CHILDHOOD LEAD POISONING

Issue Brief

A HEALTH PROBLEM ...

Childhood lead poisoning is one of the most common pediatric health problems in Rhode Island, yet it is entirely preventable. Infants and young children are particularly susceptible to the toxic effects of lead on the central nervous system. Lead exposure can cause irreversable damage resulting in loss of intelligence, speech delay, learning disabilities, attention deficits, and behavioral problems. The most acute poisoning can result in severe illness and death.^{1,2}

The percentage of Rhode Island children under age 6 with elevated blood lead levels decreased from 18% in 1996 to 7% in 2002. During calendar year 2002, 34,842 children under age 6 were screened for lead poisoning; of these, 2,462 children had an elevated blood lead level.^{3,4} Rhode Island is a national leader in screening young children for lead poisoning.⁵ Nonetheless, Rhode Island's children are still poisoned at rates above the national average.⁶ Children in urban areas with high rates of childhood poverty have lead poisoning rates two to three times that of children living elsewhere in the state.⁷

AND A HOUSING PROBLEM ...

Childhood lead poisoning is directly related to a shortage of safe, affordable housing. Deteriorating lead-based paint is the main cause of childhood lead poisoning. Rhode Island's housing stock is among the oldest in the country, and many units are in need of repair.⁸ The lack of affordable housing in many communities results in low-income families living in older dwellings with deteriorating lead paint, placing children at increased risk for lead poisoning. Children in homes that are being renovated, children living in poverty, and minority children are particularly at risk.^{9,10}

Further reduction in the rate of childhood lead poisoning in Rhode Island depends on investments that expand the supply of safe, affordable housing so that lead exposure is prevented from occurring in the first place. Equally critical are efforts that improve the condition of existing housing through increased inspection for lead and other hazards, housing code enforcement, and rehabilitation. Exposure to lead can also be reduced through public education about lead hazards and how to safely renovate older homes.

ode Island KIDS COUN

LEAD EXPOSURE: UNSAFE AT ANY LEVEL

"Because there is no apparent threshold below which adverse effects of lead do not occur, 'EBLL' [elevated blood lead level] must be defined arbitrarily."¹¹

-Centers for Disease Control and Prevention

Research suggests that all lead exposure results in negative impacts on children and that there may in fact be no definable threshold for "safe" lead exposure. Discernible decreases in IQ, short-term memory, reading, arithmetic and nonverbal reasoning scores are associated with increasing blood levels, even with levels below 5µg/dL.¹²

Blood lead level is measured in micrograms of lead (.000001 gram) per deciliter (one-tenth of a liter) of whole blood (abbreviated as μ g/dL). Since the 1960s, the Centers for Disease Control has repeatedly redefined lead poisoning based on a growing body of research, reducing the elevated blood lead level threshold from 60 μ g/dL in the 1960s to 10 μ g/dL in 1991.¹³



THE IMPACT OF LEAD EXPOSURE

Children are far more vulnerable to lead exposure than adults, absorbing 30% to 75% of lead which reaches their digestive track, as compared with 11% for adults.¹⁴ Poor nutritional status (particularly calcium, vitamin C, or iron deficiencies) increases susceptibility to lead poisoning by increasing lead absorption.¹⁵

Lead exposure has severe and long-lasting effects on children. While treatment for lead exposure has the potential to reduce further brain damage, it does not undo damage which has already occurred.¹⁶ Lead can cause loss of intelligence, learning disabilities, hyperactivity, short attention spans, behavioral problems, aggression, and hearing and speech impediments.^{17,18}

Many of the effects of lead exposure may not become evident until a child begins school. Cognitive and developmental problems may emerge at critical transition points in childhood, such as first grade, fourth grade, and middle school.¹⁹ A recent Rhode Island report suggests a relationship between elevated blood lead levels and repeating a grade and/or poor performance on standardized tests.²⁰

Estimated economic losses attributable to lead exposure (due to reductions in IQ and consequent reductions in earnings expectations) amount to an estimated \$135 million per year in Rhode Island and more than \$43 billion per year nationally.²¹ The societal costs of childhood lead exposure include the loss of lifetime earnings due to decreased cognition as well as medical and special education costs.²²

