Health Law Section 1370(a) (3).

7. Coordinate available financial and technical resources to assist property owners with remediation.
8. Develop and implement lead-safe work practices (LSWP) 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 the New York State Department of Health (DOH) to evaluate the progress and effectiveness of the initiative.

In 2008, the Governor proposed and the NYS Legislature committed additional funds for the Primary Prevention Program, bringing the total funded amount for October 2008-September 2009 to approximately $5 million. In 2009, based on the promising results of the Pilot, the Primary Prevention Program was made permanent, and funding was further increased to $7.7 million (see Table 1).

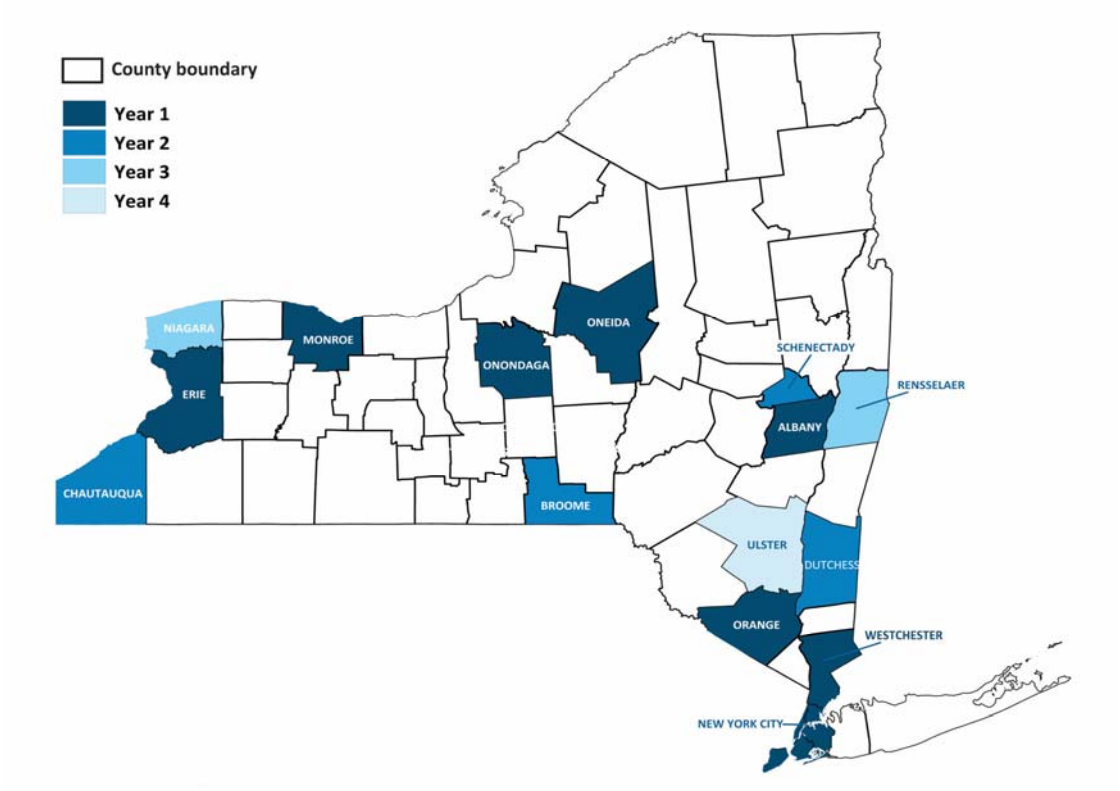
Table 1: Childhood Lead Poisoning Primary Prevention Program Funding Levels

Year	Funding Amount	Authority
2007-2008	$3 million	Pilot Program: Public Health Law Section 1370(a) (3)
2008-2009	$5 million	Pilot Program: Public Health Law Section 1370(a) (3)
2009-2010	$7.7 million	Permanent Program: Public Health Law Section 1370(a) (3)
2010-2011	$10 million	Permanent Program: Public Health Law Section 1370(a) (3)
2011-2012	$10 million	Permanent Program: Public Health Law Section 1370(a) (3)

The eight pilot locations funded in 2007 included: Albany, Erie, Monroe, Oneida, Onondaga, Orange, and Westchester Counties and New York City. In 2008, four new sites received funding: Broome, Chautauqua, Dutchess, and Schenectady counties. In 2009, Niagara and Rensselaer Counties received funding. The 2010 addition of Ulster County brought the total number of grantees to 15 (see Figure 1).

