Health experts have long known the serious health problems resulting from exposure to lead, particularly for young children.

Children can be exposed to lead from food, water, paint chips, dirt, dust, or sand in and around their home. But lead poisoning is preventable, which is why the state worked to strengthen lead poisoning prevention efforts with the Lead Hazard Mitigation Law enacted in 2005. Under the law, rental property owners must attend a lead hazard awareness class, inspect rental properties, fix lead hazards, provide tenants information about lead hazards and a copy of the inspection report, respond to tenant concerns about any lead hazards and use lead-safe work practices when performing any maintenance.

Given Rhode Island’s aging housing stock, the law has the potential to increase the healthiness and quality of housing in the state, but a great number of properties remain exempt from the law and the protections it offers to residents. This Issue Brief will examine the impact of that law on childhood lead exposure in Rhode Island and identify ways to prevent lead poisoning in our children.
**KEY FINDINGS**

AS SEEN IN THE ADJACENT INFOGRAPHIC, THE STUDY OF AT RISK PROPERTIES CONCLUDED THAT:

- Most properties in the urban core were built before 1978 and are considered potential risks for lead poisoning. ProvPlan looked at nearly all residential properties in Central Falls, Pawtucket, Providence, and Woonsocket for this study. 94 percent of the residential properties we studied were built before 1978, meaning paint at the property may contain lead paint that could poison children.

- Even though these properties pose potential risks, most are not required to comply with the law. Our findings show that less than one third of properties built before 1978 were required to comply with the law. The remaining 69 percent of properties studied were owner-occupied single-family homes and multi-family properties with two or three units and were not required to comply with the law.

- Of the 16,043 properties that were required to comply with the law, only 20 percent had complied within the first five years of the law’s implementation. By 2012, we found that 30 percent of properties had gotten at least one certificate, but some of these properties may have only become compliant after a lead poisoning had occurred.

**WHAT DOES THIS MEAN FOR CHILDREN LIVING IN AT RISK PROPERTIES IN THE URBAN CORE?** THE STUDY OF AT RISK KIDS CONCLUDED THAT:

- More than half of the children screened between 2005 and 2009 were living in properties that were not required to comply with the law.

- Of children living in homes required to comply, the majority live in non-compliant homes.

- In our study analysis, blood lead levels were significantly reduced in children living in properties where landlords were fully compliant with the Lead Hazard Mitigation Law. This suggests that if more properties complied with the law, more children would benefit.
In 2011 ProvPlan began researching the effectiveness of the state’s Lead Hazard Mitigation Law.

First we worked to identify the number of properties required to comply with the Lead Hazard Mitigation Act and the number of those properties that were actually in compliance.

Then we analyzed whether the regulations have helped reduce the number of children poisoned by lead at those properties.

We then focused on properties that are exempt from the law to see how many of these properties still house lead-exposed children.

We excluded properties built during or after 1978 and included four main property types: one-family residences, two- to five-family residences, apartments, and commercial and residential mixed-use buildings. The findings in this study revealed:

- Even small amounts of lead in the blood can compromise cognition, behavior, growth, and development. Lead can also contribute to anemia, elevated blood pressure, kidney damage, muscle weakness, and brain damage. Young children are more at risk of these negative effects because their smaller bodies absorb more lead than adults and their developing brains are at greater risk of lasting complications.

- Although average blood lead levels have greatly decreased in recent decades, childhood lead poisoning still occurs today. According to the RI Department of Health, incidence of children’s blood lead levels of 5 micrograms per deciliter or greater (the current CDC reference level for lead) decreased from 19% in 2003 to 4% in 2013. While these recent poisoning rates seem acceptably low, a statewide incidence rate of 4% still means that 1,002 children in Rhode Island who had never previously been lead poisoned were newly exposed in 2013.

- The Lead Hazard Mitigation Law was intended to decrease lead exposure risks and reduce the number of poisoned children. The law requires that landlords of non-owner-occupied buildings built before 1978 that have more than three units take a 3-hour lead hazard awareness class, assess and fix any hazards to the property, perform lead-safe maintenance practices and obtain the certificate from a proper inspector. Many properties remain exempt from the law including:
  - owner-occupied single-family homes;
  - owner-occupied multi-family homes with three or fewer units;
  - homes that have received Lead Safe or Lead Free (LSLF) certificates;
  - temporary or seasonal units;
  - and elderly housing.

- ProvPlan studied residential properties in the four cities that have traditionally had the highest rates of childhood lead exposure – Central Falls, Pawtucket, Providence, and Woonsocket – to see if the law was preventing children from lead exposure.
For children, even mild lead poisoning can permanently affect their attention span and IQ. With such devastating and lasting impacts, preventing lead exposure in our young children is imperative.

The good news is that the Lead Hazard Mitigation Law can work in preventing childhood lead exposure when fully implemented. Blood lead levels were significantly reduced in children living at properties where landlords were fully compliant with the Lead Hazard Mitigation Law. But in the four cities where children are most at risk for lead exposure, only 20 percent of the properties required under state law to protect tenants from lead exposure had done so by 2009. Even more troubling, the widespread exemptions from the law mean that more than one in five children living in homes without a certificate of compliance have had at least one elevated blood lead level.

Policymakers must address the risk that lead poses in all residential properties built before 1978. In addition, the state must ensure that resources are available to not only fully implement the current law, but to assist property owners with protecting their tenants from lead exposure and obtaining a certificate of compliance.

Only when the state works to fully implement the Lead Hazard Mitigation Law will we ensure that all of our children can grow up healthy, ready to learn and become active participants in Rhode Island’s future.