

Childhood Lead Poisoning Prevention and Control

2014 Annual Disease Surveillance Report

State of Connecticut Department of Public Health Lead and Healthy Homes Program

This report describes the rates of childhood lead testing by pediatricians, the rates of childhood lead poisoning for children under the age of six, the identification and frequency of lead hazards in residential properties, and the effectiveness of the actions taken by local health departments and districts in response to reported cases of severe childhood lead poisoning.

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CT Department of Public Health 2014 Annual Disease Surveillance Report on

Childhood Lead Poisoning Prevention and Control

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Chapter 1. KEY FINDINGS

The following provides a summary of key findings for lead poisoning disease surveillance conducted by the Lead and Healthy Homes Program during the 2014 calendar year (CY):

• Statewide Mandatory Blood Lead Screening/Compliance

- 84,101 blood lead tests for children under age of 6 received by the Lead and Healthy Homes program
- o 75,956 children under age of 6 were screened
- Among the 2011 birth cohort (children who turned 3 years of age in 2014), 82.5% were screened by age 2 and 97.3% were screened by age 3
- Among the 2011 birth cohort, 53.0% of children were screened at age 1 and again at age 2

• Prevalence of Childhood Lead Poisoning:

Children are considered lead poisoned when diagnosed with a confirmed blood lead level $\ge 5 \ \mu g/dL$. Among children under 6 years of age who had a confirmed blood lead test:

- \circ ~ 2284 (30 per 1,000, i.e. 3.0%) children $\geq 5~\mu g/dL$
- \circ 213 (3 per 1,000, i.e. 0.3%) children ≥15 µg/dL
- \circ 99 (1 per 1,000, i.e. 0.1%) children ≥20 µg/dL

Incidence of Childhood Lead Poisoning

Number of new cases identified (incidence) among children under 6 years of age who had a confirmed blood lead test:

- \circ 1473 (19 per 1,000, i.e. 1.9%) ≥5 µg/dL
- \circ 164 (2 per 1,000, i.e. 0.2%) ≥15 µg/dL
- \circ 74 (1 per 1,000, i.e. 0.1%) ≥20 µg/dL

Race and Ethnicity Associated with Childhood Lead Poisoning

Among children under 6 years of age who had a confirmed blood lead test:

- \circ Blacks (5.8%) were twice as likely to be lead poisoned at levels ≥5 µg/dL than Whites (2.5%), or Asians (2.5%)
- Hispanics (4.0%) were 1.5 times as likely to be lead poisoned at levels ≥5 µg/dL than Non-Hispanics (2.6%)

• Environmental Lead Hazard Investigations

Among the 111 dwelling units for which environmental investigations were completed and reported for poisoned children:

- \circ 93.7% were identified with environmental lead hazards
- 77.7% were multiple-unit dwellings
- o 83.8% were identified with paint hazards
- 44.1% were identified with dust hazards
- 23.4% were identified with soil hazards
- o 0.9% with a drinking water hazard

Chapter 2. UNDERSTANDING THE LEAD DATA

Connecticut General Statutes (CGS) Section 19a-110. -- Report of lead poisoning, requires laboratory reporting of blood lead tests for all individuals. Laboratories are required to submit blood lead test reports (i.e., findings \geq 10 µg/dL of lead in blood) within 48 hours of receipt of the test result to the Connecticut Department of Public Health (CT DPH) and the local health department serving the town where the person (child) resides. At least monthly, laboratories are also required to submit to the CT DPH a comprehensive report of all blood lead test results for Connecticut residents.

The CT DPH has maintained a blood lead surveillance system since 1994. In 2010, the CT DPH Lead and Healthy Homes program upgraded its blood lead surveillance system to a new, more comprehensive webbased system. The new system has enhanced the ability to merge birth records and comprehensive environmental data with childhood blood lead data. The new surveillance system has had a significant positive impact on the Lead and Healthy Homes program's capability to utilize surveillance data to enhance child case management efforts. The web-based feature of the new system enables secure and remote access by local health department staff. Case management features are built into the system for both child and property case management activities at the local health department level. The new system has been offered to local health departments since May 2011. Sixty-three health departments have adopted the CT DPH surveillance system and utilize it on an ongoing basis.

Important Business Rules:

Lead Screening – A person is considered to have a lead screening if he or she was tested for lead with either a venous or capillary blood draw.

Lead Poisoning - Children who are diagnosed with a blood lead level of \geq 5 µg/dL are considered to be lead poisoned. In 2013, the CT DPH lowered the case management action level from 10 µg/dL to 5 µg/dL to correspond with the Centers for Disease Control and Prevention (CDC) reference value (2012, June 7. CDC Response to Advisory Committee on Childhood Lead Poisoning Prevention Recommendations in *"Low Level Lead Exposure Harms Children: A Renewed Call of Primary Prevention"* retrieved October 31, 2012 from http://www.cdc.gov/nceh/lead/acclpp/cdc_response_lead_exposure_recs.pdf). Blood lead levels as low as 5 µg/dL have been shown to affect IQ, ability to pay attention, and academic achievement. This new reference value is based on the children ages 1-5 years who are in the highest 2.5% of children when tested for lead in their blood by CDC's National Health and Nutrition Examination Survey (NHANES).

Prior to 2013, lead poisoning was defined in Connecticut as a blood lead level of \geq 10 µg/dL (i.e. "level of concern"). All previous CT DPH published lead poisoning statistics are based on the former "level of concern".

Children who had a blood sample collected for a lead screening in 2014 are included in this report regardless of whether the test was analyzed in 2014.

When a child had more than one lead screening in CY 2014, the child was only counted once and the highest confirmed lead result was used. If the child had multiple lead screenings while living in more than one town in CY 2014, the statistics regarding the child were applied to the town where the child lived when tested with the highest confirmed lead result.

A confirmed test result is defined as one of the following:

- 1) A venous blood draw
- 2) A capillary blood draw with a result of $<5 \mu g/dL$



Photo credit: CDC/Amanda Mills

Chapter 3. BLOOD LEAD SCREENING

Blood Lead Screening in 2014

Connecticut law mandates that medical providers must conduct annual lead screening (i.e., blood lead testing) for each child 9 to 35 months of age, effective January 1, 2009. Furthermore, the law requires that any child between 36-72 months of age who has not been previously tested must also be tested by his or her medical provider, regardless of risk^{*}.

During CY 2014:

- The Lead and Healthy Homes Program received 84,101 blood lead test results for children under the age of 6
- 75,956 children under 6 years of age were tested for lead poisoning
- 56,349 (73.0%) children between 9 months and 2 years old were tested for lead poisoning

<u>Statewide Screening</u>





In CY 2014, 75,956 children under 6 years of age were tested for lead at least one time. The demographic characteristics for these children are reported in Table 3.1. This figure displays the raw data counts and doesn't represent declining screening rates. Since 2007, the number of births in Connecticut have consistently declined. The number of births dropped 13% (5510 children) from 2007 to 2013.

^{*} Conn. Gen. Stat. §19a-111g. Pediatric lead testing and risk assessment. Exemption.

Demographics	Number	Percent
Age		
0-8 months	454	0.6%
9-11 months	5511	7.3%
12-23 months	26,402	34.8%
24-35 months	24,437	32.1%
36-47 months	8,823	11.6%
48-59 months	6,734	8.9%
60-71 months	3,595	4.7%
Gender		
Male	38,702	51.0%
Female	37,176	48.9%
Unknown	78	0.1%
Race		
White	47,532	62.6%
Black	10,365	13.7%
Asian	3,542	4.7%
Native American	173	0.2%
Hawaiian or Pacific Islander	6	<0.1%
Other	1,108	1.5%
Unknown	13,230	17.4%
Ethnicity		
Hispanic	19,025	25.0%
Non-Hispanic	44,399	58.5%
Unknown	12,532	16.5%

Table 3.1. Demographics of children under 6 years of age who had a lead screening – Connecticut CY2014 (N=75,956)



Figure 3.2. Percentage of children 1-2 years of age who had a lead screening - Connecticut 1996-2014[†]

In CY 2014, 56,349 (73.0%) children between 9 months and 2 years of age were tested for lead poisoning. There was an increase of 2.0% (487 children) in the screening rate from 2013 to 2014.

<u>By Town Screening</u>

A map illustrating screening rates, by town, for children between 9 months and 2 years old is shown on the next page (Map 3.1). For detailed information on screening by town for children between 9 months and 2 years of age, see Appendix Table 8.1.

[†] Starting with the 2011 report, the CT DPH modified how screening rates were evaluated for one and two year olds. State law requires medical providers to test children between 9 to 35 months of age. As such, the CT DPH included the 9 months through 11 months test results to the analysis. In prior reports, children between 9 through 11 months of age were not counted.

Map 3.1.



Compliance with Blood Lead Testing Requirements: Screening rates among birth cohorts who turned 2 years old, 3 years old, and 6 years old in 2014

All healthcare providers in Connecticut are required to conduct annual blood lead testing for children between 9 to 35 months of age. Compliance with the law is assessed by measuring the proportion of children born in Connecticut during a given year who have had one blood lead test at age one or age two and two annual tests by age three.

In this report, the Department of Public Health Lead and Healthy Homes Program is able to evaluate the effectiveness of universal screening laws (i.e., mandated blood lead testing) for children under the age of three by assessing the screening rate among the 2011 birth cohort as the entire 2011 birth cohort reached three years of age (36 months) in 2014.

The analysis uses the total number of children who received a lead test while residing in Connecticut, regardless of where the child was born, divided by the total number of births in the given year from the Connecticut vital registry. The numerator includes all children born in the given year who had a lead test associated with a Connecticut address regardless of the child's birth state. This method accounts for population relocation. This method is adopted by the CDC's National Environmental Public Health Tracking (EPHT) Program to assess lead screening in young children among the grantee states. One unknown weakness in this method of calculation is that it may overestimate the screening rate‡, especially for smaller geographic areas.

Screening rate=

Children born in the given year who received a blood lead tests reported with a CT address # of live births in a given year in CT

http://ephtracking.cdc.gov/showIndicatorPages.action?selectedContentAreaAbbreviation=6&selectedIndicatorId=33&selected dMeasureId=)

[‡] CDC EPHT program conducted screening rate analyses at county level and the results indicated some counties had screening rates over 100%. CDC explains this by stating the limitation of the analysis method "The number of children born from Vital Statistics does not include children who have moved in or out of the area since birth. Therefore, as a denominator, it may under or over estimate the number of children in a birth cohort." (Centers for Disease Control and Prevention. Environmental Health Tracking Program and Lead Poisoning Prevention Program. Blood Lead Levels by Birth Cohort. Accessed From: <u>www.cdc.gov/ephtracking. Accessed on May 13</u>, 2016.

Blood Lead Testing By Birth Cohort:

Summary statistics for children up to three years of age

2012 Birth Cohort (turned 2 years old in 2014)

Assessment of first required screening

Among children born in 2012,

- 16.9% were tested before age 1 (defined as under 12 months)
- 70.3% were tested at age 1 (defined as 12 months to 23 months)
- 83.9% were tested by age 2 (defined as under 24 months)

2011 Birth Cohort (turned 3 years old in 2014) Assessment of required first and second annual screening

The 2011 birth cohort provides us with an opportunity to evaluate medical provider compliance with required blood lead testing for children between 9 to 35 months.

