

ALLIANCE TO END CHILDHOOD LEAD POISONING

Preventing Childhood Lead Poisoning Through Code Enforcement: Ten Effective Strategies

Introduction

Code enforcers can play a critical role in fighting childhood lead poisoning, due to the strong link between poor housing conditions and the increased risk of lead exposure. By including lead among the hazards they address and focusing on effective enforcement of housing code standards in communities at highest risk, code enforcers can significantly increase the identification and control of lead hazards and prevent the needless poisoning of children.

This report briefly reviews the status of childhood lead poisoning and makes the case for incorporating lead safety explicitly into code enforcement. The report then outlines ten strategies for maximizing lead poisoning prevention through code enforcement (listed below), citing programs where work to incorporate these strategies is underway.

Strategies:

- 1. Require owners to secure a license for rental property.**
- 2. Conduct routine, periodic inspections.**
- 3. Enforce chipping and peeling paint violations.**
- 4. Include lead-based paint and dust hazards as prosecutable offenses in housing codes.**
- 5. Train and require code enforcers to conduct visual inspections for potential lead hazards in all pre-1978 housing and, where appropriate, sample household dust.**
- 6. Ban unsafe work practices, and require property owners to conduct repair work in a lead-safe manner and to undergo post-work clearance testing to ensure the absence of hazards.**
- 7. Develop self-sustaining, effective enforcement programs.**
- 8. Target intensive enforcement efforts to high-risk units and neighborhoods and to recalcitrant landlords.**
- 9. Use lead hazard data gathered by code enforcers to prevent lead poisoning and neighborhood decay.**
- 10. Collaborate with agencies working on environmental health and housing issues.**

Current Status of Childhood Lead Poisoning

Lead poisoning remains the foremost environmental health threat to children in the United States, with deteriorating lead-based paint and lead-contaminated dust in and around housing responsible for most poisonings. Almost one million American children continue to suffer from elevated blood lead levels, resulting in reduced IQ, learning disabilities and behavioral problems.

Although lead poisoning affects children of all races and socioeconomic levels, the disease is concentrated primarily in economically distressed communities, where privately owned, poorly maintained, older housing poses the greatest risk. Low-income children are eight times more likely to be lead-poisoned than children from well-to-do families and African-American children are at five times higher risk than white children.¹ Families who rent are more likely than homeowners to live in a high-risk housing unit.²

An estimated twenty-seven percent of housing units in the U.S. have significant lead-based paint hazards.³ The vast majority of these were constructed before 1978, when the use of lead in residential paints was banned.⁴ Lead-contaminated household dust is the most common source of exposure. Lead dust is generated by deteriorating lead-based paint or created by friction or impact of lead-painted surfaces (e.g., doors and windows). Lead dust hazards also may be created during renovations or repairs if workers fail to employ lead-safe work practices. Children ingest lead dust through normal activities such as crawling on the floor and putting hands, toys or other objects in their mouths.

Why Incorporate Lead Hazard Control into Code Enforcement?

Lead poisoning can be prevented entirely by controlling sources of exposure, the most common of which is deteriorating lead-based paint in poorly maintained housing. The link between the level of housing maintenance and the potential for lead exposure puts code enforcers in a unique position to prevent needless poisonings.

Effective enforcement of housing code standards provides a necessary and important foundation for lead hazard reduction. By compelling compliance with a broad array of health and safety standards, code enforcers already reduce the likelihood of lead hazards. For example, addressing moisture problems and water leaks removes an underlying cause of paint deterioration.

¹ U.S. Centers for Disease Control and Prevention, "Update: Blood Lead Levels – U.S., 1991-1994," 46 *MMWR Morbidity & Mortality Weekly Report* (1997) at 141-146.

² U.S. Department of Housing and Urban Development, National Survey of Lead and Allergens in Housing, Final Report, Volume I: Analysis of Lead Hazards, Revision 6.0 (April 18, 2001), www.hud.gov/lea/HUD_NSLAH_Vol1.pdf at Table 3.1.

