

Summary of 2017 Lead Surveillance Report

Childhood lead poisoning is the most common pediatric public health problem, yet it is entirely preventable. Lead paint in homes built before 1978 continues to be the most common source of lead exposure. Lead harms children's nervous systems and is associated with reduced IQ, behavioral problems, and learning disabilities, among other health outcomes. Once a child has been poisoned, the impairment it may cause is irreversible. A mission of the Lead Poisoning Prevention and Radon Program is to protect children from lead exposure. The program strives to prevent lead poisoning and promote wellness through education and a wide range of program activities that relate to lead poisoning prevention and intervention. This annual report summarizes the findings from blood lead surveillance for Connecticut children under the age of 6 years in 2017 and reviews the progress of the program efforts in addressing this important public health issue. Below are the key findings.

- **Source of Lead Exposure**

- Deteriorated paint at dwelling units continues to be the most common source of lead exposure among young children. Of the 104 dwelling units inspected for children with environmental actionable blood lead levels, 81.7% were identified with lead paint hazards, 53.8% were identified with dust hazards, 43.3% were identified with soil hazards, and 1.0% were identified with drinking water hazards.
- Of the 1,665 number of children with elevated blood lead levels, 5 cities remain the locations of housing that harm these children.

- **Compliance with Mandatory Universal Screening**

- 74,389 children under the age of 6 were tested for lead.
- 86.1% of children were tested for lead once by the age of 2 years old and 99.9% were tested at least one time by the age of 3 years old, but only 57.4% are tested twice before turning 3 years of age as required. Despite that, the screening rate for the required two annual tests increased 11.5% from 51.5% in 2013 to 57.4% in 2017.

- **Continued Decline in Childhood Lead Poisoning Rates**

- 1,665 (23 per 1,000) children were tested with elevated blood lead levels ≥ 5 $\mu\text{g}/\text{dL}$, the CDC reference value. The prevalence rate statistically decreased significantly from 27 per 1,000 to 23 per 1,000 from 2016 to 2017 and this decrease is the largest (14.8%) observed in a single year over the past 5 years.
- Of the 1,665 children tested with elevated blood lead levels, 1034 (62.1%) were new cases. The incidence rate (new cases) of blood lead tests ≥ 5 $\mu\text{g}/\text{dL}$ decreased significantly from 1.7% to 1.4% from 2016 to 2017 and is in concert with the media campaign that took place mid-year 2017 and reflects the effectiveness of the expanded prevention efforts.

- **Continued Decline in Health Disparity**

- Blacks (3.9%) were twice as likely to be lead poisoned at levels ≥ 5 $\mu\text{g}/\text{dL}$ than Whites (1.7%). Although the disparity remains, the disparity among Black and White children in 2017 is decreased compared to 2016 (Risk ratio 2.4 in 2016 vs. 2.3 in 2017).
- Hispanics (2.7%) were 1.4 times as likely to be lead poisoned at levels ≥ 5 $\mu\text{g}/\text{dL}$ than Non-Hispanics (2.0%). The ratio of lead poisoning between Hispanic children and non-Hispanic children continues to decrease from 2016 to 2017 (Risk ratio 1.5 in 2016 vs. 1.4 in 2017).