

# **PREVENTION IN PRACTICE: Promoting Healthy Homes, Healthy Families for New Americans in Maine**

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# Workshop Goals

1. Identify challenges faced by refugees to creating a healthy home;
2. Describe strategies for developing culturally appropriate materials to promote healthy homes;
3. Review a model for promoting healthy homes in your own communities.



# Agenda

- Introductions
- Understanding the Lewiston Context
- Lead poisoning in “New Americans”
- Healthy Homes, Healthy Families Partnership
- Challenges and Successes
- Open discussion

**MAPPING THE  
CONTEXT:  
Lewiston, ME**



# Lewiston, ME

- Small-scale city
- 2<sup>nd</sup> largest in Maine
- Working class community
- 2000: 35,690
  - 96% white
  - Ethnically diverse
- 2010: 36,592
  - 86% white
  - ↑ Racially *and* ethnically diverse



Photo: Lewiston, HL Lindkvist

# A Post-Industrial City



- Once thriving mills now shuttered
- Non-gateway city

- Environmental hazards
- Housing inequities



*Photos: Mills, Shamrock & Fleur de Lis , Interior of Bates Mill, HL Lindkvist*



Photo: Lewiston, HL Lindkvist

# “New Americans” in Lewiston

Newly arrived refugees and immigrants in Lewiston estimated at 6,000

- **Somalis** primarily secondary migrants (2001)
- **Somali Bantus** primary resettlement and secondary migration (2005)
- Today, Sudanese and other West Africans, Asian immigrants, Latino migrants



*Photo: Somali Rally, HL Lindkvist*

# **LEAD POISONING IN NEW AMERICANS**

# “A hidden menace”

- April 21, 2000: A 2 year-old Sudanese refugee girl dies from lead poisoning
- CDC/MMWR, 2001 (50(22):457)  
**“Children who are refugees, adoptees, or recent immigrants may be at increased risk... from their country of origin or to continued use of... traditional remedies and cosmetics. However such children also are at risk for exposure to leaded paint hazards in older U.S. housing.”**

# Five Years Later...

“African refugee kids threatened by lead” (AP, May 11, 2005)

- CDC/MMWR, 2005 (54(2): 42)
  - Elevated blood levels detected among African refugee children living in Manchester, NH
  - Second investigation: African children had higher rates of elevated blood lead levels (BLL) in one housing complex compared with US-born children living in the same complex
  - Children older than those typically tested may have elevated BLLs

# Ten Years Later...

- “Refugee children are at high risk of lead exposure before and after resettlement”  
(Eisenberg, et.al. 2011 AJPH 101(1):48)
- Children from Africa, Near East, and South Asia more likely to have pre-entry lead exposure
- New pathways for lead
  - Within immigrant communities, nonpaint sources of lead poisoning (MMWR 2011)

# Overseas Exposures

- Lead gasoline
  - “Belatedly, Africa is converting to lead-free gasoline.” (*NY Times*, 2004)
- Lead-glazed ceramics
- Mining and smelting
- Battery repair and recycling
- Cottage industries (ammunition)
- Flour mills
- Medication and cosmetics
- Consumer products

# Exposure Risks in the U.S.

- Living in older homes
- Presence of lead hazards
- Cultural practices and traditional medicines
- Lack of awareness about the dangers of lead
- Compromised nutritional status