Figure 1. Primary Prevention Program Grantees by Year of Entrance, FY 2008 – FY 2011

Source: New York State Department of Health



EVALUATION METHODS

The National Center for Healthy Housing (NCHH) provides ongoing technical and evaluation assistance to the DOH and to Primary Prevention grantees.The contract enables NCHH 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. Investigators also participate in joint site visits with DOH staff and in conference calls and meetings hosted by DOH.

NCHH gathers information from grantees about their actions and progress toward achieving each of the Primary Prevention Program's five goals. Those five goals are:

(1) Identify housing at greatest risk of 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 LSWP workforce capacity, and
(5) Identify community resources for lead-hazard control.

This report is based on two sources of data: (1) narrative descriptions in grantee work plans and quarterly reports; and (2) unit-based quantitative data collected by grantees and submitted to NCHH for analysis. To help grantees capture the unit-based housing data, grantees use a Microsoft ACCESS database developed by NCHH.[2] Grantees can either use the database provided or import data into it from their own systems. At the end of the March 2012, grantees sent their ACCESS database to NCHH for analysis. NCHH then compiled data for all grantees and analyzed the data using SAS.

RESULTS

Since its inception on October 1, 2007, over 12,000 children have been directly reached through the Primary Prevention Program through visits to their homes, and nearly 6,900 have been referred for blood lead testing as a result of those visits (See Table 2). See the companion report to this document, "*New York State's Childhood Lead Poisoning Primary Prevention Program: Grantee Impact Summaries, October 2007-March 2012*," for individual impact summaries for each of the fifteen programs since program inception.

Table 2. Impact of the Primary Prevention Program between October 1, 2007 and March 31, 2012

Activity	Impact
Units visited	25,982
Units visited and inspected	24,493
Units with confirmed or potential lead-based paint hazards[3]	11,346
Units cleared of all hazards	6,605
Units undergoing work to remediate hazards	4,465
Children impacted by the program	12,281

Primary Prevention Programs have cleared (deemed lead-safe) 58 percent of units identified to have one or more confirmed or potential hazards.[3] An additional 39 percent (4,465) of units are still undergoing work to remediate hazards. Primary Prevention Programs used additional

[2] Note: Due to changes in the data collection system over time, comparing data across years is not possible for all variables. For example, some data elements previously reported are no longer collected, and the revised system added a number of new data elements.

[3] Potential lead hazards are those identified through visual assessment alone. Confirmed lead hazards are hazards identified through sampling or testing, such as XRF measurement, paint chip sampling, or soil sampling.

enforcement actions beyond the initial notice of hazards for 3,937 units between October 1, 2007 and March 31, 2012 to help facilitate remediation and clearance of units with identified hazards.

The remaining data presented in this report come from the "October 2011 to March 2012 dataset." These data include units first visited between October 1, 2011 and March 31, 2012 (4,766 units) and units carried over from prior years for remediation or clearance (4,820 units) for a total of 9,586 housing units. Grantees inspected 9,418 of these units. Units that were inspected prior to October 2011 and found to have no hazards or that were cleared of all hazards before October 2011 were excluded from analysis for the remainder of the data presented in this report. Table 3 summarizes the characteristics of units impacted by the Primary Prevention Programs between October 2011 and March 2012.

Table 3. Summary Impact of the Primary Prevention Program between October 1, 2011 and March 31, 2012

Activity	Impact
Total units visited	9,586
Units first visited between October 2011 and March 2012	4,766
Units first visited and inspected between October 2011 and March 2012	4,737
Units with confirmed or potential lead-based paint hazards	5,886
Units cleared of all hazards	1,145
Units undergoing work to remediate hazards	4,471
Children impacted by the program	4,760

Housing Units Visited and Their Characteristics

NYS identified the communities of concern and areas of high risk for the Primary Prevention Program by:

(1) identifying municipalities with an annual average of sixteen or more incident cases of childhood lead poisoning;[4] and

(2) repeating the analysis at the zip code level to identify zip codes with an annual average of seven or more incident cases.

