



# **Update on Preparation for Universal Lead Testing**

## **Allegheny County Board of Health Meeting**

**11.01.2017**



# Areas of Preparation

- Education on all sources & primary prevention
- Surveillance and monitoring: generally, and compliance with regulation
- Intervention and follow up: medical community guidance, outreach to families and key communities, home assessment and other resources
- ACHD preparation to operationalize testing onsite





## Education/Prevention

- Prepared FAQ document about the new lead regulations (<http://www.achd.net/legal/pub/pdf/Article-XXIII-FAQ.pdf>)
- Completed a lead brochure for parents with information on primary prevention, testing, and resources.
  - Translated into Spanish, Arabic, Nepali, and French.
- Completed document for doctors.
  - Allegheny County Health Department (ACHD) Recommendations for Case Management of Children Receiving Blood Lead Tests.





## Education/Prevention

- Released Lead Outreach Mini-grants RFP.
  - Support activities to educate residents on the sources and consequences of lead exposure, as well as prevention and testing.
  - Up to 10 projects will be funded until July 1st.
- Launched ACHD's approach to lead page for ACHD.net website ([achd.net/lead](http://achd.net/lead))
- Working on lead topic page (for ACHD new website)





# Education/Prevention

- **Allegheny Lead Safe Homes program (ACED)** provides free remediation for families that meet income requirements and have children. They require and pay for a full lead assessment, and remediation of hazards, and require child lead testing
- Sent new parents living in high risk areas (based on predictive models) information on the Allegheny Lead Safe Homes Program (ACED grant).
  - To date 1000 letters have been sent.
- WIC and MCH making direct referrals to Allegheny Lead Safe Homes program after speaking with interested families and/or identifying potential lead hazards during home visits.
- Housing program sending informational flyers for the Allegheny Lead Safe Homes program with all complaint housing non-lead related pre-inspection letters.
- Housing inspectors (newly trained and certified as lead inspectors) providing education and direct referral to Allegheny Lead Safe Homes program.
- Safe and Healthy Homes inspectors doing visual assessment of potential lead hazards, providing referrals and educating families during Healthy Home Assessments.