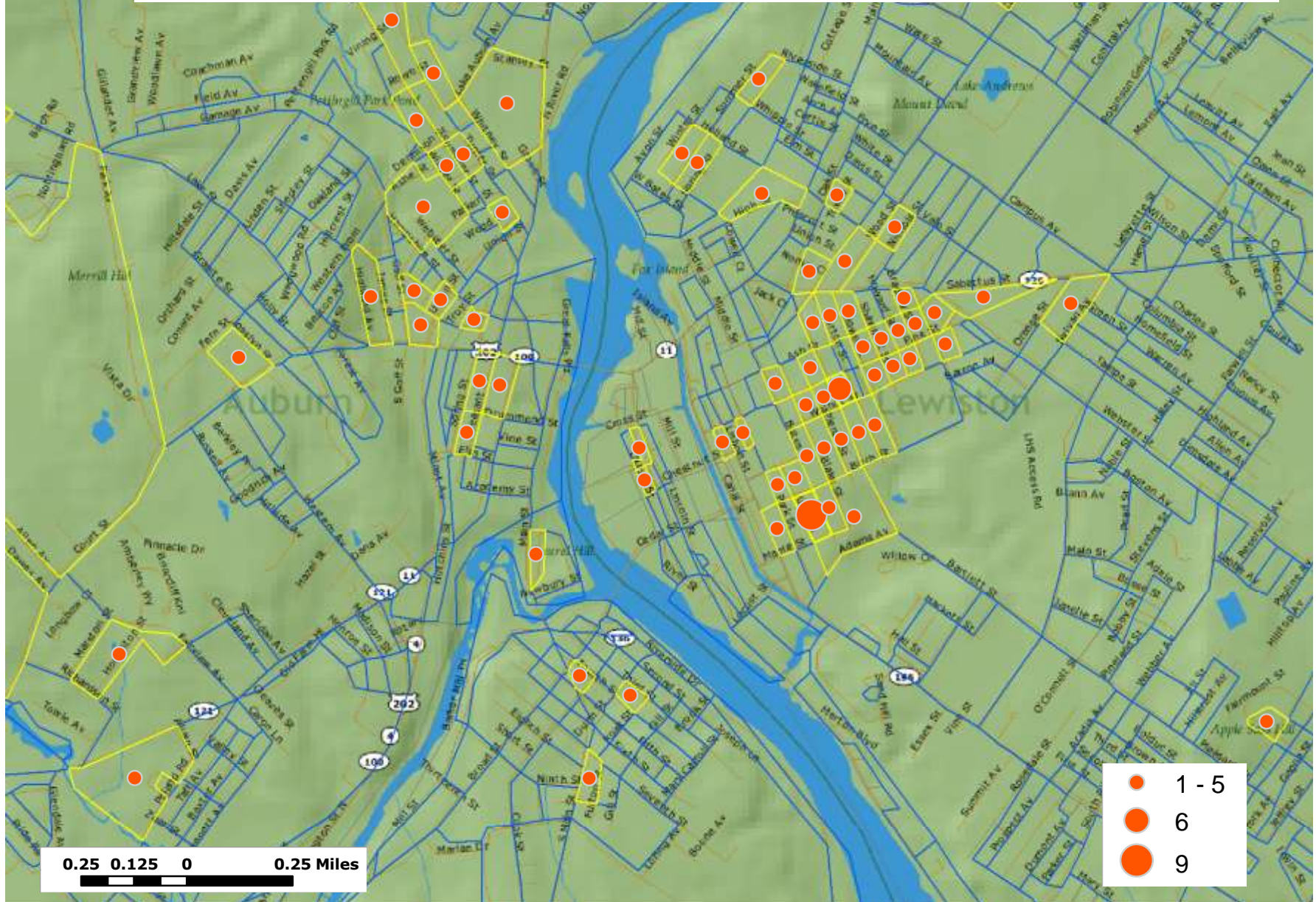
# Environmental Factors in Lewiston



- dilapidated, pre-1950 housing stock
- highest concentration of properties with a history of lead poisoned children
- dirt contaminated with lead

*Photo: Downtown Lewiston tenement, HL Lindkvist*

# 2003 to 2007 Elevated Blood Levels by Census Block in Auburn/Lewiston



# “Leedkha?”

- Few have ever heard of “lead” or “lead poisoning”
- Few remember receiving “disclosure of lead-based paint” from landlord
  - Landlords not required to use interpreters to assist with notification
- No precise translation of “lead” in Somali or Maay Maay

# Cultural Practices

- **Kuul** (kohl) brought from East Africa or imported post-entry
- **Henna** used as a hair dye and for temporary skin decoration
- **Ethnomedical remedies**
- **Imported spices or incense** may contain lead
- **Cleaning methods** (e.g., dry sweeping, dusting)

