

**CHILDHOOD  
LEAD POISONING  
IN RHODE ISLAND:  
THE NUMBERS  
2010 EDITION**





# CHILDHOOD LEAD POISONING IN RHODE ISLAND: THE NUMBERS 2010 EDITION



## TABLE OF CONTENTS

ELIMINATING CHILDHOOD LEAD POISONING IN RHODE ISLAND BY THE END OF 2010	3
UNDERSTANDING BLOOD LEAD LEVELS	4
What is a Level of Concern?	4
Should We Lower the Blood Lead Level of Concern?	4
What is an Action Level?	4
Lead Action Levels in Rhode Island	5
UNDERSTANDING THE LEAD DATA	6
Race and Ethnicity Data	6
Confirmed Tests in 2005-2009	7
COMPLIANCE WITH LEAD SCREENING GUIDELINES	8
INCIDENCE OF LEAD POISONING IN RHODE ISLAND	9
INCIDENCE OF LEAD POISONING BY GEOGRAPHIC LOCATION	10
2009 INCIDENCE OF LEAD POISONING BY CITY AND TOWN	12
2009 INCIDENCE OF LEAD POISONING IN RHODE ISLAND	13
INCIDENCE OF LEAD POISONING BY BIRTH COHORT	14
LEAD POISONING AMONG CHILDREN ENTERING KINDERGARTEN	15
PREVALENCE OF LEAD POISONING IN RHODE ISLAND	16
SERVICES OFFERED TO LEAD POISONED CHILDREN	17
Children with Elevated Blood Lead Levels	17
Children with Significant Lead Poisoning	18
GLOSSARY	21

## LETTER FROM THE DIRECTOR

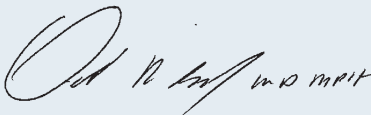
Dear Colleague:

Our work to eliminate childhood lead poisoning as a public health problem is more important than ever as we approach CDC's deadline at the end of this year. Analyzing our 2009 data, we know that unless we make a remarkable effort to clean up homes, we are likely to fall short of our lead poisoning elimination goal.

Elevated blood lead levels impair mental and physical development, which may have a negative effect on children's learning and school performance. In Rhode Island, while we continue to see a decline in the number of children with elevated blood lead levels (greater than or equal to 10 µg/dL), children younger than six years of age are still affected by this preventable disease. In 2009 alone, 324 children younger than six years old were found to have an elevated blood lead level for the first time in their lives. Our data also shows that of the 12,384 children who will enter kindergarten in 2011, 2.4% (302) have had an elevated blood lead level at one time.

We continue to support the outstanding efforts of our community partners and stakeholders to create healthier environments to protect Rhode Island families. We hope that the publication of our 2009 data encourages policy makers to support additional efforts to remove lead hazards from Rhode Island homes. We must all continue to work together to increase the availability of lead-safe housing to reach our ultimate goal of eliminating childhood lead poisoning.

Sincerely,

A handwritten signature in dark ink, appearing to read "David R. Gifford", with a stylized flourish at the end.

David R. Gifford, MD, MPH  
Director of HEALTH

# ELIMINATING CHILDHOOD LEAD POISONING IN RHODE ISLAND BY THE END OF 2010

**GOAL:** To eliminate childhood lead poisoning in Rhode Island by the end of 2010.

**MILESTONE:** To decrease the number of new cases of lead poisoning (blood lead level  $\geq 10 \mu\text{g/dL}$ ) in children younger than six years of age in all Rhode Island communities without displacing children, decreasing screening rates, or decreasing access to affordable housing.

In 2004, Rhode Island developed a Plan to Eliminate Childhood Lead Poisoning by 2010. This plan focuses on promoting primary prevention while maintaining secondary prevention efforts in the state. Primary prevention reduces or eliminates lead hazards in the environment before a child is exposed. Secondary prevention includes screening all children to identify those with elevated blood lead levels (BLL) and, in turn, removing or reducing any further exposure. Additional details about the Rhode Island Childhood Lead Poisoning Prevention Program (RI CLPPP) elimination plan and how we are measuring our progress toward elimination can be found on the web at [www.health.ri.gov/leadpoisoning](http://www.health.ri.gov/leadpoisoning).



# UNDERSTANDING BLOOD LEAD LEVELS

## WHAT IS A LEVEL OF CONCERN?

A level of concern is the threshold used to define an elevated blood lead level. Children with a blood lead level greater than the level of concern (i.e., children with an elevated blood lead level) should be monitored and re-tested according to lead screening guidelines. Primary prevention activities, such as community-wide environmental interventions and nutritional and educational campaigns, should be directed at reducing children's blood lead levels below the level of concern. CDC currently defines the level of concern as  $\geq 10 \mu\text{g/dL}$ .

Primary prevention activities, such as community-wide environmental interventions and nutritional and educational campaigns, should be directed at reducing children's blood lead levels below the level of concern.

- *No effective clinical interventions are known to lower the blood lead levels for children with levels less than  $10 \mu\text{g/dL}$  or to reduce the risk for*

*adverse developmental effects.*

- *Children cannot be accurately classified as having blood lead levels above or below a value less than  $10 \mu\text{g/dL}$  because of the inaccuracy inherent in laboratory testing.*
- *Finally, there is no evidence of a threshold below which adverse effects are not experienced. Thus, any decision to establish a new level of concern would be arbitrary and provide uncertain benefits.*

## SHOULD WE LOWER THE BLOOD LEAD LEVEL OF CONCERN?

In response to questions about whether to change the level of concern, based on recent research that found that blood lead levels lower than  $10 \mu\text{g/dL}$  can have harmful effects,<sup>1,2</sup> CDC has prepared the following statement, which is posted on the web at [www.cdc.gov/nceh/lead/policy/changeBLL.htm](http://www.cdc.gov/nceh/lead/policy/changeBLL.htm):

*“Recent studies suggest that adverse health effects exist in children at blood lead levels less than  $10 \mu\text{g/dL}$ . In the past, the Centers for Disease Control and Prevention (CDC) have lowered the level considered elevated in response to similar reports. However, at this time the reasons not to lower the level of concern are as follows:*

*These studies support making primary prevention of childhood lead poisoning a high priority for health, housing, and environmental agencies at the state, local, and federal levels.”*

## WHAT IS AN ACTION LEVEL?

An action level is the threshold at which interventions should be implemented based on evidence that the interventions are effective and resources are available. It is impossible to define one action level for all interventions, so various action levels trigger different interventions. According to CDC guidelines, community prevention activities, such as nutritional and educational campaigns, should be implemented at blood lead levels  $\geq 10 \mu\text{g/dL}$ ,

1 Canfield RL, Henderson CR, Cory-Slechta DA, Cox C, Jusko TA, Lanphear BP. Intellectual impairment in children with blood lead concentrations below  $10 \mu\text{g}$  per Deciliter. *New England Journal of Medicine* 2003; 348:1517-26.

