

# Lead Exposure in Allentown

## A Summary of Efforts to eliminate Lead Poisoning in Children



## EXECUTIVE SUMMARY

**The report from the Pennsylvania Department of Health on lead exposure in children in cities including Allentown has nothing to do with water contamination as is the case with the large scale problem in Flint, Michigan. It has to do with lead paint which is present in older housing stock across the Commonwealth.**

The city Health Bureau is not the testing agent. All Allentown children covered by medical assistance are routinely screened at age 1 and 2 by physicians.

In 2014, 11 Allentown children were reported as having a blood lead level of 15ug/dl or higher.

Each report of a child with a lead level of 10ug/dl or higher is investigated by the Allentown Health Bureau. The city Health Bureau educates anyone with a 5ug/dl level or higher and will work with the physicians.

Allentown has a very transient population and many children arrive in Allentown already exposed to lead. Many countries in the Caribbean and South America have a large variety of sources of lead, and lead-based paint is still utilized.

Allentown has had a lead ordinance on the books for decades that requires remediation upon discovery.

The city allocated \$135,000 in CDBG funding in 2016 to continue a remediation and abatement program previously funded by HUD's Healthy Homes.

The city had a systematic inspection and rehabilitation program for over 37 years, resulting in more than 5,000 housing units deemed lead safe.



## Overview

The Vox website story comparing the situation of a water borne lead crisis in Flint, Michigan to the rates of lead exposure in Allentown children is deceptively inaccurate, much like comparing apples to oranges. Flint is experiencing a public health emergency resulting from water contamination. The lead data in Allentown does not stem from any relation to our water or water infrastructure.

The 69 News report that almost 1 in 4 children under age 7 in Allentown has an unsafe level of lead in their blood was grossly inaccurate.

Vox did not generate the lead study mentioned in the news. Rather, Vox reported a 2014 study by the Pennsylvania Department of Public Health (PADOH) that was released in late 2015, probably based on the crisis situation in Flint, Michigan.

**Data and Methodology:** It is important to understand data collection and the validity of data comparison in order to accurately interpret the problem.

- The 2014 lead report released recently by the Pennsylvania Department of Health (PADOH) utilized a new methodology for data reporting called geospatial analysis. This report combines 2010 census data on housing with 2014 case reporting resulting in a different format for results. The zip codes in the report include Salisbury and South Whitehall Township.
- PA ranks third in the United States for having the most housing units identified as built before 1950 and fourth in the US for the most units built before 1978.
- The city is not the testing agent. PA adheres to a requirement for children on medical assistance to be tested for lead at age 1 and age 2. This results in a high number of children on medical assistance in PA and therefore in Allentown being tested for lead. Other states and municipalities are under no legal obligation to report at all and children not covered by medical assistance may or may not be offered testing by their medical provider.
- Allentown has a very robust pediatric provider community. These providers adhere to testing requirements and therefore Allentown children on medical assistance are closely monitored for lead exposure due to potentially higher risks.
  - As a direct result of this aggressive pediatric program and close monitoring of high risk children, Allentown has consistently shown high detection rates, especially among Center City children.
- Until 2012 it was blood lead levels greater than or equal to 10ug/dl(micrograms per deciliter) that were considered by the Centers for Disease Control (CDC) to be above the level of concern. However since, studies show that there is no level that is considered safe. As a result, the CDC has established 5ug/dl as their reference value, meaning that



children with levels above 5ug/dl are considered to have an elevated blood lead level (EBLL).

- The percentages in the PADOH report are based upon the number of confirmed elevated blood levels for children under the age of 7 divided by the total number of children under 7 tested, not the total number of children under the age of 7 in the city.

***What the data indicates is that PA and therefore Allentown is aggressively seeking to test children under 7 years of age for lead and reduce those lead levels as quickly as possible by educating parents and reducing risk via environmental controls.*** Data is readily available and although PA is not a universal testing state, lead screening is readily available and widely supported by the medical community.

**Understanding Lead Exposure in Children:** It is important to understand that the treatment for children exposed to levels of lead under or equal to 15 ug/dl is source removal. There is no medical intervention that is given to children at these levels. Extremely high levels of lead (upwards of 15ug/dl) are rare and may require a medication to remove lead.

The following recommendations are made to families with children whose blood levels indicate exposure at 15ug/dl or lower:

- Remove the child from the source. Lead based paint tastes sweet. Children eat paint chips tainted with lead. They place objects or their hands in their mouths thus transferring lead paint dust from the environment into their bodies.
- Remove the source from the environment. Lead abatement from windows, walls and painted surfaces improves the environment however abatement is extremely costly and must be done by qualified professionals so as to prevent additional exposure.
- Frequent cleaning of homes or apartments containing lead based paint reduces the dust and reduces the risk of exposure.
- Keep young children in close watch to prevent them from chipping and consuming paint. Frequent hand washing also reduces risk from hand to mouth transfer of dust.
- Improve diet. Once exposed, fried or fatty foods retain lead in the system where food high in calcium and magnesium bind to lead and help lead to be excreted.