³ *Id.* at 3-2. These hazards include deteriorated lead-based paint, contaminated household dust and contaminated bare soil. *Id.* at 3-1 – 3-2.

⁴ *Id.* at Table 3.1.

However, by failing to focus directly on lead hazards, code enforcers lose numerous *additional* opportunities to prevent children from being poisoned. For example, deteriorating paint is a code violation in most jurisdictions, but may be viewed as an eyesore rather than a potentially serious health hazard and therefore is inconsistently cited as a violation. During the course of routine enforcement in older properties, code officials should focus on deteriorating paint and potential lead dust hazards, as well as the causes that underlie them.

Local housing and building departments often view lead poisoning as a problem to be dealt with by health officials.⁵ However, housing departments actually are in a better position than health departments to *prevent* children from becoming poisoned, because their mandate is to ensure that housing conditions do not deteriorate to a point where lead hazards are likely to exist. Housing and building officials also are optimally positioned to ensure that work that disturbs painted surfaces is performed in a lead-safe manner. Health departments, on the other hand, typically become involved in lead-safe housing issues only after a child has been poisoned, when the opportunity for primary prevention is lost.

The benefits of incorporating lead safety into code enforcement are significant. Advancing primary prevention by identifying, controlling and avoiding the creation of hazards is critically important. Incorporating lead safety into code enforcement also can help to pinpoint individual properties containing lead hazards as well as identify lead “hot-spots” and neighborhoods with older housing in danger of decline. Information gathered during the course of code enforcement should be made publicly available to enable code enforcers and community groups to focus their efforts on high-risk areas. This information also can be used to create a registry of lead-safe housing to enable families with young children to steer clear of lead hazards.

In addition to protecting children from lead hazards, code officials will strengthen their enforcement cases and gain greater leverage in compelling compliance. Code officials also can use the presence of lead hazards to aid in prioritizing enforcement efforts, requiring immediate corrective action in situations imminently threatening a child.

Finally, addressing lead hazards makes good economic sense. In addition to the harm suffered by children, lead poisoning imposes significant burdens upon society, including the costs associated with medical screening and treatment, lead hazard identification and control, special education and juvenile delinquency. Many of the lead hazard control measures available to code enforcers are relatively low-cost, particularly when compared to the potential economic and social benefits of preventing the disease. For example, basic training in lead hazard identification is available at low cost, and inspectors can integrate this training easily into routine inspections.

⁵ Western Center on Law and Poverty, “Preventing Childhood Lead Poisoning: Identifying and Eliminating Local Barriers to Primary Prevention Strategies,” (November 2001) at 8-9.

Strategies for Maximizing Lead Poisoning Prevention Through Code Enforcement

Code enforcers can take advantage of a number of strategies to incorporate lead safety into their enforcement programs. Some approaches described below augment the effectiveness of code enforcement generally, thereby reducing lead hazards by improving housing maintenance (e.g., periodic inspection programs). Other approaches deal with lead hazards more directly and comprehensively (e.g., training inspectors to identify lead hazards). Ideally, code enforcement ensures compliance with basic maintenance standards and also explicitly integrates lead hazard control measures. This section describes strategies for minimizing and eliminating lead hazards through code enforcement and offers examples of programs implementing these approaches.

1. Require owners to secure a license for rental property.

Concealed ownership can hamper enforcement by code officials as well as effective action by tenants. Requiring owners to obtain a license by registering their properties can thwart attempts by owners to shield themselves from responsibility for lead or other health and safety hazards. In New Jersey, for example, owners are required to register buildings containing three or more units. In addition, they must designate a local agent for receiving service of process and pay a ten-dollar registration fee. Owners who fail to comply are subject to fines and are precluded from evicting tenants for any reason, including nonpayment of rent.⁶

The state uses the information it gathers through the registration program to enforce its housing and construction codes. The registration program has worked to identify and locate recalcitrant individuals responsible for significantly deteriorated properties (which often contain lead hazards). While many rental registration programs have not proven effective, New Jersey's program illustrates that when coupled with real enforcement power and meaningful penalties, rental licensing can work to hold property owners accountable for lead and other hazards in housing.⁷

