

An Academic-Community Outreach Partnership: Building Relationships and Capacity to Address Childhood Lead Poisoning

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One City's Tale...

- I. Pediatric fatality in an African refugee child**
- II. Building an academic-community partnership; CBPR**
- III. CLP as a Wicked problem**
 - a. Latina Mothers**
 - b. Quality improvement screening tool**
- IV. Environmental inequality**
 - a. The perfect storm?**
 - b. Is a moratorium the answer?**
- V. Conclusions and future work**
- VI. Acknowledgments**



Learning Objectives

1. Describe the impact refugee resettlement can have on a resource constrained community.
2. Describe the importance of how considering a community's ecology can affect environmental communication efforts pertaining to childhood lead poisoning.
3. Describe at least one method by which a health practitioner can carry out the public health mission for refugee populations in economically challenging times.

Manchester

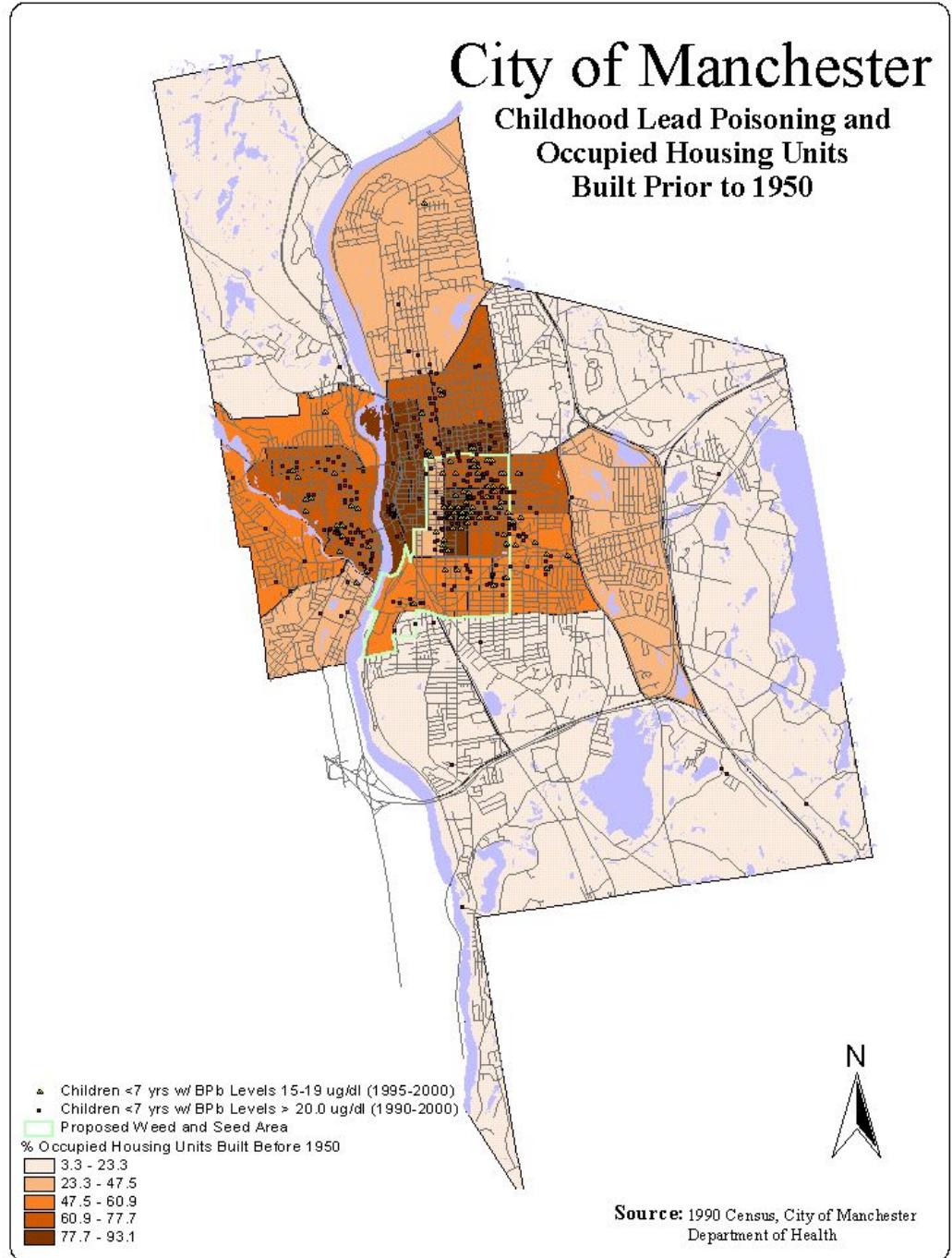




Manchester



Why Study Childhood Lead Poisoning (CLP)?