Among children born in 2011,

- 17.3% were tested before age 1 (defined as under 12 months)
- 68.7% were tested at age 1 (defined as 12 months to 23 months)
- 67.9% tested at age 2 (defined as 24 to 35 months)
- 82.5% were tested by age 2 (defined as under 24 months)
- 97.3% were tested by age 3 (defined as under 36 months)
- 53.0% were screened at age 1^{**} and again at age 2

Please refer to the illustrated graph, shown on the next page (Figures 3.3 and 3.4) which describes testing behaviors of medical providers for the 2011 birth cohort.

** Including children 9 to 11 months old



Figure 3.3. Screening rate by age at blood lead testing among 2011 birth cohort

Figure 3.4. Percentage screened for lead at least once by age and annually under age three among 2011 birth cohort



Figures 3.3 and 3.4. illustrate the data for the 2011 birth cohort described on the prior page of this report. The 2011 birth cohort provides an opportunity to evaluate medical provider compliance with required blood lead testing for children between 9 to 35 months of age.

The data indicates that healthcare providers are testing children for lead at least once by age three. However, efforts need to be made to remind healthcare providers of the requirement to test children under the age of three <u>annually</u>; 97.3% of children are tested for lead at least one time by age three, but only 53.0% are tested the required two times before turning three years of age. Despite that, the screening rate for age 2 increased 2.4% and for the required two annual screenings increased 1.5% from 2013 to 2014.

A map (Map 3.2.) illustrating by town screening rates for the 2011 birth cohort is shown on next page. Looking more closely at lead screening rates by town provides the Lead and Healthy Homes Program with the opportunity to evaluate healthcare provider practices in specific geographic areas. The program uses the data to inform and focus outreach efforts in collaboration with local health departments and district departments of health.



Map 3.2.

Percentage of Children Who Received Two Annual Lead Tests by Age 3* Connecticut Birth Cohort 2011





Figure 3.5. At least one screening by second birthday (0 to 23 months), birth cohort 2005 to 2012

Another method for evaluating the effectiveness of mandatory screening for young children is to compare blood lead testing rates between birth cohorts. Since every child should be tested annually between 9-35 months of age, then minimally, every child should have had at least one blood lead test by age two. Figure 3.5 illustrates the percentage of children who were tested for lead by their healthcare providers at least one time before turning two years old. After steady increases in the screening rates by second birthdays for birth cohorts 2005 to 2009, a slightly decreased trend is observed in the 2010 and 2011 birth cohorts and a slightly increased screening rate is observed in the 2012 birth cohort.

Birth Cohort Analysis for Children under Six

Figure 3.6. Percentage of children who have had at least one screening by 72 months of age, by year of birth – Connecticut 2000-2008

Many children, prior to 2009, were not tested for lead before reaching three years of age. If a healthcare provider determines that a child older than three and under the age of 6 has never been tested for lead, the provider is then required to test that child. Therefore, an analysis of lead testing for birth cohorts that have reached 6 years of age by 2014 should also be considered. Figure 3.6 illustrates that, over time, more children under the age of 6 are being screened by healthcare providers, indicating that providers are complying



with statutory requirements for testing older children who were previously never tested. The increase in blood lead screening among birth cohorts (illustrated by Figure 3.6 above) is also coupled with a decrease in childhood lead poisoning rates (page 18, Figure 4.2.) strongly suggesting that mandatory screening laws combining with primary prevention measures are an effective tool for reducing both the burden and incidence of childhood lead poisoning in Connecticut.

Our analysis shows 99.9% of children had at least one lead screening by 6 years of age among children born in 2008. The statistic method deployed is consistent with the CDC's methods for creating the childhood lead poisoning Nationally Consistent Data and Measures (Indicator: Blood Lead Levels by Birth Cohort.

<u>http://ephtracking.cdc.gov/showIndicatorPages.action</u>. Accessed May 13, 2016). By looking at each individual child, we identified some children born in Connecticut that did not receive a blood lead screening by age 6. We are unable to confirm if these children resided in Connecticut until age 6. As the aforementioned CDC states (page 8) screening rates could be over 100% in some geographic areas using the CDC method. However, this statistic serves as an indicator for trends and progress in the prevention of lead poisoning.

Chapter 4. PREVALENCE OF CHILDHOOD LEAD POISONING

Prevalence of childhood lead poisoning is defined as the proportion of children under six years of age with a confirmed lead test in CY 2014 whose blood lead levels were $\geq 5 \ \mu g/dL$. The previous reference value in place since 1991 was 10 $\mu g/dL$. A growing body of research identified that blood lead levels below 10 $\mu g/dL$ can harm children in terms of their IQ, cognitive functions, and academic achievement. In May 2012, the CDC recommended a new "reference value" of 5 $\mu g/dL$ ^{**}, for lead poisoning among young children. The State of Connecticut adopted the new reference value in May 2013. As such, Connecticut local health departments and district departments of health are required to initiate public health case management actions for children with a confirmed blood level of $\geq 5 \ \mu g/dL$.

Prevalence includes child lead poisoning cases that may have occurred prior to 2014, and remained lead poisoning cases into CY 2014.

Prevalence of Environmental Intervention Blood Lead Levels -

Prevalence of childhood lead poisoning cases of \geq 15 µg/dL is defined as the proportion of children under 6 years of age with a confirmed lead test in CY 2014 whose blood lead levels were \geq 15 µg/dL.

Prevalence of childhood lead poisoning cases $\geq 20 \ \mu g/dL$ is defined as the proportion of children under 6 years of age with a confirmed lead test in CY 2014 whose blood lead levels were $\geq 20 \ \mu g/dL$.

Response Policies for Actionable Blood Lead Levels in 2014 -

** "Experts now use a reference level of 5 micrograms per deciliter to identify children with blood lead levels that are much higher than most children's levels. This new level is based on the U.S. population of children ages 1-5 years who are in the highest 2.5% of children when tested for lead in their blood. The current reference value is based on NHANES data from 2007-2008 and 2009-2010. CDC will update the reference value every 4 years using the two most recent NHANES surveys." (Centers for Disease Control and Prevention. Childhood Lead Poisoning Prevention Program. Update on Blood Lead Levels in Children. Accessed from: <u>http://www.cdc.gov/nceh/lead/ACCLPP/blood_lead_levels.htm</u>. Accessed on 5/13/2016) Per Connecticut General Statutes (CGS) sections 19a-110(d), and 19a-111, local health departments are responsible for responding to reported blood lead levels of 10 µg/dL or more. With the adoption of new reference value of 5 µg/dL, all local health departments/districts were required, by July 2013, to implement new response policies related to education/outreach and case management at lower blood lead values. When a child's blood lead is at or above the reference value or a capillary 10 µg/dL, the local health department must provide the parent or guardian with information describing the dangers of lead poisoning, precautions to reduce the risk of lead poisoning, information about potential eligibility for services under the Birth-to-Three Program, and laws and regulations pertaining to lead abatement. In addition to mandated response policies, local health departments/districts also carry out lead poisoning <u>prevention</u> activities annually, enabled by CGS section 19a-111j.

A local health department/district must conduct an on-site comprehensive lead inspection and order the abatement of identified lead hazards for the dwelling unit where a child under 6 years of age has had two venous blood lead levels of 15 to 19 μ g/dL for tests taken at least 3 months apart resides. When a child's venous blood lead level reaches 20 μ g/dL, a local health department/district must conduct an epidemiological investigation (which includes an on-site comprehensive lead inspection and completion of the epidemiological investigation from [interviews with parents or caregivers to determine all potential sources of lead exposure]) and order the abatement of the identified sources of lead exposure for that child.

Some local health departments/districts opt to conduct investigations and order the abatement of identified lead hazards at lower levels of diagnosed lead poisoning. Those environmental data elements are also included in this report.





Number of children identified as lead poisoned in 2014:

- $\bullet \quad 2,284 \geq 5 \ \mu g/dL^{\dagger\dagger}$
- 510 $\geq 10~\mu g/dL^{\ddagger\ddagger}$
- $213 \ge 15 \ \mu g/dL^{\$\$}$
- 99 ≥20 μg/dL

Map 4.1 (page 22) and map 4.2 (page 23) depict the distribution of lead poisoning children with blood lead levels \geq 5 µg/dL and \geq 15 µg/dL among Connecticut towns/cities. New Haven (377 cases), Bridgeport (365 cases), Waterbury (258 cases), Hartford (164 cases), and Meriden (106 cases) are the geographic areas with highest number of lead poisoned children.

 $^{^{\}dagger\dagger}$ Inclusive with blood lead levels ${\geq}10~\mu g/dL$, ${\geq}15~\mu g/dL,$ and ${\geq}20~\mu g/dL$

^{‡‡} Inclusive with blood lead levels \geq 15 $\mu g/dL$ and \geq 20 $\mu g/dL$

Inclusive with blood lead levels $\ \geq 20 \ \mu g/dL$

Chapter 4. Prevalence of Childhood Lead Poisoning



Figure 4.2. Prevalence of children under 6 years of age who are lead poisoned, by calendar year and by blood lead level -

^{***} Data of 1995-2001 are based on analysis using number of tests instead of number of children screened as the unit of analysis.

Per CGS Sec. 19a-110(d), "On and after January 1, 2012, if one per cent or more of children in this state under the age of six report blood lead levels equal to or greater than ten micrograms per deciliter, the director shall conduct such on-site inspection and order such remediation for any child having a confirmed venous blood lead level equal to or greater than ten micrograms per deciliter in two tests taken at least three months apart". Based on the 2014 blood lead surveillance, 0.7% of children under the age of 6 in Connecticut were diagnosed with a confirmed blood lead levels $\geq 10 \ \mu g/dL$. Since CY 2009, the prevalence of childhood lead poisoning cases of $\geq 10 \ \mu g/dL$ dropped below 1%.

The prevalences for children under 6 years of age with confirmed blood lead tests \geq 5 µg/dL, \geq 10 µg/dL, \geq 15 µg/dL, and \geq 20 µg/dL are 3.0%, 0.7%, 0.3%, and 0.1% respectively and did not change from 2013 to 2014.





Figure 4.3. Number of children under 6 years of age with lead poisoning, by calendar year and by blood lead levels – Connecticut 2002-2014

Starting in 2012, blood lead levels $\geq 5 \ \mu$ g/dL were added to this graph, because of the adoption of the CDC reference value by the CT Department of Public Health. In CY 2014, 2,284 children under 6 years of age were identified with a blood lead level $\geq 5 \ \mu$ g/dL. Although the prevalence rate for blood lead levels of $\geq 5 \ \mu$ g/dL remains unchanged as 3.0% from 2012 to 2013, there is a slight increase of 9 cases from 2013 to 2014 as shown in Figure 4.3. However, we observed a decrease of 15 children diagnosed with lead levels of $\geq 10 \ \mu$ g/dL and a decrease of 12 children diagnosed with lead levels of $\geq 20 \ \mu$ g/dL from CY 2013 to CY 2014.