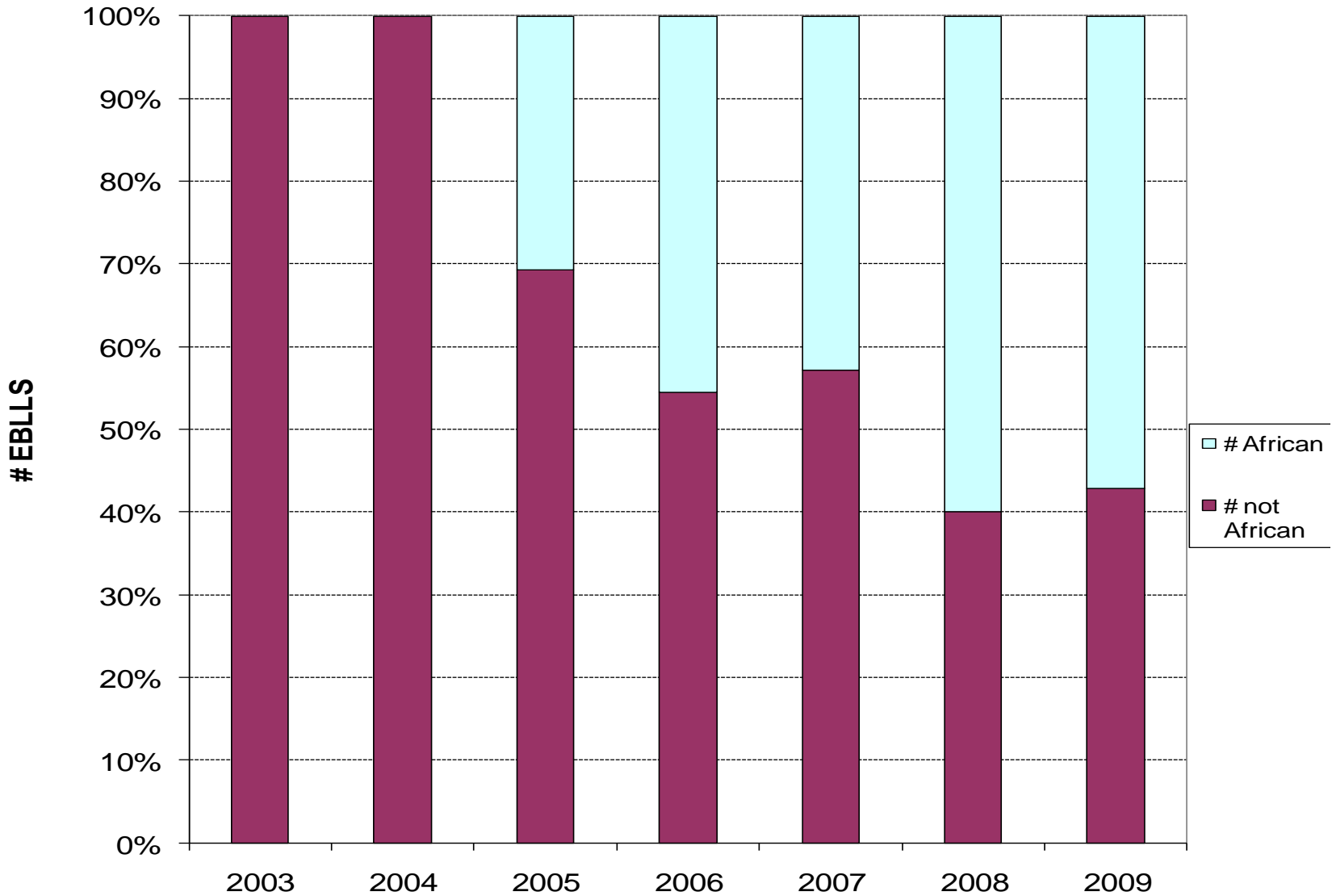


# Preventive Cultural Behaviors

- Remove shoes before entering home
- Ritual ablution
  - Wash hands frequently to maintain purity