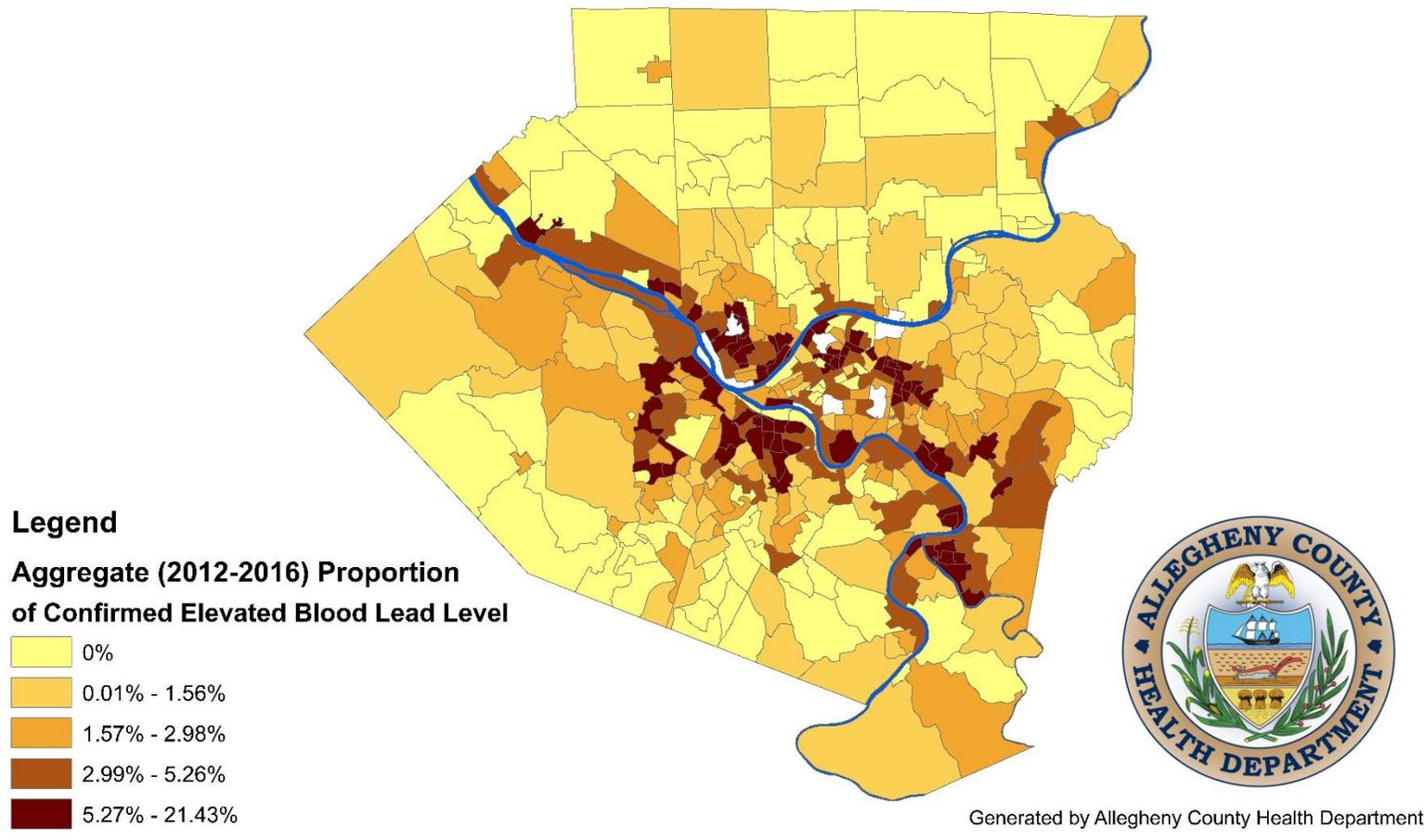
# **Identifying High Risk Communities**





- Number of individual children under six years of age with confirmed blood lead level tests with a measurement  $\geq 5$  ug/dL divided by total number of individual children under six with a blood lead level test.
- Aggregated rates from 2012-2016
- Census tracts stratified by quintiles

Allegheny County Aggregated (2012-2016) Proportion of Confirmed Elevated Blood Lead Levels ( $\geq 5$  ug/dL) by Census Tract for Children Under Six Years of Age



