

**CHILDHOOD
LEAD POISONING
IN RHODE ISLAND:
THE NUMBERS
2011 EDITION**



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LETTER FROM THE DIRECTOR

Dear Colleague:

Over the last few years Rhode Island has seen a tremendous decrease in the incidence of childhood lead poisoning. In 2010, while the proportion of new lead poisoning cases declined to just 1% of screened children, 252 Rhode Island children still had an elevated blood lead level for the first time in their lives. This represents 252 cases of preventable lead poisoning and is a powerful impetus to eliminate childhood lead poisoning in Rhode Island.

To accomplish this, we must eradicate lead hazards in housing, the most common source of lead poisoning. Research tells us that housing influences the health of its occupants, and our children and young families are exposed daily to dangers in their own homes, including lead poisoning, injuries, asthma triggers, and carbon monoxide. Promoting the assessment and remediation of lead hazards, as part of a comprehensive approach to healthy housing, is the best way to ensure the health of children and their families.

Keeping housing healthy is everyone's job. For more than five years, the Rhode Island Department of Health has convened a group of health and housing stakeholders to design and implement a plan to promote safe housing. The participation and support of housing advocates, energy partners, policy makers, municipalities, and regulators deserves praise and recognition, but more help is needed. If you are not yet part of the Healthy Housing Collaborative, please join us (email Magaly.Angeloni@health.ri.gov).

We hope you use this resource to engage others in our efforts to remove lead hazards in housing and to eliminate lead poisoning in our youngest residents. Thank you for all your hard work and commitment.

Sincerely,



Michael Fine, MD

Interim Director of Health

OUR GOAL TO ELIMINATE CHILDHOOD LEAD POISONING IN RHODE ISLAND

Childhood lead poisoning will only be completely eliminated through intense primary prevention efforts that include an increase in the availability of lead-safe housing in Rhode Island.

In 2004, the Rhode Island Department of Health (HEALTH) laid out a plan to eliminate childhood lead poisoning statewide by 2010. In 2011, HEALTH is proud of the progress Rhode Island has made towards this goal and renews its commitment to eliminating childhood lead poisoning. With even more expertise and knowledge about the causes and effects of childhood lead poisoning and with the support of an even wider range of partners, Rhode Island is closer than ever to eliminating childhood lead poisoning. The great strides detailed below demonstrate this progress.

THE INCIDENCE HAS DECREASED

From 2004 to 2010, the incidence of childhood lead poisoning in Rhode Island decreased from 3.7% to 1.0% and the number of new cases dropped from 1,167 to 252 (page 9). In 2004, these 1,167 new cases of elevated blood lead levels were found among 31,718 children tested, and six (15%) of Rhode Island's 39 cities and towns had an incidence of childhood lead poisoning lower than 1%. In 2010, only 252 of 26,311 children tested had elevated blood lead levels, and 30 (77%) of Rhode Island's 39 cities and towns had an incidence of childhood lead poisoning lower than 1% (page 12).

SCREENING RATES REMAIN HIGH

To measure compliance with lead screening requirements, HEALTH reviews the number of children screened for lead poisoning once by 18 months of age and twice by 36 months of age. Of Rhode Island children in the 2001 birth cohort, 72.4% were screened at least once by 18 months of age and 40% were screened a second time by 36 months of age. Of Rhode Island children born in the 2007 birth cohort, who were turning three years old at the time this report was prepared, 73.5% were tested for lead poisoning at least once by 18 months of age and 40.2% were screened a second time by 36 months of age (page 8).

FEWER CHILDREN ARE ENTERING KINDERGARTEN WITH ELEVATED BLOOD LEAD LEVELS

In 2005, 8.4% of children ready to enter kindergarten had a blood lead level of at least 10 µg/dL. For the group of children who will enter kindergarten in 2012, only 2.2% have had a blood lead level of at least 10 µg/dL (page 15).

NEW LEAD POISONING LEGISLATION WAS ENACTED

After many attempts, the Rhode Island General Assembly, with support from lead poisoning prevention advocates, enacted a Lead Hazard Mitigation Law in Rhode Island in 2002. The law, which took effect in 2005, requires owners of most rental properties to assess and remove lead hazards as an ongoing measure to prevent lead exposure and poisoning. Additionally, the law

requires the state to identify and publish listings of housing units considered high-risk and units where multiple lead poisonings have taken place.

Childhood lead poisoning will only be completely eliminated through intense primary prevention efforts that include an increase in the availability of lead-safe housing in Rhode Island. Relevant data sources must be used to identify housing that is poisoning children through lead exposure and that needs improvement. A comprehensive system of both state and municipal data to assess Rhode Island's housing situation must be implemented.

Further progress on lead poisoning elimination depends on the enforcement of housing violations and on compliance with housing regulations, including certificate of conformance regulations outlined in Rhode Island's Lead Hazard Mitigation Law. Constraints on funding for lead hazard abatement, enforcement, policy development, and public education means that remaining funds must be spent more efficiently and strategically. Stakeholders can accomplish this by continuing to forge collaborations to promote housing that is safe for all Rhode Island residents.



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. The Centers for Disease Control and Prevention (CDC) currently define any blood lead level greater than or equal to 10 µg/dL as a blood lead level of concern. The terms “childhood lead poisoning” and “elevated blood lead level” are also used to describe blood lead levels at or above 10 µg/dL.

Children with a blood lead level greater than the level of concern 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 bringing children’s blood lead levels below the level of concern.