The number of children under 6 years of age diagnosed with lead levels of $\geq 10 \ \mu g/dL$ decreased by 1,223 children over the past 12 year period.



Figure 4.4. Percentage and number of children under 6 years of age with blood lead levels $\ge 5 \ \mu g/dL$ – Connecticut 2014

In CY 2014, a total of 2,284 children under 6 years of age were identified with blood lead levels \geq 5 µg/dL, indicating some exposure to lead hazards. Among these children, the majority (77.7% of total poisoned) have a level between 5-9 µg/dL, while 10 children (<0.1%) had a chelation level \geq 45 µg/dL. Detailed tables of this data are presented in Table 8.2 in the appendices.

Мар 4.1.

Number of Children Under 6 Years Old with Blood Lead Levels ≥5 µg/dL by Town, Connecticut 2014



Map 4.2.

Number of Children Under 6 Years Old with Blood Lead Levels ≥15 µg/dL, by Town Connecticut 2014



Chapter 5. INCIDENCE OF CHILDHOOD LEAD POISONING

Incidence of Lead Poisoning among Children Under Six Years of Age

The incidence of lead poisoning cases (i.e., new cases of lead poisoning) is defined as the proportion of children under 6 years of age who had a confirmed lead test of $\ge 5 \ \mu g/dL$ for the first time in 2014 compared to all children under 6 years of age who were tested for lead in 2014 *AND* did not have a result of $\ge 5 \ \mu g/dL$ prior to 2014.

Incidence of Environmental Intervention Blood Lead Levels -

The incidence of lead poisoning cases of $\geq 15 \ \mu g/dL$ (i.e., new cases of blood lead $\geq 15 \ \mu g/dL$) is defined as the proportion of children under 6 years of age who had a confirmed lead test of $\geq 15 \ \mu g/dL$ for the first time in 2014 compared to all children under 6 years of age who were tested for lead in 2014 *AND* who had not had a result of $\geq 15 \ \mu g/dL$ prior to 2014.

The incidence of lead poisoning cases of $\ge 20 \ \mu g/dL$ (i.e., new cases of blood lead $\ge 20 \ \mu g/dL$) is defined as the proportion of children under 6 years of age who had a confirmed lead test of $\ge 20 \ \mu g/dL$ for the first time in 2014 compared to all children under 6 years of age who were screened for lead in 2014 *AND* who did not have a result of $\ge 20 \ \mu g/dL$ prior to 2014.



Figure 5.1. Cumulative incidence of lead poisoning among children under 6 years of age, by blood lead levels – Connecticut CY 2014

Number of new cases identified and incidence of lead poisoning in 2014: • $\geq 5 \ \mu g/dL$: 1,473 (19 per 1,000, i.e. 1.9%) • $\geq 10 \ \mu g/dL$: 342 (5 per 1,000, i.e. 0.5%) • $\geq 15 \ \mu g/dL$: 164 (2 per 1,000, i.e. 0.2%) • $\geq 20 \ \mu g/dL$: 74 (1 per 1,000, i.e. 0.1%) Figure 5.2. Incidence of lead poisoning by blood lead categories among children under 6 years of age, by blood lead levels – Connecticut CY 2014



Number of new cases identified by blood lead categories

- 5-9 μg/dL: 1177
- 10-14 μg/dL: 195
- 15-19 μg/dL: 94
- 20 μg/dL: 74

Map 5.1 (page 28) and map 5.2 (page 29) depict the distribution of new cases of blood lead levels \geq 5 µg/dL and \geq 15 µg/dL among Connecticut towns/cities. New Haven (233 cases), Bridgeport (215 cases), Waterbury (167 cases), Hartford (118 cases), and Meriden (71 cases) are the geographic areas with highest number of new lead poisoned cases.

Figure 5.3. Number of existing and new cases of lead poisoning among children under 6 years of age, by blood lead levels – Connecticut CY 2014



- Of the 2,284 children who were found to have blood lead levels ≥5 µg/dL in 2014, 1,473 (64.6%) were new cases. (9% decrease in the percentage from last year)
- Of the 510 children who were found to have blood lead levels ≥10 µg/dL in 2014, 342 (67.1%) were new cases. (10% decrease in the percentage from last year)
- Of the 213 children who were found to have blood lead levels ≥15 µg/dL in 2014, 164 (77.0%) were new cases. (0.6% decrease in the percentage from last year)
- Of the 99 children who were found to have blood lead levels ≥20 µg/dL in 2014, 74 (74.7%) were new cases. (2.8% decrease in the percentage from last year)


Figure 5.4. Incidence Rate of lead poisoning among children under 6 years of age, by blood lead levels – Connecticut CY 2004-2014

Among children under 6 years of age who had a confirmed blood lead test in 2014, 1.9%, 0.5%, 0.2%, and 0.1% of children were identified as a new case with a level of $\geq 5 \ \mu g/dL$, $\geq 10 \ \mu g/dL$, $\geq 15 \ \mu g/dL$, and $\geq 20 \ \mu g/dL$ respectively. The incidence of $\geq 5 \ \mu g/dL$ dropped below 2% in 2014. A trend of gradual decreased incidence rates was observed every few years for the incidence rates of $\geq 10 \ \mu g/dL$ and $\geq 15 \ \mu g/dL$. However, the rates remains unchanged for the last 3 years and 4 years, respectively. The incidence rate for $\geq 20 \ \mu g/dL$ remains unchanged since 2009. The decrease in the $\geq 5 \ \mu g/dL$ incidence is in concert with the new action level that was implemented mid-year in 2013 and reflects the effectiveness of the expanded prevention efforts.

Мар 5.1.

Number of New Cases ≥5 µg/dL By Town Among Children Under 6 Years Old Connecticut 2014



Мар 5.2.

Number of New Cases ≥15 µg/dL By Town Among Children Under 6 Years Old Connecticut 2014



CHAPTER 6. DEMOGRAPHIC CHARACTERISTICS ASSOCIATED WITH CHILDHOOD LEAD POISONING

Race and Ethnicity

For the purposes of this report, children who were diagnosed with a blood lead level of $\geq 5 \ \mu g/dL$ are considered to be lead poisoned. The health disparities for lead poisoning among races and between Hispanic and non-Hispanic ethnicities remain in 2014. These health disparities were noticed in the first comprehensive annual lead surveillance report in 2004. The following figures portray the association between lead poisoning and race and ethnicity. They also indicate health disparities.

<u>Race</u>



Figure 6.1. Percentage of children under 6 years of age with a blood lead level $\ge 5 \mu g/dL$, by race – Connecticut CY 2014

Among children under 6 years of age who had a confirmed blood lead test in 2014, Blacks (5.8%) were twice as likely to be lead poisoned at levels of \geq 5 µg/dL when compared to Whites (2.5%) or Asians (2.4%). The health disparity for lead poisoning prevalence among Black and White children decreased slightly from 2013 (2.4 times higher in Black children) to 2014 (2.2 times).

<u>Ethnicity</u>

Figure 6.2. Percentage of children under 6 years of age with a blood lead level $\ge 5 \mu g/dL$, by ethnicity – Connecticut CY 2014



Among children under 6 years of age who had a confirmed blood lead test in 2014, Hispanics (4.0%, 757 children) were 1.5 times as likely to be lead poisoned at levels of \geq 5 µg/dL than non-Hispanics (2.6%, 1160 children). The disparity in the lead poisoning prevalence between Hispanics and non-Hispanics has not changed since 2012. Map 6.1 (page 32) depicts the number and percentage of lead poisoned Hispanic children in Connecticut towns.

Household Income below Poverty Level (Map 6.2)

A correlation between household incomes below poverty level and childhood lead poisoning is observed using geospatial illustration. Map 6.2 (page 33) depicts the overlay of lead poisoning cases \geq 5 µg/dL and household incomes below poverty level. Bridgeport, Hartford, New Haven, and Waterbury are the locations that have the highest number of households with incomes below poverty level, as well as the highest rates of childhood lead poisoning.

Pre-1978 housing (Map 6.3)

Lead-based paints were banned for residential use in 1978. The U.S. Environmental Protection Agency (EPA) reports that 83% of homes built prior to 1980 contain some lead-based paint (*Report on the National Survey of Lead-Based Paint in Housing, Base Report*, EPA, 1995. EPA 747-R-95-003.). Older houses have an even higher probability of containing lead-based paint. In Connecticut, 45% of the housing stock was built before 1960 (2010-2014 American Community Survey 5-Year Estimates, US Census, 2015). Map 6.3 (page 34) depicts childhood lead poisoning cases and pre-1960 housing.

Мар 6.1.

Number and Percentage of Children Lead Poisoned Among Hispanic Children Under Age 6, Connecticut 2014



757 (4.0%)

Percent poisoned among Non-Hispanic Children: 2.6%. Towns with less than 15 children tested were not calculated for percentage.

Map 6.2



Number of Lead Poisoned Children with Blood Lead Levels ≥5 µg/dL &

Number of Lead Poisoned Children with Blood Lead Levels ≥5 µg/dL & Number of Housing Units Built before 1960, Connecticut 2014



CHAPTER 7. ENVIRONMENTAL INVESTIGATIONS FOR CHILDREN WITH ENVIRONMENTAL INTERVENTION BLOOD LEAD LEVELS

Per CGS sections 19a-110(d), and 19a-111, and the Lead Poisoning Prevention and Control Regulations (19a-111 et. seq.), local health departments/districts are required to carry out comprehensive lead inspections at the residences of lead poisoned children with environmental intervention blood lead levels (EIBLL) (defined in the next paragraph). A comprehensive lead inspection includes the sampling of representative painted (or coated) surfaces of a dwelling unit, as well as the collection and analysis of dust, water, and exposed soil at the property.

When a child's venous blood lead level is reported as \geq 20 μ g/dL (EIBLL), a local health department/district must conduct an epidemiological investigation and order the elimination (abatement) of the sources of lead exposure for that child. In addition, when a child's venous blood lead levels are reported as two 15-19 µg/dL tests taken at least three months apart (EIBLL), a local health department/district must conduct an on-site inspection to identify the source of lead exposure and order lead abatement if hazards are identified. The investigation to determine the sources of lead exposure may result in the health department conducting a lead inspection at more than one property, if that child is routinely cared for at alternate locations. Additionally, if a lead poisoned child moves to a new dwelling unit and

subsequent blood test results are $\ge 20 \ \mu g/dL$, the new dwelling unit must also be inspected for lead hazards and lead abatement ordered when hazards are identified. If a child resides in more than one dwelling unit, multiple investigations are conducted for all the dwelling units where the lead poisoned child resides.

Some local health departments/districts opt to conduct investigations and order lead abatement at lower levels of diagnosed lead poisoning. Those environmental data elements are also included in this report.

In 2014, 120 environmental cases were opened for children who had blood lead levels that triggered environmental intervention.

