

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land and Materials Administration

1800 Washington Boulevard · Suite 610 · Baltimore Maryland 21230-1719

410-537-3304 · 800-633-6101 · www.mde.maryland.gov



December 1, 2022 · 9:30 a.m. – 11:30 a.m. **Google Meet** **Distributed Meeting Material**

- Final Agenda 221201
- Lead Commission Testing Evaluation_12012022

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LEAD POISONING PREVENTION COMMISSION December 1, 2022 9:30 a.m. – 11:30 a.m. • Google Meet Meeting Agenda

- Welcome and Introductions
- Approval of Minutes – November Minutes Tabled to January 2023
- Old Business
 - Health Department Open Forum-Takeaways
- New Business
 - MDH Evaluation of Universal Testing and Updates on Home Visits (Cliff Mitchell)
 - Discuss Mead Commission Calendar Tentative Dates for 2023-Tabled to January 2023
- Pending Legislative Action Dates
- Agency Hot Topics/Current Events
 - **MDE** (Maryland Department of the Environment)
 - **MDH** (Maryland Department of Health)
 - **Maryland DHCD** (Maryland Department of Housing and Community) Development
 - **BCHD** (Baltimore City Health Department)
 - **MDAAP** (American Academy of Pediatrics, Maryland Chapter)
 - **HABC** (Housing Authority of Baltimore City)
 - **Baltimore City DHCD** (Baltimore City Department of Housing and Community Development)
 - **MSDE/OCC** (Maryland State Department of Education/Office of Child Care)
 - **MIA** (Maryland Insurance Administration)
 - **GHHI** (Green & Healthy Homes Initiative)
- Commissioner Comments and Updates
- Public Comments and Updates

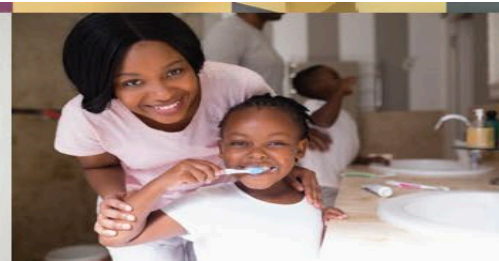
The next Meeting is scheduled for Thursday, January 5, 2023, 9:30 a.m. – 11:30 a.m.



CHILDHOOD BLOOD LEAD TESTING IN MARYLAND, 2022: EVALUATION AND RECOMMENDATIONS

Clifford S. Mitchell, MS, MD, MPH
Director, Environmental Health Bureau

December 1, 2022



Background

- ❖ March 28, 2016 Regulations (COMAR 10.11.04)
 - Health care providers required to do blood lead tests for all children born on or after January 1, 2015 at age 12 and 24 months regardless of their place of residence
 - For children born before January 1, 2015 and not enrolled in Medicaid, testing continued to be based on whether they lived in at risk areas as defined in the 2004 Targeting Plan
 - All children enrolled in Maryland's Medicaid's Early Prevention, Screening, Diagnosis and Treatment (EPSDT) tested at 12 and 24 months of age, regardless of their place of residence

Follow Up Evaluation

- ❖ Late 2019, MDH Environmental Health Bureau (EHB) began an evaluation of the regulatory changes, as recommended in the 2015 Targeting Plan, with the following goals
 - Measure the impacts of the Department's changes to COMAR 10.11.04 on childhood blood lead testing rates
 - Determine whether the regulatory changes had any impact on the number and rates of children with elevated blood lead levels
 - Based on findings, make recommendations related to future testing policies
- ❖ Evaluation significantly delayed by COVID-19 response; also by CDC plans and announcement to lower Blood Lead Reference Value, followed by Maryland's response (HB 1110)