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 µg/dL can have harmful effects,^{1,2} the CDC has prepared the following statement:

“Recent studies suggest that adverse health effects exist in children at blood lead levels less than 10 µg/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:

- *No effective clinical interventions are known to lower the blood lead levels for children with levels less than 10 µg/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 µg/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.*

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.”³

The CDC recommends that primary prevention strategies be designed, implemented, and evaluated at the local level, focusing on two approaches. The first should be lead paint in housing, as it is the most significant source of lead poisoning for young children. The second should be restricting or eliminating nonessential uses of lead. This includes lead in toys, eating and drinking utensils, cosmetics, and traditional medicines, whether they are manufactured in the United States or imported.

1 Canfield RL, Henderson CR, Cory-Slechta DA, Cox C, Jusko TA, Lanphear BP. Intellectual impairment in children with blood lead concentrations below 10 µg 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.

3 Why not change the blood lead level of concern at this time? The Centers for Disease Control and Prevention. www.cdc.gov/nceh/lead/policy/changeBLL.htm Updated June 1, 2009. Accessed March 2010.

WHAT IS AN ACTION LEVEL?

An action level is the threshold at which interventions are implemented if effective, evidence-based interventions exist and resources are available. It would not be effective to define one action level for all interventions, so different action levels trigger different interventions. According to CDC guidelines, community prevention activities, such as nutritional and educational campaigns, should be implemented when blood lead levels are greater than or equal to 10 µg/dL. Individual prevention activities, such as case management services and environmental investigations, should

be implemented when blood lead levels are greater than or equal to 15 µg/dL.⁴ For example, while the overall goal is to decrease children’s blood lead levels to lower than 10 µg/dL, there are no recognized, effective interventions for individual, environmental, and medical services for children with blood lead levels of 10 to 14 µg/dL.

LEAD ACTION LEVELS IN RHODE ISLAND

The guidelines issued by the 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)	BLL of 10-14 µg/dL	<p>CAPILLARY TEST: Educational materials sent to the family. Letter sent to the primary care provider recommending a venous test to confirm the BLL.</p> <p>VENOUS TEST: 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 of 15-19 µg/dL	<p>CAPILLARY TEST: Letter sent to the primary care provider recommending a venous test to confirm the BLL.</p> <p>VENOUS TEST: Family is referred to a lead center* for an in-home lead education visit and some environmental intervention (e.g., temporary lead hazard control measures, window replacement).</p>
SIGNIFICANT LEAD POISONING	<p>One venous BLL ≥ 20 µg/dL ~ or ~ Two venous BLLs of 15-19 µg/dL done 90-365 days apart**</p>	<p>Family is referred to a lead center* for an in-home lead education visit and is offered an environmental inspection.</p>
<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 of 15-19 µg/dL 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, ≥ 15 µg/dL were used to define persistent lead poisoning.</p>		

⁴ The Centers for Disease Control and Prevention. Preventing Lead Poisoning in Young Children. Atlanta: US Department of Health and Human Services, 1991.

UNDERSTANDING THE LEAD DATA

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.

In Rhode Island, healthcare providers are required by law to screen their patients between nine months and six years of age for lead poisoning each year. 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 mcg/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 Rhode Island.⁵ Although the guidelines recommend that children begin being screened 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.



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 ensure 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 too incomplete to include in this report. Approximately 50% to 60% of blood lead records collected from laboratories and hospitals in Rhode Island fail to report 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. National policy interventions with local mandates and funding could improve the collection of race and ethnicity data.

⁵ 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 six years of age.

CONFIRMED TESTS IN 2005–2010

Since July 1, 2004, HEALTH has recommended a confirmatory venous test for any child younger than six years of age who had a capillary blood lead level greater than or equal to 10 µg/dL, in conformance with its revised Lead Screening and Referral Guidelines. Prior to this date, confirmatory venous tests were only recommended for children with initial capillary blood lead levels greater than or equal to 20 µg/dL. HEALTH now also recommends that only venous tests be used for

confirmatory purposes. Because these changes went into effect in July 2004, 2005 is the first full year for which HEALTH’s Childhood Lead Poisoning Prevention Program (RI CLPPP) has confirmed capillary test data. As a result, 2005 to 2010 data in this document are based only on venous and confirmed capillary tests. The data presented for previous years are based on all venous and capillary tests.



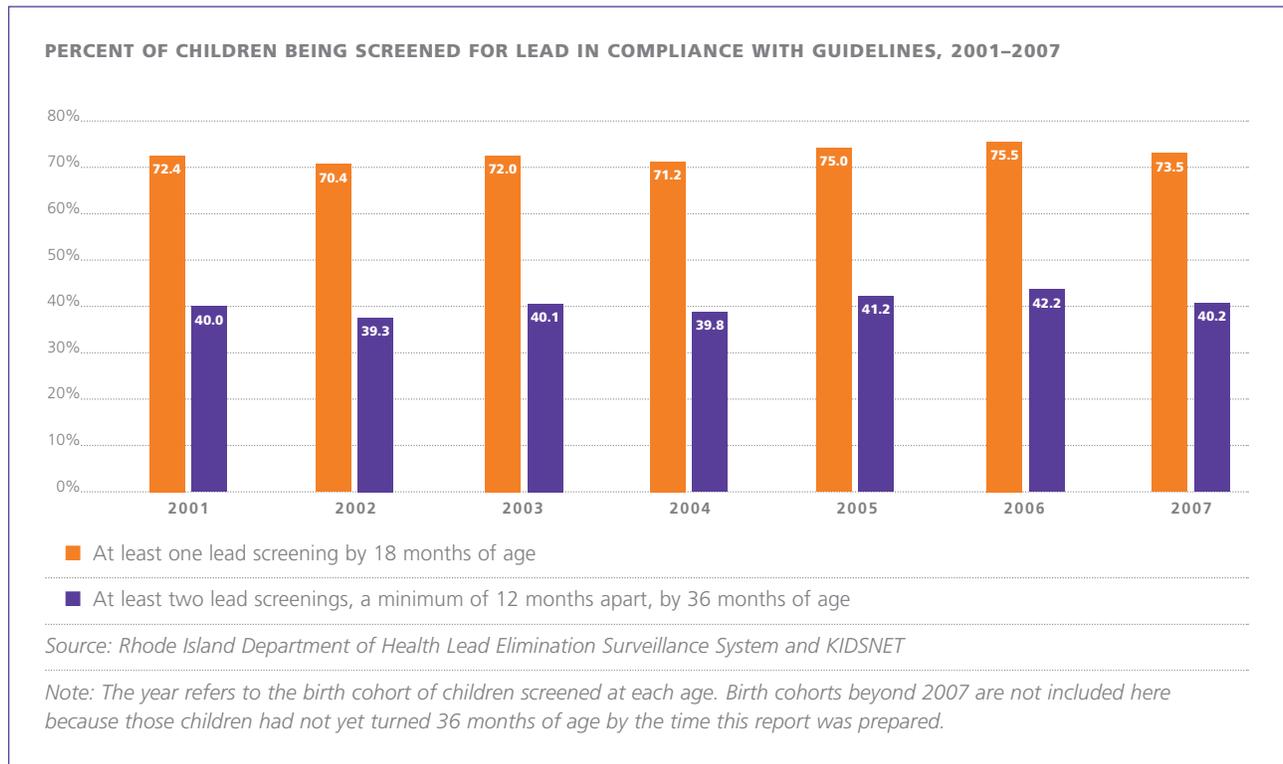
COMPLIANCE WITH LEAD SCREENING GUIDELINES