Among the 120 environmental cases opened, 113 properties required a comprehensive or limited lead inspection; seven of the homes were built after 1978. Of the 113 properties, 93 units received a comprehensive lead inspection, 18 properties received a limited inspection, and the child was not found at two of the properties. In order for a comprehensive lead inspection to be considered complete, the report must minimally include paint testing, dust sampling, water analysis, and soil analysis results (where applicable) while for limited testing, the report must include dust sampling, water analysis, and soil analysis results. The analyses of the environmental findings below are based on the environmental investigation reports for the 111 dwelling units for which environmental investigations were conducted for lead poisoned children and where lead inspection reports were provided to the CT DPH.



<u>Housing style</u>

Figure 7.1. Percentage of housing style among inspected housing units

Of the 111 dwelling units inspected, 87 (77.7%) were multiple-unit dwellings, 11 (9.8%) were single family attached dwellings, and 14 (12.5%) were single family detached dwellings.

Environmental lead hazards

Children are most commonly exposed to lead from lead-based paint hazards. Lead-based paint hazards include defective painted surfaces, friction and chewable surfaces, lead-contaminated dust on interior floors and surfaces, and lead contaminated soil. Children are less frequently poisoned from water, herbal or ethnic remedies, imported cosmetics, toys, and other miscellaneous lead-contaminated products and foods. A comprehensive lead inspection minimally consists of a comprehensive lead paint inspection, as well as dust, soil, and water sampling and analyses. If other less common sources of lead exposure are identified during a comprehensive lead inspection or through conversations with a caregiver, those media are also sampled and analyzed. The Lead and Healthy Homes Program collects, analyzes, and reports on data for the most common sources of lead exposure.

Of the 111 dwelling units for which lead inspection results were received, 104 (93.7%) were identified with at least one environmental lead hazard, and 7 (6.3%) had no identified environmental lead hazards.

Environmental lead hazards identified by source



Figure 7.2. Percentage of environmental lead hazards identified by source

Of the 111 dwelling units investigated and reported, a total of 93 (83.8%) were identified with a lead-based paint hazard, 49 (44.1%) were identified with a lead dust hazard, 26 (23.4%) were identified with a lead soil hazard, and 1 (0.9%) was identified with a lead in drinking water hazard from a private well.

Environmental lead hazards identified by existence of lead paint hazard



Figure 7.3. Percentage of environmental lead hazards related to paint or non-paint hazards

Of the 111 dwelling units for which investigations were completed, 45 (40.5%) dwelling units were identified with lead-based paint hazards only, 48 (43.2%) dwelling units were identified with both lead-based paint and non-paint hazards^{†††}, 11 (9.9%) were identified with non-paint hazards only, and 7 (6.3%) had no environmental lead hazards.

^{†††} Non-paint hazards consist of lead dust, lead in soil, or lead in water.

Reported lead abatement and management activities

A health department/district is required to issue an order to the property owner to eliminate the lead-based paint hazards identified during the comprehensive lead inspection. The dwelling unit, common areas, ancillary structures (garages/sheds), and exterior exposed soil areas may undergo lead abatement if a lead hazard was identified on the property during the comprehensive lead inspection. Intact lead-based paint surfaces that remain in the home must be placed on a management plan to ensure that they remain intact, and do not become a lead hazard and future source of exposure for occupants.

Through the lead inspection report information provided to the CT DPH, the Lead and Healthy Homes Program identified 385 dwelling units (including cases carried forward from previous years) that remained open environmental cases in 2014.

Figure 7.4. Abatement and management activities among dwelling units requiring abatement of lead hazards



As of 2014, 385 dwelling units were required to perform abatement of lead hazards. In 2014, lead abatement was initiated in 61 units and lead abatement was completed in 75 units; leaving 310 required abatement projects to carry over into 2015.





Figure 7.6. Distribution of time required to complete abatement among dwelling units where abatement of lead hazards was completed in 2014

Among the 75 dwelling units where lead abatement was completed in 2014, it took property owners between 7 days to 10 years to complete the work. The broad range of time it takes to complete abatement is dependent on factors such as the level of lead abatement needed at a property, the willingness of a property owner to comply with health orders and the enforcement of orders issued by a Director of Health.

Forty-four of the 75 (58.6%) property owners completed lead abatement within



one year. The average time to complete lead abatement for these properties was 1 year and 7 months.



Figure 7.7. Lead management plans among dwelling units where lead abatement was completed in 2014

Intact lead-based paint and encapsulated surfaces must be placed on a lead management plan. Of the 75 dwelling units for which lead abatement was completed in 2014, 40 (53.3%) of the dwelling units required lead management plans, 27 (36.0%) did not require lead management plans, and the status of 8 (10.7%) dwelling units was not reported.

Chapter 8. APPENDICES

		% Housing stock built before	Number of Children Under Age 6 Screened	Population* Age 9 months- 2 yrs.	Number and Percent of C 9 ms-2 yrs Screei	ned
		1960 ^β	Number		Number	Percent
	Connecticut					-
	CY 2002*		69,857	88,094	40,452	45.9
	CY 2003*		67,592	88,094	38,742	44
	CY 2004*		68,606	88,094	39,894	45.3
	CY 2005*		69,263	88,094	42,954	48.8
CY 2006*			69,315	88,094	43,193	49
CY 2007*			72,088	88,094	45,037	51.1
CY 2008*			76,722	88,094	48,594	55.2
	CY 2009*		85,354	88,094	54,106	61.4
	CY 2010*		82,194	79,676	52,744	66.2
	CY 2011		77,423	82,765	55,960	67.6
	CY 2012		75,569	80,411	54,524	67.8
	CY 2013		75,749	78,288	55,862	71.4
	CY 2014		75,956	77,163	55,862	71.4
	By-Town, CY 2013					
1	ANDOVER	465	24	41	20	49
2	ANSONIA	5,092	498	467	393	84
3	ASHFORD	428	69	85	68	80
4	AVON	1,296	229	244	206	84
5	5 BARKHAMSTED 317		45	42	42	100
6	6 BEACON FALLS 887		85	90	80	89
7	7 BERLIN 2,883		215	327	208	64
8	BETHANY	542	71	74	70	95

Table 8.1. By town screening for children under age 6 and 9 months to 2 years old - Connecticut CY 2014

			Number of Children Under Age 6 Screened	Population* Age 9 months- 2 yrs.	Number and Percent of C 9 ms-2 yrs Scree	hildren Age ned
		% Housing stock built before 1960 ^β	Number		Number	Percent
9	BETHEL	2,552	332	310	295	95
10	BETHLEHEM	477	42	39	36	92
11	BLOOMFIELD	3,166	305	362	273	75
12	BOLTON	849	66	88	65	74
13	BOZRAH	378	20	36	19	53
14	BRANFORD	5,460	425	447	409	91
15	BRIDGEPORT	37,586	6264	4409	3741	85
16	BRIDGEWATER	413	14	11	12	100
17	BRISTOL	11,638	1121	1369	962	70
18	BROOKFIELD	1,572	218	238	202	85
19	BROOKLYN	1,068	127	130	99	76
20	BURLINGTON	690	135	158	120	76
21	CANAAN	383	8	20	7	35
22	CANTERBURY	421	75	87	57	66
23	CANTON	1,733	138	163	132	81
24	CHAPLIN	405	21	34	20	59
25	CHESHIRE	3,108	304	346	243	70
26	CHESTER	959	47	53	42	79
27	CLINTON	1,937	181	202	176	87
28	COLCHESTER	1,244	197	310	190	61
29	COLEBROOK	336	12	11	10	91
30	COLUMBIA	743	59	102	64	63
31	CORNWALL	582	8	11	8	73
32	COVENTRY	2,306	185	242	188	78
33	CROMWELL	1,613	248	341	271	79

			Number of Children Under Age 6 Screened	Population* Age 9 months- 2 yrs.	Number and Percent of C 9 ms-2 yrs Scree	hildren Age ned
		% Housing stock built before 1960 ^β	Number		Number	Percent
34	DANBURY	12,673	2325	2122	1799	85
35	DARIEN	4,056	418	463	471	100
36	DEEP RIVER	1,253	57	69	50	72
37	DERBY	3,262	293	316	286	91
38	DURHAM	814	95	123	104	85
39	EAST GRANBY	588	85	101	72	71
40	EAST HADDAM	1,470	114	141	121	86
41	EAST HAMPTON	1,755	190	302	230	76
42	EAST HARTFORD	11,380	1162	1371	963	70
43	EAST HAVEN	5,547	492	544	431	79
44	EAST LYME	2,892	235	236	223	94
45	EAST WINDSOR	1,896	182	275	164	60
46	EASTFORD	267	21	23	17	74
47	EASTON	1,009	91	85	86	100
48	ELLINGTON	1,964	278	299	255	85
49	ENFIELD	8,055	714	758	557	73
50	ESSEX	1,253	64	74	59	80
51	FAIRFIELD	12,649	954	989	873	88
52	FARMINGTON	2,701	321	425	287	68
53	FRANKLIN	261	14	28	14	50
54	GLASTONBURY	4,137	366	486	343	71
55	GOSHEN	303	30	35	30	86
56	GRANBY	1,353	108	154	92	60
57	GREENWICH	12,607	1124	1233	1011	82
58	GRISWOLD	1,452	207	235	166	71

		Screened		Population* Age 9 months- 2 yrs.	Number and Percent of C 9 ms-2 yrs Scree	hildren Age ned
		% Housing stock built before 1960 ^β	Number		Number	Percent
59	GROTON	5,901	1054	1183	883	75
60	GUILFORD	2,648	206	245	196	80
61	HADDAM	1,281	107	150	122	81
62	HAMDEN	12,320	1046	1254	932	74
63	HAMPTON	308	25	25	23	92
64	HARTFORD	34,801	4648	4144	3388	82
65	HARTLAND	326	21	26	16	62
66	HARWINTON	896	64	74	61	82
67	HEBRON	686	87	143	89	62
68	KENT	594	23	37	22	59
69	KILLINGLY	3,012	379	313	275	88
70	KILLINGWORTH	484	58	75	58	77
71	LEBANON	981	71	111	61	55
72	LEDYARD	1,128	275	283	256	90
73	LISBON	419	31	59	33	56
74	LITCHFIELD	2,183	95	100	87	87
75	LYME & OLD LYME β	558	109	107	103	96
76	MADISON	1,891	169	202	164	81
77	MANCHESTER	12,399	1331	1691	1219	72
78	MANSFIELD	2,022	134	180	135	75
79	MARLBOROUGH	383	56	95	63	66
80	MERIDEN	14,954	2073	1619	1284	79
81	MIDDLEBURY	1,200	122	109	89	82
82	MIDDLEFIELD	871	57	62	58	94

