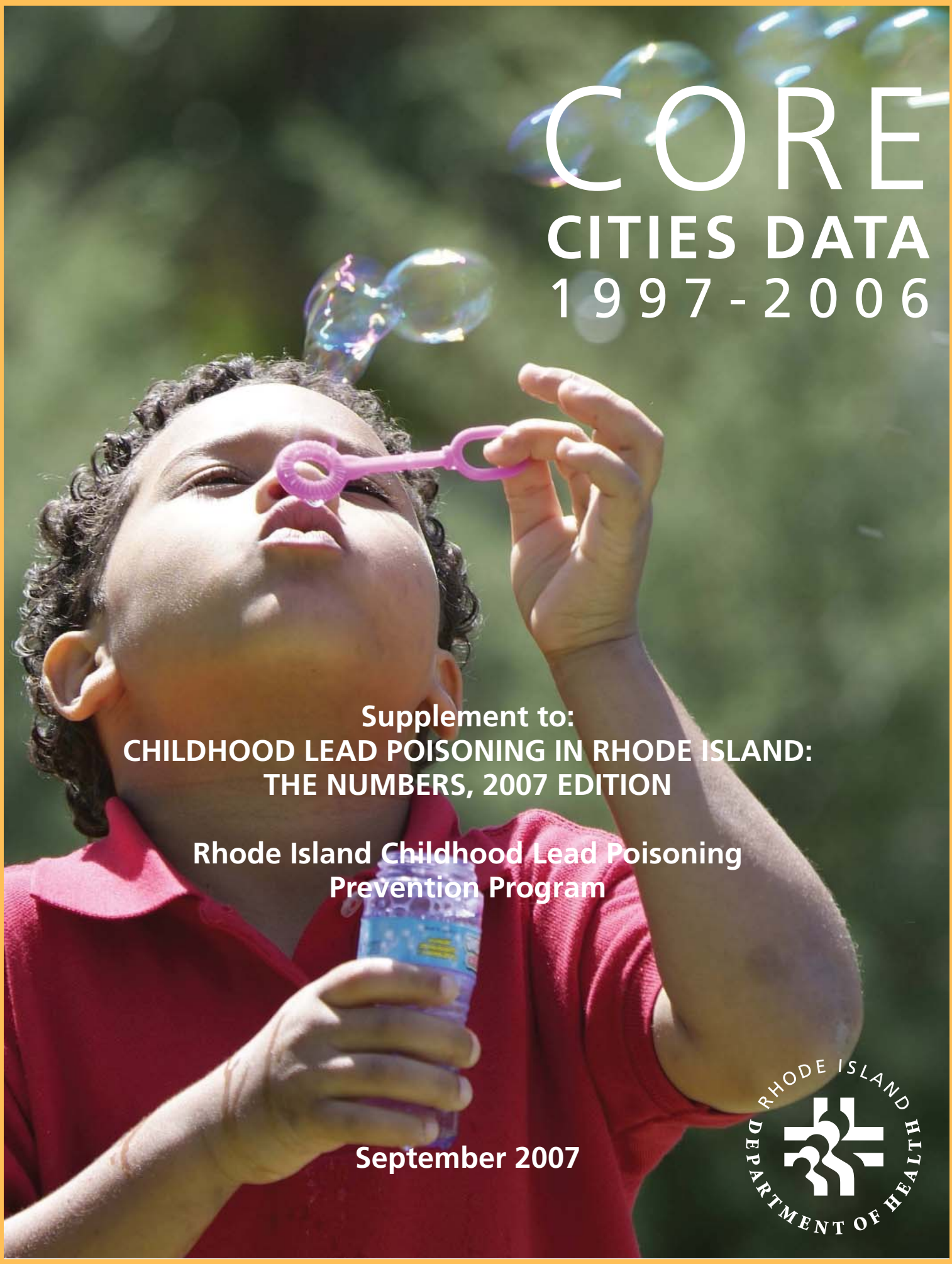


CORE CITIES DATA 1997-2006

Supplement to:
CHILDHOOD LEAD POISONING IN RHODE ISLAND: THE NUMBERS, 2007 EDITION

Rhode Island Childhood Lead Poisoning Prevention Program

September 2007

RHODE ISLAND DEPARTMENT OF HEALTH

Contents

Eliminating Childhood Lead Poisoning by 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 ≥ 10 µg/dL) in children under 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 universal screening of children to identify those with elevated blood lead levels (BLL), and in turn, removing or reducing any further exposure to the child.

The plan also describes the strategic shift from a health approach to a healthy housing approach. Progress toward the elimination of lead poisoning was to be evaluated by two factors: the incidence of lead poisoning, and the availability of lead safe, affordable housing.

While data to measure the incidence of lead poisoning is readily available, it became clear that the lack of comprehensive, quality housing data makes measuring the housing component unrealistic at this time. To address the need for the collection of housing data, the Rhode Island Childhood Lead Poisoning Prevention Program (RI CLPPP), along with the Rhode Island Housing Resources Commission (HRC) and the Healthy Housing Collaborative, developed a statewide vision for healthy housing. This vision and strategy to achieve healthy housing in Rhode Island is summarized in a document that was issued in January 2007 titled "Healthy Housing: Why Rhode Island Should Invest in the Vision" and is available at www.health.ri.gov/lead.