Childhood Lead Testing in Maryland, 2010-2020

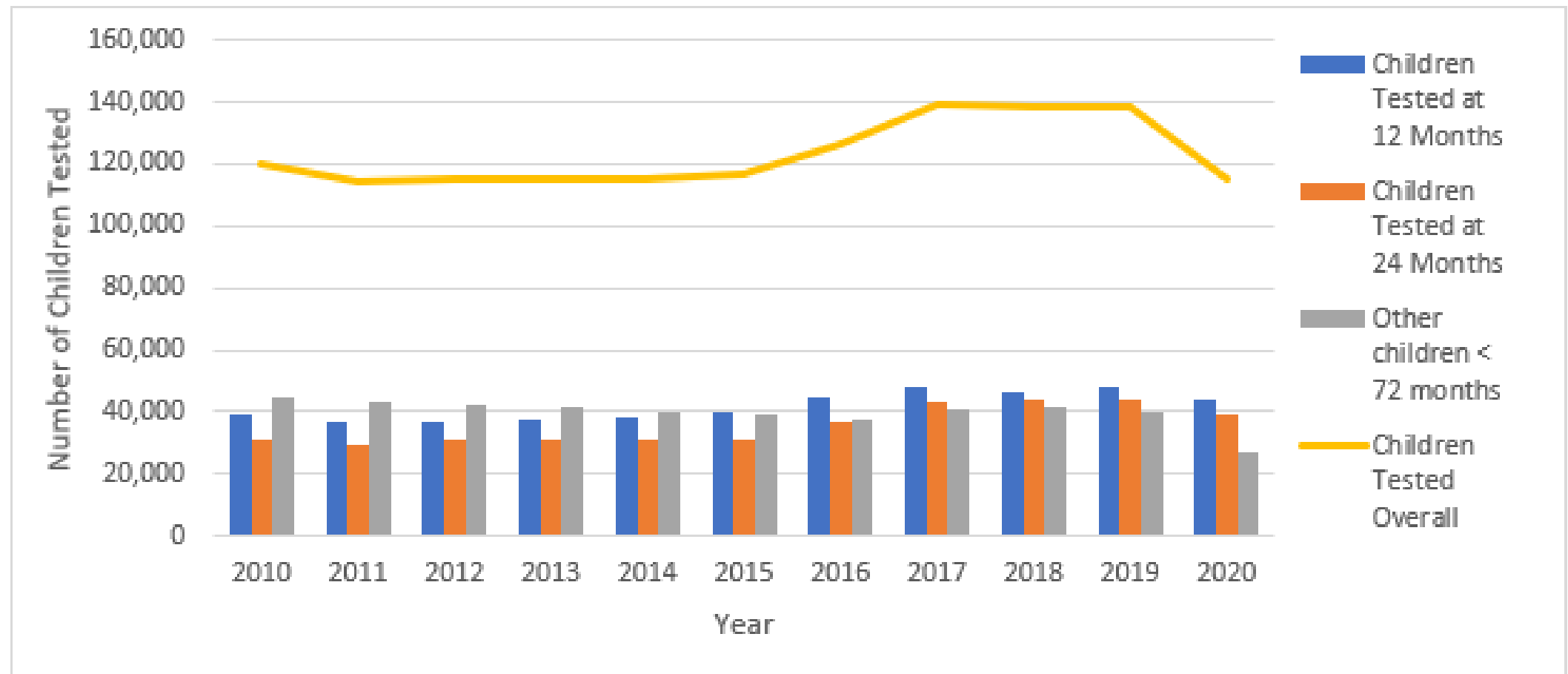


FIGURE 1. Annual number of children tested for blood lead at age 12 months, 24 months, and all other ages less than 72 months, 2010 - 2020.

Impact of Testing Regulation Changes on Testing Rates

- ❖ Compared with the pre-2016 period, significant increases in testing rates at both 12 and 24 months, primarily in areas that were historically not considered at risk
- ❖ No similar effect seen for older children