Both of these criteria were required to qualify as a target zip code. Grantees refined their efforts by identifying specific target housing or populations within the areas of highest risk. Some grantees used data such as age of housing, history of EBLLs, socioeconomic status of residents, and percentage of rental properties to accomplish this. Others focused on specific high-risk populations, such as children with BLLs between 5-9 and 10-14 µg/dL, pregnant women, or refugees. Grantees also inspected units in response to requests from tenants and/or owners.

The vast majority of units visited by the Primary Prevention Program (87 percent) were built before 1940 and 75 percent were rental units. Nineteen percent of the units visited through the program were owner-occupied, 35 percent were multi-family properties with 2 units, and 36 percent were multi-family properties with 3 or more units. Six percent of units visited through the program were vacant.[5]

Inspection Activities, Identified Hazards, and Clearance Status of Inspected Housing Units

Grantees partner with a myriad of agencies to facilitate inspections. In fact, the authorizing legislation for the program encourages such collaboration, including for example, "deputizing" code enforcement agencies to conduct housing inspections on the health departments' behalf. Between October 2011 and March 2012, inspections were conducted by:

- Primary Prevention Program staff
- Staff of a code enforcement agency that is supported or deputized[6]
- Staff of another organization that is supported or deputized

Primary Prevention staff conducted the majority of inspection activities between October 2011 and March 2012 (67 percent), while 31 percent of inspection activities were conducted by code enforcement agencies and 2 percent were conducted by another agency supported by the Primary Prevention Program.

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[4] Incident cases are children under age six that have been newly identified with a blood lead level greater than or equal to 10 µg/dL.

[5] Percentages do not total 100% because (1) data on occupancy status and unit type are collected separately; and (2) data on occupancy status and/or unit type are missing for some units visited through the Primary Prevention Program.

[6] In order for a code enforcement or other agency to be considered an agency "supported by" the Primary Prevention Program, two criteria have to be met: (1) this is an agency that could issue an order for remediation if lead hazards or potential lead hazards are identified, or could forward inspection reports to the Primary Prevention Program to issue orders for remediation; and (2) the Primary Prevention Program gave the agency direct or in-kind funding for activities related to lead hazards such as inspections, staff training to initiate or improve lead inspections, case follow-up (such as occupant education, referrals for blood lead testing, compliance inspections, and clearance dust sampling), or lead-safe work practices training for owners that the agency had cited for hazards.

Grantees used a variety of inspection techniques, with interior and exterior visual assessments most frequently mentioned (see Figure 2). Units were counted as "inspected" if techniques such as visual assessment, XRF, or dust, soil, or other sampling were used. XRF testing was reported for almost half (46 percent) of the units inspected. Overall, dust wipes were rarely used in inspections[7] (used in about 12 percent).

Table 4 highlights key program activities by grantees between October 2011 and March 2012. Programs vary in a number of ways that need to be considered when interpreting these findings, such as: number of personnel; level of financial resources for the Primary Prevention Program; inspection strategies and approaches; and type of housing in their target area (e.g., proportion of single-family homes vs. multi-family homes).

