

Childhood Lead Poisoning  
Issues, Policies, Initiatives

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*If you surveyed the public, you'd hear that lead poisoning was eliminated decades ago. We've banned lead paint; leaded gasoline is no longer an option, and leaded pipes aren't used. Yet, children in poor communities continue to be poisoned in their own homes because their homes haven't been renovated, because each time an old window is opened, the peeling lead paint turns to dust, because neighbors track lead paint from Chicago's old battle-gray rear porches through the house.*

*We worry about brownfields, about air pollution and depleting the ozone layer. But children, mostly African American children, are being poisoned in their own homes because we never really took care of the problem.<sup>1</sup>*

Lead paint poisoning is one of the top environmental threats to children's health in the United States. It is a potentially devastating, yet entirely preventable, health hazard<sup>2</sup>--and one we cannot afford not to address. The human and financial costs of toxic exposure are staggering. At low and moderate levels, lead poisoning can cause learning disabilities, hyperactivity and behavioral disorders. High levels can result in mental retardation and death. The Centers for Disease Control (CDC) estimates that the cost to society to provide for a child who is lead-poisoned is \$13,000 for every 10 milligrams of lead per deciliter of blood. With over 800,000 children poisoned in this country by lead, the cost of caring for them is over \$10 billion.

#### About Lead

Lead is a heavy metal used in many materials and products; it does not break down in the environment. Once lead is dispersed and redeposited in the environment, it will remain to poison generations of children unless it is contained or removed. Lead has no positive value to the human body and is not considered safe at any level.<sup>3</sup> Concern about the health effects of lead resulted in a variety of governmental regulations over the last 25 years: Lead in residential paint was phased out and completely banned by the Consumer Product Safety Commission in 1978. The U.S. Environmental Protection Agency (EPA) from 1975 to 1986 phased out leaded gasoline. The EPA also placed strict limits on the amount of lead in drinking water and on the amount emitted from industrial facilities, and it has phased out lead in pesticides. With the assistance of the U.S. Food and Drug Administration (FDA) the use of lead solder in domestically canned food and beverages has been virtually eliminated. In addition, the FDA has established strict standards concerning the amount of lead that can leach from U.S. manufactured ceramic ware into beverages and food.<sup>4</sup>

However, due to the broad range of uses of lead in the United States over a long period of time, there are still many ways in which children can be exposed to lead.

One way is through contaminated lead dust. Lead also can contaminate the soil near children's homes due to flaking exterior lead-based paint or previous deposits of leaded gasoline. Children play in the dirt and directly ingest the lead in the soil, or track it into their homes with their shoes. Drinking water also may contain lead from pipes or solder. This is especially a problem when contaminated tap water is used to make baby formula. Parents who work in lead-related industries also can bring lead into their homes

on their clothes, thereby exposing children to the hazard. Such industries include construction, demolition, painting, work with batteries, radio repair shops, lead factories, or a hobby that involves lead. Other sources of lead, but less common, are food and drink stored in leaded crystal, lead soldered cans, or lead glazed ceramic ware, or home remedies and cosmetics that are popular in some cultures.<sup>5</sup>

In addition, lead can be transmitted to a fetus if the mother ingests lead while pregnant or has been exposed to lead in the past.<sup>6</sup> During pregnancy, the lead stored in bones is released into the blood stream, and lead easily crosses the placental barrier throughout the gestation period, including the period during which the central nervous system is formed.<sup>7</sup>

But most children are lead-poisoned in their own homes through exposure to lead dust or paint chips from paint surfaces that have deteriorated or been disturbed during home renovation and repainting. The U.S. Department of Housing and Urban Development estimates that as of the year 2000, 25.5 million units in the country have significant lead paint hazards.<sup>8</sup> Because older homes are more likely to fall into disrepair and also more likely to have lead paint on their walls, the age of housing stock affects the risk of children's exposure to lead hazards.