			Number of Children Under Age 6 Screened	Population* Age 9 months- 2 yrs.	Number and Percent of Children Age 9 ms-2 yrs Screened		
		% Housing stock built before 1960 ^β	Number		Number	Percent	
83	MIDDLETOWN	7,794	981	1251	1068	85	
84	MILFORD	10,931	896	1021	789	77	
85	MONROE	1,671	265	272	237	87	
86	MONTVILLE	2,079	312	362	251	69	
87	MORRIS	683	29	30	23	77	
88	NAUGATUCK	5,970	685	780	531	68	
89	NEW BRITAIN	20,260	2591	2381	1977	83	
90	NEW CANAAN	2,728	344	400	405	100	
91	NEW FAIRFIELD	2,026	193	169	178	100	
92	NEW HARTFORD	1,150	82	103	75	73	
93	NEW HAVEN	37,200	4623	3854	3139	81	
94	NEW LONDON	7,702	710	722	554	77	
95	NEW MILFORD	3,173	464	506	423	84	
96	NEWINGTON	4,760	321	604	324	54	
97	NEWTOWN	2,919	300	336	279	83	
98	NORFOLK	557	17	40	16	40	
99	NORTH BRANFORD	1,710	174	114	169	100	
100	NORTH CANAAN	1,078	31	129	26	20	
101	NORTH HAVEN	4,018	323	238	329	100	
102	NORTH STONINGTON	685	75	229	64	28	
103	NORWALK	18,786	2428	2550	2072	81	
104	NORWICH	10,597	1041	1113	743	67	
105	OLD LYME & LYME β	2,648	109	107	103	96	
106	OLD SAYBROOK	2,410	100	124	90	73	

		Screened		Population* Age 9 months- 2 yrs.	Number and Percent of C 9 ms-2 yrs Scree	hildren Age ned
		% Housing stock built before 1960 ^β	Number		Number	Percent
107	ORANGE	2,278	182	209	171	82
108	OXFORD	1,195	181	213	188	88
109	PLAINFIELD	2,924	307	324	250	77
110	PLAINVILLE	3,789	288	392	259	66
111	PLYMOUTH	2,338	153	209	122	58
112	POMFRET	537	70	57	54	95
113	PORTLAND	2,155	149	197	160	81
114	PRESTON	631	56	65	46	71
115	PROSPECT	967	126	146	106	73
116	PUTNAM	2,422	232	209	172	82
117	REDDING	1,175	98	126	111	88
118	RIDGEFIELD	2,357	421	386	439	100
119	ROCKY HILL	1,555	390	426	410	96
120	ROXBURY	332	17	21	13	62
121	SALEM	372	44	67	36	54
122	SALISBURY	1,404	14	38	15	39
123	SCOTLAND	205	13	27	10	37
124	SEYMOUR	2,861	325	357	332	93
125	SHARON	1,057	11	24	10	42
126	SHELTON	4,343	641	758	677	89
127	SHERMAN	626	38	35	34	97
128	SIMSBURY	2,658	262	351	239	68
129	SOMERS	1,082	122	110	104	95
130	SOUTH WINDSOR	2,579	336	415	299	72
131	SOUTHBURY	1,330	196	212	175	83

			Number of Children Under Age 6 Screened		Number and Percent of C 9 ms-2 yrs Scree	
		% Housing stock built before 1960 ^β	Number		Number	Percent
132	SOUTHINGTON	5,574	509	718	452	63
133	SPRAGUE	725	61	70	50	71
134	STAFFORD	2,727	193	201	172	86
135	STAMFORD	19,624	3738	4197	3707	88
136	STERLING	335	56	46	43	93
137	STONINGTON	4,591	194	160	165	100
138	STRATFORD	12,674	1147	1171	982	84
139	SUFFIELD	1,614	175	138	147	100
140	THOMASTON	1,280	131	123	104	85
141	THOMPSON	1,772	183	118	145	100
142	TOLLAND	1,053	243	221	207	94
143	TORRINGTON	8,629	683	757	604	80
144	TRUMBULL	5,331	583	553	547	99
145	UNION	115	10	13	8	62
146	VERNON	5,091	647	791	593	75
147	VOLUNTOWN	394	29	37	22	59
148	WALLINGFORD	7,934	809	816	670	82
149	WARREN	335	5	13	5	38
150	WASHINGTON	1,251	38	35	31	89
151	WATERBURY	26,659	4625	3186	2480	78
152	WATERFORD	4,309	254	276	228	83
153	WATERTOWN	4,080	350	345	260	75
154	WEST HARTFORD	17,599	1024	1266	913	72
155	WEST HAVEN	11,790	1410	1393	1093	78
156	WESTBROOK	1,465	65	93	61	66

			Number of Children Under Age 6 Screened	Population* Age 9 months- 2 yrs.	Number and Percent of Children 9 ms-2 yrs Screened	
		% Housing stock built before 1960 ^β	Number		Number	Percent
157	WESTON	1,426	148	119	151	100
158	WESTPORT	4,905	439	360	418	100
159	WETHERSFIELD	5,693	421	600	435	73
160	WILLINGTON	547	62	99	60	61
161	WILTON	1,852	275	306	318	100
162	WINCHESTER	3,245	187	195	153	78
163	WINDHAM	4,945	483	617	429	70
164	WINDSOR	2,886	414	552	367	66
165	WINDSOR LOCKS	4,824	184	236	158	67
166	WOLCOTT	2,370	211	236	150	64
167	WOODBRIDGE	1,193	118	131	105	80
168	WOODBURY	1,395	106	132	92	70
169	WOODSTOCK	1,184	120	78	92	100

NOTE: Children are counted only once, regardless of the number of times they are tested.

- Population estimate is based on vital registry for birth cohorts 2011 and 2012. Children 9 months to 11 months old who were tested in 2014 were added to the population denominator.
- * Screening rates for CY 2002 to CY 2010 are based on number of children who were 1 or 2 years old at time of screening. These statistics were reported in previous annual reports
- ‡ Screening rate rounded down to 100%.
- ^β Lyme and Old Lyme are combined for number and percentage of children tested because residents of Lyme are often reported as residing in Old Lyme.

Table 8.2. Percent of Children with a Blood Lead Level 0-4 µg/dL and Cumulative Percent of Children with a Blood lead

Level of ≥5 µg/dL among Children under 6 Years of Age, by Blood Lead Categories

				umbers and hildren Ageo						d Test		
CY	2014 Data	Number of Children with	0.4	ug/dl	Cumulative Statistics							
(<6	years old)	Confirmed Test	0–4 μg/dL		≥ 5 μ g/dL		≥ 10 μ g/dL		≥15 μg/	/dL	≥ 20 µg	J/dL
			Number	%	Number	%	Number	%	Number	%	Number	%
	Connecticut											
	CY 2002	69,062					1,733	2.5			353	0.5
	CY 2003	66,847					1,445	2.2			272	0.4
	CY 2004	67,688					1,472	2.2			288	0.4
	CY 2005	68,757					1,263	1.8			212	0.3
	CY 2006	68,828					1,082	1.6	415	0.6	215	0.3
	CY 2007	71,627					1,020	1.4	445	0.6	208	0.3
	CY 2008	76,367					1,054	1.4	448	0.6	221	0.3
	CY 2009	85,138					737	0.9	308	0.4	153	0.2
	CY 2010	81,999	76.598	93.4	5,401*	6.6*	743	0.9	315	0.4	156	0.2
	CY 2011	77,306	72,322	93.6	4,984*	6.4*	619	0.8	264	0.3	111	0.1
	CY2012	73,785	71,524	96.9	2,261	3.1	522	0.7	196	0.3	107	0.1
	CY2013	74,636	72,361	97.0	2,275	3.0	525	0.7	214	0.3	111	0.1
	CY2014	75,368	73,084	97.0	2,284	3.0	510	0.7	213	0.3	99	0.1
	By-Town											
1	ANDOVER	24	23	95.8	1	4.2	1	4.2	0	0	0	0
2	ANSONIA	497	464	93.4	33	6.6	8	1.6	4	0.8	3	0.6
3	ASHFORD	69	68	98.6	1	1.4	0	0	0	0	0	0

* Capillary tests ³ 5 mg/dL were treated as confirmatory tests based on previous confirmatory definition

				umbers and hildren Ageo						d Test			
		Number of Children with		Cumulative Statistics									
	2014 Data years old)	Confirmed Test	0–4 µg/dL		≥ 5 μg/dL		≥ 10 µg/dL		≥ 15 µg/dL		≥ 20 µg	g/dL	
			Number	%	Number	%	Number	%	Number	%	Number	%	
4	AVON	227	227	100	0	0	0	0	0	0	0	0	
	BARKHAMSTED	44	44	100	0	0	0	0	0	0	0	0	
	BEACON FALLS	84	82	97.6	2	2.4	1	1.2	1	1.2	0	0	
7	BERLIN	215	213	99.1	2	0.9	0	0	0	0	0	0	
8	BETHANY	69	68	98.6	1	1.4	0	0	0	0	0	0	
	BETHEL	329	325	98.8	4	1.2	1	0.3	0	0	0	0	
10	BETHLEHEM	42	41	97.6	1	2.4	0	0	0	0	0	0	
11	BLOOMFIELD	296	286	96.6	10	3.4	0	0	0	0	0	0	
12	BOLTON	66	65	98.5	1	1.5	0	0	0	0	0	0	
13	BOZRAH	20	18	90	2	10	0	0	0	0	0	0	
14	BRANFORD	422	416	98.6	6	1.4	3	0.7	2	0.5	1	0.2	
15	BRIDGEPORT	6,211	5,846	94.1	365	5.9	70	1.1	30	0.5	20	0.3	
16	BRIDGEWATER	14	14	100	0	0	0	0	0	0	0	0	
17	BRISTOL	1,116	1,086	97.3	30	2.7	4	0.4	2	0.2	1	0.1	
18	BROOKFIELD	217	216	99.5	1	0.5	0	0	0	0	0	0	
19	BROOKLYN	127	120	94.5	7	5.5	3	2.4	3	2.4	1	0.8	
20	BURLINGTON	134	131	97.8	3	2.2	0	0	0	0	0	0	
21	CANAAN	8	6	75	2	25	2	25	0	0	0	0	
22	CANTERBURY	75	74	98.7	1	1.3	1	1.3	0	0	0	0	
23	CANTON	138	137	99.3	1	0.7	0	0	0	0	0	0	
24	CHAPLIN	21	21	100	0	0	0	0	0	0	0	0	
25	CHESHIRE	304	304	100	0	0	0	0	0	0	0	0	
26	CHESTER	46	44	95.7	2	4.3	0	0	0	0	0	0	
27	CLINTON	180	179	99.4	1	0.6	0	0	0	0	0	0	
28	COLCHESTER	196	193	98.5	3	1.5	1	0.5	1	0.5	0	0	