2 Selevan SG, Rice DC, Hogan KA, Euling SY, Pfahles-Hutchens A, Bethel J. Blood Lead Concentration and Delayed Puberty in Girls. *New England Journal of Medicine* 2003; 348:1527-36.



and individual prevention activities, such as case management and environmental investigations, should be implemented at blood lead levels  $\geq 15$   $\mu\text{g}/\text{dL}$ .<sup>3</sup> For example, while the overall goal is to reduce children's blood lead levels below 10  $\mu\text{g}/\text{dL}$ , there are reasons not to implement individual, environmental, and medical interventions for children with blood lead levels between 10 and 14  $\mu\text{g}/\text{dL}$ . Effective environmental and medical interventions for children with blood lead levels between 10 and 14  $\mu\text{g}/\text{dL}$  have not yet been

identified. Given limited resources, the sheer number of children in this range would preclude effective case management and would detract from the individualized follow-up required by children with higher blood lead levels.

#### LEAD ACTION LEVELS IN RHODE ISLAND

The guidelines issued by CDC were used to define various action levels in Rhode Island. The action levels are detailed in the table below.

CATEGORY	ACTION LEVEL	ACTION
ELEVATED BLOOD LEAD LEVEL	BLL between 10-14 $\mu\text{g}/\text{dL}$	<p><b>CAPILLARY:</b> Educational materials sent to the family. Letter sent to the Primary Care Provider recommending a venous test to confirm the BLL.</p> <p><b>VENOUS:</b> Educational materials sent to the family. Family is referred to a lead center* for an in-home lead education visit and a visual assessment to identify lead hazards.</p>
	BLL between 15-19 $\mu\text{g}/\text{dL}$	<p><b>CAPILLARY:</b> Letter sent to the Primary Care Provider recommending a venous test to confirm the BLL.</p> <p><b>VENOUS:</b> Family is referred to a lead center* for an in-home lead education visit and some environmental intervention (i.e., temporary lead hazard control measures, window replacement).</p>
SIGNIFICANT LEAD POISONING	One venous BLL $\geq 20$ $\mu\text{g}/\text{dL}$ ~ or ~ Two venous BLLs 15-19 $\mu\text{g}/\text{dL}$ done 90-365 days apart**	Family is referred to a lead center* for an in-home lead education visit and is offered an environmental inspection.
<p>* A lead center is a non-profit agency funded by Medicaid that offers comprehensive case management services to families of children with lead poisoning.</p> <p>** Two venous blood lead levels 15-19 <math>\mu\text{g}/\text{dL}</math> done between 90 and 365 days apart may also be referred to as "Persistent Lead Poisoning". Prior to January 1, 2006, two blood lead levels, capillary or venous, <math>\geq 15</math> <math>\mu\text{g}/\text{dL}</math> were used to define persistent lead poisoning.</p>		

3 CDC. Preventing Lead Poisoning in Young Children. Atlanta: US Department of Health and Human Services, 1991.

# UNDERSTANDING THE LEAD DATA

In Rhode Island, healthcare providers are required by law to annually screen their patients between nine months and six years of age for lead poisoning. The screening process involves collecting a sample of blood from the child, either from a capillary (finger stick) or a vein (venous test), and analyzing the blood to determine the amount of lead in the sample. Blood lead levels are measured and reported as micrograms of lead per deciliter of blood ( $\mu\text{g}/\text{dL}$  or  $\text{mcg}/\text{dL}$ ).

The data presented in this report are based on all blood lead results, both capillary and venous, performed on children from birth to six years of age in the state of Rhode Island.<sup>4</sup> Although the guidelines recommend that children begin screening at nine months of age, some children may be screened earlier if they are at high risk for lead poisoning.

For the incidence and prevalence analyses, each child is counted only once in each year, regardless of how many times that child was tested for lead.

The data presented in this report are based on all blood lead results, both capillary and venous, performed on children from birth to six years of age in the state of Rhode Island.



## RACE AND ETHNICITY DATA

The collection of race and ethnicity data is an important part of public health. These data allow us to monitor disease trends, track health status, and assess progress in improving health among various populations. These data also help us assure non-discriminatory healthcare access and treatment, identify issues surrounding access to care and discrimination, and track the extent to which members of

minority groups are beneficiaries of and participants in federally assisted programs.

Despite the mandate to collect this information, race and ethnicity data are often incomplete. Approximately 40-50% of blood lead records collected from laboratories and hospitals report race and ethnicity; therefore, lead poisoning information presented in this report is not broken down by race and ethnicity. Efforts have been made to improve the quality of race and ethnicity data, but very little progress has been made thus far.

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<sup>4</sup> The numbers presented here are estimates, given that calculations in this document are based on screening data rather than population data for all children younger than the age of six.



#### CONFIRMED TESTS IN 2005-2009

Prior to July 1, 2004, if a child younger than six years old had a capillary blood lead level  $\geq 20$   $\mu\text{g}/\text{dL}$ , the Rhode Island Department of Health would recommend that the child have a confirmatory venous test within three months. On July 1, 2004, the Rhode Island Department of Health revised the Lead Screening and Referral Guidelines and began recommending a confirmatory venous test for any child younger than the age of six who had a capillary blood lead

level  $\geq 10$   $\mu\text{g}/\text{dL}$  (instead of  $\geq 20$   $\mu\text{g}/\text{dL}$ ). The Rhode Island Department of Health is also recommending that only venous tests be used for confirmatory purposes. Since these changes went into effect in July 2004, the first full year for which the RI CLPPP has confirmed capillary test data is 2005. As a result, 2005-2009 data in this document are based on venous and confirmed capillary tests only. The data presented for previous years are based on all venous and capillary tests.



# COMPLIANCE WITH LEAD SCREENING GUIDELINES

All healthcare providers in Rhode Island are required by law to annually screen their patients between nine months and six years of age for lead poisoning. Compliance with these guidelines is assessed by measuring the proportion of children born in a given year with at least one blood lead test by 18 months of age, and at least two blood lead tests, no less than 12 months apart, by 36 months of age.

For birth cohorts 2005 and 2006, compliance with lead screening has increased. The number of children screened for lead poisoning at least once by 18 months of age went from 71.2% for children

born in 2004 to 75.5% for children born in 2006.