A national study found the greatest concentrations of lead containing dust in window wells, followed by windowsills, then interior floors<sup>9</sup>. This is because paints with high lead contents were used for surfaces that are subject to weathering and friction. While lead is most hazardous to the nation's twenty-four million children under the age of six, children ages one to three are at particular risk because of their normal hand-to-mouth activity and an increase in mobility, which makes lead hazards more accessible. In addition, children absorb up to 50% of the lead they ingest, compared to adults who retain only 10%.<sup>10</sup>

While childhood lead poisoning occurs in all population groups and income brackets, the risk of lead poisoning falls disproportionately on minority children from low-income families who live in older housing.<sup>11</sup> The General Accounting Office estimates that one in twelve children on Medicaid have elevated blood levels; 81% of Medicaid children are not being screened.<sup>12</sup>

## About Lead Poisoning

The Centers for Disease Control defines an elevated blood lead level as a concentration of  $\geq 10\mu\text{g/dL}$  (micrograms of lead per deciliter of blood).<sup>13</sup> The harmful effects of lead on the child's developing brain and nervous system often are permanent. At high levels, lead poisoning causes damage to the child's nervous system, kidneys, and reproductive system.<sup>14</sup> Even at low and moderate elevated levels ( $\geq 10\mu\text{g/dL}$ ) lead poisoning can cause learning disabilities, problems with speech, shortened attention span, hyperactivity, behavioral problems, and reduced growth.<sup>15</sup> Research links low levels of lead exposure to lower IQ scores and possibly to juvenile delinquency.<sup>16</sup> Other adverse effects of lead exposure, such as hearing loss, have been reported to occur at concentrations  $\leq 10\mu\text{g/dL}$ .<sup>17</sup> And a more recent study found that there is an inverse relationship between blood lead levels and lowered arithmetic and reading scores for children with blood lead concentrations  $\leq 5\mu\text{g/dL}$ .<sup>18</sup>

## Existing Efforts to Address the Problem of Lead Paint Poisoning: Screening and Education

The only way to know that a child is lead-poisoned is through screening. Screening involves determining a child's blood lead level by means of a blood test. The primary goal of lead poisoning assessment and screening is to identify lead-poisoned children and to intervene as quickly as possible to reduce their blood lead levels. The majority of lead efforts are focused on responding to children who already have been found to be poisoned. The CDC recommends that child-care providers use a blood lead level test to screen children at ages one- and two-years, and children three- to six- years of age who have not previously been screened, if they meet one of the following criteria<sup>19</sup>:

1. Child resides in a zip code area in which more than 27% of the housing was built prior to 1950, and/or
2. Child receives services from the public assistance programs for the poor, such as Medicaid or the Supplemental Food Program for Women, Infants, and Children (WIC), and/or
3. Child's parent or guardian answers "yes" or "don't know" to any question in a basic person-risk questionnaire consisting of these three questions:
  - a. Does your child live in or regularly visit (for example, daycare, babysitter, relative) a house that was built before 1950?
  - b. Does your child live in or regularly visit a house built before 1978 with renovations or remodeling occurring within the last six months?
  - c. Does your child have a sibling or playmate who has or did have lead poisoning?

Screening is not federally mandated.<sup>20</sup> Many states' laws, however, require that physicians and health care providers either screen or assess children six months through six years of age for lead poisoning. The majority of children who are identified at high risk for lead poisoning, however, are not screened.

Efforts are underway throughout the country to educate families, including children, about the dangers of lead paint, about cleaning techniques that may lessen the risks in one's home, and about good nutritional habits that reduce the absorption of lead. In addition, advocacy groups are seeking to educate physicians and health care providers about screening requirements, the importance of identifying children with lead poisoning, and providing follow-up information and case management to the children and their families.

