

Lead Exposure in Cleveland: Enhancing Public Health

CITY of CLEVELAND Communication and Case Management

MAYOR JUSTIN M. BIBB

PUBLIC HEALTH



CASE WESTERN RESERVE
UNIVERSITY
School of Medicine

Faye Hashim, MPH Candidate

Preceptor: Patrick Cusick, Deputy Commissioner, Cleveland Department of Public Health

Master of Public Health Program

Background

The Cleveland Department of Public Health's Lead Poisoning Prevention Program, under the Division of Environment, aims to improve quality of life by providing education and promoting a healthier city for all residents. The Lead Safe Living Program focuses on equipping families with the knowledge and resources needed to prevent lead exposure.

During my practicum, I assessed gaps in existing health department resources and examined how the evolving needs of target populations—particularly multilingual refugee communities—have shaped outreach efforts. With the increasing reliance on online resources and a rise in elevated blood lead level cases, I developed educational materials for distribution in community centers, ensuring accessibility through basic educational content and Arabic translations. Additionally, I worked on restructuring the Lead Safe Living webpage to enhance usability and provide more relevant information for families seeking support.

Population

Show proportion of calls that require an interpreter
Where dowe pla on putting these handouts
Can a 6th grader understand this

Learning Objectives

1. Redesign the Lead Safe Living Webpage

Enhance structure and content to improve accessibility and provide clear information on lead exposure prevention.

2. Develop an Accessible Lead Safe Living Resource

Address literacy and language barriers by creating a user-friendly infographic with FAQs, guidance, and lead exposure mitigation strategies.

3. Case Management for Lead-Exposed Children

Provide support and resources for children under six with elevated blood lead levels (3.5–9.9 µg/dL), ensuring timely follow-up and education for families.

Activities

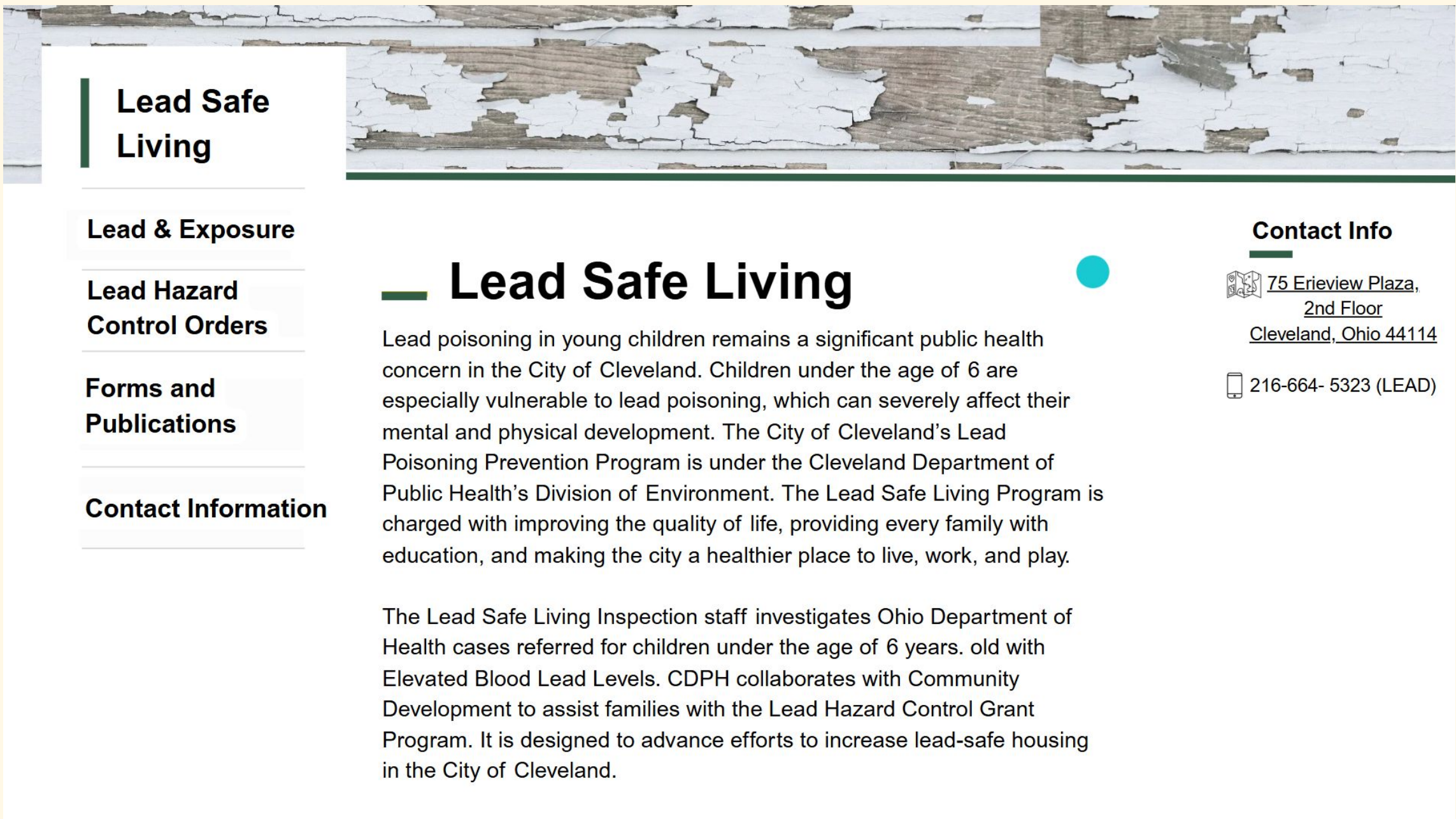
- Redesign and Enhancement of the Lead Safe Living Webpage: Updating and reorganizing content with updated information and points of contact.
- Creating an accessible Lead Safe Living infographic tailored for low-literacy and immigrant populations, featuring clear visuals, simple language, FAQs, and guidance on lead exposure risks and prevention.
- Contacting families of children with elevated blood lead levels (EBLL) to conduct comprehensive assessments, identify potential sources of lead exposure, and connecting guardians with relevant community resources for intervention and prevention.