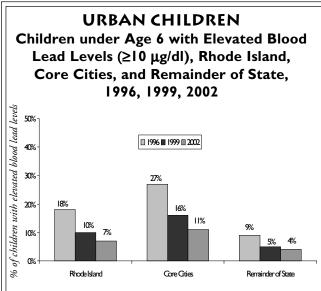
SCREENING RATES IN RHODE ISLAND

According to state law, all Rhode Island children between the ages of nine months and six years must be screened for lead, usually on an annual basis.²³ As of 2001, approximately 78% of Rhode Island children were being screened for blood lead, far exceeding estimated national screening rates of 10 to 25%.²⁴ The overall screening rate for children enrolled in RIte Care (Rhode Island's Medicaid managed care program) is even higher: 80% of children enrolled in RIte Care are screened for lead, compared with fewer than 20% of children enrolled in Medicaid across the United States.²⁵ Private, office-based health care providers in Rhode Island have screening rates of about 68%, significantly below the 85-91% screening rates of other providers (such as hospital clinics and health centers).²⁶



CHILDREN AT GREATEST RISK

Children with elevated blood levels are found in every community in Rhode Island. However, those at greatest risk are poor, minority and urban children, as well as children in older homes undergoing renovation.



In 2002, children in the core cities were three times as likely to have elevated blood lead levels as children in the remainder of the state.

Source: Rhode Island Department of Health, Childhood Lead Poisoning Prevention Program, 1996, 1999, 2002, based on all children screened for lead poisoning. Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.

CHILDREN IN HOMES UNDERGOING RENOVATION

All children residing in homes with lead paint are potentially at-risk for lead poisoning. Children in homes undergoing renovation are particularly at risk unless work is performed by a licensed lead abatement contractor employing safe abatement practices, children are not present during the abatement/ renovation and the premises are tested for lead dust at the conclusion of the work. The riskiest practices are sanding, scraping or removing lead paint with a heat gun.^{27,28}

CHILDREN LIVING IN POVERTY AND MINORITY CHILDREN

Children under Age 6 with Elevated Blood Lead Levels (≥10 µg/dl), by Race and Ethnicity, Rhode Island, 2002						
Black, non-Hispanic	17.9%					
Asian	11.8%					
Hispanic	9.8%					
White, non-Hispanic	5.4%					
<i>All Rac</i> es	7.1%					

Source: Rhode Island Department of Health, Childhood Lead Poisoning Prevention Program, 2002.

- In 2002, Black, Asian and Hispanic children were two to three times as likely as White, non-Hispanic children to have elevated blood lead levels.
- The disproportionate risk of lead poisoning among minority children is related to higher rates of poverty and the concentration of minority populations in core urban communities. Poor children frequently live in deteriorating housing with increased risks of lead hazards. They are more likely to suffer from inadequate nutrition and anemia, which further increases susceptibility to lead poisoning.^{29,30}
- According to Census 2000, 8% of White children in Rhode Island are poor, compared with 38% of Black children, 47% of Hispanic children, and 26% of Asian children.³¹

LEAD SAFETY AND THE AFFORDABLE HOUSING CRISIS IN RHODE ISLAND

Approximately 80% of housing units in Rhode Island were built before 1978, when the sale of lead-based paint was prohibited. About 30,000 housing units are classified as high-risk, meaning that they not only contain lead paint, but are also in deteriorating condition. Of the 29 census tracts with the highest concentrations of old housing, 25 are in low-income neighborhoods.³²

The lack of housing that is safe and affordable is closely related to lead poisoning. In Rhode Island, 38% of renters are unable to afford the fair market rent for a two-bedroom unit.³³ Many low-income families have no choice but to live in older dwellings with deteriorating lead paint, placing children at risk for lead poisoning.³⁴ High housing costs also result in a disproportionate percentage of income being spent on rent, reducing funds available for food. Poor nutrition and anemia further increase a child's susceptibility to lead poisoning.³⁵

In March of 2002, the General Assembly and the Governor approved funding for the Neighborhood Opportunities Program which will create 200 new units of lead safe affordable housing over two years, in addition to grants for renovation, demolition and homeownership opportunities. The Neighborhood Opportunities Program is a ten-year program to develop 1,000 units of affordable housing. However, funding beyond the first two years is uncertain. Without additional, sustained investment in housing, the need for affordable housing units will continue to far exceed the supply.³⁶

RATES OF CHILDHOOD LEAD POISONING



In Rhode Island, the Department of Health regularly measures two rates of lead poisoning in children. The first, the number and percentage of children under age 6 with elevated blood lead levels ($\geq 10 \mu g/dl$), is based

on the highest lead test results within the last year for all screened children under age 6. *This is the count of children poisoned each year*.