Similarly, the number of children screened at least twice, no less than 12 months apart, by 36 months of age went from 39.8% for children born in 2004 to 42.2% for children born in 2006.

The high screening rates among children by 18 months of age in Rhode Island may be attributed in part to pediatricians' and family physicians' access to KIDSNET, Rhode Island's integrated child health information system. KIDSNET allows healthcare providers to monitor lead screening among their patients and to generate reports of unscreened patients in their practices at any time.



# INCIDENCE OF LEAD POISONING IN RHODE ISLAND

The RI CLPPP tracks and reports the number of new cases of lead poisoning (BLL  $\geq 10$   $\mu\text{g}/\text{dL}$ ) among children younger than six years of age who have not previously been poisoned. This statistic is known as the incidence of lead poisoning.

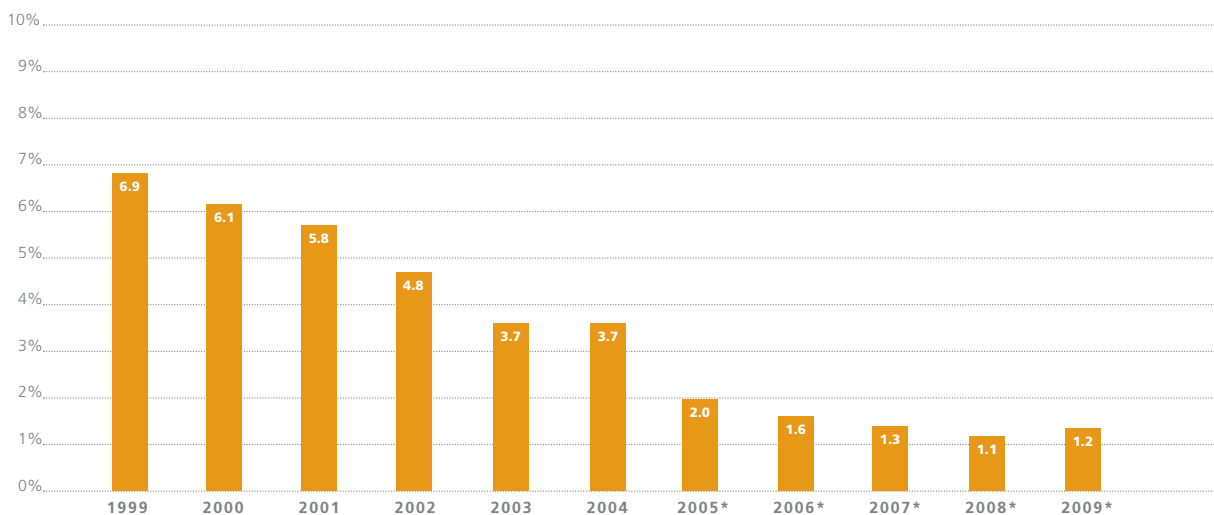
The proportion of new cases among children screened for lead poisoning has declined dramatically from 6.9% (2,025/29,280) in 1999 to 1.1% (330/29,334 children) in 2008. The incidence

Rhode Island must continue to focus on primary prevention and lead-safe housing to protect children from becoming lead poisoned in the future.

for 2009 is 1.2% (324/27,478), slightly higher than the 1.1% reported in 2008. This increase is not due to an increase in the number of children being lead poisoned, but rather to a decrease in the number of children being screened for lead. In 2009, 324 children were lead poisoned compared to 330 children in 2008.

Rhode Island must continue to focus on primary prevention and lead-safe housing to protect children from becoming lead poisoned in the future.

INCIDENCE OF LEAD POISONING STATEWIDE, 1999-2009



Source: Rhode Island Department of Health Lead Elimination Surveillance System

\*Data are based on venous tests and confirmed capillary tests only.

# INCIDENCE OF LEAD POISONING BY GEOGRAPHIC LOCATION

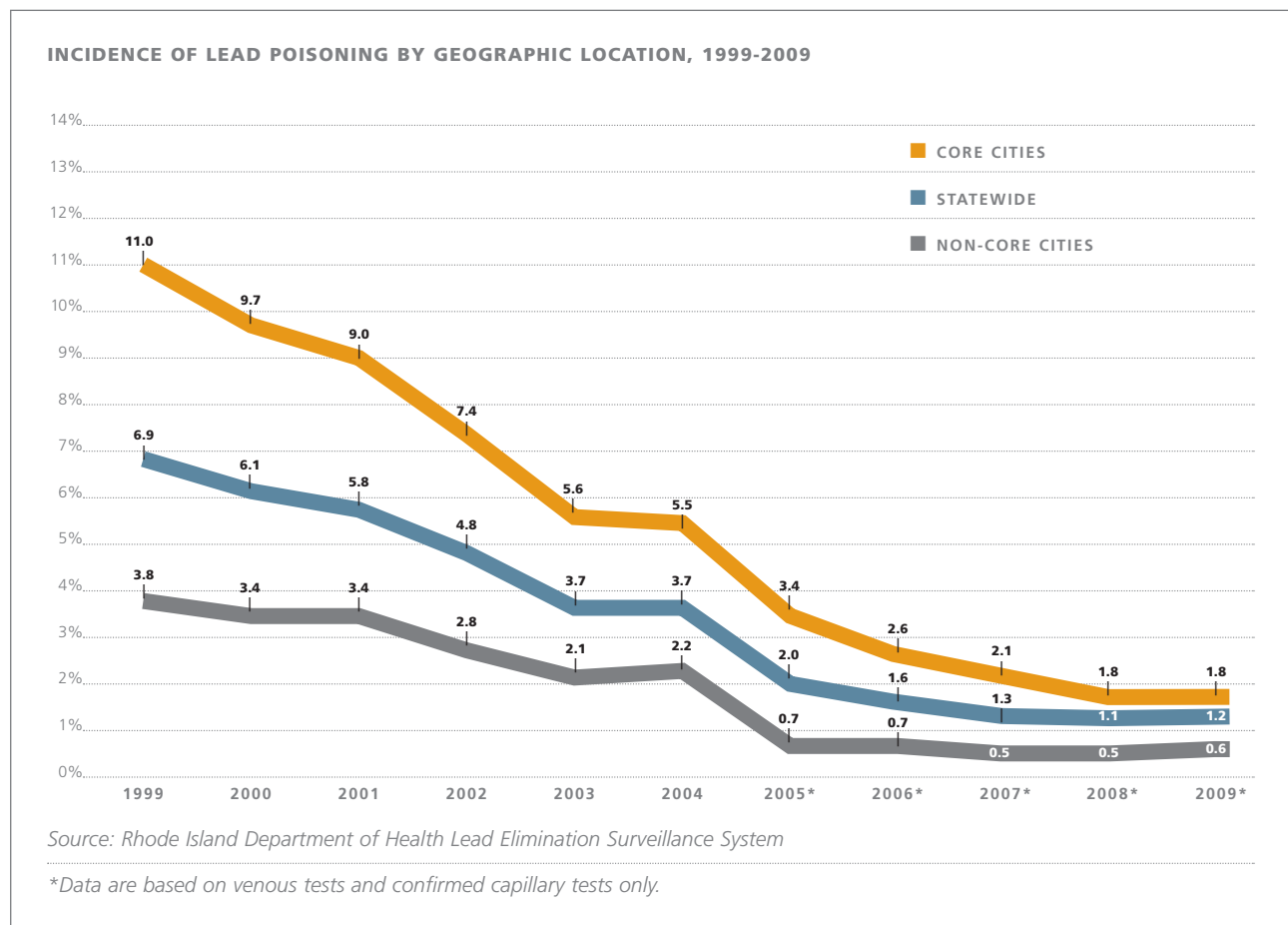
According to the 2000 census, cities where the child poverty level is greater than 15% are designated as core cities.

