

## Eastern Michigan University

## Michigan Childhood Lead Poisoning Prevention Program for Underserved Asian Americans

with funding support from Michigan Department of Health & Human Services Child Lead Exposure Elimination Commission

June 17<sup>th</sup>, 2022







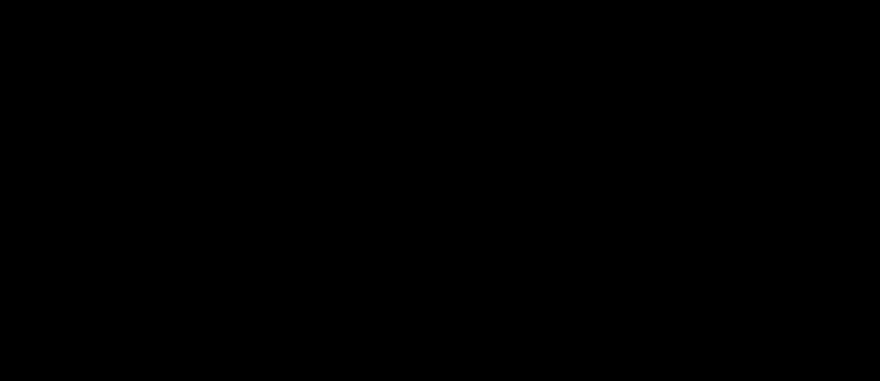


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# Purpose of the Project

Design, plan, implement, and evaluate a culturally appropriate lead poisoning prevention program for high-risk Asian-Americans in Hamtramck and the Detroit area.

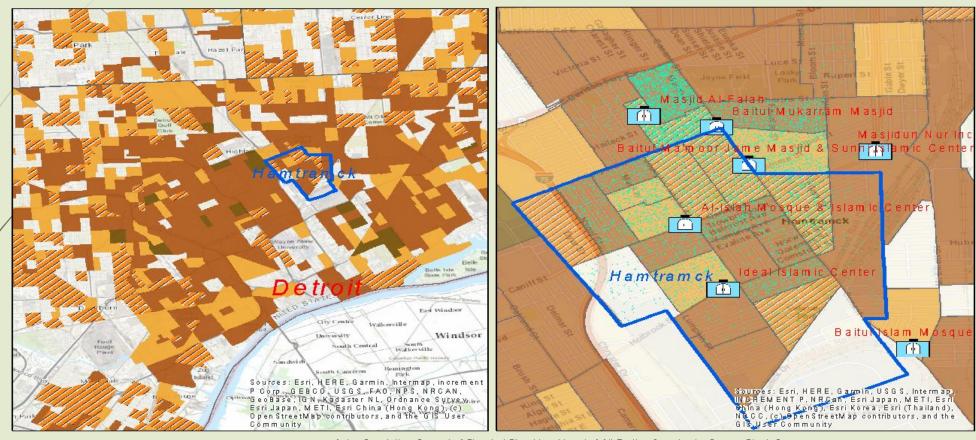
# Why the Hamtramck Area?

### Lead Poisoning Risk

### and Hamtramck



### **Project Work Plan**



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Asian Population Percent of Elevated Blood Lead Level of All Testing Samples by Census Block Group



**Bangladeshis and** 

**Elevated Blood** 

Lead Level

## Project Goals

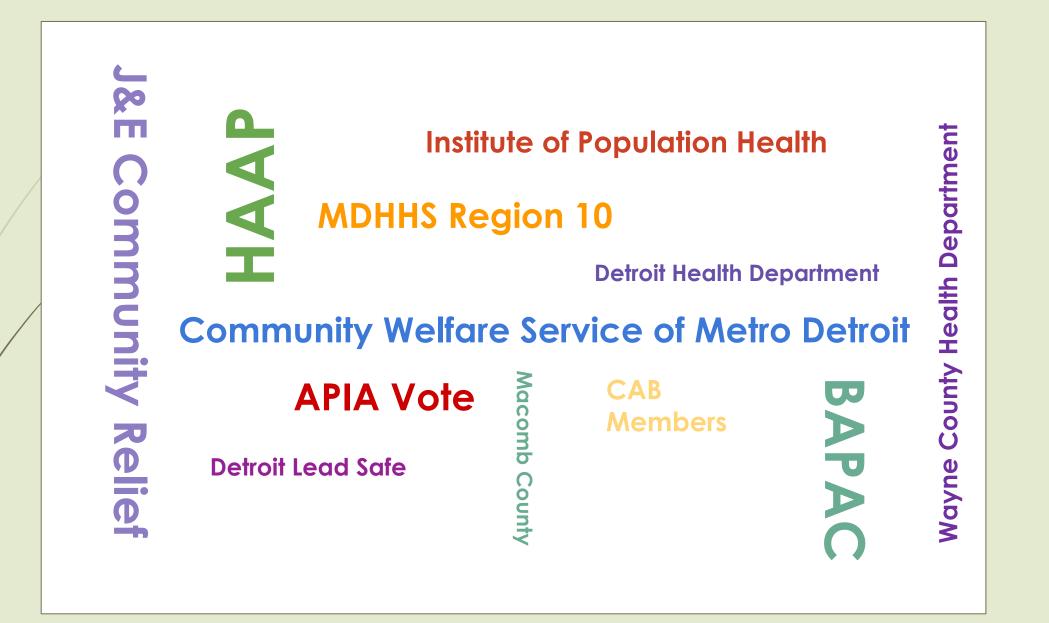
- A. Connect high-risk children and pregnant women with lead testing and prevention services
- B. Provide healthcare professionals and providers with education related to lead testing and elevated blood lead level treatment
- C. Create a primary prevention program to increase awareness and connect the community to resources