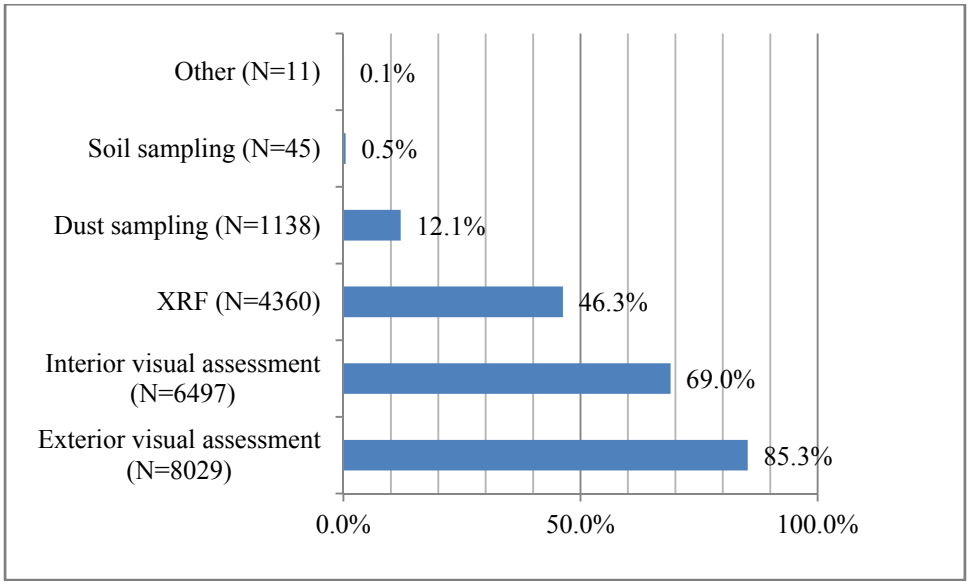
Table 4. Communities of Concern, Zip Codes, and Inspections, October 2011-March 2012, by Grantee

Grantee	Municipality	Target Zip Codes	Total Number of Units Inspected	% of Inspected Units in Target Zip Codes[8]	% of Inspected Units with Children[9]	% of Units with Hazards Cleared to Date[10]
Albany	Albany	12206, 12210, 12202, 12208, 12209	270	95%	94%	19%
Broome	Binghamton	13905	205	77%	66%	10%
Chautauqua	Jamestown	14701	150	97%	73%	20%
Dutchess	Poughkeepsie	12601	494	91%	4%	9%
Erie	Buffalo	14207, 14208, 14211, 14212, 14213, 14215, 14209, 14201	1,894	99%	19%	15%
Monroe	Rochester	14605, 14609, 14611, 14621, 14604, 14606, 14607, 14608, 14610, 14612, 14613, 14614, 14615, 14619, 14620	2,518	100%	5%	27%

[7] Note: This section discusses the use of dust wipe sampling during the inspection process. It does not include information on dust wipe sampling used during clearance.
[8] The percentages are calculated out of the total units inspected within valid zip codes. Units with missing zip codes were not included in the calculation.
[9] The percentages are calculated out of the total units inspected. Some counties are only able to collect data on whether children reside at the unit for a portion of the units inspected due to the nature of their inspections and therefore these data may underestimate the percentage of inspected units where children reside.
[10] The percentages are calculated out of the total number of units issued a notice to remediate identified confirmed or potential lead hazards.

Grantee	Municipality	Target Zip Codes	Total Number of Units Inspected	% of Inspected Units in Target Zip Codes[8]	% of Inspected Units with Children[9]	% of Units with Hazards Cleared to Date[10]
Niagara	Niagara Falls	14301, 14303, 14305	1,155	98%	61%	66%
New York City	Bronx, Kings, New York, Richmond, and Queens Counties	Program operates in high risk housing in all NYC zip codes.	710	100%	14%	18%
Oneida	Utica	13501, 13502	339	99%	65%	15%
Onondaga	Syracuse	13204, 13205, 13208, 13202, 13203, 13207, 13210, 13224	546	76%	76%	22%
Orange	Multiple communities	12550, 10940	331	99%	74%	9%
Rensselaer	Troy	12180, 12182	133	85%	60%	35%
Schenectady	Schenectady	12303, 12304, 12307,12308	115	91%	83%	34%
Ulster	Kingston	12401	23	100%	22%	0%
Westchester	Multiple communities	10550, 10606, 10701, 10705, 10801	535	93%	34%	8%

Figure 2. Percent of Inspections in Which Each Inspection Activity Was Used, October 2011-March 2012 (N=9,418)



Source: Unit-based data for all units first inspected from October 2011-March 2012 or carried over from previous years.