# Proportion of Elevated Blood Lead Levels in Lewiston where families are of African descent



Source: Maine CDC • Environmental and Occupational Health Program



# Healthy Homes, Healthy Families

Lewiston/ Auburn

[www.healthyandroggin.org/lead-awareness](http://www.healthyandroggin.org/lead-awareness)

| <b>Organization</b>                          | <b>Goal</b>   |
|--|---|
| Catholic Charities                           | Educate Lewiston/Auburn renters about food sanitation                         |
| Healthy Androscoggin                         | Educate Lewiston/Auburn renters about lead poisoning prevention               |
| University of Maine<br>Cooperative Extension | Educate low income population about nutrition                                 |
| Bates College                                | Understand New Mainer health issues and assist in finding community solutions |
| City of Lewiston                             | Reduce housing related health issues and enforce code violations              |
| Pine Tree Legal Assistance                   | Provide legal advice for low income Mainers                                   |
| Lots to Gardens                              | Educate Lewiston residents about nutrition and gardening                      |
| United Somali Women of Maine                 | Educate Lewiston/Auburn refugees about Lead, Pesticides, Pest Management      |

# Common Thread

*Supporting healthy homes to ensure healthy families in Lewiston and Auburn*

- First meeting:  
**Fall 2008**
- First class:  
**Feb 2009**



# HHHF Classes



**Lead  
Poisoning  
Prevention**



**Pest  
Prevention**  
(Cockroaches  
and Bed  
Bugs)



**Food  
Storage  
and Safety**



**Safe Food  
Preparation  
and  
Nutrition**

# Course Overview



- 2 Two-hour sessions; typically 12:30-2:30pm
- Setting: Large teaching kitchen in downtown Lewiston
- Class taught in English with one interpreter, typically Somali
- Light refreshments, childcare available
- Bus vouchers available



# Module 1



## Lead Poisoning Prevention

- A. Video: Kids Run Better Unleaded (Maine CDC)
- B. Lead Hazard Awareness  
What is lead? Where is it found?  
How can you prevent lead poisoning?
- C. Activity: Safe Cleaning of Lead Dust

# Sunta Rinjiga



**Awralla Hashi-Aldus**  
**Community Health Promotion Specialist**

Kids Run Better Unleaded DVD, Maine CDC & Barbara Bush Children's Hospital

# Module 2



**Pest  
Prevention**  
(Cockroaches  
and  
Bed Bugs)

- A. Video: “New Roots in Common Ground” (Mercy Housing)
  - Chapter 5: Keeping Pests and Bugs Away.
- B. Pests – How do I prevent and eliminate pests?
- C. Discussion: Tenants’ Rights and Responsibilities with Pine Tree Legal Assistance
- D. Activity: Identifying Cockroaches and Bedbugs in the Home

# Module 3



## Food Storage and Safety

- A. Video: “New Roots in Common Ground” (Mercy Housing)
  - Chapter 4: Maintaining and Cleaning Your Apartment
- B. Food Storage – How do I keep food safe?
- C. Leftovers – How long can I keep this food?
- D. Demonstration: Thawing Food
- E. Activity: Understanding Dates and Labels

# Module 4



## Safe Food Preparation and Nutrition

- A. Nutrition –  
The Prevention of Lead Poisoning  
through Good Food
- B. Discussion: UME - Coop Extension
- C. Activity: Sanitizing Counters
- D. Preventing Foodborne Illness:  
Proper Handwashing
- E. Activity: Kitchen Safety Mistakes
- F. Demonstration: Putting Out a  
Kitchen Fire





## Class 1 Incentives

- Bucket
- Floor cleaner
- Spray cleaner
- Disposable gloves
- Trash bags
- Disposable cleaning clothes



## **Class 2 Incentives**

- Storage containers
- Storage baggies
- Empty spray bottle
- Bleach cleaning clothes

# HHHF Home Visit

- Provides information about tenant's current housing concerns
- Organizations work with existing clients
  - Individual home visits or group home visit
- Modified Peer-to-Peer Model
  - Somalis employed by existing agencies conduct home visits
- Gradual shift toward Peer-to-Peer Education
  - EPA grant to support peer health education by Somalis and Somali Bantus (Neighbor to Neighbor)

### **HHHF Class**

- For residents of targeted geographic area in Lewiston/Auburn
- Instructors from CCM, UME Ext, HA, Bates College
- Provide tip sheets and educational handouts to supplement instruction and demonstrations in the class
- At first class participants receive 1/2 cleaning supplies to clean effectively
- At second class receive food storage supplies

### **Pine Tree Legal Assistance**

- Provide overview of tenant's rights and responsibilities
- Review process for working with landlords