Rhode Island currently has six core cities: Central Falls, Newport, Pawtucket, Providence, West Warwick, and Woonsocket.

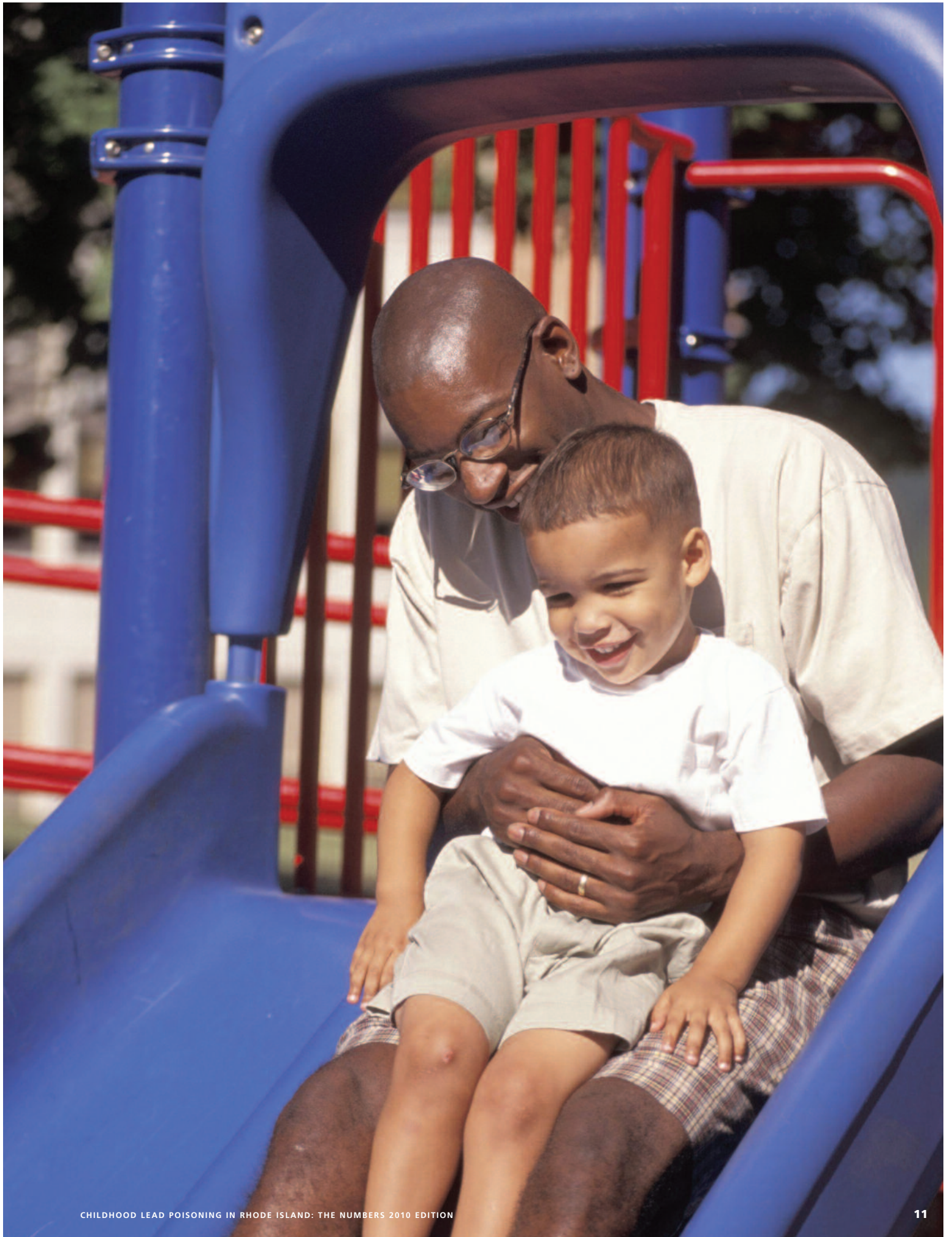
Although all Rhode Island cities and towns have experienced a dramatic decline in incidence

Rhode Island must continue to focus its efforts on increasing the availability of lead-safe housing, particularly in the core cities, in order to reach its elimination goal.

over the last ten years, cases of lead poisoning continue to be concentrated in the core cities. In 2009, the incidence of lead poisoning in the core cities remained at 1.8%, compared to 0.6% in the other cities and towns. Rhode Island must continue to focus its efforts on increasing the availability of lead-safe housing, particularly in the core cities, in order to reach its elimination goal.