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

Of the units grantees first inspected from October 2011-March 2012 or carried over from previous years:

- 62 percent (5,886) had potential and/or confirmed hazards
- 2,390 units had confirmed interior hazards
- 2,954 units had confirmed exterior hazards
- 652 units had potential interior hazards (hazards identified through visual assessment alone), and 1,751 units had potential exterior hazards (See Table 5)

Grantees cleared nearly 20 percent of the units with hazards by the end of March 2012. Many factors affect time from inspection to clearance, including inclement weather in the winter season and enforcement actions needed to achieve clearance.

Table 5. Confirmed and Potential Hazards, Notices, and Clearance,

Location	Units with hazards	Units sent notice	Units cleared
Confirmed Interior Hazard	2,390	2,312	883
Confirmed Exterior Hazard	2,954	2,895	884
Potential Interior Hazards	652	498	85
Potential Exterior Hazards	1,751	1,588	290

Source: Unit-based data for units first inspected between October 1, 2011 and March 31, 2012 or carried over from previous years.

Note 1: Potential hazards are hazards identified exclusively through visual assessment, without testing to confirm the presence of lead.

Note 2: Excludes 663 units with "unspecified hazards" only. Unspecified hazards are hazards identified prior to the changes to the data collection system in April 2011 that are unknown to be exterior, interior, or both.

Enforcement of Remediation and Confirmation of Clearance

Primary Prevention Programs typically use a notice and demand or another administrative notification as the initial notice of hazards. For 1,809 units, the grantees used additional enforcement actions- such as office or field conferences, departmental or administrative hearings, court hearing, and fines - to help facilitate remediation and clearance. As shown in Figure 3, grantees most frequently used the enforcement technique of additional office or field conferences (1,144 actions between October 1, 2011 and March 31, 2012).