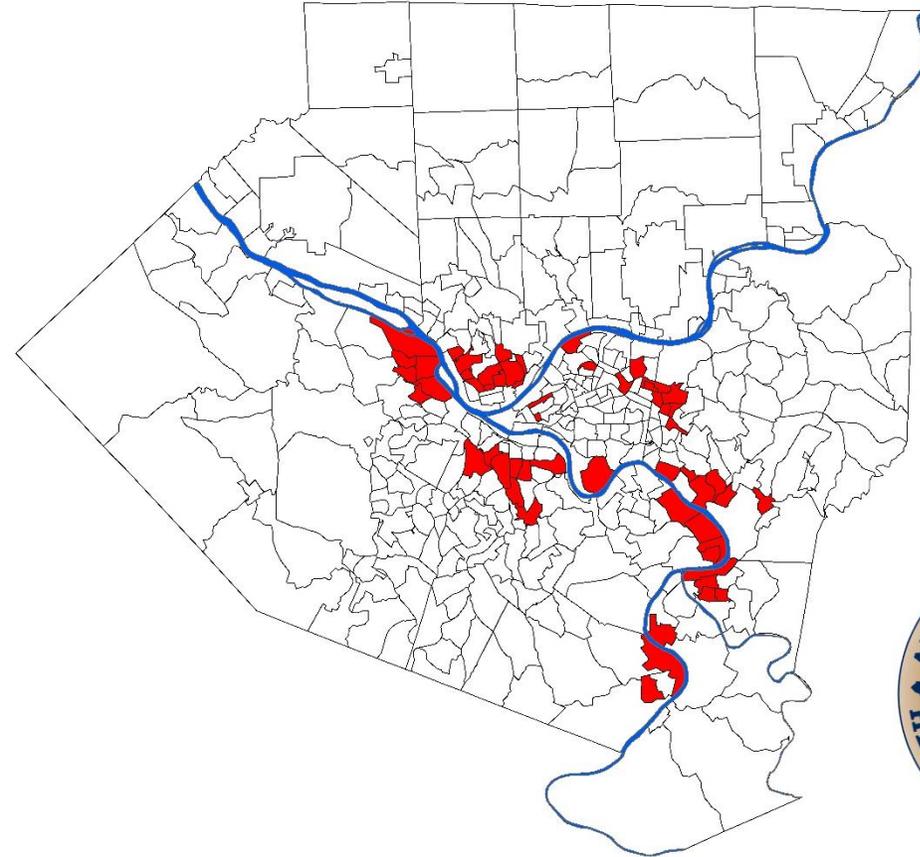


# Identifying High Risk Neighborhoods

Allegheny County Health Department

- Risk model developed for identifying highest risk census tracts for childhood lead exposure
- Model factors are high school education rate, proportion of individuals under five years of age, proportion of houses built before 1950, and percent of households below poverty rate
- Highest quintile of census tracts in risk model identified as priority locations