### **Home Visit**

- Referring agency contacts and conducts home visit
- Receive 1/2 of cleaning supplies at the HV
- Review materials from HHHF packet

### **Evaluation**

- Assess each class session
- Assess effectiveness of HHHF class series
- Home Visit: Visual inspection of apartment, assess knowledge and observe cleaning strategies during home visits. Ask about other housing concerns

### **Landlords**

- May refer tenants to HHHF classes
- Cities of Lewiston/Auburn provide education about lead hazards and outreach re: grant programs

### **Home Visitors**

**UME Co-op Extension**

**Catholic Charities Maine (CCM)**

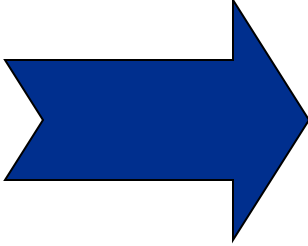
- Clients referred to HHHF classes

**AFC Lead Educator**

- Individuals may not have attended HHHF classes

**Refugee Mutual Assistance Organization**

# Moving toward a more culturally competent curriculum

- Somali and Somali Bantu Cultures
  - Oral tradition
  - Many illiterate
  - Existing “healthy” behaviors
- 
- Graphics
  - Activities
  - Encouraging questions and sharing

# Bedbugs

## Where would bedbugs like to live?

*Answer:*

### Bedbugs like to live in many places

- Along the seams in a mattress
- Under rugs
- In piles of clothes
- Under loose wallpaper
- Along picture frames
- Cracks in walls
- In curtains and wall hangings



# Take-Home Resources

- Kids Run Better Unleaded video
- Tipsheets provided by the state childhood lead poisoning prevention program
- Tipsheets from EPA

## Keep your Child Away from Lead

Lead Tipsheet #5



Here are **4** things you can do to keep your child away from lead. If you know that you have lead paint in your home or you think you might, use this tipsheet to help keep your children away from lead.

Toddlers at ages 1 and 2 are more likely to be around lead. They can get lead dust or lead paint chips into their bodies because they often put their hands, toys or other things in their mouths. They also play where lead dust may be -- like on floors and near window sills.

# 1

### Keep Play Areas Clean

Think about all the places in your home where your child plays.

- See if there is peeling or chipping paint. Pick up any paint chips and throw them away.

# Take-Home Resources

## Cleaning Up Lead Dust

**STEP 1**



Collect the following supplies before you begin Wet Washing:

- 1 bucket to Wash
- 1 bucket to Rinse
- 1 disposable cloth or rag to Wash
- 1 disposable cloth or rag to Rinse
- Rubber Gloves
- Mop
- Replacement Mop Head
- Trash bags

**STEP 2**



Use a two bucket method to clean

- Fill one bucket with detergent and water for **cleaning**
- Fill second bucket with water for **rinsing**

**STEP 3**

Always wear disposable gloves when cleaning up lead paint and dust



**EVALUATION**

# Process Evaluation

- Count of class participants
- Instructors, Partners, and Evaluator assess curriculum and activities
- Evaluator documents participant responses to curriculum and their questions

## Healthy Homes, Healthy Families

CLASS EVALUATION:  
Lead and Kitchen Safety/Nutrition  
March 16, 2011

| OVERALL   | Strongly Disagree |   |   |   |   | Strongly Agree |
|---|-------------------|---|---|---|---|----------------|
| <i>Please rate the following.</i>   |                   |   |   |   |   |                |
| The class allows participants to connect the importance of lead poisoning prevention with nutrition and kitchen safety. | 1                 | 2 | 3 | 4 | 5 |                |
| Participants understand the class material as it is presented by the instructor(s)                                      | 1                 | 2 | 3 | 4 | 5 |                |

# Outcome Evaluation

- Pre-class survey of participant's knowledge of major concepts
- Narrative on participants' ability to apply knowledge at home
- Home safety checklist
- Counts: # of families assisted in identifying and living in a lead safe unit

# Misperceptions

- Mechanisms
  - “I don’t let my kids eat paint chips”
  - “Africa is hot and we sweat it out”
  - “My house doesn’t have lead”
- American Culture
  - “Americans have everything figured out, why not lead?”
- In the Community
  - Bedbugs reflect cleanliness
  - Somalis “imported” bedbugs
  - Tenants rights