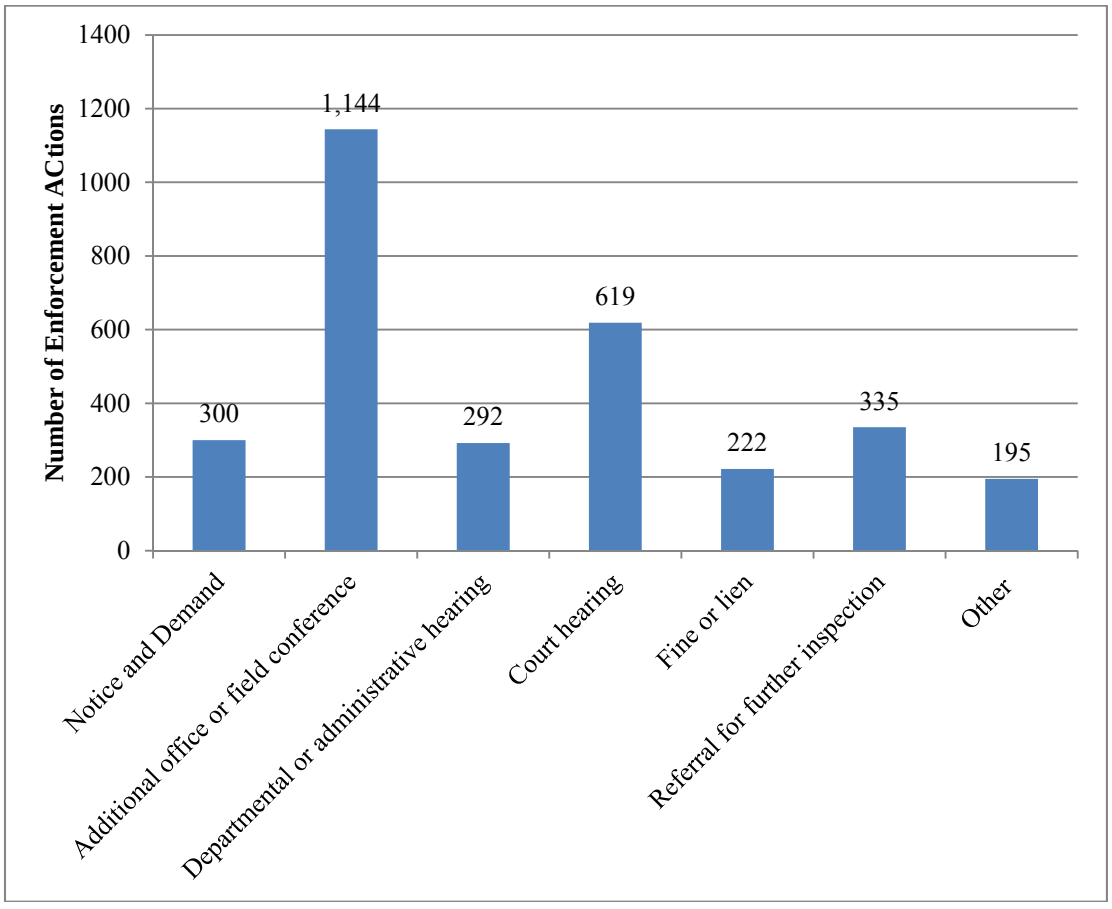
Benefits for Children and Others

Children experienced some of the program's benefits immediately; while other benefits are longer term. For example, future child residents living in a housing unit where lead paint hazards were remediated through these interventions will benefit from living in a lead-safe home, as long as the housing unit is maintained and remains lead-safe.

For units first visited from October 2011-March 2012 or carried over from previous years, Primary Prevention grantees reported:

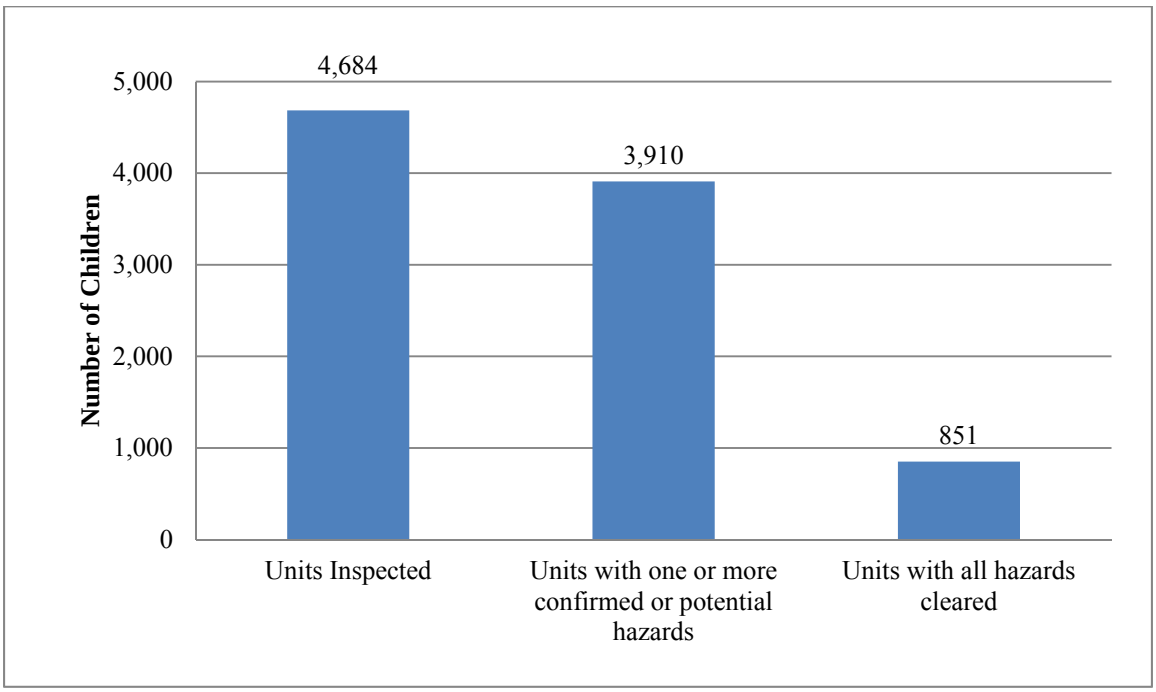
- Visiting 3,111 housing units where at least one child was present, impacting a total of 4,760 children.
- Referring 2,374 children for blood lead level testing as a result of these visits.
- Directly benefitting at least 4,684 children six and under who lived in housing units that were inspected (See Figure 4).