Allegheny County Census Tracts with Highest Risk for Childhood Lead Exposure



**Legend**

 Highest Quintile of Risk Factors Census Tracts

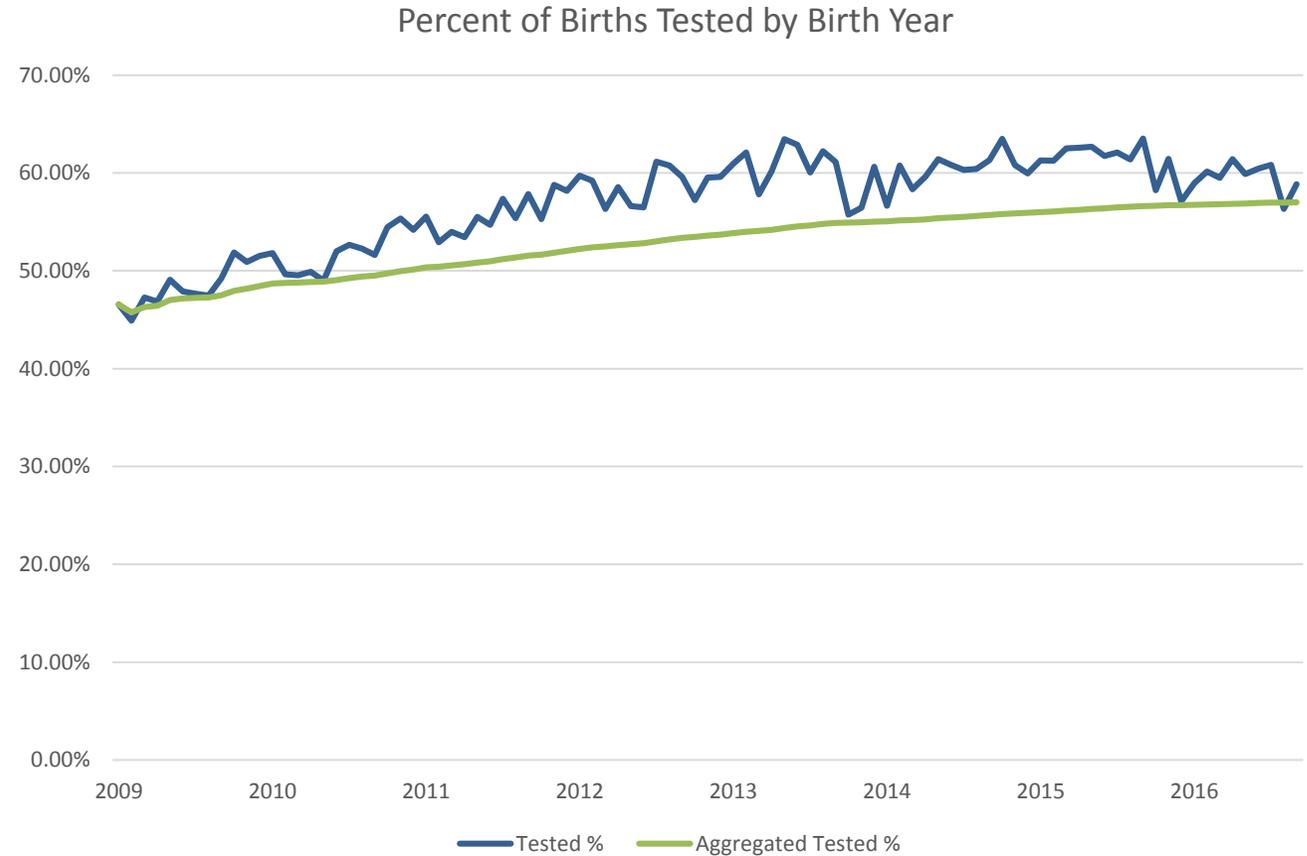


Generated by Allegheny County Health Department



## Surveillance

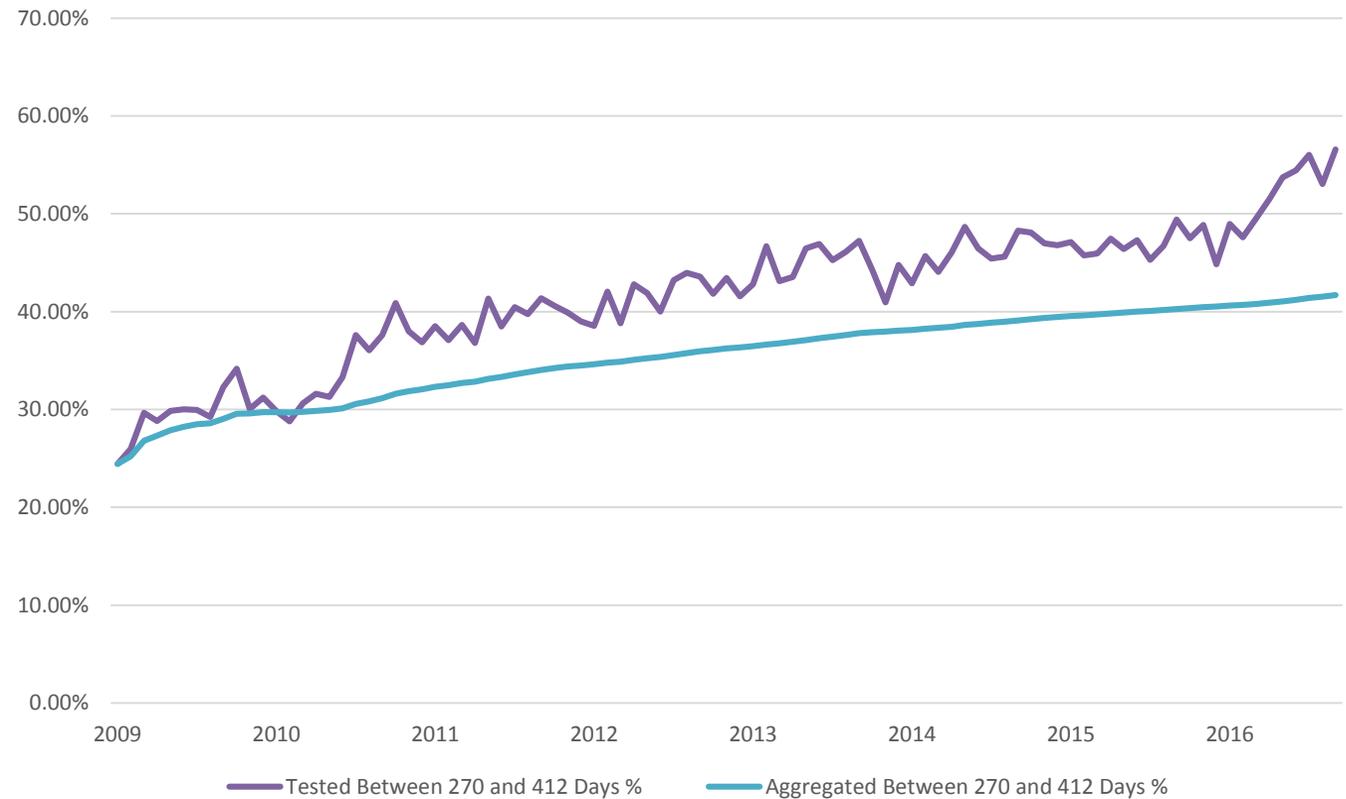
- Met with Dr. Potash (University of Chicago) to evaluate impact of regulation
- Completed matching of children born to lead testing data
- Testing rates for all children < 6 years increased from 48.4% in 2009 to 61.3% in 2015
- More individual children have already been tested in 2017 than in any year in 2009 through 2016
- Children born in 2016 and 2017 still reaching age for recommended tests