All Rhode Island healthcare providers are required by law to screen their patients between nine months and six years of age for lead poisoning each year. 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 by 36 months of age. These two blood lead tests should take place at least 12 months apart.

Lead screening rates have not changed dramatically in recent years. The percentage of children born in 2007 who were screened for lead poisoning at least once by 18 months of age was

73.5%. The percentage of these children who were screened a second time by 36 months of age was 40.2%.

Rhode Island has the tools in place to improve the number of children tested a second time by 36 months of age. Rhode Island’s integrated child health information system, KIDSNET, allows healthcare providers to monitor lead screenings and to generate reports of unscreened patients in their practices at any time. Pediatric providers are encouraged to use KIDSNET often to follow up on patients in need of screening.



INCIDENCE OF LEAD POISONING IN RHODE ISLAND

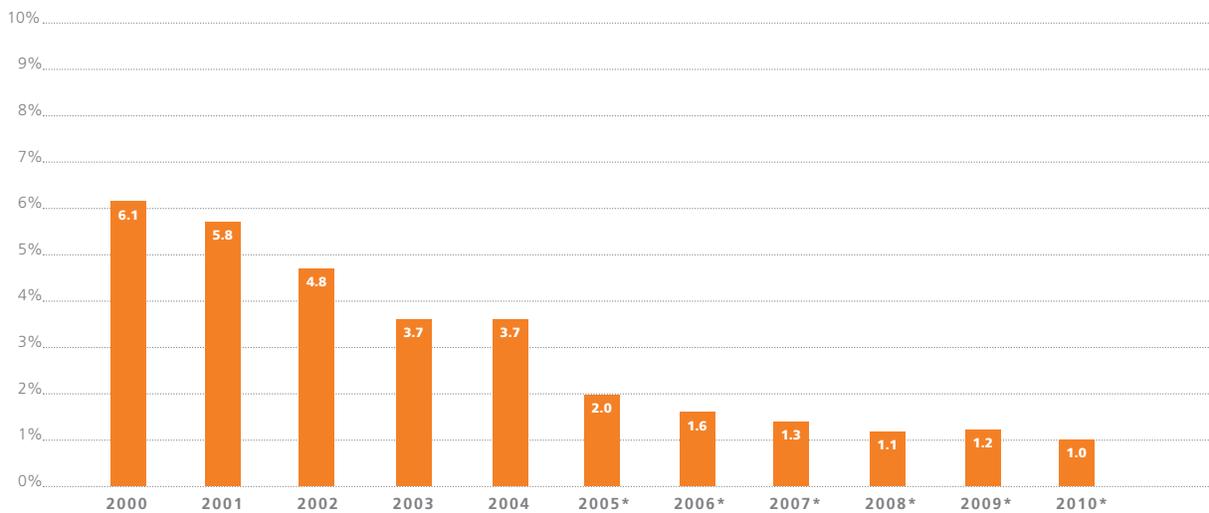
The RI CLPPP tracks and reports the number of cases of lead poisoning (a blood lead level greater than or equal to 10 µg/dL) among children younger than six years of age who have not previously been poisoned. This statistic is known as the incidence of childhood lead poisoning.

The proportion of new cases among children screened for lead poisoning has declined dramatically from 6.1% (1,740/28,419) in 2000 to 1.0% (252/26,311) in 2010. In 2010, 252 children were lead-poisoned compared to 324 children in 2009.

Continued progress on primary prevention and lead-safe housing is needed to protect children from lead poisoning.