Neighborhoods and Health: Place Matters



Photos Courtesy of the MHD

Neighborhoods and Health: Place Matters



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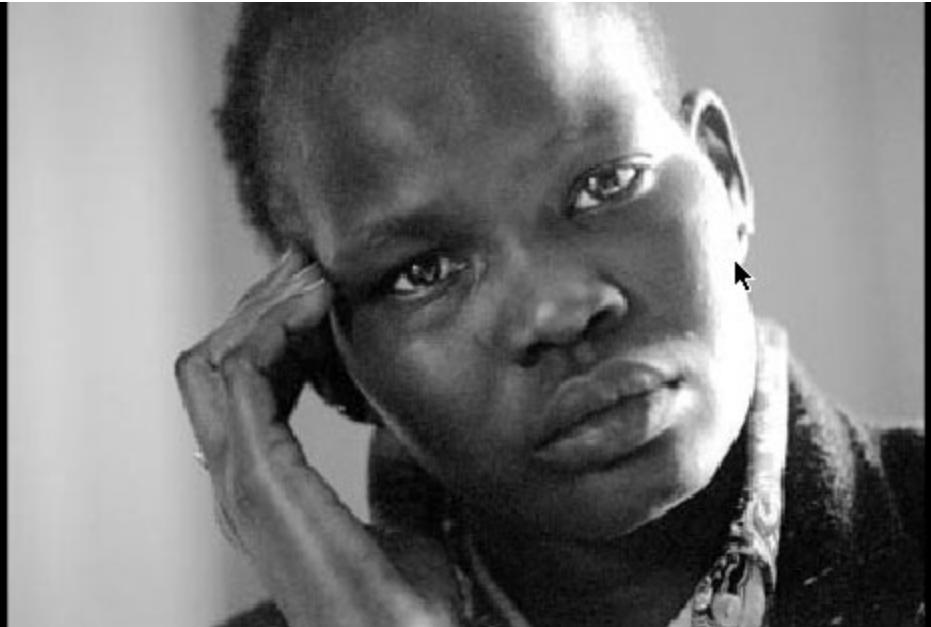


Pediatric Fatality

- 2 y/o Sudanese refugee child
- Action level = 10 µg/dl
- 391 µg/dl ; 72 µg/dl
- EPA investigation
- Property manager fined \$40,000 and served a 15 month federal prison sentence
- Lawsuit settled in 2003 for \$700,000



Faces of this Public Health Problem



PORTRAIT OF LOSS: The death of her little daughter, newly arrived in America where she was supposed to live a long and safe life, is a heavy burden for her mother, Mary Alorout Kuol. Health officials say Sunday Abek's death was probably caused by the deteriorated lead paint at her Manchester, NH, apartment.

Journal Photo / JOHN FREIDAH



GRIEF-STRICKEN: Mary Alorout Kuol mourns her daughter, Sunday Abek, who died of lead poisoning early last spring when she was just 2, while friends, including Adhol Akot, right, and family within the Sudanese community gather around her bed and, with their prayers, try to offer her some solace.

Journal Photo / JOHN FREIDAH

The Providence Journal



When Something Wicked This Way Comes

- Wicked problems are **multi-factorial** in nature and possess no clear resolution due to numerous **community stakeholder involvement**.
- Often, there are multiple stakeholders who **define the problem differently** and who possess **uncoordinated solutions**.





CLP as a Wicked Problem

- **Major stakeholders:** residents of poor quality housing, local city health dept., housing agencies, city building inspectors, realtors, childcare providers, health care community, etc.
- CLP is **socially complex**, viewed as responsibility of **multiple stakeholders**; requires **behavior change** at the **individual** and **organizational level**.