## Surveillance

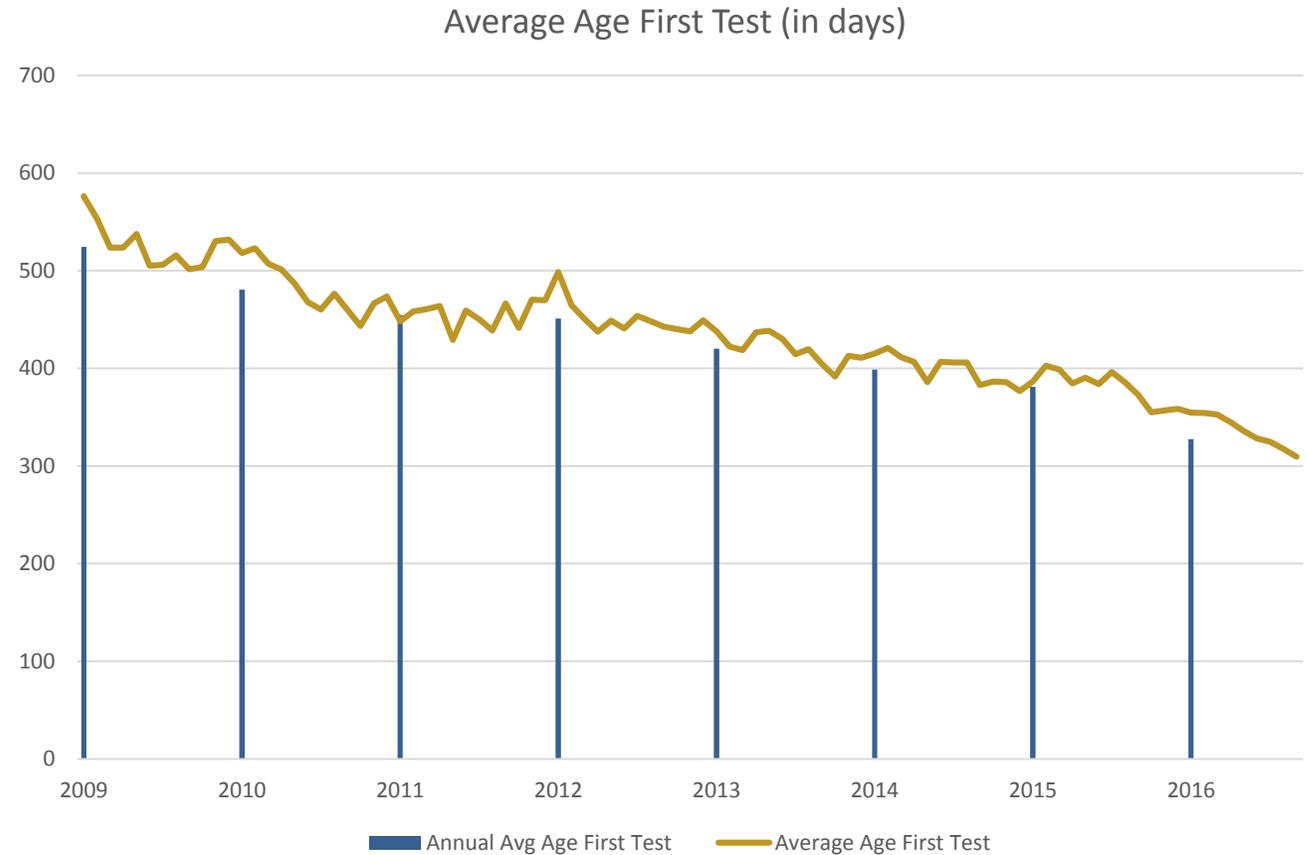
- The proportion of children tested between 9 months and approximately 1 year of age (measured at 270 days and 412 days old, respectively based on Early and Periodic Screening, Diagnostic, and Treatment definition) increased from 29.7% in 2009 to 47.5% in 2015