The fundamental missing link necessary to address the problem of childhood lead poisoning, however, is a mechanism that will ensure that once lead is identified in the home, it will be eliminated. Without this final step, there is limited use to screening or education. In addition, in order to prevent children from being poisoned, funding must be made available to mitigate or abate lead- hazards even before a child is identified.<sup>21</sup> Currently, government funding for abatement or mitigation work usually is only available to property owners in whose units a child has been identified as lead-poisoned. One further disincentive to property owners: if an owner chooses to have a building inspected

for lead hazards, the cost of that inspection—approximately \$500-- is only covered if a child already has been identified as lead-poisoned. Otherwise, the property owner must cover the expense himself. And once the owner is on notice that there are lead hazards, he or she is open to a lawsuit if a child is subsequently poisoned in that unit. But few dollars are available to assist the property owner in undertaking the necessary abatement or mitigation efforts.

### Current Litigation Strategies

While there have been some successful individual damage claims brought by families whose children have been lead-poisoned against rental property owners and their insurers, city, state and federal governmental agencies now also are bringing lawsuits. In the last two-and-a-half years, 36 lawsuits have been filed against lead pigment manufacturers.<sup>22</sup> This includes the State of Rhode Island; twelve counties in California, Mississippi, New Jersey, and Texas; 24 municipalities including San Francisco and Oakland in California, St. Louis, Missouri, Milwaukee, Wisconsin and 20 cities in New Jersey. In addition, the New York City Housing Authority and several school districts in California, Mississippi, and Texas have filed or joined in suits against the manufacturers. Lead-poisoned children also have sued the lead industry in several locales. Generally, the plaintiffs in these cases have sued paint companies, lead pigment manufacturers, and the Lead Industries Association for manufacturing and marketing a product they knew was unsafe.<sup>23</sup>

While no suit has yet been won, several are going forward. In April 2001, the Superior Court in Rhode Island<sup>24</sup> denied the defendant's motion to dismiss the suit, and upheld the state's standing to protect the public health and right to sue on the basis of public nuisance. The court ruled that the state can proceed to prove that defendants violated Rhode Island's Unfair Trade Practice and Consumer Protection Act, that they conspired to conceal hazards of lead-based paint, and that they are liable under tort law theories for damages to public buildings and liable for unjust enrichment and indemnity. Most recently, in February 2002, the court granted the state's request to focus the first phase of the trial on the central claim against the defendants: that lead-based paint in public and private buildings constitutes a public nuisance. The court set the trial date for September 4, 2002.

The City of Milwaukee filed suit in April 2001 against National Lead Industries and a local paint producer and seller.<sup>25</sup> Its suit seeks compensatory and punitive damages, abatement of lead hazards in Milwaukee homes, and restitution for the city's abatement-related expenditures. It also seeks relief on grounds of continuing public nuisance and conspiracy, as well as restitution. The court has dismissed a false advertising claim against the paint company, but ruled that the city may seek to prove a conspiracy by defendants resulting in public nuisance.

In California in September 2001, the Superior Court threw out the plaintiffs' public nuisance claim.<sup>26</sup> It held, however, that the state may seek to recover damages to public property on grounds of strict product liability and negligence, and can pursue claims of fraud and concealment, and violations of California's Business & Professions Code.

These suits provide for a variety of remedies. Generally, they seek to recover costs associated with the government entities' abatement and mitigation efforts in public and/or private housing; court orders for defendants to pay for the detection and abatement of lead hazards, for public awareness campaigns, for the costs of detecting and screening for lead-poisoned children, and for the costs associated with treating them.

While no lawsuit against the lead industry has yet gone to trial or been settled, the U.S. Environmental Protection Agency (EPA) has brought several successful lawsuits against property management companies for failure to comply with the EPA's federal disclosure requirements.<sup>27</sup> The law was passed in 1992; joint EPA and HUD regulations implementing the provisions became fully effective in December 1996. The law requires that owners of pre-1978 properties and their agents disclose any known information about the presence of lead-based paint and lead hazards in the particular property. It also provides prospective buyers and tenants an educational pamphlet about lead hazards to children. In addition, prospective homebuyers, at their own expense, must be given the opportunity to hire a lead inspector or a risk assessor to conduct a lead evaluation before purchasing the property. The law does not require that a property owner test for the hazard.