2. Conduct routine, periodic inspections.

Code enforcement systems triggered solely by tenant complaints, although widely used throughout the country, are highly ineffective and costly. Often, this approach contributes to the decline of housing conditions since tenants may not complain until physical conditions are fairly severe. Some tenants (such as recent immigrants) are reluctant to report problems no matter how grave, so many substandard units remain outside the sys-

⁶ New Jersey Hotel and Multiple Dwelling Law, N.J.S.A. 55:13A-12; presentation by William Connolly, Director, New Jersey Division of Codes and Standards at Expert Forum, *Maintaining Healthy Homes: Challenges and Strategies for Distressed and Marginal Communities*, Camden, New Jersey, December 7, 2000 ("Connolly, December 7, 2000"). For more information on New Jersey's program, see Alliance To End Childhood Lead Poisoning, "Holding Property Owners Accountable: New Jersey Multiple Dwelling Registration and Inspection Program," [Innovative Strategies for Addressing Lead Hazards in Distressed and Marginal Housing: A Collection of Best Practices](#) "AECLP Best Practices."

⁷ *Id.*

tem entirely. Complaint-based programs also fail to encourage broad scale preventive maintenance since they are reactive, not proactive, and ad hoc, not systematic.

In contrast, systematic, periodic inspection programs ensure that the entire universe of substandard units complies with basic health and safety standards. Periodic inspections can prevent lead hazards by promoting routine preventive maintenance. These programs also can foster a more cooperative relationship between property owners and code enforcers than complaint-based systems, which are inherently adversarial. Of course, periodic inspection programs also must accommodate complaint-based inspections.

Proactive programs are rare, but a couple of examples demonstrate their effectiveness. New Jersey's Hotel and Multiple Dwelling Law requires inspections every five years of all residential buildings containing three or more units. The state conducts initial inspections in approximately 200,000 units per year, and reinspects about 110,000 of those.⁸ Ninety-seven percent of the 9000 cases that proceed to enforcement annually end in compliance.⁹ Los Angeles adopted a program in 1998 to require inspections to be conducted at least once every three years in buildings with two or more units.¹⁰ Although staffing levels, technical problems and re-inspections have inhibited the city's ability to meet this requirement, additional staff has been approved and the pace of new inspections has increased. It is estimated that all of the approximately 800,000 units subject to the program will be inspected by 2004.¹¹

3. Enforce chipping and peeling paint violations.

Deteriorating paint (regardless of its lead content) is a code violation in most jurisdictions, but usually is viewed as an eyesore rather than a potentially serious health hazard. Perhaps the single greatest step code enforcers can take to prevent childhood lead poisoning is to consistently cite chipping and peeling paint violations. Deteriorating lead-based paint and associated lead-contaminated dust must be viewed as potentially serious health hazards and dealt with accordingly. Not only must paint deterioration be corrected in a lead-safe manner, its underlying causes (e.g., excessive moisture) must be identified and addressed to prevent the development of future hazards.

4. Include lead-based paint and dust hazards as prosecutable offenses in housing codes.

In order to provide the clearest legal basis for housing code officials to address lead hazards, housing codes should state explicitly that deteriorating lead-based paint, lead-contaminated dust and lead-laden bare soil are prosecutable offenses. Otherwise, enforcement officials seeking to address lead hazards will need to establish that they constitute a nuisance or other catch-all violation contained in the code. Specifically referencing

⁸ Connolly, December 7, 2000.

⁹ *Id.*

¹⁰ Los Angeles Housing Code, § 161.351.

¹¹ Gary Bess Associates, Systematic Code Enforcement Program Evaluation, November 13, 2001 at 5-14; phone conversation with Tai Glenn, Senior Attorney, Housing Improvement Project, Legal Aid Foundation of Los Angeles, March 25, 2002.

lead hazards in the housing code also may increase the attention enforcement officials devote to them and will put property owners on notice that such hazards are illegal.