One important step toward the implementation of the Healthy Housing vision is the development of a statewide housing database, which would be used to assess and improve our knowledge and understanding of Rhode Island's housing stock, and to evaluate the progress toward the elimination of childhood lead poisoning. In 2007, RI CLPPP and HRC will continue to work together toward the establishment of this database. Given that this will be a long-term initiative that could benefit several programs, it is expected that other agencies, state and local government, public health programs, and advocates will be included in discussions regarding the design and use of the database.

Meanwhile, RI CLPPP is using the following alternative measures to assess progress toward the elimination of childhood lead poisoning.

Decrease in the Incidence of Lead Poisoning

The first measure of progress outlined in the elimination strategy is a decrease in the number of newly lead poisoned children (BLL $\geq$ 10 µg/dL) by 100 each year. There were 621 children lead poisoned in 2005. The target for 2006 was to have fewer than 520 newly lead poisoned children. Rhode Island met this goal with 500 newly lead poisoned children in 2006.

Maintenance of Lead Screening Rates

The second measure of progress outlined in the elimination strategy is to maintain or increase the percent of children screened in compliance with lead screening guidelines. Compliance is defined as having at least one blood lead test by 18 months of age, and at least two blood lead tests, a minimum of 12 months apart, by 36 months of age. Among children born in 2002, 70% of 18 month-old children, and 40% of 36 month-old children were screened in compliance with the guidelines. Rhode Island met the goal of maintaining these rates among children born in 2003, with 72% of 18 month-old children and 40% of 36 month-old children screened in compliance with the lead screening guidelines.

Availability of Affordable Housing

The third measure of progress toward elimination relates to access to affordable housing. In an effort to learn more about affordable housing throughout the state, RI CLPPP is taking steps to create a statewide housing database. This effort was motivated by the interest in linking health data, such as childhood blood lead test results, with property attributes, neighborhood demographics, and ownership information. With a statewide housing database, RI CLPPP could conduct research related to the association between lead poisoning and housing factors, such as: year of construction, housing type, and proximity to pollution point sources. The database would also allow RI CLPPP to easily generate public lists of properties, as mandated by the Lead Hazard Mitigation Law. For more information about the public lists, visit www.health.ri.gov/lead.

In an effort to develop a statewide housing database, RI CLPPP has partnered with The Providence Plan, a private, nonprofit organization working to improve the economic and social wellbeing of all city residents. The Providence Plan has assisted us in contacting each of Rhode Island's 39 cities and towns to request electronic tax assessor data for all properties in the municipality. As of August 2007, data have been collected from all 39 cities and towns.

Data collected from municipalities include address information, plat/lot, state tax classification, number of residential units, year of construction, and land use code. However, the data fields submitted by each municipality vary.

The greatest limiting factor in the data provided by municipalities thus far is the absence of a residential unit count by property. The majority of towns did not supply this data field. However, with several municipalities due for a physical revaluation and others planning to implement a detailed land use code, better unit counts should be available in coming years.

Several other agencies are submitting data that can be linked to the tax assessor information. Currently, Rhode Island Housing, Rhode Island Housing Resources Commission (HRC), and the Department of Housing and Urban Development (HUD) are contributing data to the statewide housing database.

- RI Housing, a quasi-public agency committed to helping everyday Rhode Islanders find, rent, purchase, and maintain healthy, affordable homes, maintains a list of properties that have received a federal, state, or municipal subsidy and meet Rhode Island's definition of low/moderate income housing.

- HRC, whose mission is to provide housing opportunities for all Rhode Islanders, to maintain the quality of housing in Rhode Island, and to coordinate and make effective the housing opportunities of agencies and subdivisions of the state, issues Certificates of Conformance and maintains a list of properties receiving certificates in accordance with the Lead Hazard Mitigation Law.

- HUD, whose mission is to increase homeownership, support community development, and increase access to affordable housing free from discrimination, maintains a list of privately owned, multi-unit properties that receive a subsidy through HUD.

These three datasets, along with the data collected from the cities and towns and the data from the Lead Elimination Surveillance System (LESS) database, contain information that is useful in describing the housing stock in Rhode Island, as well as evaluating the association between lead safe affordable housing and childhood lead poisoning.

Displacement of Children

The fourth, and final measure of progress toward elimination is assessing the displacement of children. One useful indicator is the home addresses of children who are insured by Medicaid at birth. Preliminary analyses of home addresses of children born in Providence between 1997 and 2005 indicate that children born on Medicaid are being concentrated into fewer and fewer neighborhoods over time. As we work toward our goal of elimination, it is important that our efforts do not contribute to the displacement of children.

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. 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. Currently, CDC has defined the level of concern as ≥ 10 µg/dL.

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] CDC has prepared the following statement, which can be found on the website at: www.cdc.gov/lead/qanda.htm.

"Recent studies suggest that adverse health effects exist in children at blood lead levels less than 10 µg/dL. In the past, CDC has 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, no evidence exists 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."

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. 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 ≥ 10 µg/dL, and individual prevention activities, such as case management and environmental investigations, should be implemented at blood lead levels ≥ 15 µg/dL.[3] For example, while the overall goal is to reduce children's blood lead levels below 10 µg/dL, there are reasons for not implementing individual, environmental, and medical interventions for children with blood lead levels between 10 and 14 µg/dL.