# 2009 INCIDENCE OF LEAD POISONING BY CITY AND TOWN

CITY/TOWN	NUMBER OF CHILDREN WITH BLL ≥ 10 µg/dL FOR THE FIRST TIME	TOTAL NUMBER OF CHILDREN SCREENED WITH NO PREVIOUS CONFIRMED ELEVATED BLL	INCIDENCE
Barrington	1	493	0.2%
Bristol	3	536	0.6%
Burrillville	2	323	0.6%
<b>Central Falls</b>	<b>21</b>	<b>938</b>	<b>2.2%</b>
Charlestown	1	163	0.6%
Coventry	4	704	0.6%
Cranston	17	1,676	1.0%
Cumberland	2	817	0.2%
East Greenwich	0	254	0.0%
East Providence	13	1,465	0.9%
Exeter	0	94	0.0%
Foster	0	95	0.0%
Glocester	2	130	1.5%
Hopkinton	0	189	0.0%
Jamestown	0	62	0.0%
Johnston	2	557	0.4%
Lincoln	4	407	1.0%
Little Compton	0	68	0.0%
Middletown	1	329	0.3%
Narragansett	2	169	1.2%
New Shoreham	0	14	0.0%
<b>Newport</b>	<b>5</b>	<b>511</b>	<b>1.0%</b>
North Kingstown	2	539	0.4%
North Providence	5	585	0.9%
North Smithfield	1	188	0.5%
<b>Pawtucket</b>	<b>35</b>	<b>2,560</b>	<b>1.4%</b>
Portsmouth	1	295	0.3%
<b>Providence</b>	<b>158</b>	<b>7,152</b>	<b>2.2%</b>
Richmond	1	113	0.9%
Scituate	1	186	0.5%
Smithfield	1	313	0.3%
South Kingstown	0	551	0.0%
Tiverton	2	337	0.6%
Warren	5	294	1.7%
Warwick	7	1,531	0.5%
West Greenwich	0	91	0.0%
<b>West Warwick</b>	<b>4</b>	<b>728</b>	<b>0.5%</b>
Westerly	4	515	0.8%
<b>Woonsocket</b>	<b>17</b>	<b>1,487</b>	<b>1.1%</b>
Unknown RI City/Town	0	19	0.0%
<b>Statewide</b>	<b>324</b>	<b>27,478</b>	<b>1.2%</b>

Source: Rhode Island Department of Health Lead Elimination Surveillance System

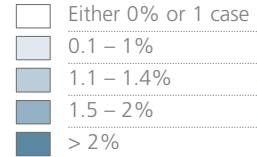
Note: Core cities are in bold. City specific incidence for previous years can be found on the web at [www.health.ri.gov/leadpoisoning](http://www.health.ri.gov/leadpoisoning)



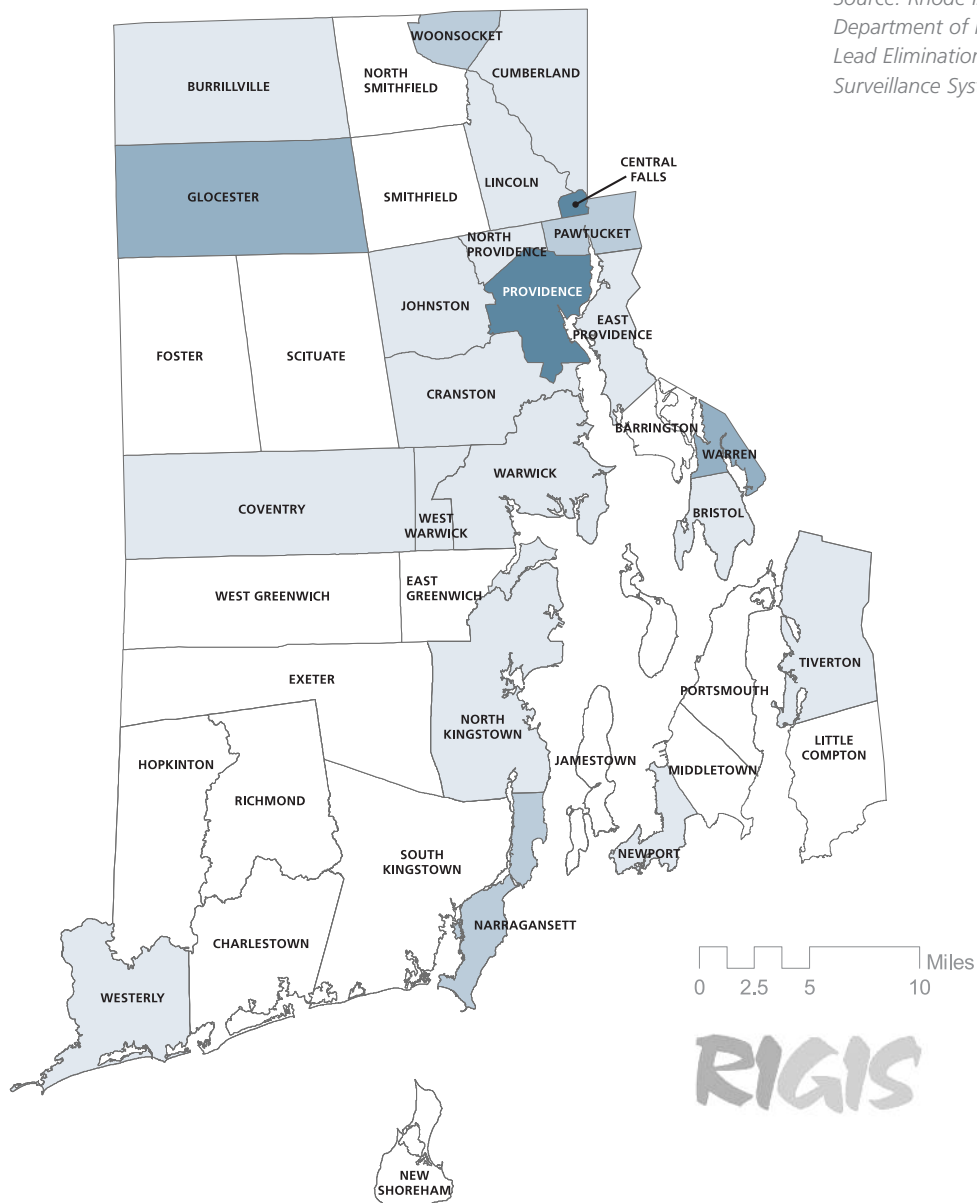
# 2009 INCIDENCE OF LEAD POISONING IN RHODE ISLAND

The following map depicts the distribution of children found to have a blood lead level  $\geq 10 \mu\text{g/dL}$  for the first time in 2009. Providence is home to the majority of lead poisoned children, as indicated by the darkest color.

