



98 Bank Street ◦ Seymour, CT 06483 ◦ Tel: (203) 881-3255 ◦ Fax: (203) 881-3259 ◦ Website: nvhd.org

NAUGATUCK VALLEY HEALTH DISTRICT LEAD SURVEILLANCE REPORT FISCAL YEAR 2014-2015

Naugatuck Valley Health District

Ansonia ◦ Beacon Falls ◦ Derby ◦ Naugatuck ◦ Seymour ◦ Shelton



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Overview

Lead poisoning occurs when the body absorbs too much lead by breathing or swallowing a substance with lead in it, such as paint, dust, water, or food. Lead can damage almost every organ system. In children, too much lead in the body can cause lasting problems with growth and development. These can affect behavior, hearing, and learning and can slow the child's growth.

Although it isn't normal to have lead in the body, a small amount is present in most people. Environmental laws have reduced lead exposure in the United States, but it is still a health risk, especially for young children.

Lead poisoning is usually caused by months or years of exposure to small amounts of lead at home, work, or day care. It can also happen very quickly with exposure to a large amount of lead. Many things can contain or be contaminated with lead: paint, air, water, soil, food, and manufactured goods. The most common source of lead exposure for children is lead-based paint and the dust and soil that are contaminated by it. This can be a problem in older homes and buildings.

Lead poisoning can occur at any age, but children are most likely to be affected by high lead levels. Children at highest risk include those who:

- Live in or regularly visit homes or buildings built before 1978. These buildings may have lead-based paint. The risk is even higher in buildings built before 1950, when lead-based paint was more commonly used.
- Are immigrants, refugees, or adoptees from other countries. They may have been exposed to higher lead levels in these countries.
- Are 6 years old or younger. Young children are at higher risk because:
 - They often put their hands and objects in their mouths.
 - They sometimes swallow nonfood items.
 - Their bodies absorb lead at a higher rate.
 - Their brains are developing quickly.

Data Review

Naugatuck Valley Health District (NVHD) has monitored the incidence of lead poisoning in the Naugatuck Valley Health District's towns for many years. In particular, children who have confirmed elevated levels of

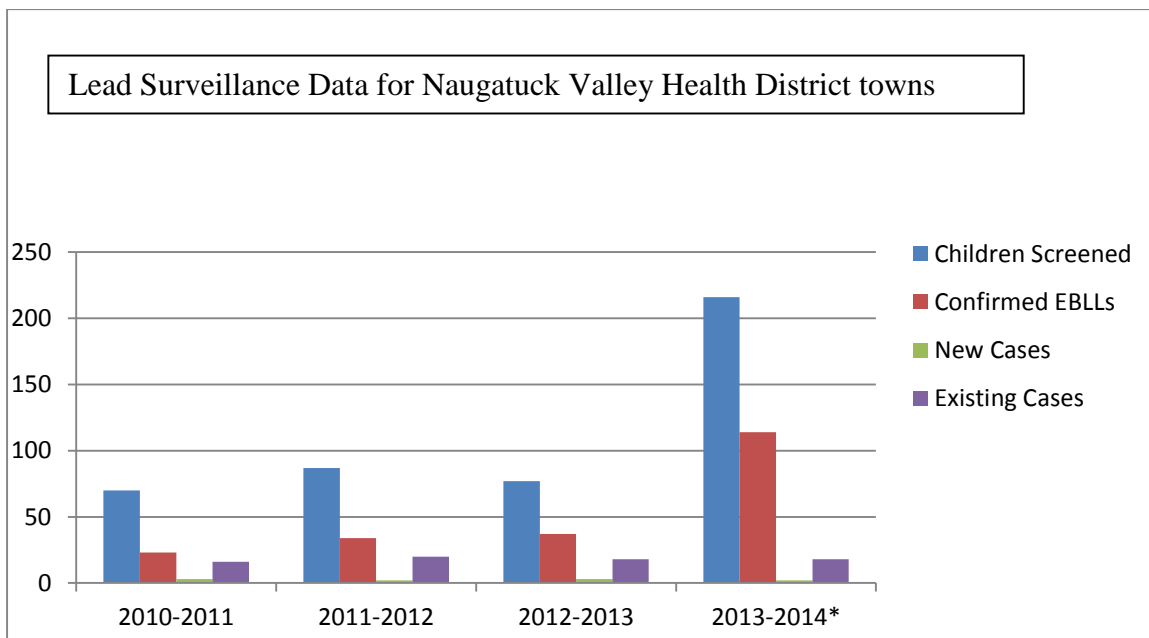
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lead in their blood receive education regarding ways to mitigate the effects of lead exposure and case management services to ensure that the levels decrease over time. Depending on the level of lead in the blood, full environmental investigation and, if needed, remediation and/or abatement may be required.



In 2013, the blood lead “action level” requiring surveillance and follow up was decreased from $\geq 10\mu\text{g}/\text{dL}$ to $\geq 5\mu\text{g}/\text{dL}$. NVHD developed a surveillance program to further identify children at risk for lead poisoning and to identify geographic locations within our communities that may have high lead levels and opportunities to help with lead prevention education. A survey was developed in conjunction with the CT Department of Public Health Lead Poisoning Prevention Program as part of its Preventive Health Services Block Grant award.