INCIDENCE OF LEAD POISONING STATEWIDE, 2000–2010



Source: Rhode Island Department of Health Lead Elimination Surveillance System

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

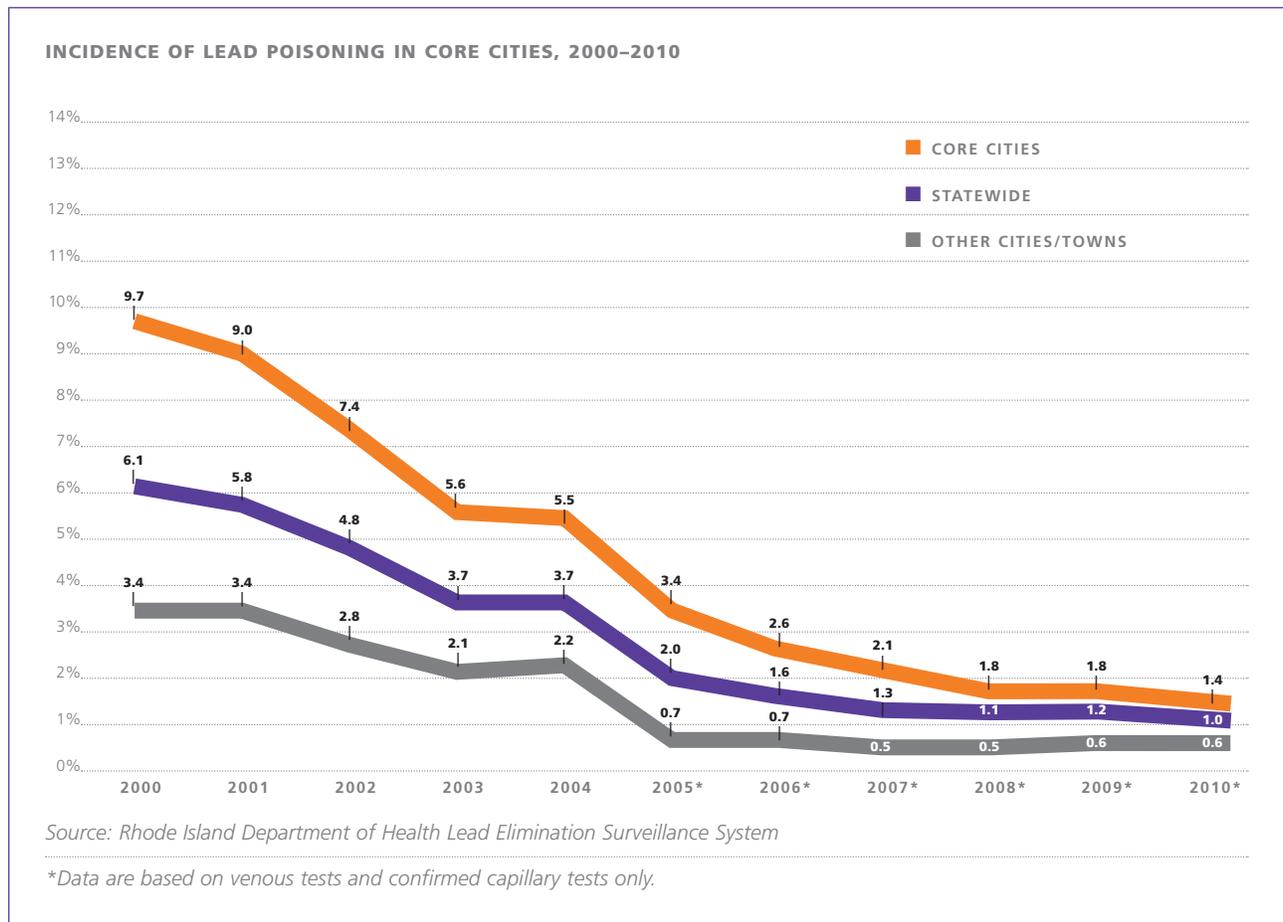
INCIDENCE OF LEAD POISONING IN CORE CITIES

Although all Rhode Island cities and towns have experienced a dramatic decline in incidence over the last ten years, cases of lead poisoning continue to be concentrated in the core cities.

Cities where the child poverty level is greater than 15% are designated as core cities. Rhode Island designated six core cities based on 2000 Census data:

Central Falls, Newport, Pawtucket, Providence, West Warwick, and Woonsocket.

Although all Rhode Island cities and towns have experienced a dramatic decline in incidence over the last ten years, cases of lead poisoning continue to be concentrated in the core cities. In 2010, the incidence of lead poisoning in the core cities was 1.4%, more than twice the 0.6% incidence in other cities and towns.





2010 INCIDENCE OF LEAD POISONING BY CITY AND TOWN

CITY/TOWN	NUMBER OF CHILDREN WITH BLL \geq 10 μ g/dL FOR THE FIRST TIME	TOTAL NUMBER OF CHILDREN SCREENED WITH NO PREVIOUS CONFIRMED ELEVATED BLL	INCIDENCE
Barrington	1	462	0.2%
Bristol	3	528	0.6%
Burrillville	2	291	0.7%
Central Falls	8	910	0.9%
Charlestown	0	109	0.0%
Coventry	3	618	0.5%
Cranston	18	1,621	1.1%
Cumberland	3	648	0.5%
East Greenwich	0	241	0.0%
East Providence	8	1,463	0.5%
Exeter	0	86	0.0%
Foster	1	72	1.4%
Glocester	0	127	0.0%
Hopkinton	0	155	0.0%
Jamestown	0	66	0.0%
Johnston	3	552	0.5%
Lincoln	4	411	1.0%
Little Compton	0	77	0.0%
Middletown	4	320	1.3%
Narragansett	0	147	0.0%
New Shoreham	0	14	0.0%
Newport	9	516	1.7%
North Kingstown	3	472	0.6%
North Providence	2	561	0.4%
North Smithfield	0	178	0.0%
Pawtucket	22	2,434	0.9%
Portsmouth	0	271	0.0%
Providence	127	7,186	1.8%
Richmond	0	97	0.0%
Scituate	0	195	0.0%
Smithfield	1	260	0.4%
South Kingstown	2	483	0.4%
Tiverton	0	376	0.0%
Warren	4	328	1.2%
Warwick	5	1,531	0.3%
West Greenwich	1	90	1.1%
West Warwick	8	783	1.0%
Westerly	1	419	0.2%
Woonsocket	9	1,202	0.7%
Unknown Rhode Island City/Town	0	11	0.0%
Statewide	252	26,311	1.0%