Figure 3. Number of Additional Enforcement Actions Needed, by Type, October 2011-March 2012



Although the grantees did not quantify the change in information and attitudes of owners and tenants in the 9,586 housing units first visited between October 2011-March 2012 or carried over from previous years, it is reasonable to think that both owners and tenants learned from the experience of the inspection and, where needed, from the remediation and clearance efforts. This increased information and awareness may lead them to preventive actions that will protect children in the future in houses that they own or rent.

Figure 4. Number of Children in Units Inspected, in Units with Hazards, and in Units with All Hazards Cleared, October 2011 through March 2012



Source: Unit-based data for units first inspected in Year Four or carried over from previous years.

Note 1: Excludes 663 units with "unspecified hazards" only. Unspecified hazards are hazards identified prior to the changes to the data collection system in April 2011 that are unknown to be exterior, interior, or both.

Creation of lead-safe housing units. Lead-safe units created through the program are expected to hold up for many years. Although maintenance is a critical factor in the durability of the upgrades, data from the HUD Lead Hazard Control Grant Program indicate that a range of lead-hazard control treatments are all effective at significantly reducing lead levels on floors, window sills, and window troughs even six years after the lead hazard control treatments.[11]

Referral for blood lead screening. Grantees referred many of the children they encountered in the units for blood lead tests, including children without a prior test, children who were overdue, and children whose parents were unsure if their child had been tested. At least 62 percent of those children in units cleared of hazards (530 of the 851 children) were referred for testing.

[11] Wilson, Jonathan et al. (2006). Evaluation of HUD-funded lead hazard control treatments at 6 years post-intervention. *Environmental Research* 102 (2): 237-248.

Leveraged resources. The Primary Prevention Program has leveraged additional resources for lead poisoning prevention in New York State by assisting many jurisdictions in successfully obtaining funding through HUD's Lead Hazard Control, Lead Hazard Reduction, and Healthy Homes Production Grant Programs. The Primary Prevention Program has helped to leverage these resources by providing necessary match funding during the application phase, providing data on high-risk properties and children, and developing partnerships to assist in the development of successful grant applications.

Neighborhood Revitalization. As grantees are increasingly successful in getting housing units remediated, whole neighborhoods are being improved, especially where the units being cleared are single family dwellings or small rental properties. In addition to protecting children, this intervention can improve neighborhoods and property values.

Developing Partnerships and Community Engagement

Outreach and Education

All grantees sought to create awareness and support for housing-based primary prevention and to engage residents and property owners in target areas in Primary Prevention Program services. Between October 2011 and March 2012, grantees reached nearly 4 million individuals through news stories, radio segments, paid advertisements, health fairs, letters, flyers, displays, and other forms of direct contact with residents and property owners. Grantees conducted outreach to property owners and contractors, including presenting at first time homebuyer courses and distributing educational materials at home shows.

Collaboration with Community Groups, Agencies, and Legislators

Because the issue of lead poisoning crosses over many jurisdictional lines (public health, housing, social services, etc.), interagency collaboration and partnerships are fundamental to successful programs. Grantees sought to make lead poisoning prevention a priority in their county housing and community development Consolidated Plans. Grantees also worked to create housing courts dedicated to handling all cases involving alleged code violations to enable more rapid enforcement and repair of housing units identified to have hazards. Grantees partnered with local health care providers to distribute information to families on lead poisoning prevention, Primary Prevention services, and incentives (such as cleaning supplies) available to families for participating in the Primary Prevention Program.

Building Lead-Safe Work Practice Workforce Capacity

Grantees offered a total of 133 courses that built the capacity of 1,167 individuals in lead-safe work practices (LSWP) (See Table 6). As in previous report periods, a small number of grantees reported the most of the training were paid for with Primary Prevention funds. New York City, Albany, Erie, Monroe, and Rensselaer combined represented a total of 726 students, over 60 percent of the total number trained. Many grantees use contractors or partners, such as Environmental Education Associates, Cornell Cooperative Extension, or Boards of Cooperative Educational Services (BOCES), to instruct the classes, while others continue to make investments of time and resources to arrange for facilities, register participants, addressing cancellations and waiting lists, and advertise courses. Grantees continue to use various

techniques to facilitate training among a diverse population. Most grantees offered training for free or at reduced cost and took steps to schedule the training when it would be most convenient for participants to attend. Some offered incentive packages to participants who completed the training. Others conducted training sessions in Spanish and used modified course testing procedures to address low literacy levels.