Percent of Births Tested Between 270 and 412 Days Old by Year



## Surveillance

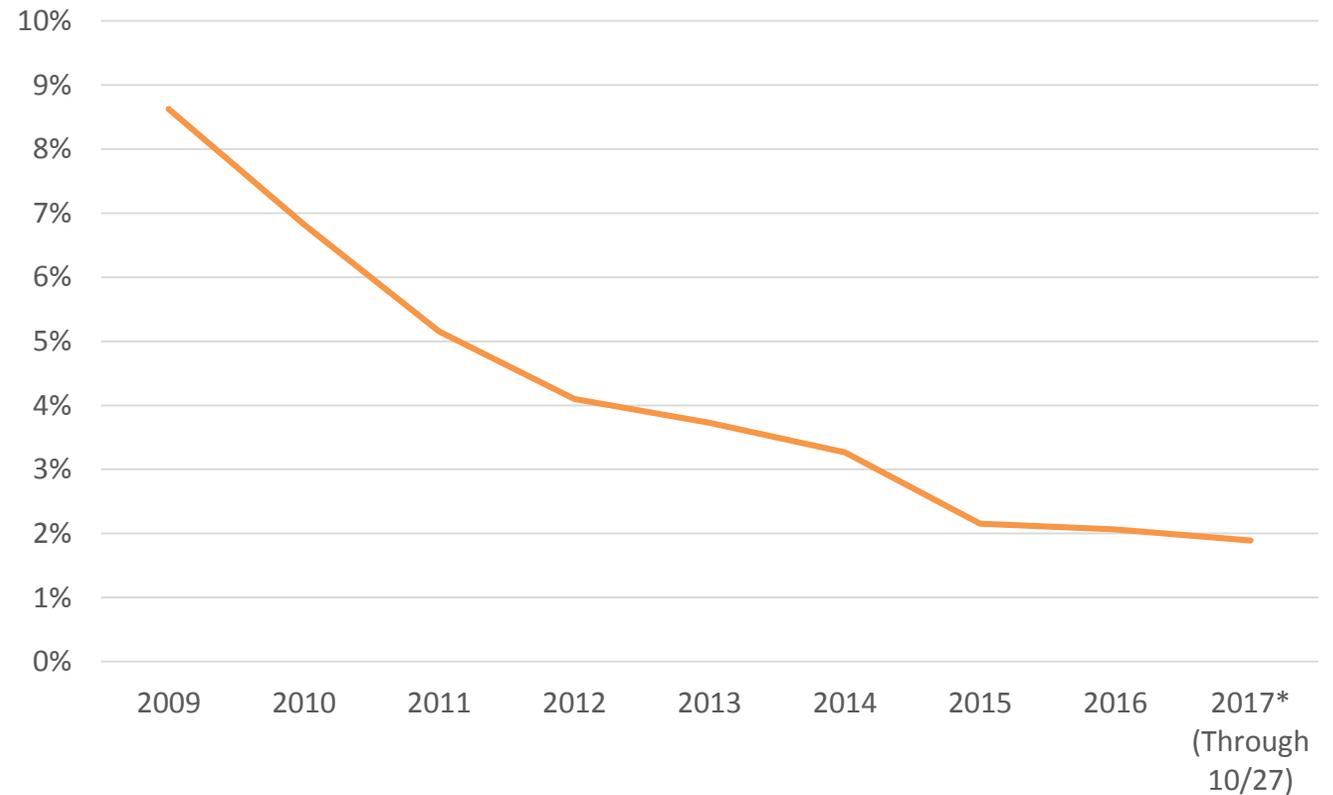
- The average age of a child < 6 years for their first BLL test decreased from 524 days old for children born in 2009 to 381 days old for children born in 2015
- Only measuring average age of first test for children that have been tested