Effective environmental and medical interventions for children with blood lead levels in this range 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.

1 Canfield RL, Henderson CR, Cory-Slechta DA, Cox C, Jusko TA, Lanphear BP. Intellectual impairment in children with blood lead concentrations below 10µg 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 CDC Preventing Lead Poisoning in Young Children. Atlanta: U.S. Department of Health and Human Services, 1991.

Lead Action Levels in Rhode Island

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

Category	Action Level	Action
Elevated Blood Lead Level	One BLL between 10-14 µg/dL	***Capillary*** Letter sent to Primary Care Provider recommending venous test to confirm the BLL* ***Venous*** Letter sent to family inviting them to call the HEALTH Information Line 800.942.7434 or visit the website for additional information www.health.ri.gov
	One BLL between 15-19 µg/dL	***Capillary*** Letter sent to Primary Care Provider recommending venous test to confirm the BLL ***Venous*** 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)
Significant Lead Poisoning	One Venous BLL ≥ 20 µg/dL or Two Venous BLLs 15-19 µg/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.

* In addition to the actions described, a letter is sent to families living in Providence ONLY, informing them that they can contact the city of Providence for a free environmental inspection of their home.

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

*** Two venous blood lead levels 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, 15-19 ug/dL were used to define persistent lead poisoning.

Understanding the Lead Data

In Rhode Island, health care 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 (BLL) are measured and reported as micrograms of lead per deciliter of blood (µg/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 the state of Rhode Island.[4] 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 represented once per year in which he was screened.

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 health care 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. In 2006, only 46% of blood lead records reported race, and only 52% reported ethnicity; therefore lead poisoning information presented in this report is not broken down by race and ethnicity.

In 2004, RI CLPPP conducted a survey to better understand the barriers to collecting race and ethnicity information. The survey findings, which can be found in more detail on the web at www.health.ri.gov/lead indicate that:

- Some laboratory professionals were not aware that they were required to collect race and ethnicity information.
- The majority of laboratory professionals were uncomfortable asking people about their race and ethnicity.
- The majority of clients did not object to reporting their race and ethnicity.

Additional assessments conducted in 2005 found that patient education is useful in improving the collection of race and ethnicity information. In an effort to educate the public about the importance of reporting race and ethnicity information, RI CLPPP will send informational posters to all licensed laboratories in the state in 2007.

Confirmed Tests in 2005

Prior to July 1, 2004, if a child under the age of six had a capillary blood lead level $\geq$ 20 µg/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 under the age of six who had a capillary blood lead level $\geq$ 10 µg/dL (instead of $\geq$ 20 µg/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 RI CLPPP has confirmed capillary test data is 2005. As a result, 2005 and 2006 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.

4 The numbers presented here are estimates, given that calculations are based on screening data rather than population data for all children under the age of six.

Compliance with 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.

Approximately 70% of all Rhode Island children born between 2001 and 2003 were screened for lead poisoning at least once by 18 months of age. When looking only at children living in the core cities, the percent of children screened at least once by 18 months of age increases to approximately 75%.

The same pattern is evident among children 36 months of age. Statewide, approximately 40% of children are screened twice, a minimum of 12 months apart, by 36 months of age. When looking only at children living in the core cities, the percent of children screened in compliance with the screening guidelines at 36 months of age increases to approximately 45%.

The increased screening rates in the core cities indicate that we are screening the high-risk populations in Rhode Island. Although this is a success, we still need to focus on increasing screening compliance among children 36 months of age.