% of Screened Children					
Under Age 6 with Elevated					
Blood Lead Level in Last					
Year, Rhode Island					
and Core Cities, 2002					
Core Cities* 11%					
Remainder of State 4%					
Rhode Island 7%					
Source: RI Department of Health					



CHILDREN (AGE 3) WITH A HISTORY OF LEAD POISONING

The second measure of lead poisoning in Rhode Island is a count of 3-year-olds who have ever had an elevated blood lead level. It is reported by reference to the year in which they are expected to enter kindergarten, e.g. "children entering kindergarten in 2004" includes all children who were born between 9/1/98 and 8/31/99.³⁷ This rate counts 3-year-old children who have *ever* had elevated blood lead levels (not just in the last year) and is limited to younger children who are more likely to ingest lead. This is the better measure for ascertaining the rates of children likely to

be affected by lead poisoning % over the course of their lives. This count includes the full history of a child's lead screening rather than only the most recent So year.

% of Screened 3-Year-Olds with History of Lead Poisoning, Rhode Island and Core Cities, 2002 (Entering K in 2004)				
Core Cities*	7%			
Remainder of State	6%			
Rhode Island	%			

Source: RI Department of Health

*Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket.



CHILDREN UNDER AGE 6 WITH BLOOD LEAD LEVELS \geq 10 µg/dL, RHODE ISLAND, 2002

CITY/TOWN	# CHILDREN UNDER AGE 6	# SCREENED WITH ELEVATED LEVELS			TOTAL SCREENED WITH ELEVATED LEAD LEVELS	
	SCREENED	I0-I4μg/dL	15-19μg/dL	≥20μg/dL	≥l0ļ NUMBER	lg/dL PERCENT
Barrington	727	10	6	3	19	3%
Bristol	699	20	8	4	32	5%
Burrillville	426	21	3	4	28	7%
Central Falls	1,173	112	31	18	161	14%
Charlestown	266	4	I	3	8	3%
Coventry	887	17	3	0	20	2%
Cranston	2,023	60	21	16	97	5%
Cumberland	936	9	I	3	13	1%
East Greenwich	341	5	2	I	8	2%
East Providence	1,528	38	9	15	62	4%
Exeter	154	2	I	0	3	2%
Foster	109	0	0	I	l	1%
Glocester	179	8	0	I	9	5%
Hopkinton	362	7	2	2	11	3%
amestown	123	0	0	2	2	2%
Johnston	699	17	5	4	26	4%
Lincoln	541	10	2	I	13	2%
Little Compton	113	5	0	0	5	4%
Middletown	455	15	4	3	22	5%
Narragansett	364	8	1	1	10	3%
New Shoreham	10		0	0		10%
Newport	899	66	14	14	94	10%
North Kingstown	886	11	3	6	20	2%
North Providence	681	13	4	2	19	3%
North Smithfield	231	5	Í	0	6	3%
Pawtucket	2,809	141	46	42	229	8%
Portsmouth	537	12	5		18	3%
Providence	8,391	745	226	162	1,133	14%
Richmond	251	7	0	2	9	4%
Scituate	304	3	0	0	3	1%
Smithfield	407	3	1		5	1%
South Kingstown	841	35	5	10	50	6%
Tiverton	542	22	3	2	27	5%
Warren	387	9	2	2	13	3%
Warwick	2,035	40	11	3	54	3%
West Greenwich	148	2	0	2	4	3%
West Warwick	918	28	7	7	42	5%
Westerly	590	25	10	4	39	7%
Woonsocket	I,850	101	25	18	44	8%
Unknown RI Town	20	2	0	0	2	10%
Core Cities*	16,040	1,193	349	261	I,803	11%
Remainder of State	18,782	444	114	99	657	4%
Rhode Island	34,842	1,639	463	360	2,462	7%

Data are based on highest lead test result in calendar year 2002. Data include both capillary (fingerstick) and venous tests. *Core cities are Central Falls, Newport, Pawtucket, Providence, West Warwick and Woonsocket. Source: Rhode Island Department of Health, Childhood Lead Poisoning Prevention Program, 2002.