Ideally, housing codes would incorporate the Environmental Protection Agency (EPA) standards for lead dust on floors and interior window sills, recently set at 40 µg/square foot and 250 µg/square foot, respectively.¹² Incorporating these standards would provide code enforcers with a bright-line test for code compliance based upon dust testing results and would ensure that lead levels in household dust remain within safe limits. Including numerical standards also would draw attention to lead-contaminated dust as the primary pathway of exposure. Lead dust standards would comprise *additional* code requirements; compliance with them should not constitute a defense to other code violations.

Although the EPA standards currently apply only to properties receiving federal assistance, some jurisdictions are revising their codes to explicitly include lead-based paint hazards as code violations. For example, the recently revised Manchester, Connecticut Property Maintenance Code (PMC), modeled on BOCA's 1996 National PMC, requires that lead-based paint be free from peeling, chipping and flaking, or be removed or covered.¹³

Legislation denoting lead hazards as distinct prosecutable offenses should provide that the remedies associated with those hazards are cumulative. For example, a lead hazard may violate basic provisions prohibiting deteriorating paint, in addition to specific provisions banning lead hazards and establishing dust lead standards. To maximize compliance and enforcement, penalties for each violation should be cumulative.

5. Train and require code enforcers to conduct visual inspections for potential lead hazards in all pre-1978 housing and, where appropriate, sample household dust.

Code inspectors should routinely inspect for lead safety by performing a visual check for deteriorating paint in pre-1978 housing. In addition, lead dust testing is critical to verify the effectiveness of lead hazard control measures, to confirm that apparently well-maintained premises do not in fact contain lead hazards and to complement visual inspections.

Some jurisdictions are moving to require lead hazard assessment during the course of routine code enforcement. For example, proposed legislation in New Jersey would require multi-family housing to be visually inspected for lead hazards every five years. If the inspector identifies potential hazards, the owner has the option of performing a more thorough investigation to determine whether lead-based paint is actually present or conducting lead hazard control work, which may consist of abatement or interim controls.¹⁴ This forward-thinking legislation holds great promise for visible lead hazards to be routinely identified.

¹² 40 CFR § 745.65(b).

¹³ Manchester, Connecticut Property Maintenance Code, § 7-305.4.

¹⁴ Assembly Substitute for Assembly No. 2399 [2R], sponsored by Assemblymen Collins and Kelly.

While the New Jersey legislation does not require dust testing, other jurisdictions have taken that step. In Manchester, Connecticut, the Property Maintenance Code requires code officials to collect dust wipe samples when inspecting units with deteriorating paint that house a child under age six. The samples are to be sent to the health department, which orders abatement if appropriate.¹⁵ While these measures have the potential to significantly increase the detection and safe repair of lead hazards, adherence to date unfortunately has been somewhat inconsistent.¹⁶

The Department of Housing and Urban Development (HUD) currently offers a one-hour, on-line lead-based paint visual assessment training course, available at www.hud.gov/lea/training/visualassessment/h00100.htm. This course is designed for experienced housing inspectors and provides basic information on lead poisoning and how to identify and safely repair deteriorated paint.

EPA also has developed a one-day “lead sampling technician” training course to teach participants how to collect samples for lead in dust. A list of trained sampling technician training providers who will provide free training (subsidized by HUD) is available at www.leadshousing.org/html/sampling_technician.htm. Housing code inspectors should take advantage of these readily available, free training opportunities to strengthen their knowledge of lead hazards and their ability to detect them.

Some jurisdictions are undertaking to train code officials independent of the HUD-sponsored training. For example, in Manchester, Connecticut, the city’s Lead Abatement Project provides training for code inspectors in lead poisoning prevention. The training includes basic information on the causes and effects of lead poisoning; background on applicable local, state and federal laws; hazard identification; collection of dust wipe samples; and lead-safe work practices.¹⁷ Statewide, Connecticut has subsidized lead inspection training for approximately 400 health and housing code enforcers. The state also has cut costs and reduced administrative hurdles by lifting certification requirements for trained, state employed code enforcers performing inspections in their official capacity.¹⁸

6. Ban unsafe work practices, and require property owners to conduct repair work in a lead-safe manner and to undergo post-work clearance testing to ensure the absence of hazards.