CLP as a Wicked Problem

- People's concerns regarding **basic needs** for food, shelter, and clothing **outweigh** their **concerns** over exposure to any **environmental hazard**
- **Poverty reduces choice.**





Building an Academic-Community Outreach Partnership to Address a Public Health Issue

- Manchester, New Hampshire Health Department (MHD)
- Greater Manchester Partners Against Childhood Lead Poisoning (GMPALP)
- Dartmouth Toxic Metals Research Program's Community Outreach Group
- Manchester-Dartmouth Partnership for Health



Building an Academic-Community Outreach Partnership to Address a Public Health Issue

- NIEHS SBRP funding
- Community-Based Participatory Research (CBPR)
- Childhood Lead Screening Initiative





Community Ecology and Capacity Building

- **Focus groups with Latina Mothers (n=15):** perception of illness; knowledge of lead poisoning; preferred communication methods regarding an environmental hazard; and feedback on existing CLP prevention materials





Community Ecology and Capacity Building

- **Focus groups with Latina Mothers:**
 - Aware homes posed a risk to children
 - Concern for household chemicals
 - **“I don’t even know how you get lead so I can’t give an opinion.”** (Maria, Latina Mother)
 - Word of mouth *via* their community
 - Need cultural competent materials





Community Ecology and Capacity Building

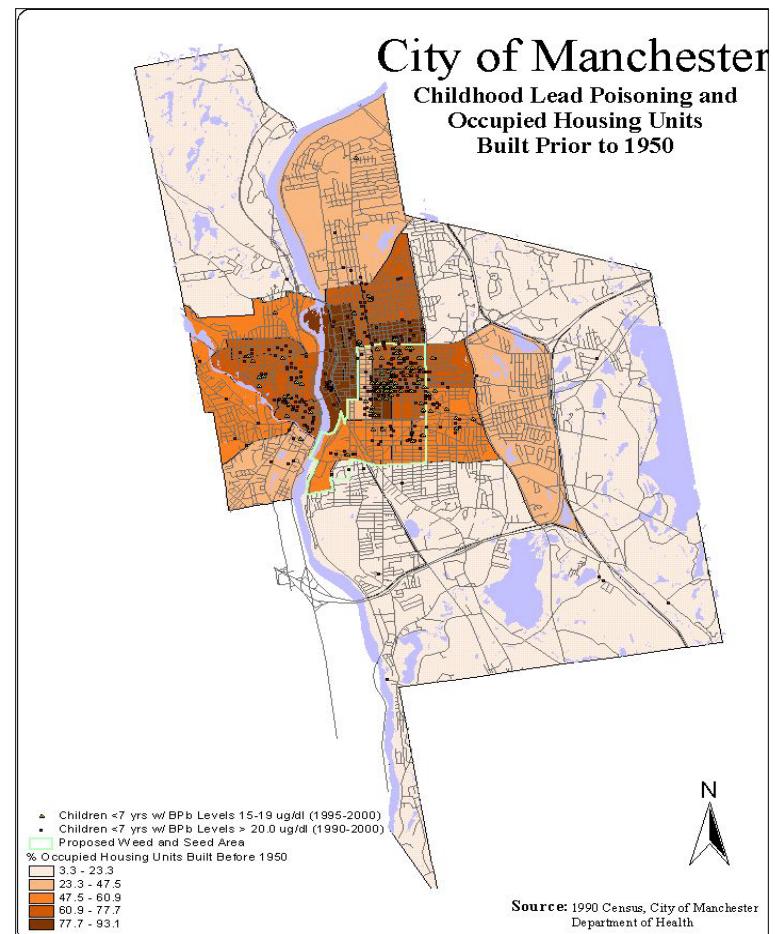
- Practitioners need to consider a **community's ecology and the social context of risk** as it pertains to all types of wicked problems, as these factors will influence the **management** of the wicked problem and how a **diverse community interprets and responds** to educational messages and **community capacity building efforts**.





Place-based Strategy

“...First, lead exposure may be reduced via place-based strategies facilitated by the **spatial concentration of certain groups**, which can lead to the **sharing of information about health risks, prevention and screening**. Second, screening **activity** and the **dissemination** of information about lead hazards may **reflect local knowledge** of where poisoned children have been located before...”