FROM TREATMENT TO ABATEMENT: ADDRESSING THE NEEDS OF RHODE ISLAND CHILDREN EXPOSED TO LEAD

MEDICAL TREATMENT

Consistent with guidelines from the Centers for Disease Control and Prevention (CDC), the Rhode Island Department of Health considers a child under age 6 to be significantly lead poisoned at a venous blood level of $\geq 20\mu g/dL$ or a persistent blood lead level of $\geq 15\mu g/dL$ (2 or more venous or fingerstick tests at least 90 days but not more than 365 days apart) and recommends medical evaluation and follow-up. Chelation treatment (the administration of drugs that bind with lead) may be necessary for children with lead levels $\geq 45\mu g/dL$. At lead levels $\geq 70\mu g/dL$, a child must be hospitalized in order to receive appropriate medical attention. In 2002, 7 children (5 from Providence and 2 from Pawtucket) were hospitalized for lead poisoning.³⁸

CASE MANAGEMENT

As of January 2003, case management services are provided to children with a blood lead level of $\geq 15\mu g/dL$. Case management includes education regarding health, nutrition, and cleaning techniques, ongoing developmental assessment and contact with the child's health care provider, and referrals for further assistance with education, nutrition, housing, and legal needs.

Children in the Providence area with high lead levels can receive case management services from the HELP Lead Safe Center. Three additional Lead Centers have been certified recently by the Department of Human Services and will serve the rest of the state beginning in 2003. All Lead Centers provide case management and environmental inspections for RIte Care/Medicaid enrolled children with any single test result of $\geq 15 \mu g/dL$. A federal waiver obtained by Rhode Island allows the Lead Centers to use Medicaid funding to pay for window replacement in the homes of lead poisoned children enrolled in RIte Care. Deteriorated lead paint on windows is one of the most common lead hazards due to lead dust caused by the friction of window opening and closing.

The Department of Health Family Outreach Program contracts with three Visiting Nurse agencies across the state to provide home visits and case management to families of children diagnosed with lead poisoning, education on temporary lead hazard control, nutritional counseling, and referrals.^{39,40,41}

EDUCATION

If a child's blood level falls between 10 and 19µg/dL, the RI Department of Health sends parents educational materials on lead poisoning prevention. The Department of Health is implementing a pilot project through which visiting nurses educate pregnant women in Providence about lead poisoning and prenatal care. Eligible pregnant women and their landlords are referred to the City of Providence's Lead Hazard Reduction Program for financial assistance in removing lead hazards before the baby is born.⁴²

LEAD POISONING AND LONG-TERM CHILD DEVELOPMENT

Research indicates that there is often a lag between the time a child has an elevated blood lead level (EBLL) and the emergence of developmental problems. The Centers for Disease Control and Prevention now recommends long-term developmental surveillance as a component of case management for children with EBLL, including:

- Documentation of the child's history of elevated lead levels in the medical record.
- Referral to early intervention services.
- Ongoing monitoring for emerging developmental, behavioral or educational problems at transition points such as first grade, fourth grade and middle school.

Source: *Managing Elevated Blood Lead Levels Among Young Children* (2002). Atlanta, GA: Centers for Disease Control and Prevention.

INSPECTIONS

According to state regulations, if a child is significantly lead poisoned, a comprehensive lead inspection of the child's home is performed by the Department of Health. During 2002, there were 295 inspections offered; of these, 221 inspections were performed and 74 were refused.⁴³ Currently, free lead inspections by the state are not available when a lead paint hazard is suspected but no lead poisoning is documented. Such inspections are available for a fee from private inspectors listed on the Department of Health's website. Similarly, due to limited resources, even when a child is lead poisoned, other units in the building are not automatically inspected.⁴⁴

ENFORCEMENT

If lead hazards are found upon inspection of the property in response to a significantly elevated blood lead level in a child, a notice of violation is issued to the property owner by the Department of Health. If the property owner fails to complete the abatement process within a specified period of time, the Department issues a second notice of violation and records the violation in the city/town land evidence records. If the property owner fails to comply with the second notice of violation, the Department refers the case either to the Providence Office of Inspections and Standards, Prosecution Unit, for prosecution in Housing Court, or to the Department of the Attorney General for prosecution in Superior Court.⁴⁵