Once code violations are identified, it is critical that repair work be done in a safe manner to avoid creating additional hazards. Unless testing proves that painted surfaces are not lead-based, lead-safe work practices should be required as a matter of course in pre-1978 housing. Property owners should be required to have their units independently tested fol-

¹⁵ Town of Manchester Property Maintenance Code, § 7-305.4.2.

¹⁶ Heller, August 2, 2001.

¹⁷ Phone conversation with Sue Heller, Manchester Lead Abatement Project Administrator, August 2, 2001; *Basic Lead Hazard Evaluation & Control Training for Code Officials*, manual produced by Safe Homes Inc. for Manchester Lead Abatement Project.

¹⁸ Phone conversation with Al Bizetti, Connecticut Department of Public Health; Conn. Gen. Stat. § 20-479.

lowing repair work ordered by a health or code enforcement agency to ensure that repairs do not leave lead dust hazards behind.¹⁹ These measures become increasingly important as the age of the housing increases, because the paint in older housing is likely to contain higher concentrations of lead and the odds of the unit containing lead-based paint increase with age.²⁰

The City of New Orleans' recently enacted Lead Paint Poisoning Prevention and Control Act follows this model. The act bans unsafe paint removal practices during work on the interior or exterior of pre-1978 buildings or on steel structures. Paint on those structures is presumed to contain lead unless tests establish otherwise. The act mandates the use of containment barriers for exterior work and requires property owners or their contractors to notify tenants, neighbors and the city before work begins. The Department of Health is authorized (but not required) to conduct dust sampling, and can issue notices of violation and stop work orders, or in lieu of penalties, can require first-time violators to complete training in lead-safe work practices.²¹

HUD's lead-safe housing regulation also prohibits unsafe methods of paint removal in federally-assisted housing, including dry sanding or scraping, open flame burning, operating a heat gun above 1100 degrees, machine sanding without a HEPA attachment, and stripping in poorly ventilated areas using hazardous volatile strippers.²² The HUD regulation requires persons undertaking maintenance and lead hazard control measures to follow lead-safe work practices, and mandates clearance testing (visual assessment followed by dust testing) after virtually all work that repairs or disturbs painted surfaces in pre-1978 federally assisted housing.²³

EPA has been contemplating regulations that would cover renovation and remodeling for many years. To this end, the agency has developed a model training course that focuses on containing, minimizing and cleaning up lead hazards during renovation and remodeling. The training course is available at <http://www.epa.gov/lead/rrmodel.htm>. HUD has adapted EPA's model renovation and remodeling course to facilitate compliance with its lead-safe housing regulation. The student manual for the HUD-adapted course is available at www.hud.gov/offices/lead.

New Bern, North Carolina recently enacted an ordinance that imposes permitting requirements to ensure adherence to lead-safe work practices during repairs that will disturb painted surfaces. The city's permitting authority refers applicants to the health department, which oversees the lead safety requirements and recommends to the city

¹⁹ The federal Occupational Safety and Health Administration (OSHA) and state worker safety agencies administer standards to protect employees from lead exposure. However, local housing and health officials rarely make use of these requirements.

²⁰ U.S. Department of Housing and Urban Development, National Survey of Lead and Allergens in Housing, Final Report, Volume I: Analysis of Lead Hazards, Revision 6.0 (April 18, 2001), www.hud.gov/lea/HUD_NSLAH_Vol1.pdf at Table 4.1, 4.6.

²¹ Code of the City of New Orleans, §§ 82-311 *et seq.* San Francisco also requires lead-safe work practices during exterior work on pre-1979 buildings.

²² 24 CFR § 35.140.