Table 6. LSWP Training Sessions and Individuals Trained by All Grantees, October 1, 2011 through March 31, 2012

Type of Training	Number of Sessions	Number of Individuals Trained
EPA/HUD LSWP curriculum	9	**47**
EPA 8-hour renovator curriculum (RRP)	94	**909**
EPA 4-hour RRP refresher	13	**99**
LSWP presentations not using EPA/HUD curriculum	3	**7**
Other	14	**105**
TOTAL	**133**	**1,167**

Source: Quarterly reports.

Note 1: Some individuals might have received more than one kind of training.

Note 2: Data do not include training programs that have become self-sustaining through local partnerships with community colleges or additional training programs that support workplace safety and workforce development that have resulted from Primary Prevention partnership efforts.

OBSTACLES AND RECOMMENDATIONS

Budget challenges at the federal, county, and city levels continued to present tremendous challenges to Primary Prevention Programs. Staff layoffs triggered by county and city budget constraints directly impacted Primary Prevention Program staffing levels and resulted in redistribution of workload across fewer staff members. At the federal level, the final appropriations bill for Fiscal Year 2012 (FY12) provided only $2 million for CDC's Healthy Homes and Lead Poisoning Prevention Program—down from $29 million in FY11. This dramatic cut has significant implications for the Childhood Lead Poisoning Prevention Programs and lead poisoning prevention infrastructure across the United States. Efforts to improve program sustainability will be increasingly important given the current funding challenges at national, state, and local levels.

In addition to these budget challenges, grantees faced additional challenges in this report period, including:

- Large numbers of vacant and foreclosed properties in their communities with lead-based paint hazards that are not being maintained;
- Challenges with enforcement, including working within city or county enforcement processes with slow timelines;
- Difficulty developing synergistic partnerships with housing code agencies, HUD Lead Hazard Control grant programs, and other potential partner agencies;

- Language barriers which presented challenges in scheduling initial visits, conducting follow-up activities, ensuring effective communication with families about lead poisoning prevention, and conducting effective LSWP training; and
- Challenges ensuring that remediation work is being conducted by RRP certified contractors.

Grantees continue to adapt and respond to the above challenges. The following are ten recommendations to expand and strengthen program activities:

1) Encourage code enforcement officials to adopt systematic rental property inspection programs and to use the Property Maintenance Code for citing deteriorated paint in pre-1978 housing.
2) Increase inspections targeted to units where high-risk children with BLLs of 5-9 or 10-14 µg/dL have resided in the past to ensure that these units provide no ongoing risk to children.
3) Address both exterior and interior hazards.
4) Maximize use of the deputizing authority offered under the public health law.
5) Fund partner agencies to assist in identification of high-risk units and inspection strategies.
6) Train code enforcement officials in LSWP through the continuing education process.
7) Forge partnerships with public agencies (e.g., DSS, weatherization agencies, nonprofit housing agencies) to ensure that families receiving government assistance have access to lead-safe housing.
8) Explore housing courts, or agreements with local code enforcement offices, prosecutors, and judges to expedite the resolution of cases involving lead-paint hazards.
9) Identify and actively seek out opportunities to diversify and increase resources, including: partnering with philanthropic organizations; leveraging other programs and service systems; developing partnerships with colleges and universities; hosting fellows from national organizations such as the CDC; and by shifting LSWP and RRP training capacity to local community colleges and vocational schools.
10) Explore opportunities for generating or increasing revenue internally through permits, fines and other fee structures.
11) Capitalize on opportunities to address lead poisoning along with other home health hazards.

REFERENCES

[ii] 16 C.F.R. § 1303.

[iii] 73 *Federal Register*. 21692, 21790, *supra* note 3.

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