				umbers and I nildren Aged						d Test		
cv	2014 Data	Number of Children with							Statistics			
	years old)	Confirmed Test	0–4 μg/dL		≥ 5 μg/dL ≥ 10 μ		≥ 10 μg	/dL	≥ 15 μg/dL		≥ 20 μ g/dL	
,			Number	%	Number	%	Number	%	Number	%	Number	%
29	COLEBROOK	12	12	100	0	0	0	0	0	0	0	0
30	COLUMBIA	57	57	100	0	0	0	0	0	0	0	0
31	CORNWALL	8	7	87.5	1	12.5	0	0	0	0	0	0
32	COVENTRY	183	181	98.9	2	1.1	1	0.5	0	0	0	0
33	CROMWELL	247	247	100	0	0	0	0	0	0	0	0
34	DANBURY	2,314	2,266	97.9	48	2.1	10	0.4	4	0.2	0	0
35	DARIEN	417	417	100	0	0	0	0	0	0	0	0
36	DEEP RIVER	56	55	98.2	1	1.8	0	0	0	0	0	0
37	DERBY	292	280	95.9	12	4.1	2	0.7	2	0.7	1	0.3
38	DURHAM	94	94	100	0	0	0	0	0	0	0	0
39	EAST GRANBY	84	84	100	0	0	0	0	0	0	0	0
40	EAST HADDAM	113	112	99.1	1	0.9	0	0	0	0	0	0
41	EAST HAMPTON	188	187	99.5	1	0.5	0	0	0	0	0	0
42	EAST HARTFORD	1,157	1,136	98.2	21	1.8	5	0.4	2	0.2	2	0.2
43	EAST HAVEN	488	477	97.7	11	2.3	1	0.2	0	0	0	0
44	EAST LYME	232	232	100	0	0	0	0	0	0	0	0
45	EAST WINDSOR	181	180	99.4	1	0.6	0	0	0	0	0	0
46	EASTFORD	21	21	100	0	0	0	0	0	0	0	0
47	EASTON	91	90	98.9	1	1.1	0	0	0	0	0	0
48	ELLINGTON	275	271	98.5	4	1.5	0	0	0	0	0	0
49	ENFIELD	705	695	98.6	10	1.4	2	0.3	1	0.1	0	0
50	ESSEX	62	61	98.4	1	1.6	0	0	0	0	0	0
51	FAIRFIELD	948	938	98.9	10	1.1	2	0.2	1	0.1	0	0
52	FARMINGTON	318	316	99.4	2	0.6	0	0	0	0	0	0
53	FRANKLIN	14	14	100	0	0	0	0	0	0	0	0

				umbers and hildren Aged						d Test		
cv	2014 Data	Number of Children with							Statistics			
	years old)	Confirmed Test	0-4	μg/dL	≥ 5 μg	/dL	≥ 10 µg	ı/dL	≥ 15 μg/	/dL	≥ 20 μg	g/dL
i i			Number	%	Number	%	Number	%	Number	%	Number	%
54	GLASTONBURY	366	363	99.2	3	0.8	1	0.3	1	0.3	0	0
55	GOSHEN	30	30	100	0	0	0	0	0	0	0	0
56	GRANBY	104	104	100	0	0	0	0	0	0	0	0
57	GREENWICH	1,110	1,104	99.5	6	0.5	4	0.4	2	0.2	1	0.1
58	GRISWOLD	204	202	99	2	1	0	0	0	0	0	0
59	GROTON	1,048	1,041	99.3	7	0.7	2	0.2	0	0	0	0
60	GUILFORD	205	205	100	0	0	0	0	0	0	0	0
61	HADDAM	104	103	99	1	1	1	1	1	1	0	0
62	HAMDEN	1,041	1,011	97.1	30	2.9	13	1.2	5	0.5	2	0.2
63	HAMPTON	23	22	95.7	1	4.3	0	0	0	0	0	0
64	HARTFORD	4,619	4,455	96.4	164	3.6	40	0.9	23	0.5	8	0.2
65	HARTLAND	21	21	100	0	0	0	0	0	0	0	0
66	HARWINTON	62	62	100	0	0	0	0	0	0	0	0
67	HEBRON	86	86	100	0	0	0	0	0	0	0	0
68	KENT	22	20	90.9	2	9.1	0	0	0	0	0	0
69	KILLINGLY	377	360	95.5	17	4.5	4	1.1	3	0.8	1	0.3
70	KILLINGWORTH	56	56	100	0	0	0	0	0	0	0	0
71	LEBANON	71	70	98.6	1	1.4	0	0	0	0	0	0
72	LEDYARD	273	271	99.3	2	0.7	0	0	0	0	0	0
73	LISBON	31	31	100	0	0	0	0	0	0	0	0
74	LITCHFIELD	92	90	97.8	2	2.2	0	0	0	0	0	0
75	LYME	10	8	80	2	20	0	0	0	0	0	0
76	MADISON	169	168	99.4	1	0.6	0	0	0	0	0	0
77	MANCHESTER	1,320	1,282	97.1	38	2.9	8	0.6	4	0.3	3	0.2
78	MANSFIELD	132	131	99.2	1	0.8	0	0	0	0	0	0

				umbers and hildren Aged						d Test		
CY	2014 Data	Number of Children with					Cu	mulative	Statistics			
	years old)	Confirmed Test	0–4	μg/dL	≥ 5 μg	/dL	≥ 10 µg	/dL	≥ 15 μg/	/dL	≥ 20 μg	/dL
			Number	%	Number	%	Number	%	Number	%	Number	%
79	MARLBOROUGH	56	56	100	0	0	0	0	0	0	0	0
80	MERIDEN	2,060	1,954	94.9	106	5.1	23	1.1	11	0.5	8	0.4
81	MIDDLEBURY	122	122	100	0	0	0	0	0	0	0	0
82	MIDDLEFIELD	57	57	100	0	0	0	0	0	0	0	0
83	MIDDLETOWN	976	954	97.7	22	2.3	4	0.4	1	0.1	1	0.1
84	MILFORD	892	885	99.2	7	0.8	0	0	0	0	0	0
85	MONROE	265	265	100	0	0	0	0	0	0	0	0
86	MONTVILLE	312	307	98.4	5	1.6	2	0.6	1	0.3	0	0
87	MORRIS	29	28	96.6	1	3.4	0	0	0	0	0	0
88	NAUGATUCK	683	665	97.4	18	2.6	5	0.7	2	0.3	1	0.1
89	NEW BRITAIN	2,572	2,488	96.7	84	3.3	13	0.5	5	0.2	1	0
90	NEW CANAAN	342	340	99.4	2	0.6	0	0	0	0	0	0
91	NEW FAIRFIELD	192	191	99.5	1	0.5	1	0.5	0	0	0	0
92	NEW HARTFORD	82	79	96.3	3	3.7	0	0	0	0	0	0
93	NEW HAVEN	4,543	4,166	91.7	377	8.3	100	2.2	33	0.7	13	0.3
94	NEW LONDON	696	655	94.1	41	5.9	9	1.3	3	0.4	0	0
95	NEW MILFORD	462	452	97.8	10	2.2	1	0.2	1	0.2	0	0
96	NEWINGTON	320	316	98.8	4	1.3	2	0.6	1	0.3	0	0
97	NEWTOWN	297	294	99	3	1	1	0.3	0	0	0	0
98	NORFOLK	17	15	88.2	2	11.8	0	0	0	0	0	0
99	NORTH BRANFORD	174	174	100	0	0	0	0	0	0	0	0
100	NORTH CANAAN	31	28	90.3	3	9.7	0	0	0	0	0	0
101	NORTH HAVEN	318	315	99.1	3	0.9	0	0	0	0	0	0
102	NORTH STONINGTON	73	72	98.6	1	1.4	0	0	0	0	0	0

				umbers and hildren Ageo						d Test		
		Number of							Statistics			
	2014 Data years old)	Children with Confirmed Test	0–4	μg/dL	≥ 5 μg	ı/dl	≥ 10 µg	ı/dl	≥ 15 µg	/dl	≥ 20 µg	n/dl
(~0	years only		Number	%	Number	%	Number	%	Number	%	Number	%
103	NORWALK	2,419	2,376	98.2	43	1.8	8	0.3	2	0.1	1	0
104	NORWICH	1,034	985	95.3	49	4.7	14	1.4	5	0.5	2	0.2
105	OLD LYME	98	96	98	2	2	1	1	1	1	0	0
106	OLD SAYBROOK	100	100	100	0	0	0	0	0	0	0	0
107	ORANGE	181	181	100	0	0	0	0	0	0	0	0
108	OXFORD	181	180	99.4	1	0.6	0	0	0	0	0	0
109	PLAINFIELD	305	281	92.1	24	7.9	4	1.3	3	1	1	0.3
110	PLAINVILLE	288	287	99.7	1	0.3	0	0	0	0	0	0
111	PLYMOUTH	153	145	94.8	8	5.2	3	2	0	0	0	0
112	POMFRET	68	65	95.6	3	4.4	0	0	0	0	0	0
113	PORTLAND	149	146	98	3	2	0	0	0	0	0	0
114	PRESTON	55	55	100	0	0	0	0	0	0	0	0
115	PROSPECT	125	124	99.2	1	0.8	1	0.8	1	0.8	1	0.8
116	PUTNAM	228	218	95.6	10	4.4	0	0	0	0	0	0
117	REDDING	98	98	100	0	0	0	0	0	0	0	0
118	RIDGEFIELD	419	416	99.3	3	0.7	0	0	0	0	0	0
119	ROCKY HILL	388	385	99.2	3	0.8	0	0	0	0	0	0
120	ROXBURY	17	17	100	0	0	0	0	0	0	0	0
121	SALEM	44	44	100	0	0	0	0	0	0	0	0
122	SALISBURY	14	14	100	0	0	0	0	0	0	0	0
123	SCOTLAND	12	12	100	0	0	0	0	0	0	0	0
124	SEYMOUR	325	323	99.4	2	0.6	1	0.3	1	0.3	0	0
125	SHARON	11	10	90.9	1	9.1	0	0	0	0	0	0
126	SHELTON	638	630	98.7	8	1.3	1	0.2	0	0	0	0
127	SHERMAN	38	38	100	0	0	0	0	0	0	0	0