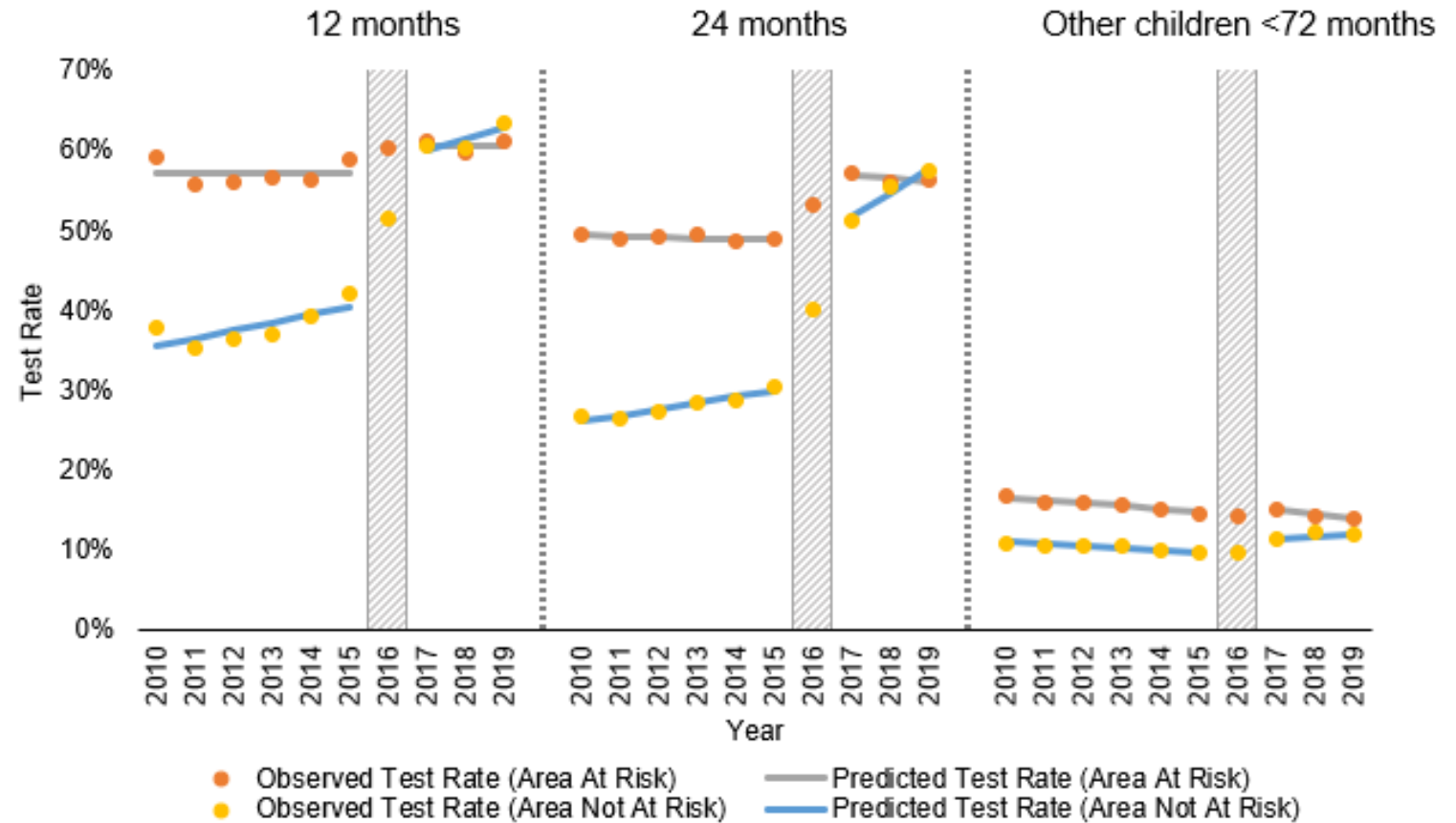


FIGURE 2. Observed and predicted childhood blood lead testing rates in Maryland before and after implementation of 2016 testing regulations.

Impact of Testing Regulation Changes on Measured Blood Lead Levels

- ❖ New regulations did not significantly affect the pre-2016 trends in rates of elevated blood lead levels