Since 1998, the Department of the Attorney General has received 254 referrals from the Department of Health. Of these, approximately 38% have been closed after receiving lead-safe certification, 11% are in litigation, 31% are open with abatement in progress, and the remaining 20% have had little or no progress due primarily to difficulties in establishing ownership responsibility for the property.⁴⁶

ABATEMENT

Lead hazards can be reduced by repairing or encapsulating deteriorated paint or removing parts exposed to friction (such as windows and doors), in compliance with safe practices and licensing standards for contractors. Complete removal of interior lead paint, while the only way to guarantee permanent lead safety, is usually significantly more costly. Removing lead from the soil around the home is also an important element of abatement. The Department of Environmental Management is responsible for oversight of exterior lead hazard abatement.⁴⁷

The Lead Hazard Reduction Program, administered by Rhode Island Housing, makes low-interest, deferred loans available to income-eligible homeowners and rental property owners for purposes of lead abatement. The program also provides education and certification classes for lead-safe remodeler/renovator contractors and workers. Since 1999, the program has committed over \$5 million towards making 588 units lead safe. Seventy percent of program loans are made in the core cities.⁴⁸ A number of localities including Providence, East Providence, Woonsocket and Pawtucket also have their own loan programs.

TARGETING INSPECTIONS

According to the Centers for Disease Control and Prevention, "The only certain way to prevent future exposure to lead from paint in a dwelling is to remove all leaded paint from the dwelling." Because of the costs and logistics of doing so safely, particularly when units are occupied, the CDC indicates that this may not always be practical.⁴⁹

Research indicates that limited prevention resources can be maximized by targeting lead hazard inspections to:

- All units at addresses where children have been previously lead poisoned.
- All units at addresses with indicators of poor housing quality (e.g. code violations).
- Addresses owned by owners of other properties where children have been lead poisoned.⁵⁰

RESOURCES

Childhood Lead Action Project/ Get the Lead Out Coalition/ Organized Parents Against Lead (401)785-1310 www.leadsafekids.org

HELP Lead Safe Center (401) 781-8595 www.helpleadsafe.org

Rhode Island Legal Services (401) 274-2652 www.rils.org

Greater Elmwood Neighborhood Services/RI CLEARCorps (401) 461-4111

Rhode Island Family Advocacy Program (401) 274-2652 x116

Conservation Law Foundation (401) 351-1102

Rhode Island Department of Health Childhood Lead Poisoning Prevention Program 1-800-942-7434 www.healthri.org/family/lead/home.htm

Housing Resources Commission (401) 450-1350 www.hrc.state.ri.us

Rhode Island Housing Mortgage and Finance Corporation (401) 450-1350 www.rihousing.com

Rhode Island Department of Attorney General (401) 274-4400 www.riag.state.ri.us

Rhode Island Department of Human Services (401) 462-1300 www.dhs.state.ri.us

Rhode Island Department of Environmental Management (401) 222-1360 www.dem.state.ri.us

Providence Lead Hazard Reduction Program (401) 351-4300 x422

Pawtucket Lead Safe Program (401) 723-4520 x227

East Providence Lead Safe Program (401) 435-7553

Woonsocket Safety First and Home Repair Cost Assistance (401) 767-9228



Legislation sponsored by Senator Thomas Izzo and enacted in Rhode Island in 2002 strengthens tenants' rights and places a strong emphasis on enforcement mechanisms to rid Rhode Island of lead hazards. Among other provisions, the Lead Mitigation Act:

- Calls for the formation of an interagency coordinating council, with the Department of Health as the lead agency, to oversee lead policy regulations, education, and enforcement.
- Establishes comprehensive planning and education through the Housing Resources Commission (HRC). Requires the HRC to develop a four-year plan to address lead poisoning through education, coordination, financing, assessment, and implementation. The plan must be adopted by April 1, 2003.
- Creates the Office of Lead Advocate within the Department of the Attorney General to investigate failures to comply with lead hazard reduction, initiate civil or criminal compliance actions, establish guidelines to protect tenants from retaliation, and bring actions against state agencies or political subdivisions to enforce performance of their duties under the Act.
- Provides for proactive tenant complaints and requests for inspection to the HRC or to the Department of Health.
- Requires that other tenants be notified if, during inspection, lead hazards are identified and are likely to exist in other units.
- Creates several separate and specific requirements for the Department of Health to maintain public registries, lists or databases of inspected properties or properties with multiple lead poisonings and uncorrected lead hazards.
- Requires the Department of Health to notify the Attorney General of all second notices of violation where no adequate response has been made by the owner within 30 days.
- Clarifies the reponsibility of code enforcement programs for overseeing compliance with lead hazard mitigation standards.
- Makes failure to initiate improvements within required time periods and after notice a felony for owners of "high risk" dwellings (as defined in the law) where the failure to abate results in an additional lead poisoning.
- Mandates (with certain exceptions) that insurance companies cover lead paint liability as of July 1, 2004.
- Creates a private right of action for pregnant women and families with children under age 6 to compel compliance with lead hazard mitigation requirements and to obtain attorneys' fees and court costs.

