How We Learned to Get the Lead Out Locally

APHA Webinar
Working Together to Address Lead Exposure
April 26, 2016

Elyse Pivnick, Isles, Inc.
Isles’ Mission

To foster self-reliant families...
And healthy, sustainable communities
Isles Vision

• Remove lead as a threat in less than a generation

• Change system from treating children to removing the source: beyond kids as lead detectors

• Lead paint chips and dust in homes greatest threat

• *Community development = public health*
Working Together: Bridging Silos

- Health
- Housing
- Social services
- Community development
- Water
- Public Works
- Criminal Justice
- Education
- Advocates
- Local, state & federal agencies
- Elected officials
- Private sector
Isles’ Broad-Based Mission

For over 35 years we have asked: what are most effective ways to get to self-reliance and healthy communities?

Early work: community gardening, housing redevelopment.

Lead and healthy homes was not on community development radar.
Why Isles and Lead Poisoning Prevention?

- Community gardening introduced us to lead; that led us to explore brownfield cleanup--.

- Residents asked, “What impact have brownfields had on our health?”

- Very limited local health data
Environmental Health Profile

- Developed an environmental health profile, including analysis of local and state health and environmental data.

- Conducted our own survey of resident attitudes, knowledge and behaviors related to environmental health.

- Completed soil and dust sampling--homes were the primary source of hazards!
Initial Findings (2000)

- Incidents of high lead levels and asthma
- Few residents, leaders or local experts understood the connection between environment and health
- Discovered that community development and health are natural allies
What To Do?

• We started small…Didn’t depend on big funding from HUD or foundations

• Built the case:
  – trained environmental asthma counselors;
  – tested homes for lead hazards, mapped results
  – Analyzed lead screening data
Homes with Hazardous Lead

Isles’ Lead Testing in Trenton

- Positive: 66%
- Detectable: 21%
- None Detected: 9%

Nearly 40% of students – min 2.5 mg/dcl of lead in their blood
Nearly 18% of students >5 mg/dcl
## Analysis of BLLs

% children starting K from all tests, ages 0-6, compared to % of children tested in a single year.

<table>
<thead>
<tr>
<th></th>
<th>Cumulative*</th>
<th>Cumulative*</th>
<th>Annual rate**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Of all Children tested before entering K, all years, the % with BLL &gt;/=2.5 ug/dL</td>
<td>Of all Children tested before entering K, all years, the % with BLL &gt;/=5 ug/dL</td>
<td>Of all Children tested in a SINGLE year, the % with BLL &gt;/=5 ug/dL</td>
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<tr>
<td>Camden</td>
<td></td>
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<tr>
<td>2012-13</td>
<td>42.4</td>
<td>13.2</td>
<td>5.6</td>
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<tr>
<td>2011-12</td>
<td>55.5</td>
<td>17.9</td>
<td>7.8</td>
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<td>Irvington</td>
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<tr>
<td>2012-13</td>
<td>64.9</td>
<td>19.6</td>
<td>11.1</td>
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<tr>
<td>2011-12</td>
<td>73.1</td>
<td>28</td>
<td>12.6</td>
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<td>New Bruns</td>
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<td>2012-13</td>
<td>48.8</td>
<td>10.6</td>
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<tr>
<td>2011-12</td>
<td>62.2</td>
<td>16.8</td>
<td>n/a</td>
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<tr>
<td>Newark</td>
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<tr>
<td>2011-12</td>
<td>61.6</td>
<td>16.9</td>
<td>8.3</td>
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</tbody>
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* Data provided to isles study by NJ DOH --see separate attachment --single highest level per child.
New Housing Rehab Skills

• NJ DCA invited us to be the first community developer to make homes lead safe.
• Why? Cities were not meeting benchmarks; Isles had experience and trust of community
• Retrofitted 39 homes, learning to make homes lead safe at less than $10,000/unit
• Learned that much of lead derived from friction surfaces (windows and doors)
Connecting to Energy

• Became weatherization subcontractor for American Recovery and Reinvestment Act
• Learned to integrate HH with energy efficiency
• Found effective ways to do this, helped by state redevelopment funds
• Asked to coordinate a NJ strategic plan for healthy housing

• Completed a plan that bridged silos—called for coordination among health, housing, social services, environment agencies --- state and local governments
Established a satellite training center of the National Center for Healthy Housing to train professionals in healthy homes; conduct lead and healthy home assessments; train in lead safe work practices, and more.

3,000 community development organizations nationally can potentially do this work alongside health and housing authorities.
How to Get Started

• Form a lead and healthy homes advisory committee
  o Stakeholders from across disciplines
  o Consider how to better coordinate services to protect your children

• Create a Lead and Healthy Homes Plan for your state and/or city that BRIDGES SILOS.
Request Better Data

- Perform annual lead surveillance—especially in high risk communities
- Map the data
- Report data cumulatively
- Require health departments to connect to mayors and school superintendents
Influence Policy

• Lead Safe Certificate bill: test homes for hazardous lead—dust and water-- at time of rental turnover. (Aizer and Currie study)
• Support on-demand inspections
• Create housing courts to enforce laws
• Seek new sources of funding
Community Health Workers

• Train home visitors to educate, assess homes, and coordinate resources to remove hazards – before a child is affected.

• Home visitors can visit homes on a regular basis.
Water and Soil

- Test water in homes
- Test water in schools
- Test soil in yards and parks where children play

Lead paint in housing is the primary source of lead exposure for young children.
Engage Educators

• New training can inform educators on real impacts of low level of lead

• Explain lead surveillance data

• Adopt policies for interventions during early childhood. CDC report
## Education Impacts

### Studies on Lead and Educational Outcomes

<table>
<thead>
<tr>
<th>Lead Level</th>
<th>Impacts</th>
<th>Number of Children</th>
<th>Location</th>
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<tbody>
<tr>
<td>4 µg/dL at 3 years of age</td>
<td>Increased likelihood learning disabled classification in elementary school, Poorer performance on tests</td>
<td>More than 57,000 children</td>
<td>North Carolina¹</td>
</tr>
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<td>5 µg/dL</td>
<td>30% more likely to fail third grade reading and math tests, More likely to be non-proficient in math, science, and reading</td>
<td>More than 48,000 children</td>
<td>Chicago³, Detroit⁴</td>
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<td>Between 5-9 µg/dL</td>
<td>Scored 4.5 points lower on reading readiness tests</td>
<td>3,406 children</td>
<td>Rhode Island⁵</td>
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<tr>
<td>≥10 µg/dL</td>
<td>Scored 10.1 points lower on reading readiness tests</td>
<td>3,406 children</td>
<td>Rhode Island⁵</td>
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<td>Between 10 and 19 µg/dL</td>
<td>Significantly lower academic performance test scores in 4th grade</td>
<td>More than 3,000 children</td>
<td>Milwaukee⁶</td>
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<td>≥ 25 µg/dL</td>
<td>$0.5 in excess annual special education and juvenile justice costs</td>
<td>279 children</td>
<td>Mahoning County Ohio⁷</td>
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What does it take to do this work?

• innovate
• collect and analyze local data to define problem
• build bridges & relationships across sectors
• connect to community
• train in lead and healthy homes work
• advocate
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