| January 2025 | April 2025 |
|---|---|
| Total 3.5-<10 Initial Non-Letter Contacted | Total 3.5-<10 Initial Non-Letter Contacted |
| 520 | 488 |
| Total of Combined Questionnaire | Total of Combined Questionnaire |
| 136 | 139 |
| Percentage completed following Non-Letter Contact | Percentage completed following Non-Letter Contact |
| 26.20% | 28.50% |

Table 1. Outcomes of Non-Letter Contact for Children with Blood Lead Levels of 3.5–<10 µg/dL in January and April 2025.

| Total 3.5-<10 Initial Non-Letter Personally Contacted | Total of Combined Questionnaire Personally completed |
|--|---|
| 90 | 21 |
| No. Initial Non-Letter Contacted requiring an interpreter | Percentage Non-Letter Contacted requiring an interpreter |
| 17 | 19% |
| No. Initial Non-Letter Contacted, non-english speakers requiring an Arabic Interpreter | Percentage Non-Letter Contacted, non-english speakers requiring an Arabic Interpreter |
| 5 | 29.40% |

Table 2. Personal Case Management data and demonstration of frequency in cases requiring subjective linguistic interpretation.



Updated Lead Safe Living Web Page Design

Lessons Learned

Through my work with the Cleveland Department of Public Health, I have learned several important lessons:

- The importance of tailoring resources to the specific needs of the target population by conducting research and understanding community barriers.
- The significance of engaging the audience before presenting information. Establishing a connection and ensuring attention is crucial to facilitate the effective transfer of knowledge.
- I have improved my skills in utilizing digital tools to enhance user experience, ensuring that online resources are intuitive and provide immediate access to vital information.

Public Health Implications

These deliverables play a crucial role in educating the community by providing information in a clear, accessible format through simplified language and digestible handouts. Including an additional language ensures that more vulnerable individuals have access to important resources. With the growing reliance on online resources, redesigning the Lead Safe Living webpage enhances user experience and facilitates faster access to tools and information, ultimately helping to protect families and prevent elevated blood lead levels among children in Cleveland.

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