Figure 1A: Compliance with Lead Screening Guidelines at 18 Months of Age

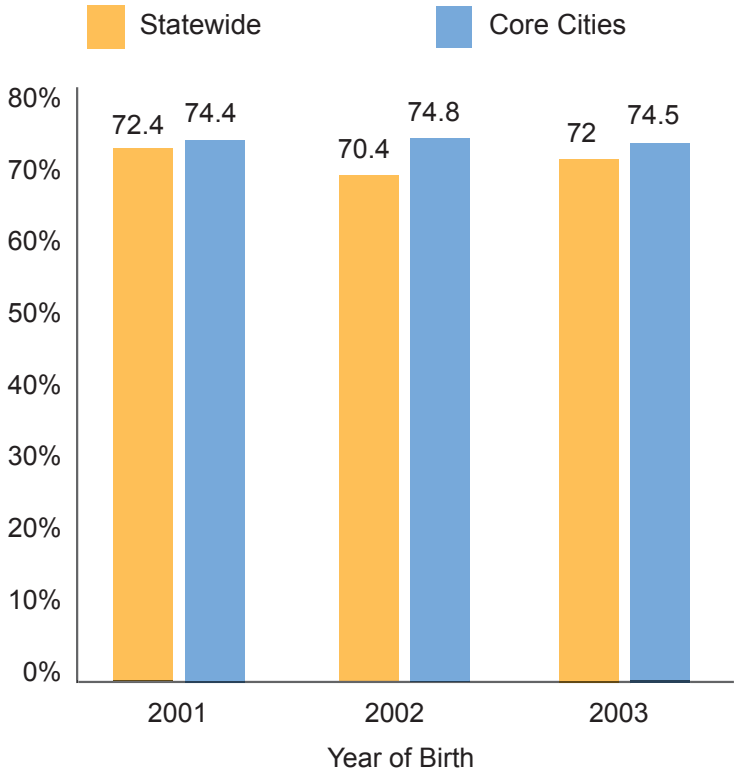


Figure 1B: Compliance with Lead Screening Guidelines at 36 Months of Age

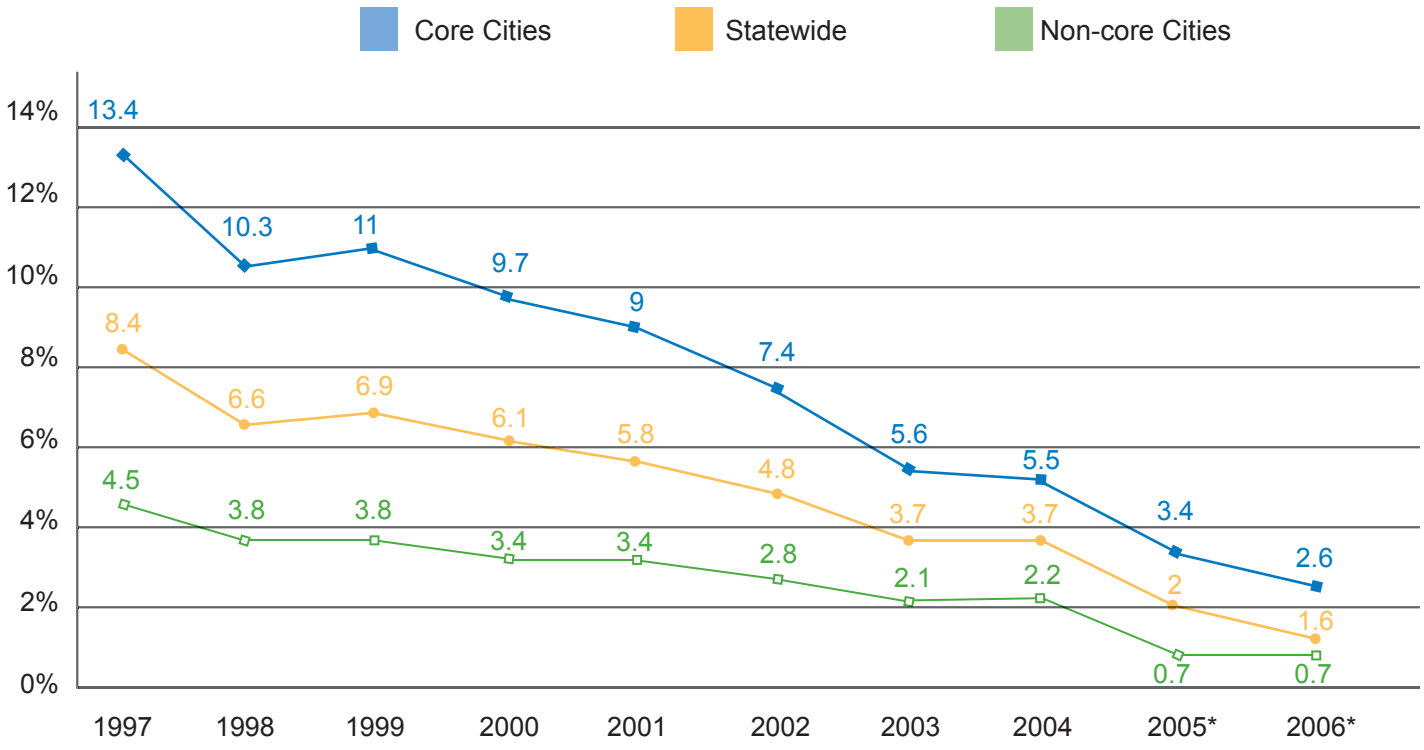
Incidence of Lead Poisoning Over Time

The Rhode Island Department of Health tracks and reports the number of newly lead poisoned children each year. This is known as the incidence of lead poisoning. Incident cases include children less than six years of age with a blood lead level ≥ 10 µg/dL for the first time.

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 2006, 387 (77%) of the 500 newly lead poisoned children were living in the core cities.

Rhode Island must maintain primary prevention efforts in order to protect additional children from becoming lead poisoned and to eliminate childhood lead poisoning by 2010.

