

Building and Strengthening Lead Surveillance Systems



Approximately half a million U.S. children under 6 years of age have blood lead levels at or above 5 micrograms per deciliter ($\mu\text{g}/\text{dL}$). No safe blood lead level in children has been identified. High blood lead levels not only damage physical health but also reduce IQ, increase rates of juvenile delinquency, and contribute to decreased lifetime earnings. To prevent childhood lead poisoning, the **Centers for Disease Control and Prevention (CDC)** funded 29 states, 5 cities, and the District of Columbia to

- build and strengthen lead surveillance systems, allowing for the identification of neighborhoods and populations of children disproportionately affected by high blood lead levels,
- educate parents and clinical providers in target areas with messages about the importance of blood lead testing for children under 6 years of age, and
- collaborate with institutional and community-based partners to initiate, promote, and evaluate childhood lead poisoning prevention activities.

Each funded jurisdiction works to eliminate childhood lead poisoning by creatively targeting resources and implementing effective program initiatives.

NEW YORK CITY

Awarded
\$404,472
by CDC in fiscal
year 2014

Over **300,000**
children under
6 years of age tested
annually

53% decrease in
number of children
with high blood lead
levels* since 2010

Small-area analyses
revealed a pattern of
high blood lead levels
within an area home
to a large Hasidic
Jewish community.

SUCCESS

Blood lead levels have declined significantly over the last 20 years. In 2014, the last year of available data, 20.8 of every 1,000 New York City children tested had a blood lead level (BLL) $\geq 5 \mu\text{g}/\text{dL}$. Just 2.7 per 1,000 tested had BLLs $\geq 10 \mu\text{g}/\text{dL}$. Although all children have benefited from the decline, there continue to be areas where the risk for elevated BLLs remains higher than average.

Staff members used small-area analyses to identify neighborhoods with higher blood lead levels. Within one neighborhood with a high rate of lead poisoning, the vast majority of children with the highest blood lead levels resided in an area home to a large Hasidic Jewish community.

The lead program collaborated with local political and religious leaders, and worked with trusted community based organizations to conduct an awareness campaign on childhood lead poisoning. All health education materials about lead poisoning prevention and how families can report and address peeling paint were translated into Yiddish.

"The CDC support was essential to having the tools to identify and respond to the needs of this small community."

*Since 2010, the number of children with blood lead levels at or above the current reference value of 5 micrograms per deciliter ($\mu\text{g}/\text{dL}$) has decreased from 13,000 children in 2010 to 6,000 children in 2014.

Photo obtained from the CDC Public Health Image Library (<http://phil.cdc.gov/phil/home.asp>). Photo Credit: Amanda Mills.
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