The EPA has settled lawsuits against major property management companies for failure to disclose. In October 2001, the EPA and HUD settled lawsuits against three management agents of residential apartment buildings in Chicago, Illinois.<sup>28</sup> The United States alleged in each of its complaints that the defendants failed to provide information to tenants concerning lead-based paint hazards, and failed to disclose to tenants the presence of any known lead-based paint or any known lead-based paint hazards. Under the consent decrees, the defendants agreed to provide the required notice and disclosures, to perform inspections at the buildings for the presence of lead-based paint, and to perform lead-based paint abatement found in their properties. The defendants manage over 225 buildings with over 10,000 residential units. In addition, the defendants will pay \$90,000 in penalties. One of the companies also agreed to contribute \$100,000 to Chicago to be used for additional lead-based paint abatement activities, primarily for window replacement.<sup>29</sup> The two other companies agreed to contribute \$77,000 to community-based health centers to screen children for lead poisoning and to create educational programs in low-income areas regarding lead paint poisoning.<sup>30</sup>

In January 2002, the EPA and HUD settled the broadest lead disclosure suit, involving residents in more than 130,000 low-income apartments in 47 states and the District of Columbia. The federal agencies reached a settlement with the Denver-based Apartment Investment and Management Co. (AIMCO), one of the nation's largest property management firms. Under the settlement, AIMCO agreed to test and clean up lead hazards in more than 130,000 apartments nationwide and pay a \$129,580 penalty.

### What More Can Be Done

Unlike so many other social ills, childhood lead poisoning can be prevented and almost entirely eradicated. But we must make a financial commitment to address the problem. The cost to our children, to families, to society is enormous. We do not know the percentage of children who have learning and reading disabilities as a direct result of lead poisoning, but all indications are that it is high. The focus for addressing the

problem of lead poisoning has been secondary prevention—identifying the problem through a child who has become lead-poisoned--and then responding. By then, the damage to that child and family, and costs to society, are irreversible.

Far more emphasis must be placed on preventive measures. The President's Task Force on Environmental Health Risks and Safety Risks to Children recognized this in its report dated February 2000. The goal of the Task Force was to develop a set of recommendations to eliminate childhood lead poisoning in the United States as a major public health problem by the year 2010. The report and recommendations focused primarily on expanding efforts to correct lead-paint hazards (especially in low-income housing).<sup>31</sup> In addition, the Alliance to End Childhood Lead Poisoning has developed ten strategies—a collection of best practices throughout the country-- for addressing lead hazards in distressed and marginal housing.<sup>32</sup>

Efforts underway in Illinois illustrate a grassroots approach that will address the problem, and on a larger scale build a coalition to obtain greater resources to eliminate lead hazards in housing.

Illinois has the largest number of identified cases of childhood lead poisoning in the nation.<sup>33</sup> This despite that the majority of children who are high-risk for lead poisoning have not even been screened. In some communities in Chicago, one-third of neighborhood children test positive for elevated blood levels. Based on the CDC estimates of the financial cost to care for children who are lead-poisoned, the financial cost of children's lead poisoning in Chicago alone exceeds \$200 million.

Almost 7% (340,000) of all housing units in Illinois are considered at high risk for lead-based paint hazards. Of these units, over 120,000 are in Chicago.<sup>34</sup> Using the national cost estimates in the President's Task Force Report, HUD estimates that in Illinois the annual cost over ten years of eliminating these hazards through permanent abatement is approximately \$300 million per year (\$3 billion for 10 years), with over one-third of the cost from Chicago where 10% of all pre-1960 units may be high-risk. For interim controls (mitigation), the annual cost over 10 years would be approximately \$33 million per year (\$330 million for 10 years).<sup>35</sup>

In response to this need, Loyola University convened a Forum on the Child to begin to establish a partnership of the university, governmental agencies, and community groups. (See Valerie Puryear's article, also in this issue, for discussion of the Forum and follow-up efforts.) Three communities were identified to participate in the effort where, because of the age of the housing stock, children are at risk for lead poisoning. In addition, unique characteristics of the neighborhoods were considered in an effort to develop a replicable model for a variety of communities.