Figure 2: Incidence of Lead Poisoning Cases by Geographic Location 1997 - 2006

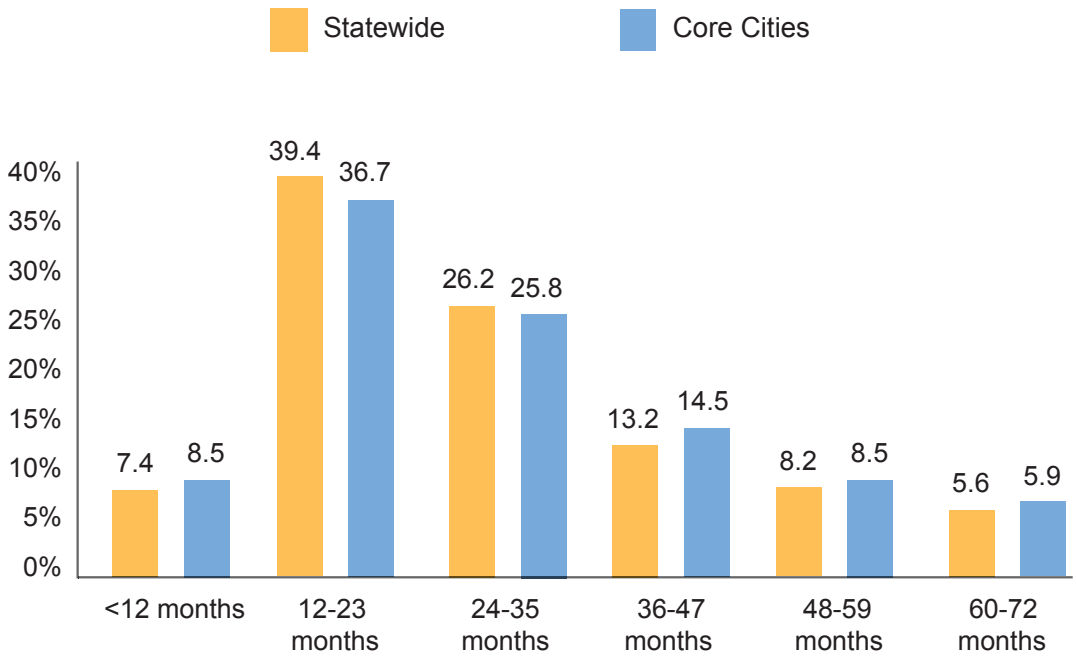


* Data are based on venous tests and confirmed capillary tests only.
Source: RI Department of Health, CLPPP, LESS Database
Report run 4/29/2004 for 1995-2003 data; 2/28/05 for 2004 data; 6/1/06 for 2005 data, 1/31/07 for 2006 data

Incidence of Lead Poisoning by Age

The distribution of newly lead poisoned children by age in the core cities in 2006 is similar to the statewide distribution. In the core cities and statewide, most first-time poisonings occur among one and two-year-old children. Of the 387 newly lead poisoned children in the core cities in 2006, 33 were identified as lead poisoned before the age of one, 142 were identified at age one, 100 were identified at age two, 56 were identified at age three, 33 were identified at age four, and 23 were identified at age five.

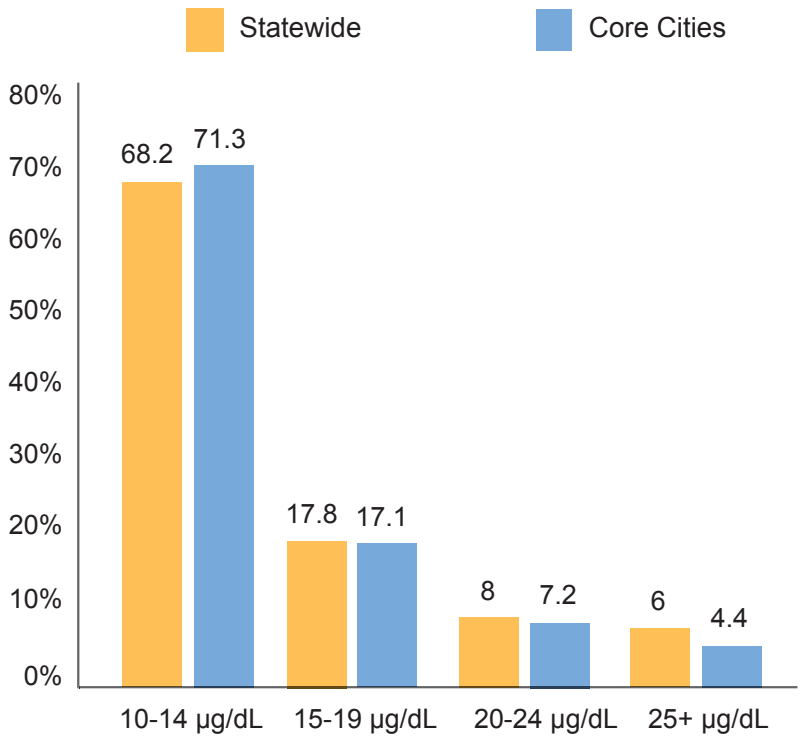
Figure 3: 2006 Incidence of Lead Poisoning Cases by Age



Incidence of Lead Poisoning by Blood Lead Level

The distribution of newly lead poisoned children by blood lead level in the core cities in 2006 follows the same trend as the statewide distribution. In the core cities, as well as statewide, lead poisoning is being detected among the majority of children when their blood lead levels are in the 10-14 µg/dL range. In the core cities, 276 (71%) of the 387 children lead poisoned in 2006 had a blood lead level between 10 and 14 µg/dL. This indicates that screening practices are successfully identifying children with elevated blood lead levels before they become highly elevated.