## TOTAL INCIDENCE



Source: Rhode Island  
Department of Health  
Lead Elimination  
Surveillance System



# INCIDENCE OF LEAD POISONING BY BIRTH COHORT

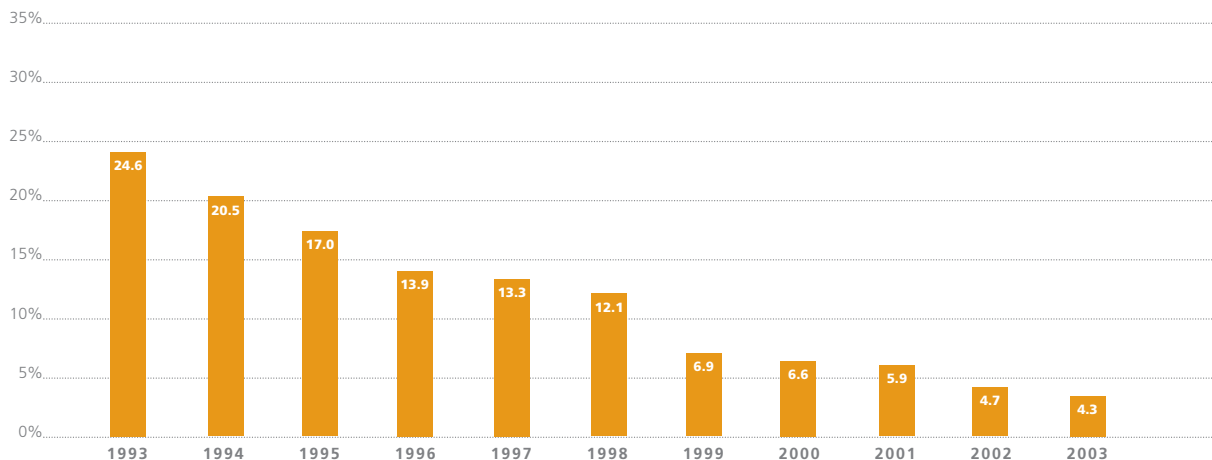
The incidence of lead poisoning by birth cohort is defined as the proportion of children born in a given year who became lead poisoned (BLL  $\geq 10$   $\mu\text{g}/\text{dL}$ ) before the age of six.

The risk of a child becoming lead poisoned in Rhode Island has decreased over time.

In order to further decrease the rate of lead poisoning, Rhode Island must continue to make lead-safe housing a priority.

Approximately one in four children (24.6%) born in 1993 were lead poisoned before the age of six, compared to one in twenty-three children (4.3%) born in 2003. In order to further decrease the rate of lead poisoning, Rhode Island must continue to make lead-safe housing a priority.

INCIDENCE OF LEAD POISONING BY BIRTH COHORT, 1993–2003



Source: Rhode Island Department of Health Lead Elimination Surveillance System

## Notes

1. Birth cohorts beyond 2003 are not included here because those children had not yet turned six years of age by the time this report was prepared.
2. Data for birth cohorts 1993-1998 are based on all venous and capillary blood lead tests received by a child.
3. Data for the 1999-2003 birth cohorts are based on venous tests and confirmed capillary tests only.
4. The percent of lead poisoned children in the 1999-2001 birth cohorts may be underestimated because prior to July 1, 2004 policies recommended a confirmatory venous follow-up test for a capillary screening  $\geq 20$   $\mu\text{g}/\text{dL}$ .

# LEAD POISONING AMONG CHILDREN ENTERING KINDERGARTEN

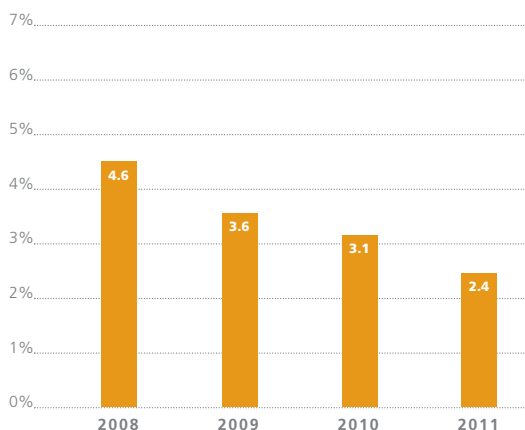
Rhode Island state law requires healthcare professionals to screen all children for lead poisoning prior to entering kindergarten. The table below illustrates elevated blood lead levels of three-year-old children who will enter kindergarten by the age of five. Rates are based on all blood lead tests given through August 31, two years prior to the year the child enters kindergarten (i.e., rates for children entering kindergarten in 2011 are based on all blood lead tests through August 31, 2009).

The number of children entering kindergarten who have ever had an elevated blood lead level

Elevated blood lead levels have been shown to impact children's IQs and learning capabilities.

has decreased by about 50% over the past few years. Of the 12,384 children who will enter kindergarten in 2011, 2.4% (302) have had a blood lead level  $\geq 10\mu\text{g/dL}$ . The benefits to the educational system as fewer and fewer children are exposed to lead each year have not yet been determined, though elevated blood lead levels have been shown to impact children's IQs and learning capabilities.

**PERCENT OF CHILDREN ENTERING KINDERGARTEN WITH BLL  $\geq 10\mu\text{g/dL}$ , 2008–2011**



Source: Rhode Island Department of Health Lead Elimination Surveillance System

Note: Data are based on venous tests and confirmed capillary tests only.



# PREVALENCE OF LEAD POISONING IN RHODE ISLAND

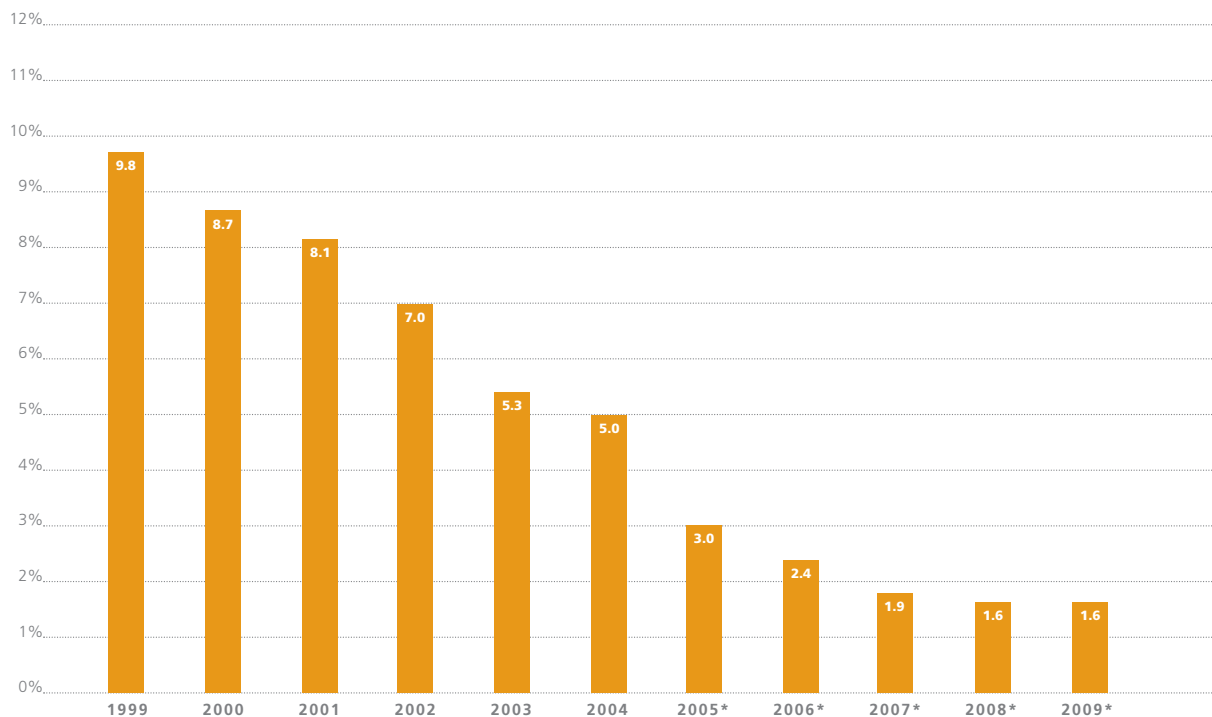
The prevalence of lead poisoning is the number of children younger than the age of six who are lead poisoned at a given point in time. The data show a steady decline in the prevalence of lead poisoning over the last ten years, from 9.8% in 1999 to 1.6% in 2009. Although the prevalence of lead poisoning in