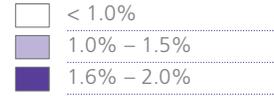
Source: Rhode Island Department of Health Lead Elimination Surveillance System

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

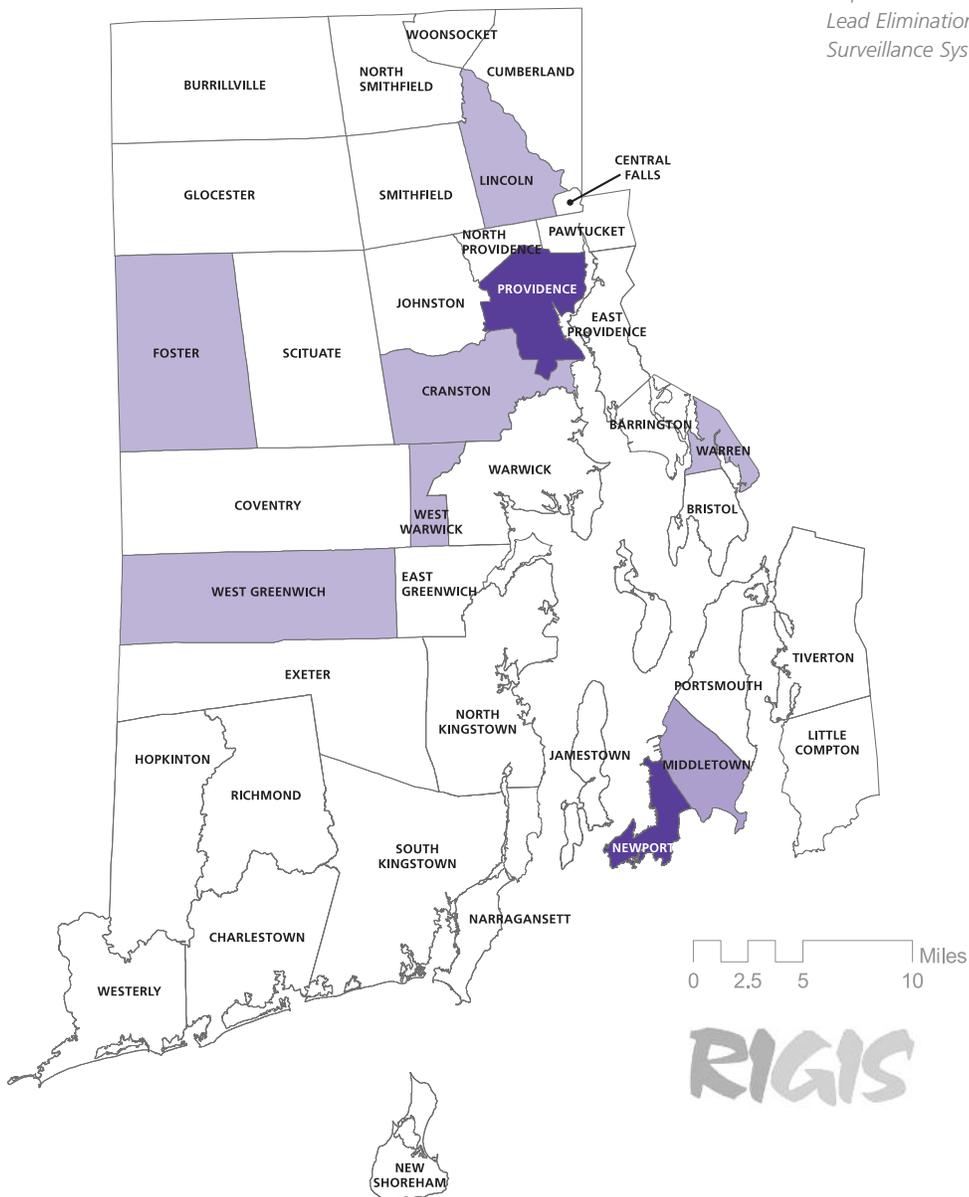
2010 INCIDENCE OF LEAD POISONING IN RHODE ISLAND

The map below displays the distribution of children whose blood lead levels were greater than or equal to 10 µg/dL for the first time in 2010. Providence and Newport both have an incidence of close to 2%, as indicated by the darkest shade. Thirty of Rhode Island's 39 cities and towns had an incidence lower than 1%.

TOTAL INCIDENCE



Source: Rhode Island Department of Health
Lead Elimination Surveillance System



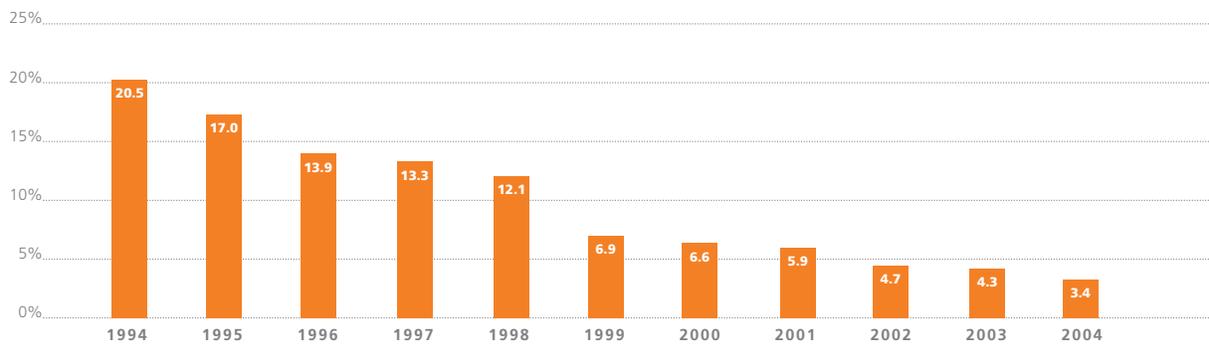
INCIDENCE OF LEAD POISONING BY BIRTH COHORT

The incidence of lead poisoning by birth cohort is defined as the proportion of children born in a given year who were lead-poisoned (with a blood lead level greater than or equal to 10 µg/dL) before six years of age.