# Challenges

- Language barrier
- Interpretation services
- Translation equipment
- Sustaining the collaboration
- Continuous updating of curriculum
- Illiteracy
- Childcare
- Condition of Housing



# Successes

- Community embracing the effort
- Ability to make lean/efficient
- Exciting new partnerships on horizon
- Lewiston Auburn Public Health Committee



# Neighbor to Neighbor Program



- Trained 28 Somali women to educate their neighbors on lead hazards
- Each educator trains 2 friends/neighbors on how to clean-up lead in their apartments

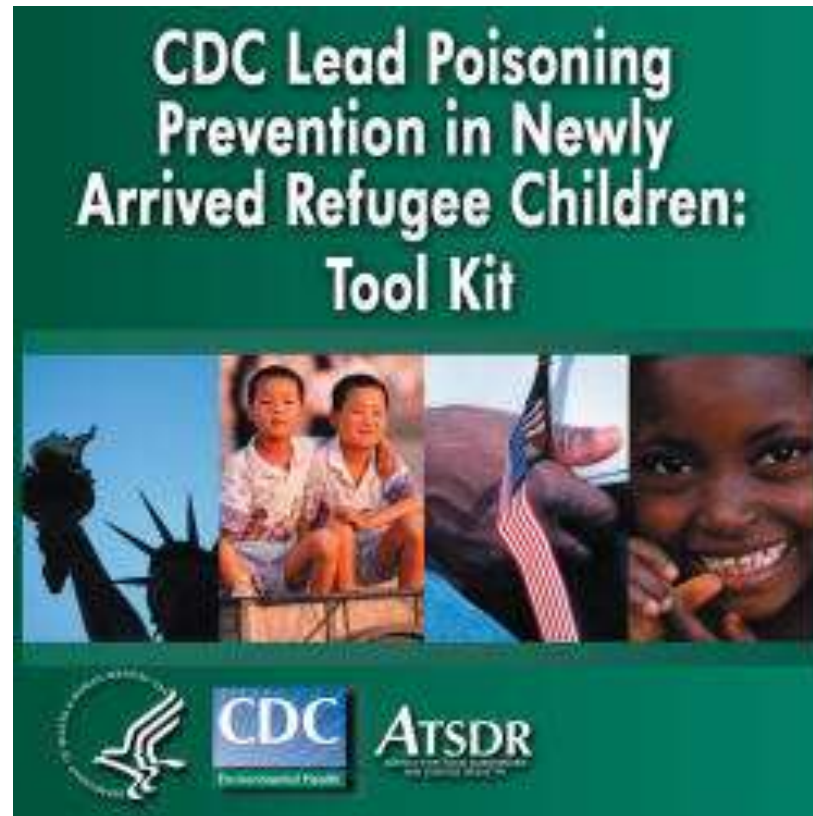
# Take Home Messages

- Opportunities for Collaboration
  - Locating more culturally appropriate graphics
  - Testing for lead in substances
  - Developing new tipsheets in collaboration with Maine CDC
  - Door to door surveys on lead awareness
  - Assisting with HHHF class
  - Grant opportunity research

# Replication Tips

- Form a diverse collaboration of partners
- Don't be afraid to recruit new partners
- Work lean
- Diversify funding
- Have several people trained to teach the class

# Important: CDC Refugee Toolkit!



[http://www.cdc.gov/nceh/lead/Publications/RefugeeToolKit/Refugee\\_Tool\\_Kit.htm](http://www.cdc.gov/nceh/lead/Publications/RefugeeToolKit/Refugee_Tool_Kit.htm)

# **ACKNOWLEDGEMENTS**

# Funding Sources

- State of Maine Lead Poisoning Prevention Fund (2008 – present)
- EPA Environmental Justice Grant
- Maine Community Foundation

# HHHF Partners

- Bates College
- Catholic Charities Maine
- City of Auburn
- City of Lewiston
- Healthy Androscoggin
- The Neighborhood Alliance
- The Nutrition Center
- United Somali Women of Maine
- University of Maine – Cooperative Extension

# **DISCUSSION**