²³ 24 CFR §§ 35.1330, 35.1335, 35.1340.

whether a permit should be granted. Workers must be trained in lead-safe work practices and the unit must pass a clearance test that includes a visual assessment as well as dust sampling. The health department's environmental health section has trained numerous contractors in lead-safe work practices, and provides clearance testing.²⁴

In Massachusetts, property owners must hire licensed contractors to perform mandated lead hazard control work, unless they choose to undertake the work themselves. Property owners are authorized to perform low- and moderate-risk lead hazard control activities, which include encapsulation as well as removal and replacement of windows and woodwork, but only after completing a training course in lead-safe work practices and passing an exam.²⁵ During the first year this option was made available, about 2000 owners completed the training.²⁶ Work performed by owners must be checked by a licensed inspector to ensure that no hazards have been left behind.²⁷

In Battle Creek, Michigan, a proposed code provision requires lead clearance exams after painted surfaces are disturbed during the course of paid renovations in pre-1978 housing.²⁸

Manchester, Connecticut's Property Maintenance Code requires inspectors to attach lead hazard warnings to repair orders.²⁹ This low-cost, easy-to-implement measure has the potential to prevent needless poisonings brought about by unsafe work practices.

Enforcement officials also could provide information to help property owners locate workers trained in lead safety. A HUD-sponsored listing of lead-trained renovators, as well as certified abatement contractors is available at www.leadlisting.org. In addition, building departments should make lead safety information available to property owners and contractors seeking remodeling permits. In Sacramento County, California, for example, HUD pamphlets are on display in the building permit department alerting remodelers to employ lead-safe work practices.³⁰

7. Develop self-sustaining, effective enforcement programs.

Poorly designed enforcement systems can waste agency resources and limit the impact of enforcement initiatives. For example, an audit of New York City's code enforcement system found that inspectors repeatedly documented violations, but failed to improve housing conditions because they lacked adequate means to pressure landlords to undertake repairs.³¹

²⁴ Phone conversation with Deborah Yarbrough, Craven County Health Department, August 8, 2001.

²⁵ Massachusetts Department of Health web page, www.state.ma.us/dph/clppp.

²⁶ Phone conversation with Paul Hunter, Director, Massachusetts Childhood Lead Poisoning Prevention Program, July 18, 2001.

²⁷ Mass. Gen. L. ch. 111, § 197(d).

²⁸ Battle Creek proposed Building and Housing Code, § 1460.235

²⁹ Manchester Property Maintenance Code, § 7-305.4.

³⁰ Phone conversation with Carol Good, Sacramento County Department of Environmental Management, August 22, 2001.

³¹ *City Limits*, "Burned Out," December 2000 at 14.

In contrast, in New Jersey, the state succeeds in securing compliance with housing code requirements under its Hotel and Multiple Dwelling Law in 8800 out of 9000 annual enforcement cases.³² Much of the success in New Jersey is attributable to the law's efficient enforcement provisions under which the state rarely needs to appear in court. Owners who fail to appeal violation notices are presumed by law to be in violation. The state reinspects noncomplying units 60 days after the initial inspection, and again 30 days later if warranted. After the second reinspection, the state can and has imposed penalties up to \$5000 per day. The state can request the Superior Court to enter judgment on outstanding penalties and execute on the judgment, usually by imposing a lien on the rental receipts. If necessary, the state can work to identify assets and pierce the corporate veil, if one exists, using information obtained through the licensing and registration process (see strategy number 1, above) and court-sanctioned discovery.³³ Streamlined enforcement provisions coupled with significant penalties have enabled the state to attain compliance from all but a small fraction of property owners.