The incidence of lead poisoning by birth cohort in Rhode Island has decreased steadily since 1994. Approximately one in five children (20.5%) born in 1994 were lead-poisoned by six years of age, compared to one in twenty-nine children (3.4%) born in 2004. 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, 1994–2004



Source: Rhode Island Department of Health Lead Elimination Surveillance System

Notes

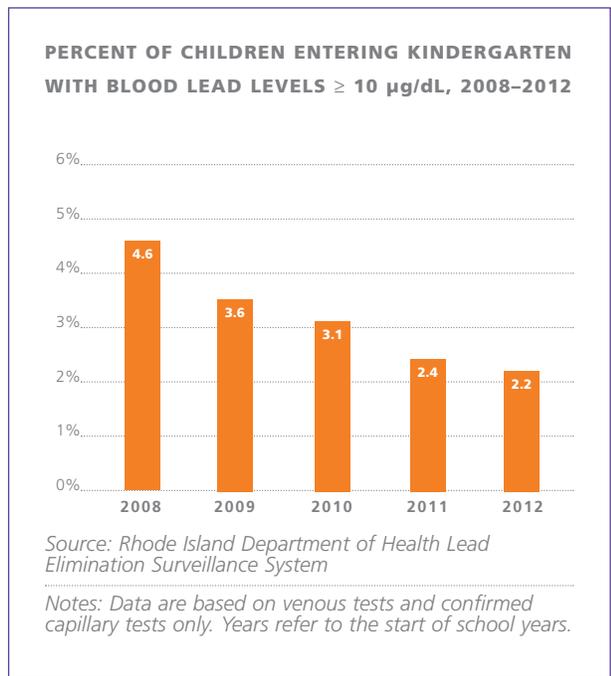
1. Birth cohorts beyond 2004 are not included here because those children had not yet turned six years of age by the time this report was prepared.
2. Data for birth cohorts 1994–1998 are based on all venous and capillary blood lead tests received by a child.
3. Data for the 1999–2004 birth cohorts are 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 ≥ 20 µg/dL.

LEAD POISONING AMONG CHILDREN ENTERING KINDERGARTEN

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

Rhode Island state law requires healthcare professionals to screen all children for lead poisoning before they enter kindergarten. The table below illustrates the elevated blood lead levels of Rhode Island three-year-olds. Rates are based on all blood lead tests given through August 31, two years prior to the year the child enters kindergarten. These rates are used to determine the percentage of children who are lead-poisoned prior to entering kindergarten at five years of age (e.g., rates for children entering kindergarten in 2011 are based on blood lead test results through August 31, 2009).

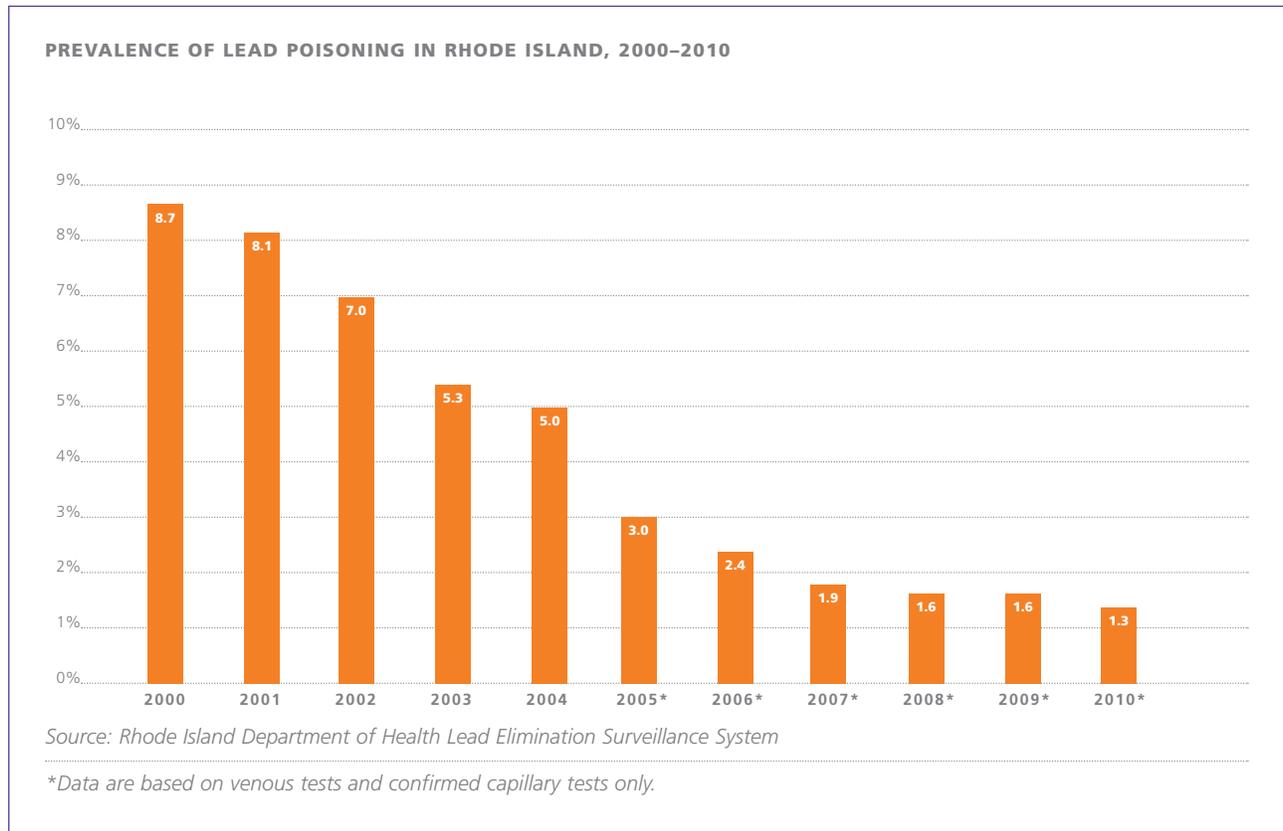
The number of children entering kindergarten who have had an elevated blood lead level has decreased by more than 50% over the past four years. Of the 12,348 children who will enter kindergarten in 2012, 2.2% (274) have had a blood lead level greater than or equal to 10 µg/dL. Because elevated blood lead levels have been shown to impact children's IQs and learning capabilities, advocates for improvements in scholastic achievement are natural partners for advocacy for lead poisoning prevention.