Increase lead-testing and enhance the linkage to services for high-risk children and pregnant women.

## **Goal A1-2 Objectives**

- Obj 1: Provide technical support and expertise for community stakeholders
- Obj 2: Collaborate with community stakeholders to create an action plan



### **Goal A3 Objective**

### Obj. 3: Conduct education and outreach



### Nutrition

TO PREVENT LEAD POISONING AND REDUCE LEAD LEVELS

#### FOODS WITH VITAMIN C



Oranges, Grapefruit, Strawberries, and Melon



Potatoes



**Tomatoes and Bell Peppers** 



Lean Red Meats, Fish, Poultry



Made possible from funding by the MDHHS and CLEEC

#### Well Fed, Less Lead

Good nutrition is one way to protect your family from lead. For children and adults, three key nutrients can play a role in protecting the body from the harmful effects of lead: calcium, iron, and vitamin C. These nutrients help the body absorb less lead and are part of a healthy diet. Choose a variety of food daily.

#### FOODS WITH CALCIUM



Milk, Cheese, Yogurt



Calcium-fortified orange juice



Broccoli, Dark Leafy Greens (Also contain Iron and Vitamin C)

#### FOODS WITH IRON



#### Legumes (Beans, Peas, Lentils)

For more information about lead testing contact Sarah Lally sarstjoh@med.umich.edu (734) 320-6432



#### **Iron-Fortified Cereals**

**Creating Healthy** Asian American Communities in Michigan





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(10012316, 10114, 1014) Creating Healthy Asian American Communities in Michigan



**Eastern Michigan University** 



#### How Does My Child Have a High Blood Lead Level?

Many older homes built before 1978 were painted with leadbased paint. Water fixtures, things like pipes, sinks, faucets, and sink handles were also made with lead.

Children are at an increased risk for lead poisoning because they like to put everything in their mouths, this is one way lead gets into the body. Lead can also be inhaled by dust in the air. Dust is the most common way children are exposed to lead.

#### Why Does it Matter if my Child Has a High Blood Lead Level?

There is no safe level of lead in the blood. Elevated blood levels can cause very serious illness in children, Any level 5µg/dl or higher requires intervention and monitoring.



Funding support from the Michigan Department of Health and Human Services



Michigan Childhood Lead Poisoning Prevention Program for Underserved Asian Americans

My Child has High Blood Lead Levels <u>What Next?</u>

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## **Goal A4 Objective**

Obj. 4: Connect lead-exposed pregnant women and children to services



#### Resources and Services for Lead-Exposed Pregnant Women and Children

#### Where Can We Get Our Blood Lead Levels Tested?

- Mother-baby Clinics in Hamtramck Hamtramck WIC Office (734) 727-7156
  - Hutzel Women's Health Specialists (313) 664-0777
    - Hamtramck Medical Center .
    - Henry Ford Medical Center (313) 871-1926
  - Metro Medical Practice (313) 891 3555 . . Your Child's Doctor
- Institute for Population Health

(313) 972-1000

(313) 309-9350

•

Your Primary Care Doctor

#### What Community Programs Can Help Us?

#### Head Start (313) 202-0255

Early On (800) 327-5966

This program is free and helps children of low-income families with language, literacy, social and emotional development. The program is for children ages 0-5 years old.

This program is free for children ages 0-3 years old who are at risk for developmental delays. It connects families with social, health, and educational resources

#### How Can I Get My Home Tested for Lead?

There are free services to have your home tested for lead. If your home has lead, you can apply for Lead Safe programs to fix your home. The Lead Safe programs are free or lowcost. There are programs for Hamtramck and Detroit, the application process is different depending on your zip code. Please call to have an application mailed to your home or pick up an application at 3100 Caniff, Hamtramck, 48212.

