

Rowan University

Rowan Digital Works

Stratford Campus Research Day

26th Annual Research Day

May 5th, 12:00 AM

Lead Poisoning, Education, and Advocacy for Prevention (L.E.A.P.) study

Stephen Acheampong
Rowan University

Britney Aderinto

Zander Turcich

Ali Harb
Rowan University

Follow this and additional works at: https://rdw.rowan.edu/stratford_research_day



Part of the [Community Health Commons](#), [Disorders of Environmental Origin Commons](#), [Health Services Research Commons](#), and the [Investigative Techniques Commons](#)

Let us know how access to this document benefits you - share your thoughts on our [feedback form](#).

Acheampong, Stephen; Aderinto, Britney; Turcich, Zander; and Harb, Ali, "Lead Poisoning, Education, and Advocacy for Prevention (L.E.A.P.) study" (2022). *Stratford Campus Research Day*. 75.
https://rdw.rowan.edu/stratford_research_day/2022/May5/75

This Poster is brought to you for free and open access by the Conferences, Events, and Symposia at Rowan Digital Works. It has been accepted for inclusion in Stratford Campus Research Day by an authorized administrator of Rowan Digital Works.

Lead Poisoning, Education, and Advocacy for Prevention (L.E.A.P.) study

Stephen Acheampong OMS-I, Britney Aderinto, Zander Turcich, Ali Harb OMS-II
 Health Careers Opportunity Program, Rowan University School of Osteopathic Medicine

Background

Lead poisoning has been regarded as a major threat due to its irreversible and harmful effects. This includes severe cognitive and developmental impairments, especially in children.¹

Over the years, the CDC has reduced the benchmark for acceptable blood lead levels (BLL) from 10 µg/ml to 3.5 µg/ml to allow for earlier intervention and prevention.²

Despite increased awareness and government programs that lead to a decline in mean blood levels across the country, testing for elevated BLL's, especially in low-income households, continues to be disproportionately lower.^{3,4}

Objective

To develop community-based intervention strategies based on current lead poisoning research and information from content experts in Southern New Jersey

Methods

Literature review was completed to explore existing data on childhood lead testing. Data obtained from NJ Department of Health (DOH) and US Census. Key search terms included: "Lead Poisoning", "Children", "New Jersey", "Covid-19", and "pediatric visits".

Limitations

Lack of demographic information. Screening percentages of children from 6 months to 26/29 months based on US census data

Results

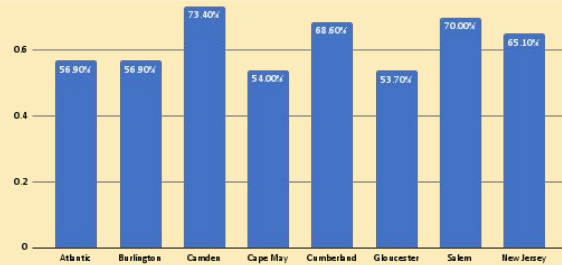


Figure 1. Percent of houses built prior to 1980 in Southern New Jersey counties compared with state percentage

In 1978, the government banned the use of lead based paint. Based on the data from our research, since over 50% of the housing units in Southern New Jersey counties were built prior to 1980, people living in these units could be at an increased risk of lead exposure.

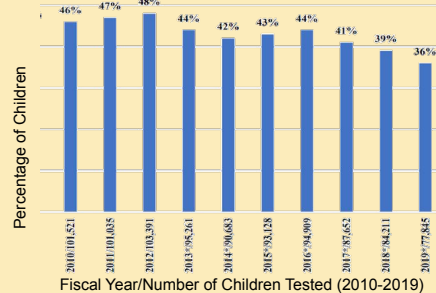


Figure 2. Trend in Percentage of Children 6 - 26/29 Months of Age Screened for lead in New Jersey

From this data, we see that the overall percentage of children tested for blood lead levels has been on the decline since 2017. Due to the COVID-19 pandemic there has been a decline in childhood pediatric visits which correlates with a decline in childhood lead testing.

Proposed Interventions

- Partner with community stakeholders to identify local barriers preventing access to lead testing
- Increasing direct access to lead testing kits
 - Making them available at barbershops, salons, churches, local businesses
 - Hosting workshops at schools and community centers
- Distribution of educational resources
 - Flyers
 - Quick fact sheets
 - Children's books
- Advocate for hands-on training
 - New homeowners
 - New parents
 - Construction companies working in "high risk" communities

Conclusion and Acknowledgements

Barriers continue to exist that prevent direct access to educational information and resources regarding childhood lead poisoning in local communities. Identifying these barriers and Increasing efforts to bring resources to at-risk communities will help ensure the members of these communities have all the information and tools they need to better protect their children and families.

References & Acknowledgements

We would like to express our sincere gratitude to Mary Duggan, Archana Salek, Dr. Kadrmas-Iannuzzi, Bonnbelle Arrojo, and Lauryn Tilghman for their time, assistance and guidance.