In many cases, lack of sufficient funding lies at the heart of ineffective code enforcement programs. Programs that generate revenues sufficient to cover their costs can avoid the vagaries of legislative appropriations and minimize cuts in staff or resources that impede enforcement efforts. New Jersey imposes a thirty-three dollar per unit inspection fee every five years upon owners, and collects \$3 million annually in penalties, enough to sustain its program.³⁴ In Los Angeles, a recently enacted housing ordinance imposes a \$12 annual fee upon owners of rental properties with two or more units to cover the cost of the city's systematic code inspection program.³⁵ Low-income tenants strongly supported passage of the ordinance, including the monthly fee, which under the law can be passed on to tenants. The fee is expected to generate \$7-8 million per year.³⁶

8. Target intensive enforcement efforts to high-risk units and neighborhoods and to recalcitrant landlords.

The ubiquitous presence of lead-based paint in the country's housing requires that neighborhoods and properties most likely to poison children receive priority attention. Older, poorly maintained distressed and marginal housing pose the greatest risk for lead hazards. While those units housing a young child present the most immediate threat of lead poisoning, units not currently housing a child cannot be ignored. A property with lead hazards that is not occupied by a family may poison a future occupant's child.

Some jurisdictions have employed targeting to aid in addressing problem housing. In Manchester, Connecticut, code inspectors conduct cyclical inspections in areas of the town determined to be most in need of investment based on factors such as resident income levels, housing condition and housing age. Inspectors initially examine exterior conditions in these target areas and, if problems are detected, they expand their efforts to

³² Connolly, December 7, 2000.

³³ *Id.*

³⁴ *Id.* The per-unit inspection fee decreases as the number of units increases.

³⁵ Los Angeles Housing Code, § 161.352.

³⁶ Phone conversation with Rod Field, Los Angeles Housing Law Project, December 10, 1998.

building interiors. They also routinely inspect building exteriors in neighborhoods in which they are working in response to a complaint.³⁷

Milwaukee, Wisconsin adopted a three-year pilot project that targets 800 units in two economically distressed areas of the City with exceptionally high childhood lead poisoning rates. Three-quarters of the housing units in each area are rental properties (determined to be more susceptible to inadequate maintenance and deteriorating painted surfaces), and more than 99% of the homes were built prior to 1950 and therefore are highly likely to contain lead-based paint.³⁸ Based on extensive environmental sampling and research, the Milwaukee Health Department conclusively documented lead-based paint on old windows as their most significant hazard.³⁹

During the first year of the program, owners of rental properties built before 1950 must obtain a lead-based paint hazard control certificate evidencing their property's compliance with the city's lead-safe housing requirements, which include abatement for lead-painted windows. During the second and third years of the program, owners must employ essential maintenance practices in order to be re-certified as lead-safe. The program makes funding available to owners to help offset the cost of the lead hazard control work.⁴⁰

One very effective targeting strategy is to undertake building-wide code enforcement in multi-family buildings where one unit is found to contain lead hazards or to house a poisoned child. This approach benefits all building occupants as well as visiting children and future occupants of the property.

9. Use lead hazard data gathered by code enforcers to prevent lead poisoning and neighborhood decay.

Information gathered during the course of code enforcement itself can be a valuable tool in improving housing conditions and preventing childhood lead poisoning. For example, multiple code violations may indicate the presence of lead hazards in individual properties, and may point to lead "hot-spots" and neighborhoods in danger of decline if present on a broad scale. Information gathered during code enforcement should be made publicly available to enable code enforcers and community groups to focus their efforts on high-risk areas and to track safe units.

a. Create a registry of lead-safe housing.

As enforcement officials determine units to be free of lead hazards, the locations of these units should be compiled in a registry of lead-safe housing. A registry can ease the identification of lead-safe housing by the public and gauge progress on the part of govern-

³⁷ Heller, August 2, 2001.

³⁸ The concentrations of lead in paint were highest before 1950, however, lead was not banned from residential paints until 1978.

³⁹ "Targeting High-Risk Neighborhoods: The Milwaukee, Wisconsin Pilot Project for Lead-Based Paint Hazard Control," AECLP Best Practices.

⁴⁰ *Id.*

ments in making housing lead-safe. In creating a lead-safe housing registry, care must be taken to ensure that the information does not become outdated and misleading. If the registry includes units at which interim controls are in place, users should be informed that a visual inspection, dust testing and ongoing maintenance are necessary to ensure those units' continuing safety.