Figure 4: 2006 Incidence of Lead Poisoning Cases by Blood Lead Level

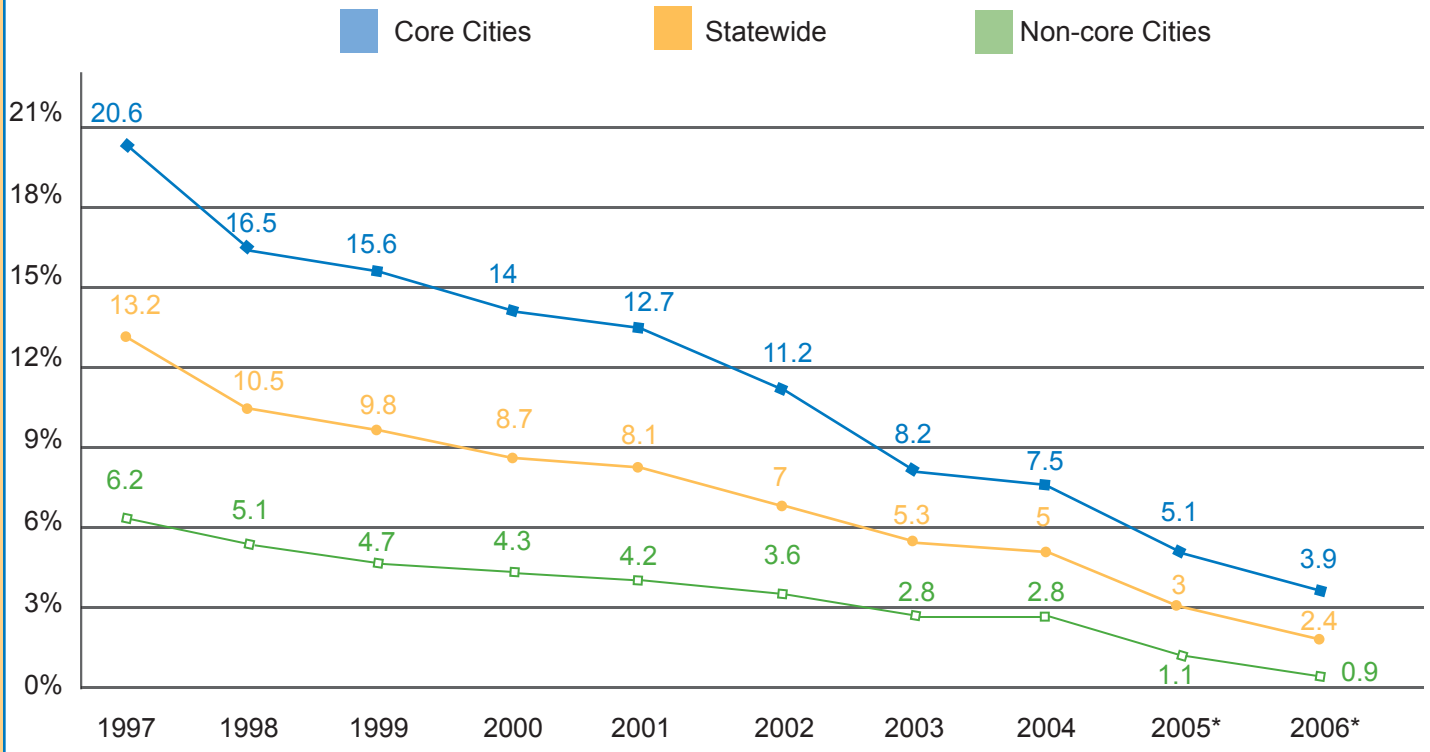


Prevalence of Lead Poisoning Over Time

Over the past ten years, the prevalence of lead poisoning has declined throughout the state. The majority of the cases, however, are concentrated in the core cities. In 2006, 627 (79%) of the 790 children with lead poisoning lived in the core cities.

In order to decrease the number of prevalent cases of lead poisoning in the future, we must continue to work on promoting policies to increase lead-safe affordable housing.

Figure 5: Prevalence of Lead Poisoning by Geographic Location 1997 - 2006



* Data are based on venous tests and confirmed capillary tests only.
Source: RI Department of Health, CLPPP, LESS Database
Report run 4/29/2004 for 1995-2003 data; 2/28/05 for 2004 data; 6/1/06 for 2005 data, 1/31/07 for 2006 data

Prevalence of Lead Poisoning by Age

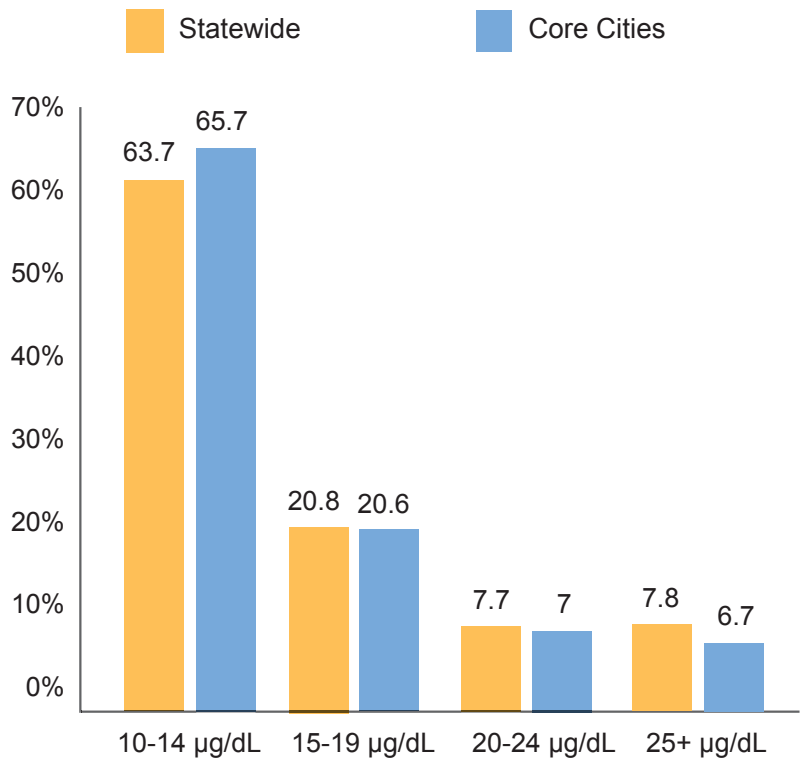
The distribution of lead poisoned children by age in the core cities is similar to the statewide distribution. The majority of lead poisoned children in the core cities in 2006 were between the ages of two and three. Of the 627 children lead poisoned, 174 were two years of age and 173 were one year of age. Thirty lead poisoned children were under one year of age, 111 were three years of age, 83 were four years of age, and 56 were five years of age.