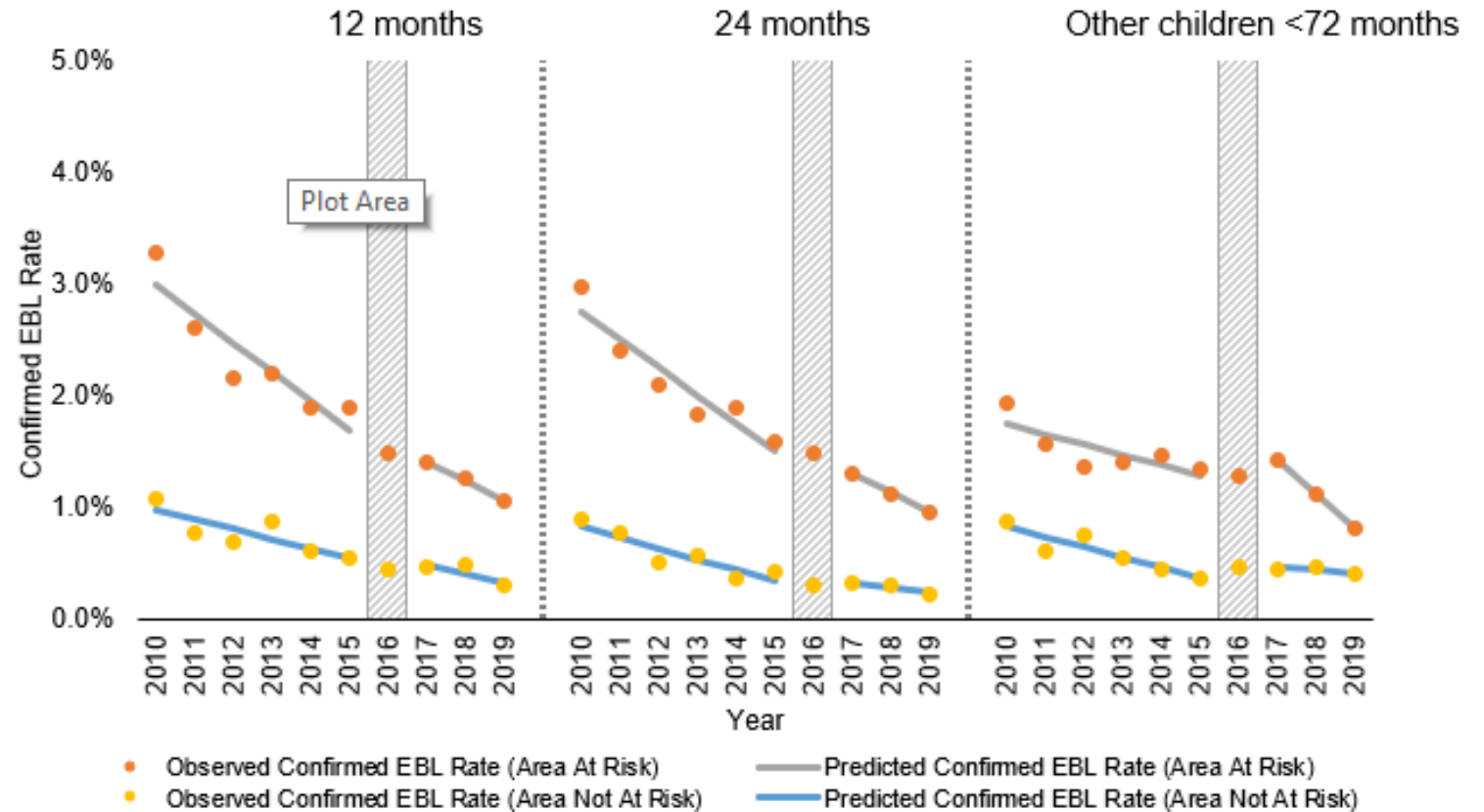


FIGURE 3. Observed and predicted childhood rates of elevated blood lead levels in Maryland before and after implementation of 2016 testing regulations.

Future Blood Lead Testing Targeting Options

- ❖ Option 1 – Maintain current testing strategy
- ❖ Option 2 – Resume targeted testing, based on blood lead distribution
- ❖ Option 3 – Resume targeted testing, based on historical risk factors

Findings

- ❖ Finding 1: Regulatory changes in 2015 and 2016, including the changes to the state's testing strategy, had a clear positive impact on blood lead testing rates, particularly in areas not previously defined as at risk for lead poisoning
- ❖ Finding 2: While the increase in blood lead testing identified more children with blood lead levels between 5 and 9 $\mu\text{g}/\text{dL}$, there was not a corresponding increase in the number of children with blood lead levels of 10 $\mu\text{g}/\text{dL}$ or greater, which was the legal definition of elevated blood lead levels at the time
- ❖ Finding 3: Despite improvements, lead testing rates continue to fall below goals, and new tools are needed to promote testing and make it easier for both families and providers

Recommendation 1

- ❖ Maryland should continue the current strategy of defining the entire state as at risk and continue to test all children at 12 and 24 months of age. MDH and MDE should analyze the distribution of blood lead levels from January, 2023 forward in re-evaluating the state's testing strategy. At least three years of data will be required to assess the strategy and impacts of other changes underway in lead poisoning prevention in the state

Recommendation 2

- ❖ MDH and MDE should work with the provider community to increase testing rates, and improve provider reporting of blood lead test results and data on race and ethnicity

Recommendation 3

- ❖ The new BLRV of 3.5 $\mu\text{g}/\text{dL}$ will result in an increase in the number of children who require some clinical and/or case management follow up, and state agencies need to carefully evaluate the messaging, effort, resources, and health equity implications of these changes

Acknowledgments

Elizabeth Heitz, MPH, Council of State and Territorial Epidemiologists Applied Epidemiology Fellow in the Environmental Health Bureau, 2018 – 2020, for the regression analyses of blood lead testing and blood lead levels

Ezatollah Keyvan-larijani, MD, DrPH, for his many years of leadership of the Maryland Childhood Lead Registry and his untold contributions to the state's lead poisoning prevention efforts

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