LITIGATION IN RHODE ISLAND LEAD PAINT AS A PUBLIC NUISANCE

"A public nuisance is an unreasonable interference with a right common to the general public; it is behavior that unreasonably interferes with the health, safety, peace, comfort or convenience of the general community."⁵¹

By the mid-1920s, there was strong and ample evidence of the toxicity of lead paint to children. The dangers represented by lead paint caused many other countries to enact bans on the use of white lead for interior paint decades before the 1978 ban of lead paint by the U.S. Consumer Products Safety Commission.⁵²

In October of 1999, the Attorney General of the State of Rhode Island filed a lawsuit against eight manufacturers of lead pigment and paint, alleging that they had actual knowledge of the health risk posed by lead long before it was banned from paint products in the U.S. in 1978, that the companies intentionally misled the public, and that they created a public nuisance. The Attorney General sought damages to fund the costs of lead abatement, lead detection, medical care and special education for lead poisoned children.⁵³ In October 2002, the trial in this case resulted in a mistrial (i.e. the jury was unable to reach a unanimous verdict). The State intends to retry the case.



THE CHILDHOOD LEAD ACTION PROJECT

Since 1992 the Childhood Lead Action Project has worked statewide and in local communities to eliminate childhood lead poisoning through advocacy, education, and parent support. The Project organizes trainings for agencies, parents, and professionals, and works with the State and with local jurisdictions to promote improved awareness of lead safety. Childhood Lead Action coordinates the Get the Lead Out Coalition, a membership organization of environmental, housing, health and social service providers and advocates that promotes effective state and local policies to reduce childhood lead poisoning. The Project also staffs Organized Parents Against Lead, an organization of parents working to improve housing safety through information sharing and advocacy.

RHODE ISLAND CLEARCORPS

Through Rhode Island CLEARCorps, a program of Greater Elmwood Neighborhood Services, eight Americorps volunteers work in communities across the state to make properties lead safe and to educate families about lead hazards.

NATIONAL POLICY RESPONSES TO LEAD POISONING

The Clean Air Act amendment in 1970 is an example of how policy can positively affect public health. The Act required the phase-out of lead in gasoline and contributed to a 60% to 80% reduction in blood lead levels since the mid 1970s.⁵⁴ Other federal policies addressing lead safety include:

FEDERAL TITLE X: DISCLOSURE REQUIREMENTS AND CERTIFICATION PROGRAMS

The Residential Lead Hazard Reduction Act of 1992 (Title X) requires disclosure of lead-based paint and hazards at the time of sale or rental for all residential properties built before 1978. Title X also mandates that states enact lead paint certification programs to train inspectors, assessors, and contractors.⁵⁵

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT: ASSISTED HOUSING

HUD enacted lead hazard control procedures for federally owned housing and housing receiving federal assistance, effective September of 2000. All housing rehabilitation and maintenance programs receiving federal assistance must be carried out in a lead safe manner.⁵⁶

SCREENING POLICIES FOR MEDICAID RECIPIENTS

In 1998, the Health Care Financing Administration (HCFA) mandated that all children enrolled in Medicaid receive screening blood lead tests at ages 12 months and 24 months.⁵⁷



IMPLEMENT THE PROVISIONS OF THE LEAD MITIGATION ACT

The passage of the Lead Mitigation Act of 2002 creates new opportunities for prevention of childhood lead poisoning through the abatement of lead hazards. Complete and timely implementation of the legislation will require:

- Strong leadership from and coordination among the executive, legislative, and judicial branches.
- Commitment of financial resources necessary for implementation, including adequate staffing.
- Diligence in meeting the timelines required by the Act.
- Inclusion of lead mitigation policies within an overall state plan for safe, affordable housing.