In order to decrease prevalence in the future, Rhode Island must continue to promote policies to increase lead-safe affordable housing.

Rhode Island has steadily declined, a total of 438 children were lead poisoned in 2009.

In order to decrease prevalence in the future, Rhode Island must continue to promote policies to increase lead-safe affordable housing.

PREVALENCE OF LEAD POISONING IN RHODE ISLAND, 1999–2009



Source: Rhode Island Department of Health Lead Elimination Surveillance System

\*Data are based on venous tests and confirmed capillary tests only.

# SERVICES OFFERED TO LEAD POISONED CHILDREN

## CHILDREN WITH ELEVATED BLOOD LEAD LEVELS

An elevated blood lead level is defined as a first-time blood lead level (venous or capillary) from 10 through 19 µg/dL. Children with elevated blood lead levels in the 10-14 µg/dL range receive one set of services, and children in the 15-19 µg/dL range receive a different set of services.

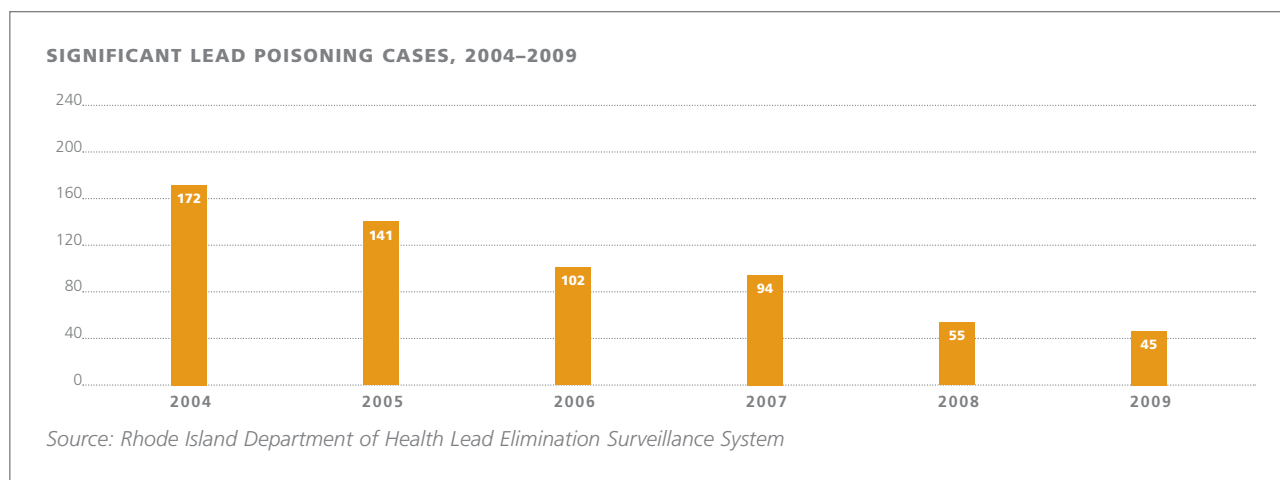
### ***Blood Lead Level 10-14 µg/dL***

In 2009, 374 children had first-time elevated blood lead levels between 10-14 µg/dL. The families of these children were sent educational materials.

### ***Blood Lead Level 15-19 µg/dL***

In 2009, 68 children had first-time elevated blood lead levels in the 15-19 µg/dL range. The families of these children were referred to one of four lead centers. These non-profit agencies, funded by Medicaid, offer comprehensive case management services to families of children with lead poisoning. The lead centers offer each family in-home lead education, nutrition advice, and coordination of medical care with the family's primary care provider. Of the 68 cases referred, 58 (85%) accepted services, while 10 (15%) declined.





#### CHILDREN WITH SIGNIFICANT LEAD POISONING

Significant lead poisoning is defined as a venous blood lead level  $\geq 20$   $\mu\text{g}/\text{dL}$  or two venous blood lead tests 15–19  $\mu\text{g}/\text{dL}$ , done between 90 and 365 days apart. The number of children with significant lead poisoning has decreased steadily over the last five years. In 2004, there were 172 significantly lead poisoned children referred to case management, compared to 45 children in 2009. The 75% decrease in the number of significantly lead poisoned children in the last six years reflects the impact of primary prevention activities and various efforts implemented to eliminate lead poisoning in Rhode Island.

Although the number of significantly lead poisoned children is decreasing over time, several children every year have a blood lead level  $\geq 45$   $\mu\text{g}/\text{dL}$ . In these severe cases, the Lead Screening and Referral Guidelines recommend that a capillary test  $\geq 45$   $\mu\text{g}/\text{dL}$  be followed up with a venous test within 48 hours. A venous test  $\geq 45$   $\mu\text{g}/\text{dL}$  should be followed up with another venous test immediately.

If the follow up test result is  $\geq 45$   $\mu\text{g}/\text{dL}$ , hospitalization is considered and an assessment of the child's home environment is conducted. In cases where lead hazards are identified in the home and no alternative housing (i.e., a relative's house) is available, the pediatrician may recommend that the child be hospitalized to prevent continued exposure. The child typically remains hospitalized until a suitable home environment is found.

#### *Non-Medical Case Management*

Of the 45 significantly lead poisoned children referred to lead centers in 2009, 41 (91%) accepted services. The remaining 4 (9%) did not receive services from lead centers because the family either refused service or could not be located after several attempts to contact them.