_		Number of	among Ch				Cu	mulative	Statistics			
	2014 Data years old)	Children with Confirmed Test	0–4	μ g/dL	≥ 5 μg	/dL	≥ 10 µg	/dL	≥ 15 µg/	/dL	≥ 20 µg	a/dL
(40	youro oray		Number	%	Number	%	Number	%	Number	%	Number	%
128	SIMSBURY	261	260	99.6	1	0.4	0	0	0	0	0	0
129	SOMERS	118	116	98.3	2	1.7	1	0.8	1	0.8	0	0
130	SOUTH WINDSOR	335	332	99.1	3	0.9	1	0.3	0	0	0	0
131	SOUTHBURY	195	194	99.5	1	0.5	0	0	0	0	0	0
132	SOUTHINGTON	506	502	99.2	4	0.8	2	0.4	2	0.4	1	0.2
133	SPRAGUE	61	58	95.1	3	4.9	1	1.6	1	1.6	1	1.6
134	STAFFORD	187	181	96.8	6	3.2	1	0.5	0	0	0	0
135	STAMFORD	3,718	3,682	99	36	1	10	0.3	3	0.1	2	0.1
136	STERLING	55	55	100	0	0	0	0	0	0	0	0
137	STONINGTON	194	190	97.9	4	2.1	0	0	0	0	0	0
138	STRATFORD	1,142	1,128	98.8	14	1.2	2	0.2	1	0.1	0	0
139	SUFFIELD	173	170	98.3	3	1.7	1	0.6	0	0	0	0
140	THOMASTON	131	130	99.2	1	0.8	0	0	0	0	0	0
141	THOMPSON	183	172	94	11	6	0	0	0	0	0	0
142	TOLLAND	243	242	99.6	1	0.4	1	0.4	1	0.4	0	0
143	TORRINGTON	671	640	95.4	31	4.6	8	1.2	3	0.4	1	0.1
144	TRUMBULL	583	579	99.3	4	0.7	0	0	0	0	0	0
145	UNION	10	10	100	0	0	0	0	0	0	0	0
146	VERNON	645	624	96.7	21	3.3	2	0.3	0	0	0	0
147	VOLUNTOWN	29	28	96.6	1	3.4	0	0	0	0	0	0
148	WALLINGFORD	803	794	98.9	9	1.1	4	0.5	1	0.1	1	0.1
149	WARREN	5	5	100	0	0	0	0	0	0	0	0
150	WASHINGTON	38	37	97.4	1	2.6	0	0	0	0	0	0
151	WATERBURY	4,566	4,308	94.3	258	5.7	46	1	17	0.4	12	0.3
152	WATERFORD	252	251	99.6	1	0.4	0	0	0	0	0	0

				umbers and hildren Aged						d Test		
СҮ	2014 Data	Number of Children with	0.4				Cu	mulative	Statistics			
	years old)	Confirmed Test	0-4	μg/dL	≥ 5 μg	/dL	≥ 10 µg	/dL	≥ 15 µg/	/dL	≥ 20 µg	/dL
			Number	%	Number	%	Number	%	Number	%	Number	%
153	WATERTOWN	348	346	99.4	2	0.6	0	0	0	0	0	0
154	WEST HARTFORD	1,012	999	98.7	13	1.3	3	0.3	2	0.2	1	0.1
155	WEST HAVEN	1,403	1,358	96.8	45	3.2	17	1.2	6	0.4	3	0.2
156	WESTBROOK	65	61	93.8	4	6.2	1	1.5	0	0	0	0
157	WESTON	148	148	100	0	0	0	0	0	0	0	0
158	WESTPORT	439	436	99.3	3	0.7	0	0	0	0	0	0
159	WETHERSFIELD	420	415	98.8	5	1.2	3	0.7	2	0.5	0	0
160	WILLINGTON	62	61	98.4	1	1.6	0	0	0	0	0	0
161	WILTON	273	272	99.6	1	0.4	1	0.4	1	0.4	1	0.4
162	WINCHESTER	187	171	91.4	16	8.6	5	2.7	3	1.6	0	0
163	WINDHAM	477	450	94.3	27	5.7	13	2.7	4	0.8	2	0.4
164	WINDSOR	413	409	99	4	1	0	0	0	0	0	0
165	WINDSOR LOCKS	182	179	98.4	3	1.6	2	1.1	2	1.1	1	0.5
166	WOLCOTT	211	211	100	0	0	0	0	0	0	0	0
167	WOODBRIDGE	117	117	100	0	0	0	0	0	0	0	0
168	WOODBURY	105	104	99	1	1	0	0	0	0	0	0
169	WOODSTOCK	119	118	99.2	1	0.8	0	0	0	0	0	0

Chapter 8. Appendices

Table 3. Incidence of lead poisoning among children under six years of age, by town and by blood lead levels - Connecticut CY 2014

				N	umbers a	nd Percer	nts of Ne	w Confirm	ned Blood	Lead Lev	vels		
СҮ	2014 Data	Number of Children with BLL ≥ 5 µg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 5 μg/dL	≥ 5 µg/dL Incidenc e (%)	Number of Children with BLL ≥ 10 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥10 μg/dL	≥ 10 µg/dL Incidence (%)	Number of Children with BLL ≥ 15 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 15 μg/dL	≥15 µg/dL Incidence (%)	Number of Children with BLL ≥ 20 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 20 μg/dL	≥ 20 μg/dL Incidence (%)
	Connecticut												
		1,473	73,682	2.0	342	75,233	0.5	164	75,621	0.2	74	75,766	0.1
	By-Town												
1	ANDOVER	0	23	0	0	23	0	0	24	0	0	24	0
2	ANSONIA	25	479	5.2	6	490	1.2	3	493	0.6	2	496	0.4
3	ASHFORD	1	69	1.4	0	69	0	0	69	0	0	69	0
4	AVON	0	227	0	0	227	0	0	227	0	0	227	0
5	BARKHAMSTED	0	44	0	0	44	0	0	44	0	0	44	0
6	BEACON FALLS	0	82	0	0	82	0	0	83	0	0	83	0
7	BERLIN	0	212	0	0	214	0	0	215	0	0	215	0
8	BETHANY	0	67	0	0	68	0	0	69	0	0	69	0
9	BETHEL	3	325	0.9	0	328	0	0	328	0	0	328	0
10	BETHLEHEM	1	42	2.4	0	42	0	0	42	0	0	42	0
11	BLOOMFIELD	4	290	1.4	0	294	0	0	294	0	0	294	0
12	BOLTON	0	65	0	0	66	0	0	66	0	0	66	0
13	BOZRAH	2	20	10	0	20	0	0	20	0	0	20	0
14	BRANFORD	5	420	1.2	2	421	0.5	2	421	0.5	1	421	0.2
15	BRIDGEPORT	215	5776	3.7	41	6096	0.7	20	6153	0.3	14	6183	0.2
16	BRIDGEWATER	0	14	0	0	14	0	0	14	0	0	14	0
17	BRISTOL	17	1096	1.6	2	1108	0.2	1	1111	0.1	1	1114	0.1
18	BROOKFIELD	1	217	0.5	0	217	0	0	217	0	0	217	0
19	BROOKLYN	5	124	4	3	125	2.4	3	127	2.4	1	127	0.8
20	BURLINGTON	2	133	1.5	0	134	0	0	134	0	0	134	0
21	CANAAN	1	5	20	1	7	14.3	0	7	0	0	8	0

				N	umbers a	nd Percer	nts of Ne	w Confirm	ned Blood	Lead Lev	vels		
СҮ	7 2014 Data	Number of Children with BLL ≥ 5 µg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 5 μg/dL	≥5 μg/dL Incidenc e (%)	Number of Children with BLL ≥ 10 μ g/dL For the First Time	Total # Children Screened with No Previous BLL of ≥10 μg/dL	≥ 10 µg/dL Incidence (%)	Number of Children with BLL ≥ 15 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 15 μg/dL	≥ 15 μg/dL Incidence (%)	Number of Children with BLL ≥ 20 μg/dL For the First Time	Total # Children Screened with No Previous BLL of \geq 20 µg/dL	≥ 20 μg/dL Incidence (%)
22	CANTERBURY	0	70	0	0	73	0	0	74	0	0	75	0
23	CANTON	1	137	0.7	0	138	0	0	138	0	0	138	0
24	CHAPLIN	0	21	0	0	21	0	0	21	0	0	21	0
25	CHESHIRE	0	304	0	0	304	0	0	304	0	0	304	0
26	CHESTER	2	42	4.8	0	46	0	0	46	0	0	46	0
27	CLINTON	1	178	0.6	0	180	0	0	180	0	0	180	0
28	COLCHESTER	3	196	1.5	1	196	0.5	1	196	0.5	0	196	0
29	COLEBROOK	0	12	0	0	12	0	0	12	0	0	12	0
30	COLUMBIA	0	57	0	0	57	0	0	57	0	0	57	0
31	CORNWALL	1	8	12.5	0	8	0	0	8	0	0	8	0
32	COVENTRY	1	181	0.6	0	182	0	0	183	0	0	183	0
33	CROMWELL	0	246	0	0	246	0	0	247	0	0	247	0
34	DANBURY	38	2264	1.7	7	2299	0.3	3	2307	0.1	0	2310	0
35	DARIEN	0	416	0	0	417	0	0	417	0	0	417	0
36	DEEP RIVER	0	54	0	0	56	0	0	56	0	0	56	0
37	DERBY	7	276	2.5	1	289	0.3	1	290	0.3	0	290	0
38	DURHAM	0	94	0	0	94	0	0	94	0	0	94	0
39	EAST GRANBY	0	84	0	0	84	0	0	84	0	0	84	0
40	EAST HADDAM	1	112	0.9	0	113	0	0	113	0	0	113	0
41	EAST HAMPTON	0	187	0	0	188	0	0	188	0	0	188	0
42	EAST HARTFORD	14	1130	1.2	2	1147	0.2	0	1152	0	0	1153	0
43	EAST HAVEN	6	478	1.3	0	483	0	0	487	0	0	488	0
44	EAST LYME	0	231	0	0	232	0	0	232	0	0	232	0
45	EAST WINDSOR	1	180	0.6	0	181	0	0	181	0	0	181	0
46	EASTFORD	0	21	0	0	21	0	0	21	0	0	21	0

				N	umbers a	nd Percer	nts of Ne	w Confirm	ned Blood	Lead Lev	vels		
Сү	7 2014 Data	Number of Children with BLL ≥ 5 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 5 μg/dL	≥ 5 μg/dL Incidenc e (%)	Number of Children with BLL ≥ 10 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥10 μg/dL	≥ 10 μg/dL Incidence (%)	Number of Children with BLL ≥ 15 µg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 15 μg/dL	≥ 15 µg/dL Incidence (%)	Number of Children with BLL ≥ 20 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 20 μg/dL	≥ 20 µg/dL Incidence (%)
47	EASTON	1	91	1.1	0	91	0	0	91	0	0	91	0
48	ELLINGTON	4	275	1.5	0	275	0	0	275	0	0	275	0
49	ENFIELD	6	694	0.9	2	702	0.3	1	703	0.1	0	704	0
50	ESSEX	1	62	1.6	0	62	0	0	62	0	0	62	0
51	FAIRFIELD	8	942	0.8	2	945	0.2	1	947	0.1	0	947	0
52	FARMINGTON	2	317	0.6	0	318	0	0	318	0	0	318	0
53	FRANKLIN	0	14	0	0	14	0	0	14	0	0	14	0
54	GLASTONBURY	2	365	0.5	1	366	0.3	1	366	0.3	0	366	0
55	GOSHEN	0	30	0	0	30	0	0	30	0	0	30	0
56	GRANBY	0	102	0	0	104	0	0	104	0	0	104	0
57	GREENWICH	3	1102	0.3	2	1106	0.2	1	1108	0.1	0	1108	0
58	GRISWOLD	1	196	0.5	0	204	0	0	204	0	0	204	0
59	GROTON	3	1041	0.3	0	1042	0	0	1046	0	0	1047	0
60	GUILFORD	0	205	0	0	205	0	0	205	0	0	205	0
61	HADDAM	0	103	0	0	103	0	0	103	0	0	103	0
62	HAMDEN	16	1018	1.6	9	1033	0.9	4	1038	0.4	2	1038	0.2
63	HAMPTON	1	23	4.3	0	23	0	0	23	0	0	23	0
64	HARTFORD	118	4443	2.7	32	4573	0.7	21	4595	0.5	8	4604	0.2
65	HARTLAND	0	21	0	0	21	0	0	21	0	0	21	0
66	HARWINTON	0	62	0	0	62	0	0	62	0	0	62	0
67	HEBRON	0	86	0	0	86	0	0	86	0	0	86	0
68	KENT	2	22	9.1	0	22	0	0	22	0	0	22	0
69	KILLINGLY	14	371	3.8	3	375	0.8	2	376	0.5	0	376	0
70	KILLINGWORTH	0	56	0	0	56	0	0	56	0	0	56	0
71	LEBANON	1	71	1.4	0	71	0	0	71	0	0	71	0

