

PUBLIC HEALTH LAW RESEARCH:

Making the Case for Laws that Improve Health

POLICY BRIEF

Local housing policy approaches to preventing childhood lead poisoning

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Introduction

Childhood lead poisoning is widely recognized as one of the most significant environmental health problems impacting children in the United States (Landrigan et al. 2002), as well as many other countries (WHO 2010; Jacobs 2011). Lead is one of the longest-known, best-understood, and most well-monitored environmental toxins. Most (but not all) children with elevated blood lead levels are exposed to lead through lead hazards in older housing.

More than half a million children in the United States still have blood lead levels above the Centers for Disease Control and Prevention reference value of 5 micrograms per deciliter (or $\mu\text{g}/\text{dL}$) (CDC, 2013). The [National Toxicology Program](#) of the National Institutes of Health (NIH) has concluded that there is now sufficient scientific evidence that even below the CDC level, children can experience decreased academic achievement and IQ, and increased incidence of attention-related behaviors and problem behaviors (NTP, 2012). Population-wide rates of elevated blood lead levels have declined since lead was removed from paint, food cans, gasoline and other sources by federal law in the 1970's, and since industrial emissions and water lead levels were reduced (Levin et al., 2008), but elevated rates of lead poisoning persist in certain areas and among low-income and minority children, and others who continue to be disproportionately affected (Levin et al., 2008). Therefore, there is increasing interest in the potential of local housing policies to reduce lead hazards.

The federal bans on lead in new paint and gasoline did not eliminate risks from existing lead paint in older homes. To address remaining risks, Title X of the federal 1992 Housing and Community Development Act took several steps to reduce lead hazards in housing. In 1996, the US Department of

Housing and Urban Development (HUD) and the US Environmental Protection Agency (EPA) started requiring disclosure of known lead hazards in all pre-1978 housing. HUD phased in lead safety requirements for federally assisted housing and established federal grants for housing rehabilitation. By 2000, government-assisted housing had lower levels of lead paint hazards compared to non-assisted low-income housing (Jacobs et al. 2002). Additionally, as of 2010, the EPA regulates renovation, repair and painting practices in pre-1978 housing.

At the state level, legislatures have adopted a variety of policy approaches. Most rely on secondary prevention: identifying children with elevated blood lead levels through blood lead screening programs and then removing the lead hazards from these children's environments. Unfortunately, secondary prevention does not protect children from the permanent injuries caused by lead poisoning. Research has clearly established that medical treatment for a child with lead poisoning is necessary but has limited effect. The best solution is to prevent exposure in the first place (Brown and Meehan 2004, 8–9, Lanphear et al. 2005). For this reason, there is interest in the effectiveness of housing-based primary prevention policies—laws that aim to identify and fix lead hazards before children become poisoned. Several states, notably Maryland, Massachusetts, Washington, DC, and Rhode Island, have housing-based primary prevention laws (Brown et al. 2001; Mares 2003; Breyse et al. 2007). However, statewide or local primary prevention laws have not been implemented in most jurisdictions.

Thus, privately-owned pre-1978 housing remains a major source of children's exposure to lead and resulting elevated blood lead levels. To fill this gap, in recent years a number of innovative local policies have been enacted (Brown, 2005; Korfmacher and Hanley, 2013). Although they differ in terms of target housing, mechanism, and enforcement strategy, these local policy approaches aim to reduce childhood lead poisoning by reducing the prevalence of lead hazards in high-risk housing, and do so by improving maintenance practices and controlling lead hazards. This Knowledge Asset summarizes the rationale underlying local housing policies and their effectiveness.

Policy Implications

Local housing-based lead laws are one of many approaches to reducing childhood lead poisoning, including federal laws, enforcement efforts, ongoing local lead hazard control and grant programs, education, and the monitoring of blood lead levels. Although the evidence is limited, existing research suggests that local laws aimed at reducing lead hazards in housing have the potential to significantly reduce childhood lead poisoning.

To the extent that most local lead laws are targeted at housing with a high concentration of low income and minority children, these laws are likely to reduce the disproportionate burden of lead poisoning on these communities. The effectiveness of these laws depends on local factors, including existing housing inspection systems, government agency resources, community engagement, state-specific case and statutory law, and the local housing market.

Although it is not possible to identify a single 'model law' that is likely to be effective in all jurisdictions, Korfmacher and Hanley (2013) suggest a series of issues that should be considered in designing a locally-appropriate housing-based lead law:

- Distribution of lead hazards in housing: To what extent are lead hazards dispersed throughout the city versus clustered in neighborhoods that can be geographically targeted for implementation? What is the appropriate target housing?
- Lead screening and childhood lead poisoning rates: What percentage of high-risk children receive blood lead tests? How many have elevated blood lead levels? Do the data suggest targeting a certain area or population?
- Public awareness: Do residents, landlords, and community leaders understand the connection between lead poisoning and health, educational, and social outcomes?
- Economy/housing market: Is the housing market strong enough to support new maintenance requirements? Are there any financial assistance programs available to subsidize needed repairs?
- State statutory law environment: Does the locality have the authority to implement a local lead law? Does state law have provisions that can serve as a framework for local action?
- Case law: What are the relevant court rulings and settlements related to lead hazards, duty to maintain properties, inspections, and landlord liability?
- Implementation resources: What is the local government's capacity for implementation and enforcement? Can other government or community groups support implementation?

Many municipalities are considering developing local laws to target the continued problems of childhood lead poisoning in their communities. In order to continue to learn from experience and inform the development of effective approaches in the future, it is essential to monitor and evaluate the impacts of these varied local lead law innovations over time.

Research and Evidence

1. Lead poisoning remains one of the most critical children's environmental health hazards in the United States.
2. Housing-based hazards remain the primary source of childhood blood lead elevations in the United States.
3. Privately owned, low income, pre-1978 rental housing that is not subject to federal housing standards is most likely to have lead hazards.
4. Low-income neighborhoods with high concentrations of pre-1978 rental housing continue to have higher rates of children with elevated blood lead levels.
5. Home maintenance standards and renovation, repair, and painting practices determine the extent of lead hazards in pre-1978 housing.
6. The structure of local housing-based lead laws varies widely
7. The impacts of local lead laws are affected by factors including the local housing market, community awareness, and relevant state statutory and case law.
8. Specialized legal enforcement approaches (e.g. "lead courts") may increase the effectiveness of existing state or local laws.
9. Research on the impacts of local lead laws is limited, but suggests that local lead laws have the potential to significantly reduce housing-based lead hazards.

For more information and additional resources, visit <http://phlr.org/product/local-housing-policy-approaches-preventing-childhood-lead-poisoning>