Figure 6: 2006 Prevalence of Lead Poisoning Cases by Age

Prevalence of Lead Poisoning by Blood Lead Level

The distribution of lead poisoned children by blood lead level in the core cities in 2006 is similar to the statewide distribution. Approximately two thirds of lead poisoned children in the core cities had a blood lead level between 10-14 µg/dL. Of the 627 lead poisoned children in the core cities in 2006, 412 had blood lead levels between 10-14 µg/dL, and 129 had blood lead levels between 15-19 µg/dL. Of the 86 children who had blood lead levels greater than 20 µg/dL, 44 had blood lead levels between 20-24 µg/dL, and 42 children had blood lead levels greater than 25 µg/dL.

Figure 7: 2006 Prevalence of Lead Poisoning Cases by Blood Lead Level



Data Tables

Table 1A. Compliance with lead screening guidelines at 18 months of age, 2001-2003

Year Born	Core Cities		Statewide	
	Total Number of Children Born	Number of Children Screened at Least Once by 18 Months	Total Number of Children Born	Number of Children Screened at Least Once by 18 Months
2001	7,353	5,470 (74.4%)	12,884	9,278 (72.4%)
2002	7,609	5,689 (74.8%)	13,178	9,229 (70.4%)
2003	8,023	5,981 (74.5%)	13,471	9,640 (72%)

Table 1B. Compliance with lead screening guidelines at 36 months of age, 2001-2003

Year Born	Core Cities		Statewide	
	Total Number of Children Born	Number of Children Screened at Least Twice by 36 Months	Total Number of Children Born	Number of Children Screened at Least Twice by 36 Months
2001	7,353	3,240 (44.1%)	12,884	5,134 (40)%)
2002	7,609	3,382 (44.4%)	13,178	5,177 (39.3%)
2003	8,023	3,483 (43.4%)	13,471	5,454 (40.1%)

Table 2A. Incidence of lead poisoning cases in core cities

Year Born	Number of Children with BLL $\geq$ 10 µg/dL for the First Time	Number of Children Screened with No Previous Elevated BLL	Incidence
1997	1,669	12,453	13.4%
1998	1,273	12,372	10.3%
1999	1,410	12,787	11%
2000	1,200	12,400	9.7%
2001	1,277	14,164	9%
2002	1,041	14,003	7.4%
2003	811	14,493	5.6%
2004	799	14,581	5.5%
2005	498	14,522	3.4%
2006	387	14,625	2.6%

Table 2B. Incidence of lead poisoning cases over time statewide

Year Born	Number of Children with BLL ≥ 10 µg/dL for the First Time	Number of Children Screened with No Previous Elevated BLL	Incidence
1997	2,369	28,125	8.4%
1998	1,870	28,170	6.6%
1999	2,025	29,187	6.9%
2000	1,740	28,419	6.1%
2001	1,857	31,848	5.8%
2002	1,535	31,954	4.8%
2003	1,161	31,579	3.7%
2004	1,167	31,610	3.7%
2005	624	31,669	2%
2006	500	31,578	1.6%

Table 2C. Incidence of lead poisoning cases over time in non-core cities

Year Born	Number of Children with BLL ≥ 10 µg/dL for the First Time	Number of Children Screened with No Previous Elevated BLL	Incidence
1997	715	15,761	4.5%
1998	606	15,861	3.8%
1999	623	16,476	3.8%
2000	550	16,077	3.4%
2001	597	17,756	3.4%
2002	509	18,018	2.8%
2003	364	17,143	2.1%
2004	377	17,107	2.2%
2005	123	17,142	0.7%
2006	113	16,953	0.7%

Table 3A. Incidence of lead poisoning cases by age in core cities, 2006

Age in Months	Number of Children with BLL ≥ 10 µg/dL for the First Time	Percent of Children with BLL ≥ 10 µg/dL for the First Time
< 12 months	33	8.5%
12 - 23	142	36.7%
24 - 35	100	25.8%
36 - 47	56	14.5%
48 - 59	33	8.5%
60 - 72	23	5.9%
Total	**387**	**100%**