				N	umbers a	nd Percer	nts of Nev	w Confirm	ned Blood	Lead Lev	vels		
CI	7 2014 Data	Number of Children with BLL ≥ 5 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 5 µg/dL	≥5 μg/dL Incidenc e (%)	Number of Children with BLL ≥ 10 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥10 μg/dL	≥ 10 µg/dL Incidence (%)	Number of Children with BLL ≥ 15 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 15 μg/dL	≥ 15 μg/dL Incidence (%)	Number of Children with BLL ≥ 20 μg/dL For the First Time	Total # Children Screened with No Previous BLL of \geq 20 µg/dL	≥ 20 µg/dL Incidence (%)
72	LEDYARD	2	272	0.7	0	273	0	0	273	0	0	273	0
73	LISBON	0	31	0	0	31	0	0	31	0	0	31	0
74	LITCHFIELD	2	90	2.2	0	92	0	0	92	0	0	92	0
75	LYME	1	9	11.1	0	9	0	0	10	0	0	10	0
76	MADISON	1	169	0.6	0	169	0	0	169	0	0	169	0
77	MANCHESTER	25	1292	1.9	6	1305	0.5	3	1312	0.2	3	1315	0.2
78	MANSFIELD	1	132	0.8	0	132	0	0	132	0	0	132	0
79	MARLBOROUGH	0	56	0	0	56	0	0	56	0	0	56	0
80	MERIDEN	71	1938	3.7	15	2025	0.7	7	2040	0.3	6	2052	0.3
81	MIDDLEBURY	0	121	0	0	122	0	0	122	0	0	122	0
82	MIDDLEFIELD	0	57	0	0	57	0	0	57	0	0	57	0
83	MIDDLETOWN	15	956	1.6	2	971	0.2	1	975	0.1	1	976	0.1
84	MILFORD	5	885	0.6	0	890	0	0	891	0	0	892	0
85	MONROE	0	265	0	0	265	0	0	265	0	0	265	0
86	MONTVILLE	3	303	1	1	310	0.3	1	310	0.3	0	311	0
87	MORRIS	1	29	3.4	0	29	0	0	29	0	0	29	0
88	NAUGATUCK	7	661	1.1	2	672	0.3	1	680	0.1	0	681	0
89	NEW BRITAIN	60	2485	2.4	11	2550	0.4	4	2562	0.2	1	2567	0
90	NEW CANAAN	2	342	0.6	0	342	0	0	342	0	0	342	0
91	NEW FAIRFIELD	1	192	0.5	1	192	0.5	0	192	0	0	192	0
92	NEW HARTFORD	3	81	3.7	0	81	0	0	82	0	0	82	0
93	NEW HAVEN	233	4193	5.6	64	4403	1.5	24	4477	0.5	7	4503	0.2
94	NEW LONDON	24	660	3.6	6	685	0.9	3	695	0.4	0	695	0
95	NEW MILFORD	9	460	2	1	461	0.2	1	461	0.2	0	462	0
96	NEWINGTON	2	317	0.6	1	319	0.3	0	319	0	0	319	0
97	NEWTOWN	2	294	0.7	0	296	0	0	297	0	0	297	0

Chapter 8. Appendices

				N	umbers a	nd Percer	nts of Nev	w Confirm	ned Blood	Lead Lev	vels		
CY	7 2014 Data	Number of Children with BLL ≥ 5 µg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 5 μg/dL	≥5 μg/dL Incidenc e (%)	Number of Children with BLL ≥ 10 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥10 μg/dL	≥ 10 µg/dL Incidence (%)	Number of Children with BLL ≥ 15 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 15 μg/dL	≥15 μg/dL Incidence (%)	Number of Children with BLL ≥ 20 μg/dL For the First Time	Total # Children Screened with No Previous BLL of ≥ 20 μg/dL	≥ 20 µg/dL Incidence (%)
98	NORFOLK	1	16	6.3	0	17	0	0	17	0	0	17	0
99	NORTH BRANFORD	0	174	0	0	174	0	0	174	0	0	174	0
100	NORTH CANAAN	2	30	6.7	0	30	0	0	31	0	0	31	0
101	NORTH HAVEN	3	314	1	0	317	0	0	317	0	0	317	0
102	NORTH STONINGTON	1	71	1.4	0	72	0	0	72	0	0	72	0
103	NORWALK	30	2367	1.3	6	2405	0.2	2	2414	0.1	1	2415	0
104	NORWICH	25	985	2.5	11	1017	1.1	4	1025	0.4	2	1031	0.2
105	OLD LYME	1	95	1.1	1	97	1	1	98	1	0	98	0
106	OLD SAYBROOK	0	99	0	0	100	0	0	100	0	0	100	0
107	ORANGE	0	181	0	0	181	0	0	181	0	0	181	0
108	OXFORD	0	178	0	0	181	0	0	181	0	0	181	0
109	PLAINFIELD	18	298	6	3	304	1	3	305	1	1	305	0.3
110	PLAINVILLE	0	284	0	0	287	0	0	287	0	0	287	0
111	PLYMOUTH	4	149	2.7	2	150	1.3	0	152	0	0	152	0
112	POMFRET	1	64	1.6	0	67	0	0	68	0	0	68	0
113	PORTLAND	2	148	1.4	0	149	0	0	149	0	0	149	0
114	PRESTON	0	55	0	0	55	0	0	55	0	0	55	0
115	PROSPECT	1	125	0.8	1	125	0.8	1	125	0.8	1	125	0.8
116	PUTNAM	6	215	2.8	0	223	0	0	225	0	0	226	0
117	REDDING	0	98	0	0	98	0	0	98	0	0	98	0
118	RIDGEFIELD	3	417	0.7	0	419	0	0	419	0	0	419	0
119	ROCKY HILL	2	383	0.5	0	386	0	0	388	0	0	388	0
120	ROXBURY	0	17	0	0	17	0	0	17	0	0	17	0
121	SALEM	0	44	0	0	44	0	0	44	0	0	44	0

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122	SALISBURY	0	13	0	0	14	0	0	14	0	0	14	0
123	SCOTLAND	0	12	0	0	12	0	0	12	0	0	12	0
124	SEYMOUR	2	324	0.6	1	325	0.3	1	325	0.3	0	325	0
125	SHARON	0	10	0	0	11	0	0	11	0	0	11	0
126	SHELTON	5	631	0.8	1	637	0.2	0	638	0	0	638	0
127	SHERMAN	0	38	0	0	38	0	0	38	0	0	38	0
128	SIMSBURY	0	259	0	0	260	0	0	261	0	0	261	0
129	SOMERS	1	115	0.9	1	115	0.9	1	115	0.9	0	117	0
130	SOUTH WINDSOR	1	329	0.3	0	331	0	0	334	0	0	334	0
131	SOUTHBURY	1	194	0.5	0	195	0	0	195	0	0	195	0
132	SOUTHINGTON	3	501	0.6	2	504	0.4	2	505	0.4	1	506	0.2
133	SPRAGUE	1	58	1.7	1	60	1.7	1	61	1.6	1	61	1.6
134	STAFFORD	5	177	2.8	1	187	0.5	0	187	0	0	187	0
135	STAMFORD	25	3682	0.7	7	3712	0.2	2	3716	0.1	1	3717	0
136	STERLING	0	55	0	0	55	0	0	55	0	0	55	0
137	STONINGTON	2	188	1.1	0	193	0	0	194	0	0	194	0
138	STRATFORD	12	1123	1.1	2	1138	0.2	1	1141	0.1	0	1142	0
139	SUFFIELD	3	171	1.8	1	173	0.6	0	173	0	0	173	0
140	THOMASTON	1	129	0.8	0	130	0	0	131	0	0	131	0
141	THOMPSON	5	173	2.9	0	179	0	0	182	0	0	183	0
142	TOLLAND	1	242	0.4	1	243	0.4	1	243	0.4	0	243	0
143	TORRINGTON	18	641	2.8	5	661	0.8	3	667	0.4	1	669	0.1
144	TRUMBULL	3	580	0.5	0	582	0	0	582	0	0	582	0
145	UNION	0	10	0	0	10	0	0	10	0	0	10	0
146	VERNON	14	626	2.2	2	638	0.3	0	644	0	0	644	0

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147	VOLUNTOWN	0	28	0	0	29	0	0	29	0	0	29	0
148	WALLINGFORD	8	794	1	4	799	0.5	1	801	0.1	1	802	0.1
149	WARREN	0	5	0	0	5	0	0	5	0	0	5	0
150	WASHINGTON	1	37	2.7	0	38	0	0	38	0	0	38	0
151	WATERBURY	167	4353	3.8	30	4493	0.7	12	4532	0.3	10	4546	0.2
152	WATERFORD	0	251	0	0	251	0	0	251	0	0	251	0
153	WATERTOWN	0	342	0	0	347	0	0	348	0	0	348	0
154	WEST HARTFORD	13	1002	1.3	3	1011	0.3	2	1012	0.2	1	1012	0.1
155	WEST HAVEN	28	1356	2.1	10	1385	0.7	6	1392	0.4	3	1397	0.2
156	WESTBROOK	2	62	3.2	0	64	0	0	65	0	0	65	0
157	WESTON	0	148	0	0	148	0	0	148	0	0	148	0
158	WESTPORT	3	438	0.7	0	439	0	0	439	0	0	439	0
159	WETHERSFIELD	5	419	1.2	3	420	0.7	2	420	0.5	0	420	0
160	WILLINGTON	1	62	1.6	0	62	0	0	62	0	0	62	0
161	WILTON	1	273	0.4	1	273	0.4	1	273	0.4	1	273	0.4
162	WINCHESTER	12	180	6.7	5	186	2.7	3	186	1.6	0	187	0
163	WINDHAM	14	458	3.1	10	467	2.1	4	473	0.8	2	474	0.4
164	WINDSOR	3	406	0.7	0	412	0	0	413	0	0	413	0
165	WINDSOR LOCKS	0	177	0	0	179	0	0	179	0	0	180	0
166	WOLCOTT	0	210	0	0	210	0	0	211	0	0	211	0
167	WOODBRIDGE	0	115	0	0	117	0	0	117	0	0	117	0
168	WOODBURY	0	104	0	0	105	0	0	105	0	0	105	0
169	WOODSTOCK	1	117	0.9	0	118	0	0	118	0	0	118	0

The children in the photos in this report are **not** lead poisoned. The goal of the Department of Public Health is for **all** children to be safe from lead poisoning.



Photo Credit: CDC/Cade Martin

Hands and toys can become contaminated from household dust or exterior soil. Regularly wash children's hands and toys can help prevent lead poisoning.

Additional lead poisoning data can be found at http://www.ct.gov/dph/lead