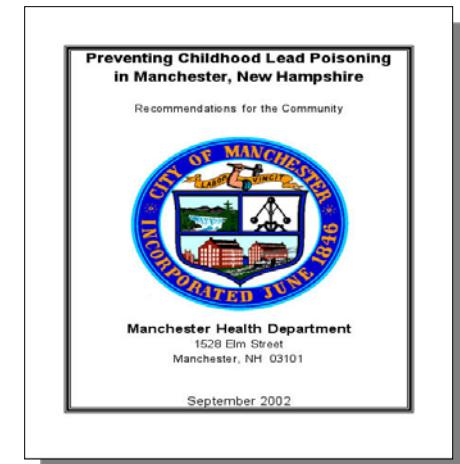


Bailey, Sargent, Blake. A tale of two counties: Childhood lead poisoning, industrialization and abatement in New England.
Economic Geography, Worcester, 1998.



Collaborators as Co-Learners: A Productive Tension

- “Call to Action Meeting”
- Community-driven priority: “engaging health professionals to ensure that all Manchester children are screened for lead poisoning and treated as early as possible”
- Dartmouth – “**best practice**”
- MHD and GMPALP – “**service delivery**”





Product of an Academic-Community Outreach Collaboration

- Barriers to childhood lead poisoning
- Systems issues
- Quality Improvement Toolkit for Childhood Lead Poisoning
 - Grand Rounds-style lectures
 - Self-administered chart audit
 - Supplemental resources





Lessons Learned

***Adaptability, consistency, shared authority and trust
are values common to CBPR and community-based
partnerships***

- **Adaptability**
- **Consistency over time**
- **Shared authority**
- **Trust**





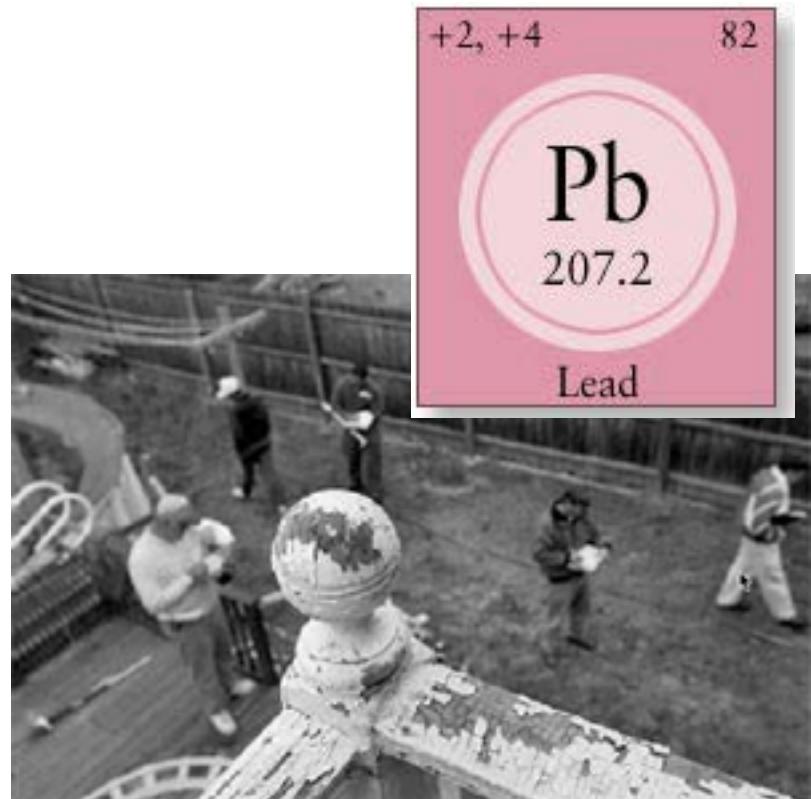
Sustainability for an Academic-Community Partnership

- Due to capacity-building and web of partners
- City of Manchester awarded HUD funding and hired Lead Coordinator
- Dartmouth group, GMPALP members serve on NH Lead Study Commission
- New lead contractor/renovator trainings funded by Dartmouth are offered on fee-basis by local contractor



Conclusions

- Developing, implementing, and evaluating a ***participatory process*** that is grounded in the **refugees' culture**, the **community's ecology**, and the **agencies' mission** and resources so that ***all voices*** contribute to a feasible and effective method that results in a **decrease in CLP for an at-risk population.**





Future Work

- The politics of a moratorium on refugee resettlement: Role for the public health system in assuring the health of the community's most diverse newcomers by utilizing CBPR.





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