The Austin neighborhood's lead poisoning rate is higher than the city average of 20%. In 1999, there were 14,138 children age six and under residing in Austin. Only 4,736 of those children, or 33.5%, were screened for lead poisoning. Approximately 35% of the children screened were reported to have blood lead levels  $\geq 10$   $\mu\text{g}/\text{dL}$ .<sup>36</sup> Eighty percent of housing in Austin is owner-occupied, or the tenants are relatives or friends of the owner. This results in a greater number of owners interested in maintaining their housing and interested in addressing the hazards.

North Lawndale's lead poisoning rate also is higher than the city average of 20%. In 1999, there were 6,514 children age six and under residing in the community. Of those, only 3,129, or 48.04%, were screened for lead poisoning. Approximately 31% of

the children screened were reported to have blood lead levels  $\geq 10$   $\mu\text{g}/\text{dL}$ .<sup>37</sup> The existing housing stock primarily is in rental units. Because there is a serious lack of affordable rental units in North Lawndale, tenants have little choice in the quality of their housing. There also are a large number of vacant lots, making lead in soil a significant concern.

In 1999, there were 6,138 children age six and under residing in Rogers Park. Of those, only 2,605, or 42.44%, were screened for lead poisoning. Approximately 11% of the children screened were reported to have blood lead levels  $\geq 10$   $\mu\text{g}/\text{dL}$ .<sup>38</sup> Of the three communities, Rogers Park has the largest number of undocumented immigrants, raising special concerns among the tenants about eviction and deportation if they were to complain about the hazards. Other sources of lead, beyond paint, also tend to be more common in some cultures, for example, glazed ceramic ware, home remedies, cosmetics.

With the groundwork for an action-oriented partnership in place between Loyola, governmental agencies, and the communities, following the forum, representatives have begun to develop specific implementation strategies aimed at lead-poisoning prevention, which will be tailored to each community's unique needs and circumstances.

What's different about this effort is that the focus is on the characteristics of the individual communities, the prior lead-related activities in the communities, and the strengths the community groups and members bring to the initiative. The effort is community-driven, with the community deciding what it wants to do. The emphasis is on bringing together the churches, health and social service organizations, and community organizing groups to work together to determine the approach that will work best in the community. The University's role is to facilitate this process, not to direct it.

As the communities and families become better educated and empowered regarding childhood lead poisoning, the goal is that they will become part of a larger coalition to advocate, on a state and local level, for resources to eradicate lead hazards in housing. The Illinois Lead Safe Housing Task Force (Task Force), chaired and staffed by Loyola's ChildLaw Center, has begun this initiative. The Task Force is made up of a diverse group of individuals with a common interest in eradicating lead paint poisoning, including insurance industry representatives, realtors, public health officials, tenant organizers, physicians, and parents. To date the Task Force has written guidelines for lead-safe housing, prepared a manual for Chicago housing court judges, and succeeded in securing legislation permitting use of Cook County funds for lead poisoning prevention efforts.

The Task Force is now overseeing efforts to establish a loans-and-grants program to be piloted in several targeted communities that are at greatest risk for lead poisoning. (See Maria Petrone, et.al. article about efforts to identify potential resources to fund the loans and grants.) The legislation calls for loans and grants to low-income property owners for window replacement. It also provides for community economic development through training and employment opportunities. The focus is on windows because they are a major source of lead dust in older homes due to both weathering conditions and friction effects on paint. Removal of lead-contaminated windows has been found to dramatically reduce lead poisoning.

## Conclusion

It is only through community education, through partnerships that support one another, and primary prevention that childhood lead poisoning can be eliminated. In addition, there must be a greater commitment by local, state, and federal governments to support these efforts and recognition by property owners as well as the lead industry that they must share in this responsibility.

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<sup>1</sup> Maria Woltjen, former director, Children's Advocacy Project, Chicago Lawyer's Committee for Civil Rights Under the Law (February 2002).