## Surveillance

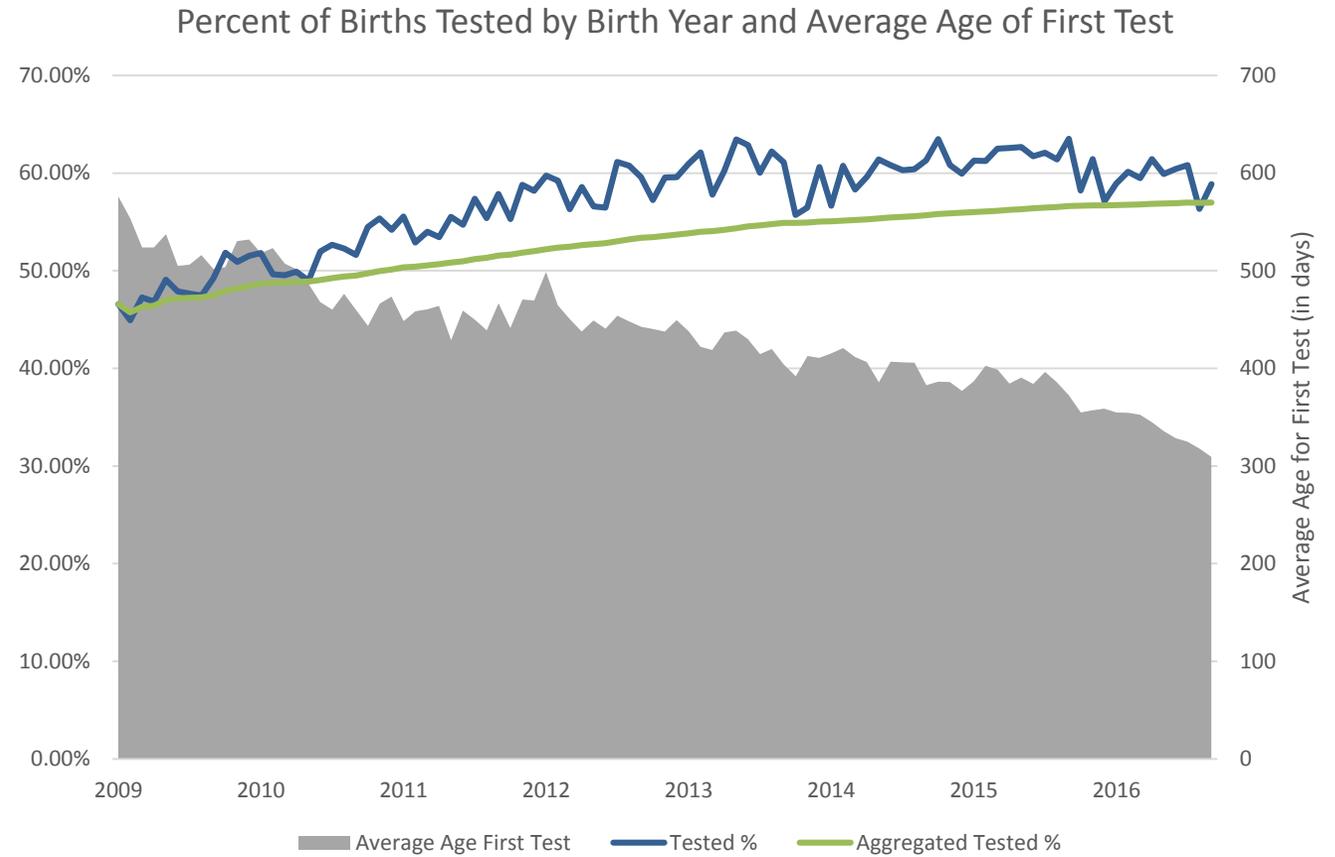
- Proportion of tested children under 6 with unconfirmed elevated capillary tests (no venous or second capillary within 12 weeks) has decreased from 8.63% in 2009 to 2.06% in 2016
- 2017 proportion is at 1.89% through 10/27/2017

Proportion of Unconfirmed Elevated Capillary Tests by Year



## Surveillance

- Tested proportions increasing steadily over the last 7+ years
- Average age of first test steadily decreasing over the last 7+ years





# Intervention

- Signed contract with Gateway and working on one with UPMC
- Phone intervention for families with children with confirmed 5-9 blood lead levels
- 10 housing inspectors were certified
- Purchase of lead blood level testing equipment completed
- Purchase of new XRF has been initiated



## What's next

- Lead Task Force recommendations
  - Policy
  - Primary Prevention
  - Intervention
  - Surveillance
- Follow up of unconfirmed capillaries
- Continuing to work with ACED grant