PREVALENCE OF LEAD POISONING IN RHODE ISLAND

The prevalence of childhood lead poisoning is the number of children younger than six years of age who are lead-poisoned at a given point in time. The data show a steady decline in the prevalence of childhood lead poisoning over the last ten years, from 8.7% in 2000 to 1.3% in 2010.

Although the prevalence of lead poisoning in Rhode Island has steadily declined, a total of 355 children were lead-poisoned in 2010. In order to decrease prevalence in the future, Rhode Island must continue to promote policies to increase lead-safe affordable housing.



CHILDREN'S BLOOD LEAD SCREENING AND FOLLOW-UP

Rhode Island requires all children to receive two blood lead screening tests prior to 36 months of age. Additional tests and follow-up services may be offered to families, depending on the blood lead test results of children.

In Rhode Island, these non-medical, follow-up case management services are provided by four certified lead centers. These Medicaid-funded centers provide lead education, nutrition counseling, and coordination of medical care with families' primary care providers.

Although substantial evidence suggests that blood lead levels lower than 10 µg/dL may cause

neurological problems in children, Rhode Island currently uses a first-time venous blood lead level of 10 µg/dL as an action level to initiate the delivery of services. Resource constraints and a lack of data showing the effectiveness of interventions at lower blood lead levels are barriers to extending services to more children.

For the purpose of delivering services to children and families, Rhode Island categorizes lead-poisoned children in two ways: those with *elevated blood lead levels* and those with *significant lead poisoning*. A child is described as having an elevated blood lead level if the child's



first-time venous blood lead level is 10 to 19 µg/dL. A child is described as having significant lead poisoning if the child's venous blood lead level is greater than or equal to 20 µg/dL, or if the child has two venous blood lead tests that reveal levels of 15 to 19 µg/dL. These two tests must be done between 90 and 365 days apart.

Services offered to children with elevated blood lead levels and with significant lead poisoning are detailed below.

ELEVATED BLOOD LEAD LEVEL

Blood Lead Levels of 10 to 14 µg/dL

In 2010, 281 children had first-time blood lead levels of 10 to 14 µg/dL. Of these children, 118 had a finger-stick test and received educational materials through a monthly mailing. The remaining 163 children had venous tests and their families were offered educational visits and visual inspections of their homes from a lead center. The families of 122 (75%) of these 163 children accepted the offer of a visit.



Blood Lead Levels of 15 to 19 µg/dL

In 2010, 47 children had first-time elevated blood lead levels in the 15 to 19 µg/dL range. The families of these children were referred to one of Rhode Island's four lead centers. The lead centers offered each family in-home lead education, nutrition counseling, and coordination of medical care with the family's primary care provider. Of the 47 families referred to a center, 36 (77%) accepted services, while 11 (23%) declined, did not respond, were unable to be located, or had moved.

SIGNIFICANT LEAD POISONING

The number of children with significant lead poisoning steadily decreased until 2009. There was a slight increase from 45 cases in 2009 to 52 cases in 2010. This included one child with a confirmed blood lead level above 45 µg/dL. That child was hospitalized.

Each family of a child with significant lead poisoning is offered non-medical case management services and an environmental inspection of the family residence. This is in addition to continuous lead testing and clinical follow up, usually done through the child's primary care provider. In instances of severe lead poisoning (blood lead levels greater than or equal to 45 µg/dL), Rhode Island's Lead Screening Guidelines recommend that the initial test, whether it was a capillary test or a venous test, be followed up immediately with a second, venous test. If the follow-up test result is 45 µg/dL or higher, hospitalization is considered and the child's home is immediately assessed for lead hazards. When lead hazards are identified in the home and no alternative residence (e.g., a relative's house) is available, the child's pediatrician usually recommends that the child be hospitalized

to prevent continued exposure. The child typically remains hospitalized until a suitable residence is identified.

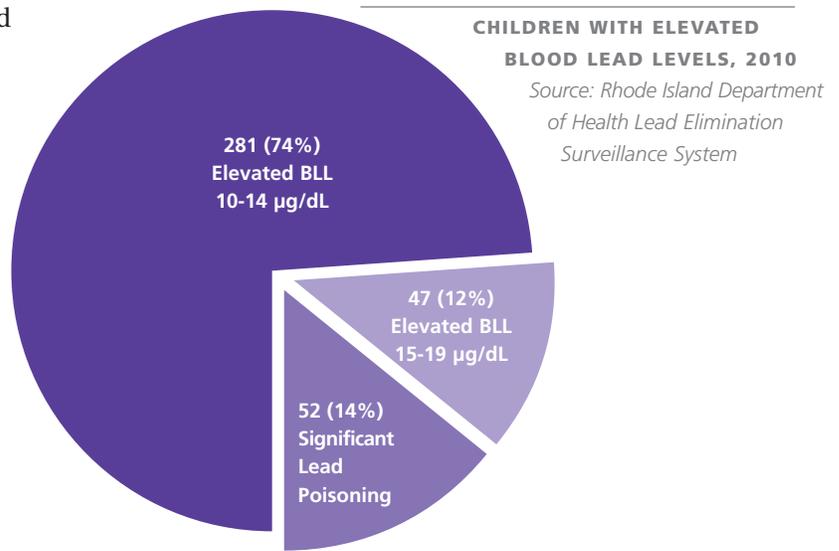
Of the 52 children who were referred to lead centers in 2010 for significant lead poisoning, 42 (81%) accepted services. The remaining families either refused service or could not be reached after several attempts at contact.