<sup>2</sup> Centers for Disease Control and Prevention, Lead Poisoning Prevention Program, <http://www.cdc.gov/nceh/lead/factsheets/leadfacts.htm>.

<sup>3</sup> RICHARD M. STAPLETON, LEAD IS A SILENT HAZARD, 2 (January 1994).

<sup>4</sup> PRESIDENT'S TASK FORCE ON ENVIRONMENTAL HEALTH RISKS AND SAFETY RISKS TO CHILDREN, ELIMINATING CHILDHOOD LEAD POISONING: A FEDERAL STRATEGY TARGETING LEAD PAINT HAZARDS 12 (February 2000).

<sup>5</sup> CENTERS FOR DISEASE CONTROL AND PREVENTION, SCREENING YOUNG CHILDREN FOR LEAD POISONING: GUIDANCE FOR STATE AND LOCAL PUBLIC HEALTH OFFICIALS (November 1997).

<sup>6</sup> Alliance to End Childhood Lead Poisoning, <http://www.aeclp.org>, 2/22/02.

<sup>7</sup> *Ibid.*

<sup>8</sup> DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, NATIONAL SURVEY OF LEAD AND ALLERGENS IN U.S. HOUSING ES-1 (2001). Available at [www.hud.gov/offices/lead](http://www.hud.gov/offices/lead).

<sup>9</sup> Helen J. Binns, *Lead Poisoning: Still a Common Problem in Chicago*, 18 *The Child's Doctor: Journal of Children's Memorial Hospital Chicago* 15 (Spring 2001).

<sup>10</sup> STAPLETON, *supra*, note 3 at 2.

<sup>11</sup> NATIONAL CENTER FOR HEALTH STATISTICS, HEALTHY PEOPLE 2000 FINAL REVIEW 182 (2001). Found at [www.cdc.gov/nchs/data/hp2k01.pdf](http://www.cdc.gov/nchs/data/hp2k01.pdf).

<sup>12</sup> UNITED STATES GENERAL ACCOUNTING OFFICE REPORT TO THE RANKING MINORITY MEMBER, COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT, HOUSE OF REPRESENTATIVES, MEDICAID—ELEVATED BLOOD LEAD LEVELS IN CHILDREN, 4 (February 1998). Found at [www.house.gov/reform/min/pdfs/pdf\\_inves/pdf\\_medi\\_child\\_lead\\_rep.pdf](http://www.house.gov/reform/min/pdfs/pdf_inves/pdf_medi_child_lead_rep.pdf).

<sup>13</sup> CENTERS FOR DISEASE CONTROL, *supra*, note 5.