Non-medical case management will continue to help children who are already lead poisoned. However, primary prevention measures are needed to protect children from being exposed to lead and to assist Rhode Island in eliminating lead poisoning by the end of 2010.

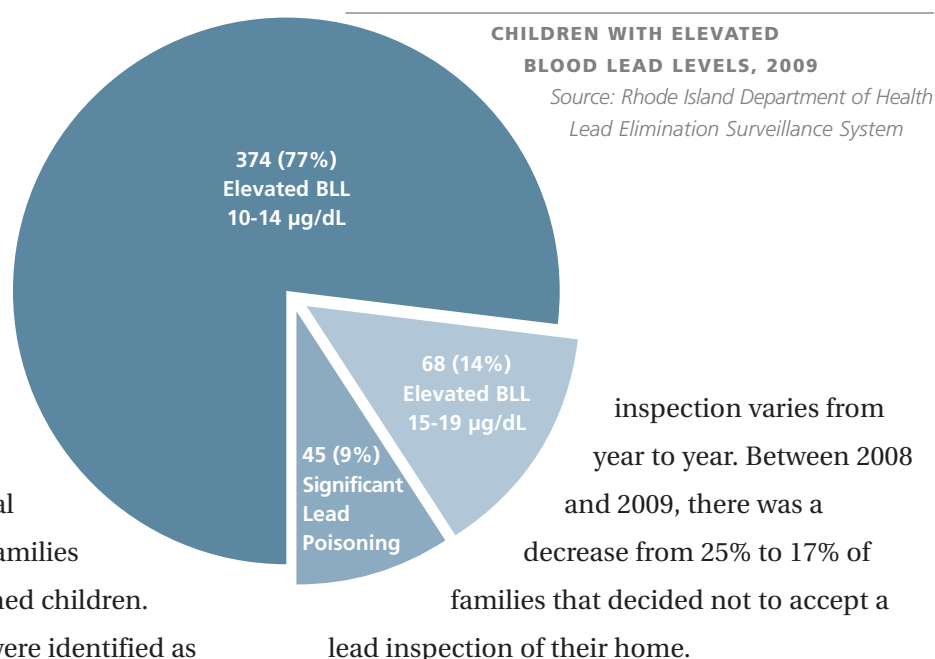


## Environmental Inspections

Families of significantly lead poisoned children are offered a comprehensive environmental lead inspection at no cost. The landlord's permission is neither required nor sought for the inspection to occur.

In 2009, 65 environmental inspections were offered to families with significantly lead poisoned children. This includes children who were identified as significantly lead poisoned in 2009, as well as those whose inspections were pending at the end of 2008. Inspections were performed at 48 of these homes. As of February 12, 2010, two inspections were pending.

Rhode Island's crisis in obtaining affordable housing may contribute to a family's decision to refuse an inspection for fear of eviction. The percentage of families refusing an environmental



In three cases in 2009, the family moved before the inspection was offered and/or performed. In these cases, the family was offered an inspection at their new address and a letter was sent to the previous address informing the new occupants that if they had children younger than six years of age residing at the address, they could receive a free inspection. No tenants at the previous addresses have requested an inspection.

### ENVIRONMENTAL INSPECTIONS OFFERED, 2004-2009

	2004	2005	2006	2007	2008	2009
Inspections Offered	168	158	135	104	63	65
■ Child Moved	11	19	7	12	4	3
■ No Response to Letters and Calls	13	12	7	2	2	1
■ Inspection Refused	16	20	32	12	16	11
■ Pending Inspection	0	6	4	1	1	2
<b>INSPECTIONS PERFORMED</b>	<b>128</b>	<b>101</b>	<b>85</b>	<b>77</b>	<b>40</b>	<b>48</b>

Source: Rhode Island Department of Health Lead Elimination Surveillance System

### ***Remediation of Hazards Identified by Environmental Inspections***

Upon completion of a comprehensive environmental inspection, which identifies lead hazards in a given property, a complete report is sent to the property owner along with instructions to correct existing problems.

In 2009, lead hazards were found in 43 of the 45 properties where an inspection was performed, and lead hazards have been completely abated in 3 of these 43 properties. Inspections were offered to two additional properties in 2009, but these inspections have not yet been performed.

The Rhode Island Department of Health actively engages owners of properties with lead hazards, including those cited in previous years, through consultation and enforcement until lead hazard remediation is achieved. These tasks include, but are not limited to, technical assistance related to lead hazard exposures and abatement, clearance inspections, compliance audits, and administrative/ judicial enforcement actions.



# GLOSSARY

**Abatement**

An activity that reduces the risk of human exposure to lead.

**BLL**

Blood lead level.

**CDC**

Centers for Disease Control and Prevention.

**Elevated Blood Lead Level**

One blood lead test result of 10-19 µg/dL.

**Incidence**

The proportion of new cases of a disease that develop during a specified period of time among the population at risk for developing the disease. For example, the incidence of lead poisoning in Rhode Island in 2009 is the proportion of children with a first-time blood lead level  $\geq 10$  µg/dL among those at risk for developing lead poisoning (i.e., children younger than age six who have never been lead poisoned in the past).

**KIDSNET**

Rhode Island's integrated child health information system.

**Lead Center**

A non-profit agency funded by Medicaid that offers comprehensive case management services to families of children with lead poisoning.

**Prevalence**

The proportion of people in a population who have a given disease at a specific point in time. For example, the prevalence of lead poisoning in 2009 is the proportion of children who had a blood lead level  $\geq 10$  µg/dL in 2009.

**RI CLPPP**

The Rhode Island Childhood Lead Poisoning Prevention Program.

**Screening**

A mandatory test that involves collecting a blood sample, either through a finger stick or a venipuncture, from a child younger than the age of six who does not show any signs or symptoms of lead poisoning, and then analyzing the sample to determine the amount of lead in the child's blood.

**Significant Lead Poisoning**

A venous blood lead level  $\geq 20$  µg/dL in a child younger than six years of age, or two venous blood lead levels 15-19 µg/dL from a child younger than six years of age tested between 90 and 365 days apart.

**µg/dL**

Micrograms per deciliter of blood. The measurement used to estimate the amount of lead in a sample of blood. This measure is sometimes represented as mcg/dL.

Childhood Lead Poisoning Prevention Program  
Rhode Island Department of Health  
Three Capitol Hill, Providence, RI 02908

Magaly Angeloni, MBA  
[Magaly.Angeloni@health.ri.gov](mailto:Magaly.Angeloni@health.ri.gov)

Additional lead poisoning data can be found at [www.health.ri.gov/leadpoisoning](http://www.health.ri.gov/leadpoisoning)

