About This Report

Local Law 1 of 2004 requires the Department of Health & Mental Hygiene (DOHMH) to annually report to the New York City Council on the progress toward reducing childhood lead poisoning and increasing blood lead testing in New York City. This report is submitted in compliance with this requirement.

Data in the report are presented in three sections:

- **Section I** describes New York City’s progress in reducing the number and severity of childhood lead poisoning. While DOHMH provides lead poisoning prevention services for all children under 18 years of age, this section focuses on children under 6 years of age\(^1\) since they are at greatest risk for lead poisoning.
- **Section II** presents data on blood lead testing for children turning 3 years of age in 2014. New York State law requires testing of all children at or around age 1 and age 2. Consequently, before turning 3 years of age New York City children should be tested twice.
- **Section III** outlines strategies for continued progress in prevention of childhood lead poisoning.

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**Important Definitions in This Report**

**Blood lead level (BLL)** is the concentration of lead, measured in micrograms in a deciliter of blood (mcg/dL).

**Lead poisoning** is defined by the New York City Health Code as a blood lead level of 10 mcg/dL or greater.

**Environmental intervention blood lead level** (EIBLL) is the term used by the New York City Department of Health and Mental Hygiene (DOHMH) to refer to the blood lead level at which environmental intervention and case coordination services for children with lead poisoning are initiated. The EIBLL is currently 15 mcg/dL.

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\(^1\) In 2006, the New York City Board of Health lowered the applicable age of Local Law 1 of 2004 from under 7 years of age to under 6 years of age. Local Law 1 of 2004 authorized the Board of Health to make a determination whether or not to amend the applicable age.
Section I: Preventing Childhood Lead Poisoning in New York City

Childhood lead poisoning is a serious but preventable health problem. Over the last few decades, New York City has made significant progress in reducing childhood lead poisoning. Since 2005 there has been an overall decline in the number and rate of children with lead poisoning, and there are fewer children requiring environmental intervention for lead poisoning. In 2014, a small annual increase in the number and rate of children with lead poisoning has been reported. However, numbers and rates in 2014 remain lower than in 2012. The Health Department continues to monitor blood lead levels and targets interventions to areas of greatest need.

Children with lead poisoning

- In 2014, 840 New York City children under 6 years of age were newly identified with blood lead levels of 10 mcg/dL or greater, a 4% increase compared to 2013, when the total was 805, an historic low.
  - Compared with 2012, there was a 9% decrease in the number of children with lead poisoning.
- The rate of the new cases of childhood lead poisoning per 1,000 children tested increased by 4%, from 2.5 in 2013 to 2.7 in 2014.

Figure 1. Number of Children with Lead Poisoning

Number of Children Requiring Environmental Intervention

Under the New York City Health Code, the DOHMH provides environmental intervention and case coordination services for New York City children younger than 18 years of age with blood lead levels greater than or equal to the environmental intervention blood lead level (EIBLL). The EIBLL, currently defined as a blood lead level of 15 mcg/dL, triggers the environmental inspection in the child’s home, assessment of potential environmental sources of lead exposure, and coordination with the child’s health care provider.

- In 2014, 304 children younger than 18 years of age were newly identified with blood lead levels of 15 mcg/dL or greater.
  - Of these children, 267 were younger than 6 years of age, the age group at greatest risk. This represents an increase of 6% compared to 2013 when there were 253 children younger than 6 years of age newly identified with blood lead levels of 15 mcg/dL or greater.
  - Compared to 2012, the number of children with BLL of 15 mcg/dL or greater decreased 13% among children under 18, and 15% among children under 6.

Disparities by Race, Ethnicity, and Neighborhood Poverty

Historically, low income families of color have been disproportionately impacted by lead poisoning. While there have been improvements over time, some disparities remain, particularly among children living in high poverty neighborhoods and South Asian children.

- In 2014, 65% of children younger than 6 years of age with blood lead levels of 15 mcg/dL or greater were from high poverty neighborhoods (defined as zip codes with 20% or more of the population living below poverty level), compared to an estimated 50% of children citywide that live in high poverty neighborhoods.

- In 2014, 26% of children under 6 years of age with blood lead levels of 15 mcg/dL or greater were Asian, more than twice the percentage of Asian children citywide (11%). Children of South Asian descent comprise the greatest percentage of Asian children with blood lead levels of 15 mcg/dL or greater (75%).

- In 2014, Hispanic and non-Hispanic Black children represented 56% of children younger than 6 with blood lead levels of 15 mcg/dL or greater, similar to their proportion in the population of New York City children younger than 6 years (57%).

Fewer Children with Blood Lead Levels at or Above the National Reference Level

- In 2014, 6,550 New York City children younger than 6 years of age were identified with blood lead levels of 5 mcg/dL or greater, which is the reference level set by U. S. Centers for Disease Control and Prevention (CDC). This represents a 9% decline from 2013 when there were 7,204 children with blood lead levels at or above the CDC reference level.
Children with a blood lead level at or above the reference level are exposed to more lead than most children. DOHMH sends letters to families and medical providers of children with blood lead levels of 5-14 mcg/dL which advise that a blood lead level of 5 or greater is an indicator of potential lead exposure, emphasize the importance of timely follow-up testing, and suggest actions that parents can take to protect their children from exposure to lead. Educational materials are provided, including a brochure on tenant rights under Local Law 1 of 2004. This information was also provided to families and providers of children with BLL of 15 mcg/dL or greater.

Section II: Blood Lead Testing

Early identification of lead-poisoned children is important in order to identify and prevent further exposures as quickly as possible. Since most children with elevated blood lead levels have no symptoms, blood lead testing is the only practical way to identify these children. In New York State, health care providers are required by law to test all children at or around age 1 and age 2 years, and to annually assess children for risk of lead poisoning starting at age 6 months to under 6 years of age.
Most Children Were Tested for Lead Poisoning At Least Once Before Age Three Years

- In 2014, an estimated 82% of New York City children turning 3 years of age were tested for lead poisoning at least once. Yet, only about half (52%) of them were tested at or around both age 1 year and age 2 years, as required by New York State law.

![Figure 4. Most (82%) New York City Children Were Tested for Lead Poisoning at Least Once Before Age Three](image)

Section III: Strategies for Continued Progress

New York City has made great progress in reducing childhood lead poisoning. Between 2005 and 2014, the number of children younger than 6 years of age newly identified with blood lead levels of 10 mcg/dL or greater fell by 69%. This success is the result of strong policies and a proactive and comprehensive approach to lead poisoning prevention. Living in older, poorly maintained housing continues to be the main source of lead exposure among NYC children. As such, efforts are targeted to those communities. Prevention strategies include:

- Eliminating or reducing lead-based paint hazards and other sources of lead in homes and communities through investigation, enforcement, training, and technical assistance.
- Promoting early identification of lead poisoning through blood lead testing for children, pregnant women, and newborns by outreaching to families, healthcare providers, and Medicaid Managed Care organizations.
o Providing care coordination services to lead poisoned children as well as lead poisoned pregnant women and their newborns.

o Building partnerships with community, social service, and faith-based organizations, home visiting programs, weatherization groups, neighborhood housing groups, medical providers, and agencies concerned with child and environmental health.

o Addressing other healthy homes issues during our lead poisoning prevention efforts, such as reduction of home asthma triggers and safety hazards.