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- <sup>14</sup> Centers for Disease Control and Prevention, *supra*, note 2.
- <sup>15</sup> NATIONAL ACADEMY OF SCIENCES, MEASURING LEAD EXPOSURE IN INFANTS, CHILDREN, AND OTHER SENSITIVE POPULATIONS, COMMITTEE ON MEASURING LEAD IN CRITICAL POPULATIONS, BOARD ON ENVIRONMENTAL STUDIES AND TOXICOLOGY, COMMISSION ON LIFE SCIENCES, NATIONAL ACADEMY OF SCIENCES, NATIONAL ACADEMY PRESS (1993).
- <sup>16</sup> H.L. Needleman, J.A. Riess, M.J. Tobin, G.E. Biesecker, J.B. Greenhouse, *Bone Lead Levels and Delinquent Behavior*, 275 J. AM. MED. ASSOC. 363-369 (Feb. 7, 1996).
- <sup>17</sup> Bruce Lanphear, et. al. *Cognitive Deficits Associated with Blood Lead Concentrations  $\leq 10\mu\text{g/dL}$  in U.S. Children and Adolescents*, 115 PUBLIC HEALTH REPORTS 521-529, 527 (2000) citing J. Schwartz and D. Otto, *Lead and Minor Hearing Impairment*, 46 ARCH. ENVIRON. HEALTH 300-5 (1991).
- <sup>18</sup> Lanphear, *ibid.*, at 521-529.
- <sup>19</sup> CENTERS FOR DISEASE CONTROL AND PREVENTION, *supra*, note 5.
- <sup>20</sup> Current Medicaid policy, however, prohibits adoption of a state lead screening policy that does not include lead screening for all Medicaid-eligible children.
- <sup>21</sup> There is debate over whether interim controls (mitigation) or abatement of lead hazards in buildings is the best course. Mitigation means reducing the hazard so that children are not immediately exposed to lead. Abatement is the removal or encapsulation of lead, and is considered the more permanent solution.
- <sup>22</sup> Alliance to End Childhood Lead Poisoning, *Governmental Lawsuits Against the Lead Industry*. Found at [www.aeclp.org](http://www.aeclp.org) under Legal Remedies.
- <sup>23</sup> For a discussion of what the lead industry knew, and when, about the hazards of lead and lead paint products, see Gerald Markowitz, and David Rosner, *Public Health Then and Now 'Cater to the Children': The Role of the Lead Industry in a Public Health Tragedy, 1900-1955*, 90 AMERICAN JOURNAL OF PUBLIC HEALTH 36-46 (January 2000).
- <sup>24</sup> *State of Rhode Island v. Lead Industries Assoc., Inc. et. al.*, C.A. 99-5226 (R.I. Super. Ct.)
- <sup>25</sup> *City of Milwaukee v. NL Industries Inc. and Mautz Paint*.
- <sup>26</sup> *County of Santa Clara v. Atlantic Richfield Co. et. al.*
- <sup>27</sup> Residential Lead-Based Paint Hazards Reduction Act, 42 USC 4851 et. seq.
- <sup>28</sup> *United States of America v. Wolin-Levin, Inc.*, No. 01 C 7580 (N.D. Ill. Oct. 2001), *United States of America v. East Lake Management and Development Corporation*, No. 01 C 7581 (N.D. Ill. Oct. 2001), *United States of America v. Oak Park Real Estate, Inc.*, No. 01 C 7582 (N.D. Ill. Oct. 2001).
- <sup>29</sup> *United States v. Wolin-Levin, Inc.*
- <sup>30</sup> *United States v. East Lake Management and United States v. Oak Park Real Estate*.
- <sup>31</sup> PRESIDENT'S TASK FORCE, *supra*, note 4.
- <sup>32</sup> Alliance to End Childhood Lead Poisoning, *Innovative Strategies for Addressing Lead Hazards in Distressed and Marginal Housing: A Collection of Best Practice*. (Revised 8/22/00). Found at <http://www.aeclp.org> under Publications.
- <sup>33</sup> NATIONAL CENTER FOR LEAD SAFE HOUSING, ANOTHER LINK IN THE CHAIN UPDATE: STATE POLICIES AND PRACTICES FOR CASE MANAGEMENT AND ENVIRONMENTAL INVESTIGATION FOR LEAD-POISONED CHILDREN 11 (November 2001).
- <sup>34</sup> Illinois Department of Public Health. Data sources used to estimate number of housing units in Chicago and Illinois with lead hazards and low-income residents: H031. Year Structure Built-Universe: Housing units; Data set: Census 2000 Supplementary Survey Summary Tables; Date source for percent units with lead and methodology used for estimations: President's Task Force, *supra*, note 4 at A-13, Table 15. A high-risk unit is a residence with lead paint hazards built before 1960 and occupied by a low-income family. The estimate included for Chicago and Illinois reflect the new 2000 Census information.
- <sup>35</sup> Letter from David E. Jacobs, Director, HUD Office of Healthy Homes and Lead Hazard Control, to Anne Evens, Childhood Lead Poisoning Program, Chicago Department of Public Health, and Mark Vassmer, Division of Environmental Health, Illinois Department of Public Health, dated March 1, 2002.
- <sup>36</sup> 1998 statistics provided by the U.S. Environmental Protection Agency.
- <sup>37</sup> 1998 statistics provided by the U.S. Environmental Protection Agency.
- <sup>38</sup> 1998 statistics provided by the U.S. Environmental Protection Agency.