Non-medical case management is available until a child’s blood lead level decreases, the environment is safe, or the family no longer needs assistance.

Environmental Lead Inspections

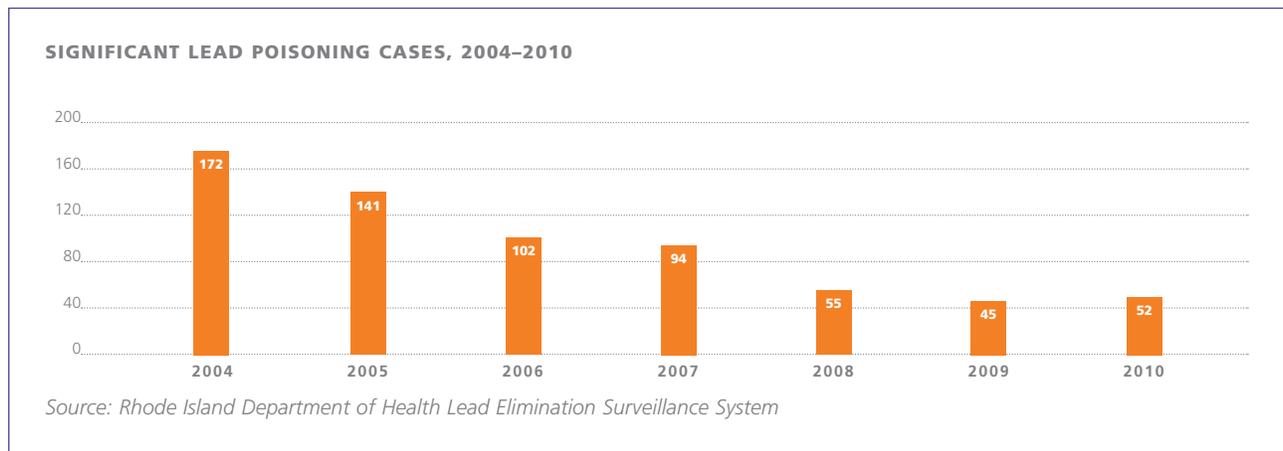
HEALTH offers comprehensive environmental lead inspections for families of children with significant lead poisoning at no cost. HEALTH neither requires nor seeks the permission of landlords for inspection.

In 2010, HEALTH offered 73 environmental inspections to families of children with significant lead poisoning. This included children identified as having significant lead poisoning in late 2009



and in 2010. HEALTH performed inspections at 59 of their homes. One inspection was still pending as of April 2011.

Rhode Island families are increasingly accepting environmental lead inspections. In 2008 and 2009, 65% and 73% of families offered inspections accepted them, respectively, compared to 81% who accepted inspections in 2010. Of families that did not accept inspections in 2010, four moved before an inspection was offered. Although the new occupants of these homes were



INSPECTIONS OFFERED TO FAMILIES OF CHILDREN WITH SIGNIFICANT LEAD POISONING, 2005–2010

	2005	2006	2007	2008	2009*	2010*
Inspections Offered	158	135	109	63	53	73
▪ Child Moved	20	9	12	4	3	4
▪ No Response to Letters, Phone Calls	13	8	2	2	1	2
▪ Refused Inspection	22	32	14	16	10	7
▪ Pending Inspections	0	0	0	0	0	1
TOTAL INSPECTIONS PERFORMED	103	86	81	41	39	59

Source: Rhode Island Department of Health Lead Elimination Surveillance System

*Starting in 2009, inspections were also offered to occupants who were deemed to be at risk of lead poisoning and were referred by a lead center. In addition to the inspections listed above, a total of 14 inspections were conducted for at-risk occupants in the last two years (6 in 2009 and 8 in 2010).

offered inspections if they had children younger than six years of age, none of them accepted these offers. Two families could not be located to offer the inspection.

LEAD HAZARDS IN HOUSING

Upon completion of a comprehensive environmental lead inspection of a given property, HEALTH sends the homeowner a report with instructions for correcting existing problems. In 2010, as in previous years, most homeowners did not voluntarily correct the lead hazards found at their properties, so the majority of cases were referred to enforcement authorities.

Initially, HEALTH tries to actively engage owners of properties with lead hazards through consultation and technical assistance until lead hazard remediation is achieved. Issuing Notices of Violation and referring homeowners for enforcement action are typically necessary to obtain compliance with lead regulations. As part of this process, HEALTH conducts clearance inspections, compliance audits, and other activities to support administrative and judicial enforcement actions. However, enforcement through the courts is a slow process, allowing these units to stay out of compliance for long periods of time during which ownership changes often occur.

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 to 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 2010 is the proportion of children with a first-time blood lead level greater than or equal to 10 µg/dL among those at risk for developing lead poisoning (i.e., children younger than six years of age 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 2010 is the proportion of children who had a blood lead level greater than or equal to 10 µg/dL in 2010.

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 six years of age 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 greater than or equal to 20 µg/dL in a child younger than six years of age, or two venous blood lead levels 15 to 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.

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Additional lead poisoning data can be found at www.health.ri.gov/leadpoisoning