### **Lead Programming in Allentown**

Concern about lead in Allentown is best explained by a triad of factors – (1) a large number of children under the age of seven years, (2) high poverty rates and low income populations, (3) a significant older housing stock, with a sizeable portion constructed prior to 1950. **Lead exposure to children in Allentown results mainly from exposure to lead dust found in housing that was painted prior to the 1978 ban of lead based paint.** Lead and lead exposure has not been an identified problem with the city’s drinking water.



*The major source of lead exposure among U.S. children is lead-based paint and lead-contaminated dust; which should be professionally removed.*



**In 2013, the City of Allentown's Water Filtration Plant was recognized by a national organization for consistently high drinking water quality for the sixth consecutive year.** The Allentown Water Works plant received a prestigious Area-wide Optimization Program Award on August 5, 2013 at the 86<sup>th</sup> Annual Conference of Water Works Operators Association of Pennsylvania (WWOAP) in State College. AWOP is a national filter plant optimization effort among 22 states, the U.S Environmental Protection Agency, the Association of State Drinking Water Administrators and other organizations. The city's water plant, now in the hands of the Lehigh County Authority (LCA), received similar honors in 2008, 2009, 2010, 2011 and 2012. It should be noted that LCA also follows all required testing procedures to ensure that lead exposure falls within acceptable standards as defined by the US Environmental Protection Agency and the Pennsylvania Department of Environmental Protection. LCA's water has routinely passed the test for acceptable levels of lead exposure.

**The Allentown Health Bureau (AHB) in partnership with the Bureau of Building Standards and Safety (BSS) has been combatting lead exposure for decades. The BSS had a systematic inspection and rehabilitation program for over 37 years, resulting in more than 5,000 housing units deemed lead safe.**

Federal regulations require that any rehabilitation work done in residential properties and funded by federal dollars be tested and result in a lead-safe condition before any funds are disbursed.



Finally, the City requires contractors who work on rehabilitation jobs funded with federal dollars to have and maintain the proper lead certifications to ensure compliance with said regulations.

In fact, because of this decades long effort, Allentown was able to significantly reduce the number of housing units with lead exposure.

Lead exposed children are reported by laboratories to AHB for investigation. AHB staff educates families, can test the environment for the presence of lead and can work cooperatively with families and BSS to suggest and at times even financially assist families with lead abatement or remediation.

- Prior to 2014, AHB staff screened nearly 1000 children per year for lead exposure (blood testing) through our own testing program. In 2014 the CDC eliminated funding for this testing program and shifted the responsibility for testing to pediatricians. All children covered by medical assistance are routinely screened at age 1 and age 2. Children not covered by medical assistance are pre-screened by their pediatricians for risk (age of housing, condition of housing, etc.) and screened if determined necessary.

- Prior to 2015 the City of Allentown received Healthy Homes funding for remediation and abatement. Pennsylvania was not awarded this funding for 2016, so in a pro-active measure \$135,000 of CDBG funding was allocated by the city to continue the program.
- Allentown has a very transient population and many children arrive in Allentown already exposed to lead. Many countries in the Caribbean and South America have a large variety of sources of lead, and lead-based paint is still utilized. Toys, household items, pottery, homeopathic gels, lotions and potions in these countries may contain high levels of lead and are readily used and distributed.
- AHB staff visits bodegas (Spanish markets) and suggests limiting sales of items known to contain lead. Staff educates citizens about the risk of using these products as part of home safety surveys, maternal child health home visits, community presentations, and environmental inspections.
- In 2014 eleven (11) Allentown children were reported as having a blood lead level of 15ug/dl or higher. These 11 children resided in seven (7) different census tracts indicating that the existence of lead based paint exists throughout the city although the majority of exposed children tend to come from the area commonly referred to as Center City.
- Each report of a child with a lead level of 10ug/dl or higher is investigated by AHB. A community health worker visits the family and thoroughly educates the family regarding lead and childhood lead poisoning. AHB environmental staff may test the environment to determine the possible source and if necessary, suggest or mandate source elimination. The community health specialist works cooperatively with the physician to insure that the levels are reduced and that the child is routinely tested to document progress. The city educates anyone with a level of 5ug/dl or higher and will work with physicians.
- Historic homes face additional challenges in remediating lead based paint since remediation often requires replacing windows and doing work which compromises the historical presentation of the home. That effort can conflict with local ordinances and is often met with opposition from historical preservation groups.
- Allentown has had a lead ordinance on the books for decades unlike many other cities or municipalities. This ordinance requires lead remediation upon discovery and enforces proper abatement, often an expensive and onerous project for property owners.
- The shift in Childhood Lead Poisoning Prevention funds is particularly disappointing since it has resulted in increased funding to areas where no enforcement accompanies testing and decreased funding to cities like ours where enforcement is occurring. But as stated previously, the city has stepped-up to fill that funding gap with CDBG dollars.