The full text of the Act is available at www.rilin.state.ri.usstatutes/title42/42-128:1/index/htm.

Recommendations below that are related to the provisions of the Lead Mitigation Act are noted in bold.

OUTREACH AND EDUCATION

- Use prenatal care visits, hospital stays after birth, and visits to the pediatrician as opportunities for parent education to prevent lead poisoning.
- Create a public database to track premises where lead poisonings and lead inspections have occurred so as to promote occupancy of safe housing by families with children.
- Promote lead safe renovation practices by providing information and expanding training to contractors, homeowners and rental property maintenance companies.
- Disseminate information about the tenant protections of the Lead Mitigation Act to landlords, tenants and courts.

SCREENING AND TREATMENT

- Further improve lead screening rates among primary care providers, especially among providers in private practice.
- Work with primary care providers to improve rates of follow-up for children with elevated blood lead levels.
- Consistent with CDC recommendations, include ongoing developmental surveillance of behavior and educational progress as part of case management services.
- Refer children with elevated blood lead levels to early intervention services, high quality early education programs and other services that promote child development.

MAKE HOUSING SAFE FOR CHILDREN

Inspections and Hazard Screening

- Dedicate sufficient resources to permit prompt inspection to occur whenever a lead hazard is suspected or when lead poisoning occurs in any unit of a building.
- Improve coordination between housing code enforcement and lead inspection services.
- Streamline the inspection process and create lower-cost screening tools to promote hazard abatement by municipalities and community-based organizations.

Enforcement

- Provide adequate resources to the Department of Attorney General, Office of Lead Advocate to support the full range of enforcement mechanisms provided for in the Lead Mitigation Act.
- Educate housing court judges and attorneys about lead poisoning and collaborate with high-risk jurisdictions to increase the effectiveness of housing courts.

Tenant Protections⁵⁸

- Promote private attorney involvement in representation of tenants with retaliation or lead complaints, capitalizing on new legal provisions which provide for attorneys' fees in such cases (as of 2004).
- Work with local jurisdictions to create escrow systems for tenants to withhold rent when landlords fail to comply with lead safety or other code requirements.



INCREASE AFFORDABLE HOUSING

- Maintain funding for the Neighborhood Opportunities Program and increase funding for the Housing Resources Commission. Create a housing trust fund in order to promote affordable housing and leverage potential federal funding.
- Develop a more effective system for conveying vacant or abandoned properties and properties sold at tax sales, to developers, nonprofits and Community Development Corporations for redevelopment into affordable housing. Make state-owned property, underutilized property and property with tax liens more available for affordable housing development by conducting an inventory.
- Help cities and towns set aside sufficient land and resources to meet their affordable housing requirements under state law.
- Work with institutions of higher education to create more student housing to decrease competition for affordable housing.
- Preserve and maintain existing affordable units that could be lost due to expiration of federal project-based assistance or prepayment of federally-assisted mortgages. A statewide plan and investment of incentive grants and loans may be necessary.
- Use lead-safe work practices and lead hazard mitigation strategies in all local, state and federally-funded housing production and repair programs in Rhode Island.

FINANCING STRATEGIES

Rental Unit Registration/Fees

One successful model for improving inspection and enforcement is New Jersey's rental unit registration/fee requirement. Registration includes owner and property manager contact information. Tenants in a non-registered building may not be evicted for any reason, including nonpayment of rent. A fee schedule charged every five years helps finance a periodic inspection of *all rental properties in the state*. The program has been effective in tracking ownership, financing inspection and code enforcement, and improving housing quality.⁵⁹

Financial Responsibility of Lead Paint Industry

In a 1997 Policy Statement, The American Public Health Association (APHA) noted that the cost of abating lead hazards and treating lead poisoning is many billions of dollars, that the lead paint industry continued to promote the sale of lead paint for decades despite awareness of its dangers, and that "the principle of 'polluter pays' is well-established in cases of environmental damage and public health problems." APHA took the position that the lead paint industry should be held responsible for financing a solution to lead poisoning, and that that responsiblility should be enforced through legislation, negotiation, fees or litigation.⁶⁰

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