Proposed legislation in New Jersey would require the state's Department of Community Affairs to create a registry of lead-safe housing, which will categorize housing as either lead-free (housing constructed after 1978 or housing containing no lead-based paint); lead-abated; or lead hazard controlled (housing in which preventive maintenance practices and interim controls are in place). If feasible, the information will be made available on the internet.⁴¹

In Manchester, Connecticut, the Lead Abatement Project (LAP) (housed within the town's Health Department), has created a registry of lead-safe units and their owners. The registry includes LAP-rehabilitated units in which lead hazards have been controlled and conditions brought up to code.⁴²

- b. Create constituencies of support for code enforcement programs by making housing information accessible to community groups.*

Community groups working to improve housing conditions can increase their effectiveness significantly if they have ready access to current information on housing characteristics and conditions. In Los Angeles, for example, UCLA's Advanced Policy Institute has created Neighborhood Knowledge Los Angeles, a freely accessible web site dedicated to preventing housing and neighborhood deterioration by tracking multiple data points for properties throughout the city.

The web site compiles a wide breadth of information gathered from a number of city agencies that indicates properties in danger of decline. Code complaints, building permits, contract nuisance abatements (city-sponsored repairs to address public safety hazards), tax delinquencies and utility liens are noted for each property in the database. Housing inspectors in the field enter information into hand-held computers, enabling community groups to track code complaints, inspections and improvements using "real time" information.

The site may be searched by zip code, census tract, council district, address, or by specific criteria (e.g., properties with pending code complaint cases). Any of the site's datasets may be viewed area-wide on easy-to-read maps, allowing users to spot clusters of tax delinquencies, code complaints, or other problems indicating pockets of potential neighborhood decay.

⁴¹ Assembly Substitute for Assembly No. 2399 [2R], sponsored by Assemblymen Collins and Kelly.

⁴² Manchester Connecticut health Department Lead Abatement Project, *Final Report – Round 5, February 1, 1998 – January 31, 2001*, at 24.

A wide range of users find the NKLA web site useful. Community groups use the site to identify property owners in trouble and provide proactive counseling services while their advice still may be effective. Local non-profit developers locate properties headed toward abandonment and acquire them before they deteriorate. Residents can determine whether their landlords are complying with their obligations, and learn about conditions in their neighborhoods. And city employees frequently use the site to easily access data generated by other agencies, which was not previously available to them.⁴³ Code enforcement personnel could use the information to target problem neighborhoods, problem owners and neighborhoods in decline.

10. Collaborate with agencies working on environmental health and housing issues.

Environmental, health and housing agencies can significantly advance the fight against childhood lead poisoning by coordinating their efforts with code enforcement programs. In Sacramento, California, the Environmental Management Department (EMD) reached out to building and housing code officials in an effort to encourage them to incorporate lead safety into their programs. EMD conducted workshops for building and housing code officials that provided basic information on childhood lead poisoning and included a brainstorming session to generate ideas for incorporating lead safety into code officials' existing scope of work. As a result of the workshops, field inspectors provide written and verbal information to occupants regarding potential lead hazards, and permitting officials offer information regarding lead-safe renovations. In addition, the Sacramento County Code Enforcement Unit, working with the EMD, has included building and soil-related lead hazards among other violations in recent repair orders issued to owners.⁴⁴

Health and housing agencies also should share information on a continuing, systematic basis. For example, health departments should direct housing code authorities to properties and neighborhoods with high incidences of lead poisoning. Conversely, when housing code inspectors discover potential lead hazards they should notify health authorities to test the blood lead levels of children potentially at risk.

⁴³ "Early Warning Systems for Deteriorating Properties: Neighborhood Knowledge Los Angeles," AECLP Best Practices; see also <http://nkla.ucla.edu>.

⁴⁴ Good, August 22, 2001 phone conversation and November 26, 2001 email correspondence; Special Lead Project Period 3 Report. Lead hazards are not specifically included as prosecutable offenses in the housing code, so citing lead hazards as nuisance violations represents a significant step forward.