Table 3B. Incidence of lead poisoning cases by age statewide, 2006

Age in Months	Number of Children with BLL ≥ 10 µg/dL for the First Time	Percent of Children with BLL ≥ 10 µg/dL for the First Time
< 12 months	37	7.4%
12 - 23	197	39.4%
24 - 35	131	26.2%
36 - 47	66	13.2%
48 - 59	41	8.2%
60 - 72	28	5.6%
Total	**500**	**100%**

Table 4A. Incidence of lead poisoning cases by blood lead level in core cities, 2006

Blood Lead Level µg/dL	Number of Children with BLL ≥ 10 µg/dL for the First Time	Percent of Children with BLL ≥ 10 µg/dL for the First Time
10 - 14	76	71.3%
15 - 19	66	17.1%
20 - 24	28	7.2%
25 +	17	4.4%
Total	**387**	**100%**

Table 4B. Incidence of lead poisoning cases by blood lead level statewide, 2006

Blood Lead Level µg/dL	Number of Children with BLL ≥ 10 µg/dL for the First Time	Percent of Children with BLL ≥ 10 µg/dL for the First Time
10 - 14	341	68.2%
15 - 19	89	17.8%
20 - 24	40	8%
25 +	30	6%
Total	**500**	**100%**

Table 5A. Prevalence of lead poisoning cases over time in core cities

Year Born	Number of Children with BLL ≥ 10 µg/dL	Number of Children Screened	Prevalence
1997	3,391	16,423	20.6%
1998	2,584	15,648	16.5%
1999	2,402	15,407	15.6%
2000	2,030	14,511	14%
2001	2,068	16,295	12.7%
2002	1,801	16,074	11.2%
2003	1,331	16,275	8.2%
2004	1,210	14,955	7.5%
2005	793	15,626	5.1%
2006	627	15,629	4%

Table 5B. Prevalence of lead poisoning cases over time statewide

Year Born	Number of Children with BLL ≥ 10 µg/dL	Number of Children Screened	Prevalence
1997	4,446	33,647	13.2%
1998	3,437	32,684	10.5%
1999	3,208	32,816	9.8%
2000	2,741	31,382	8.7%
2001	2,813	34,865	8.1%
2002	2,450	34,835	7%
2003	1,811	34,130	5.3%
2004	1,685	33,839	5%
2005	981	33,086	3%
2006	790	32,838	2.4%

Table 5C. Prevalence of lead poisoning cases over time in non-core cities

Year Born	Number of Children with BLL ≥ 10 µg/dL	Number of Children Screened	Prevalence
1997	1,084	17,352	6.2%
1998	874	17,127	5.1%
1999	819	17,503	4.7%
2000	729	16,948	4.3%
2001	775	18,666	4.2%
2002	676	18,853	3.6%
2003	503	17,938	2.8%
2004	493	17,280	2.8%
2005	188	17.460	1.1%
2006	163	17,209	0.9%

Table 6A. Prevalence of lead poisoning cases by age in core cities, 2006

Age in Months	Number of Children with BLL ≥ 10 µg/dL	Percent of Children with BLL ≥ 10 µg/dL
< 12 months	30	4.8%
12 - 23	173	27.6%
24 - 35	174	27.8%
36 - 47	111	17.7%
48 - 59	83	13.2%
60 - 72	56	8.9%
Total	**627**	**100%**

Table 6B. Prevalence of lead poisoning cases by age statewide, 2006

Age in Months	Number of Children with BLL ≥ 10 µg/dL	Percent of Children with BLL ≥ 10 µg/dL
< 12 months	32	4.1%
12 - 23	234	29.6%
24 - 35	220	27.8%
36 - 47	135	17.1%
48 - 59	97	12.3%
60 - 72	72	9.1%
Total	**790**	**100%**

Table 7A. Prevalence of lead poisoning cases by blood lead level in core cities, 2006

Blood Lead Level µg/dL	Number of Children with BLL ≥ 10 µg/dL	Percent of Children with BLL ≥ 10 µg/dL
10 - 14	412	65.7%
15 - 19	129	20.6%
20 - 24	44	7%
25 +	42	6.7%
Total	**627**	**100%**

Table 7B. Prevalence of lead poisoning cases by blood lead level statewide, 2006

Blood Lead Level µg/dL	Number of Children with BLL ≥ 10 µg/dL	Percent of Children with BLL ≥ 10 µg/dL
10 - 14	503	63.7%
15 - 19	164	20.8%
20 - 24	61	7.7%
25 +	62	7.8%
Total	**790**	**100%**

Glossary

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

BLL
Blood lead level.

Elevated Blood Lead
One blood lead test result between 10-19 µg/dL.

Incidence
The proportion of new cases of a disease that develops 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 2005 is the proportion of children with a first-time elevated blood lead level among those at risk for developing lead poisoning (i.e. children under age 6 who have never been lead poisoned in the past).

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, prevalence of lead poisoning in 2005 is the proportion of children who had an elevated blood lead level in 2005.

RI CLPPP
The Rhode Island Childhood Lead Poisoning Prevention Program.

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

Significant Lead Poisoning
A venous blood lead level >= 20 µg/dL in a child under six years of age, or two venous BLLs 15-19 µg/dL from a child under six years of age, done 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.

Daniela Quilliam, MPH
Epidemiologist
Childhood Lead Poisoning Prevention Program
Three Capitol Hill
Providence, RI 02908

daniela.quilliam@health.ri.gov
401.222.7730