• Lead Safe Ham tramck (734) 727-7400 • Lead Safe Detroit (313) 876-0133 Zip codes: 48211 48212

Zip codes: 48202, 40204, 48206, 48213, 48214

Contact the EMU Lead Team for more information! Sarah Lally, Lead Health Educator (734) 320-6432 email: sarstjoh@med.umich.edu



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## **Goal A5-60bjectives**

Obj. 5: Train bilingual navigators to promote services

### <u>Outcome Obj. 5</u>:

Bilingual Navigators
 provided one-on-one
 education, multiple
 education sessions with
 nurse educator

## **Goal A5-6 Outcomes**

Obj. 6: Maintain collaborative relationships with community stakeholders

### <u>Outcome Obj. 6</u>:

• Two community meetings

Goal B

Strengthening workforce to improve competency regarding lead testing and elevated blood lead level management among health professionals and providers caring for children.

## **Goal B1 Objective**

Obj. B1: Develop and implement lead poisoning education modules/materials to health professionals and licensed providers that take care of children and pregnant women in community of focus.

## Goal B1 Outcomes

### Outcomes B1:

- Established relationships with 15 health care providers on provider list (Pediatric, Family and OB), visited three focus offices visit to health care providers that provide care to a large population of Bengali clients
- Connected and partnered with Hamtramck pediatrician to capture lead testing data

# What Healthcare Providers Need to Know About the **Bangladesh Community** and **Lead**

### Lead Poisoning Risk Factors

- Many homes before 1978 were painted with lead-based paint and built with lead products
- Immigrants and children of immigrants are at an increased risk of having elevated blood lead levels
- Low-income people have an increased risk for elevated blood lead levels
- Low English proficiency (LEP) creates barriers to receiving optimal medical care:
  - Increased difficulty in accessing medical resources
  - Increased communication errors
  - Decreased patient satisfaction
  - Increased risk adverse outcomes
  - Increased heal th disparities in the community
  - Prescription drug complications

### Bangladesh Community Risk Factors

- Hamtramck has the third largest Bangladeshi population outside of New York and Miami
- 70% of homes in Hamtramck were built before 1950
  - 69% of homes built before 1960 are contaminated with lead
- Children in Hamtramck are two times more likely to have elevated blood lead level
  - 30% of the Bangladeshi children in Hamtramck are between the ages of 0-6 years old
- 81% of the Bangladeshi living in Hamtramck are foreign-born
- 39% of the Bangladeshi living in Hamtramck live at the poverty level
- 47% of foreign-born Bangladeshi have LEP

References: Karliner, Jacobs, Chen, & Mutha. (2007). Do professional interpreters improve clinical care for patients with limited English proficiency? A systematic review of the literature. *Family Medicine*, 42(2), 727-754. doi: 10.1111/j.1475-6773.2006.00629.x Jacket & Unger. (2014). Appropriate use of medical interpreters. American Family Physician, 90(7), 476-480. Retrieved from: https://www.aafp.org/afp/2014/1001/p476.html



### How Can Health Care ProvidersHelp?

- Have all pregnant women and children between the ages of 0-6 years old tested for lead
- Provide interpreter services for all Bangladeshi speaking patients
  - Interpreter Services must be utilized to people with low English proficiency (LEP) under Title VI of the Civil Rights Acts.

#### Benefits of Interpreter Services

- Improved quality of healthcare for patients with low English proficiency
- D ecreased communication errors
- Increased adherence to treatment plan
- Increased patient positive outcomes and satisfaction

### More Information to Come!

- Educational modules related to lead poisoning prevention in high-risk children and pregnant women are being developed
- Electronic, easy to use and complete!



Made possible from funding by the MDHHS and CLEEC Contact the EMU Lead Team: Sarah Lally, Lead Health Educator, sarstjoh@med.umich.edu, (734) 320-6432

## **Goal B2 Objective**

Obj. B2: Strengthen lead education content in Nursing curriculum with BSN, RN-BSN, and NP students



## **Goal B2 Outcomes**

### Outcomes Obj. B2:

- CDC lead module to community health nursing classes, pre and post tests
- 190 nursing students completed lead module and course

<u>Goal C</u>

Develop, Implement and Evaluate a Primary Prevention Program for underserved Bangladesh American population in Hamtramck.

## **Goal C1-3 Objectives**

Obj C1-3: Create, Develop and Implement a primary prevention program



## **Goal C1-3 Outcomes**

- Two Wellness Events
- 26 student volunteers



## Goal C1-3 Outcomes (Cont.)

### As results of this program:

 more than 3,000 benefited from primary prevention program



## **Goal C4 Objective and Outcome**

### Obj. C4: Maintain collaborative relationships

### Outcome Obj. C4:

 Bilingual Navigator and his team trained to continue lead outreach and education in the community

## **Things That Worked and Didn't Work**

### **Areas of Excellence**

- Community Navigator
   Face-to-Face education
   Volunteers/interpreters
   Vetting of translated materials
- 5. Drive thru lead and wellness event

### Challenges

- 1. COVID-19
- 2. Connecting with
  - healthcare providers
- 3. Time for buy-in from religious organizations

## **Insights and Findings**

## Need for cultural competence

## Work with multi-sector stakeholders

Community involvement and engagement



Q&A

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# Thank you!