Methodology

The block lead grant survey was comprised of children within the Naugatuck Valley Health District (NVHD) towns with an initial confirmed elevated venous blood lead level (EBLL) $\geq 5\mu\text{g}/\text{dL}$ between the time period of 4/1/2014 and 3/31/2015. The survey participant list was formed by going through closed out and current

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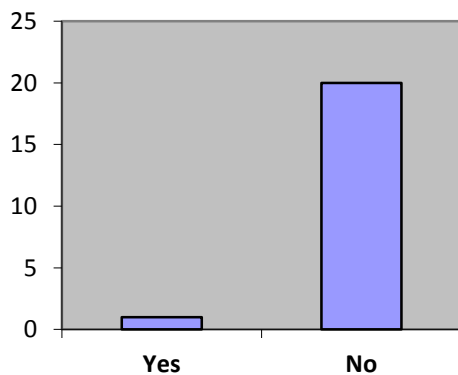
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lead records at the NVHD that included elevated venous blood lead levels that were collected in that time frame. A total of 43 children met these criteria. The survey questions were developed based on the criteria set forth in the Childhood Lead Poisoning Prevention Program Contract. Data was collected via phone calls or in person interviews with the child’s parent or guardian. Attempts to reach the parent/guardian were done by making 3 phone calls followed by sending a letter requesting a call back. Out of the 43 children, 21 surveys were completed. When unable to complete a survey, data was collected on the property listed in the child’s chart or in their MAVEN account by utilizing their specific town’s GIS mapping system on the Town Assessor’s website. The NVHD has purchased ArcGIS mapping software which was used to plot the children’s addresses to aid in identifying areas within the community that have children with high leads.

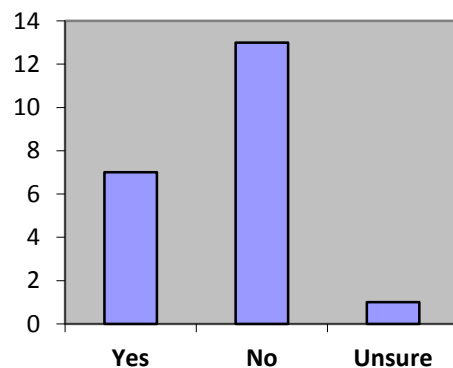
Survey Results

Overall, 40 children lived in pre-1978 homes, 2 lived in post-1978, and 2 were unsure of the year their home was built. Primary Care Providers discussed lead poisoning prevention with 33% of the families who were surveyed and 5% of them received a handout on lead poisoning prevention from their PCP.

Received Lead Prevention Handouts at Last Physical



Provider Discussed Lead Prevention at Last Physical

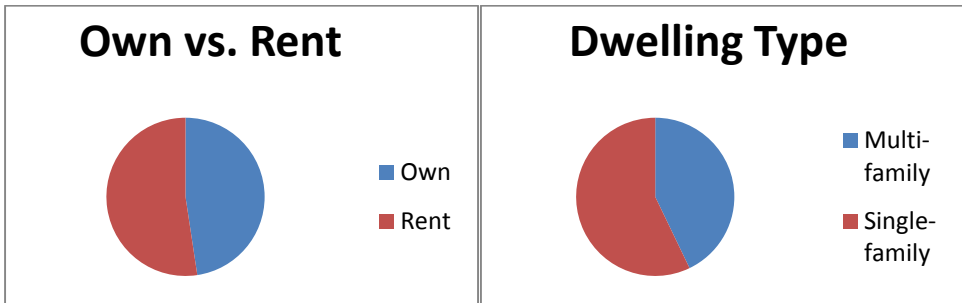
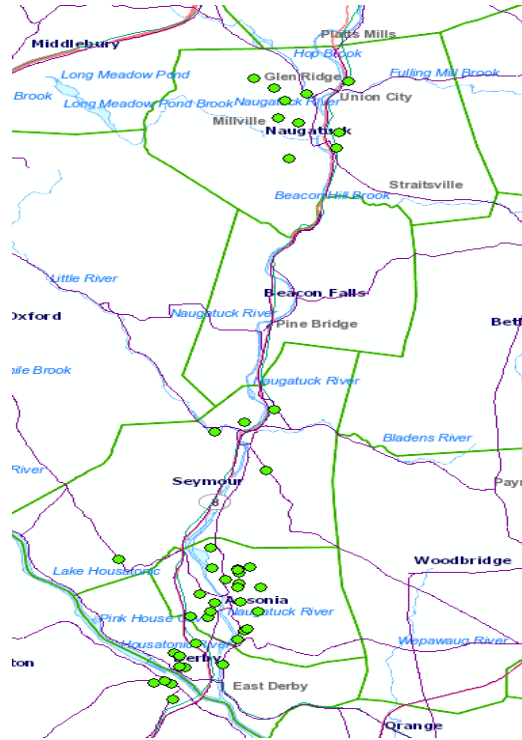


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Conclusion and Recommendations

95% of the families surveyed report not receiving any handouts on Lead Poisoning Prevention and 62% of them additionally reported no verbal discussion about Lead by their Pediatrician. This was a topic that was identified as an area of immediate intervention. Therefore, a “Lead Poisoning Prevention Update” document was drafted and disseminated to the Pediatric offices in the Naugatuck Valley Health District towns via fax. This document detailed the CT State Laws regarding Lead Poisoning, the responsibilities of the pediatrician, and a reminder on the guidelines for lead testing by the Connecticut Department of Public Health. This document is also available on the NVHD website, www.nvhd.org. It may be beneficial for NVHD to conduct surveillance regarding the education and materials families receive from their Pediatrician.

A large number of the properties that have children with EBLLs are located in the towns of Ansonia and Naugatuck. A collaborative effort amongst the community members may be most effective in addressing these findings. The NVHD plans on holding an informational session geared towards landlords, contractors, and builders that work in the six towns of the health district. The focus will be about RRP and will include a presentation on the effects of lead poisoning on children.

The study highlights the importance of educating the parents and caregivers of children in the community setting about lead poisoning which may empower them to communicate with their pediatrician/healthcare provider and to practice lead prevention activities. NVHD will focus on LPP education throughout the towns including daycare centers and libraries.

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