Chesapeake Physicians For Social Responsibility

Lead Poisoning Prevention Policy Considerations in Maryland

November 10, 2016
Lead Poisoning:
Nations Prohibiting White Lead in Paint

1909  France, Belgium and Austria ban white lead interior paint
1923  Czechoslovakia, Sweden
1924  Poland, Spain
1925  Bulgaria, Chile, Romania
1926  Greece
1928  Cuba, Luxembourg
1929  Finland, Norway, Yugoslavia
1933  Columbia, Nicaragua, Uruguay, Venezuela
1936  Argentina
1938  Mexico
1939  Afghanistan, the Netherlands
1952  Italy
1953  Vietnam
1956  Hungary, Morocco, Tunisia
1960-1988  19 more

The League of Nations banned the use of lead paint in 1922
U.S. did not ban the use of lead paint in homes until 1978

Lead in gasoline banned in 1973-95; Lead in solder banned in 1986
National Lead Safe Housing Pyramid

EBL Children
535,000
(EBLs of 5 µg/dl or higher)

Priority Lead Hazardous Homes
1.1 Million Units
(Low Income homes with children under 6)

Lead Hazards and Children Under Age 6
3.6 Million Units

Contain Lead Paint Hazards
23 Million Units

Contain Lead-Based Paint
37 Million Units

US Housing Stock
134 Million Housing Units

Source: 2011 HUD American Healthy Homes Survey
Effects of Lead Poisoning on Children

- Learning disabilities
- Hearing problems
- Attention Deficit Disorder (ADD)
- Hyperactivity
- Decreased intelligence (loss of IQ points)
- Speech and language delays
- Increased violent, aggressive behavior and juvenile delinquency
- 7 times more likely to drop out of school
Lead Poisoning Effects on Adults

• 46% increased rate of early mortality
• 16%-19% increased risk of cardiovascular disease
• Hypertension
• Depression
• Reproductive Problems
• Complications related to osteoporosis
Known Long-Term Effects: Violent Crime Reduction

Credit: Chemical & Engineering News: February 2014- By Lauren K. Wolf
Best Practices – Maryland 98% Reduction

- Passage of 30 Acts of prevention legislation in Maryland
- Passed 1994 law requiring mandatory lead remediation and inspection and rental property owner registration of older rental properties
- Strong enforcement at State and City level of lead law compliance, Health Department Lead Violations and housing code
- Passed Clean Hands Bill legislation denying access to rent court for owners who are out of compliance with Maryland lead law
- Established Rent Escrow for lead hazard remediation
- Adoption of lead safe demolition standards to prevent lead emissions
- Established Housing Choice Voucher Program for lead affected families
- Passed legislation requiring lead dust clearance testing for RRP work
- Universal blood lead testing in 2016
- Passage of Medicaid pilot for Lead Hazard Control Interventions in 2016
Decline in Lead Poisoned Children in Maryland 1993-2015

Children with Lead Levels 10 μg/dl or higher

<table>
<thead>
<tr>
<th>Year</th>
<th>1993</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>'93</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'94</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'95</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'96</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'97</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'98</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'99</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'00</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'01</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'02</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'03</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'04</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'05</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'06</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'07</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'08</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'09</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'10</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'11</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'12</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'13</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'14</td>
<td>14,546</td>
<td>377</td>
</tr>
<tr>
<td>'15</td>
<td>14,546</td>
<td>377</td>
</tr>
</tbody>
</table>

Source: MDE 2015 Annual Report
Blood Lead Concentrations
Considered Harmful by the CDC

In 2012, the CDC eliminated the term, "blood lead level of concern" and declared there is no safe level of lead in children's blood.
New Blood Lead Reference Level: 5 μg/dL

Dangers of Low Level Exposures

• From 1991-2012 the Centers for Disease Control left the blood lead level of concern unchanged at 10 μg/dL
• In November of 2012 the CDC responded to the recommendations from the CDC Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) and reduced the blood lead reference level from 10 to 5 micrograms of lead per deciliter of blood (5 μg/dL)
• The CDC declared that “No safe blood lead level in children has been identified...” (2012)
Ramifications for Children in Maryland

2,069 Additional Children with Elevated Blood Lead Levels in Maryland (2015)

- Children with EBLs of 10 µg/dl or higher
- Children with EBLs of 5-9 µg/dl

Source: MDE 2014 Childhood Lead Registry
The Business Case for Lead Poisoning Prevention

Monetized Benefits of Prevention = 2.2 to 4.7 IQ point increase results in increased lifetime worker productivity @ $723,000 per child* = $110 to $319 billion

(discounted 2000 dollars for each year’s group of 3.8 million two-year old children)

Source: Centers for Disease Control & Prevention

*$995,000 in 2016 dollars adjusted for inflation

For every $1 spent on lead hazard control programs there is a $17-$221 return on investment

Source: HUD, Gould
Maryland Legislation and Public Policy

Actions Needed: Increase Lead Hazard Reduction Funding

• Increase state lead grant program funding

• Streamline the application process for MDDHCD grant and loan funds

• Pass Lead Safe Income Tax Credit Bill
Actions Needed: Increase Funding for Enforcement and Administration of MRLRH Law

• 330,000 additional units estimated to be affected by the expansion of the Maryland Reduction of Lead Risk in Housing law to cover 1950-1978 rental units on 1/1/15
• MDE needs increased personnel for enforcement, EBL inspections, contractor and inspector oversight, and administration of the lead laws
• Increase funding needed for outreach and education, contractor training, tenant’s rights assistance and rental property owner compliance assistance programs
• Increased capacity also needed by MDE for enforcement of EPA Renovation, Repair and Painting Rule
Actions Needed: Increase Funding for Enforcement and Administration of MRLRH Law

Additional property registration revenue is being generated to fund the increased MDE staffing and other program needs but MDE needs to request in their budget:

- 2012 - $1,992,509
- 2013 - $2,557,204
- 2014 - $3,041,534
- 2015 - $4,364,733
### Actions Needed: Lowering Blood Lead Action Levels

- Change the state blood lead reference level formally to 5 μg/dL
- Lower State blood lead action level to 5 μg/dL for medical case management and environmental investigation
- Lower State blood lead action level to 5 μg/dL for Notice of Defect and Notice of Elevated Blood Lead Level responses for affected properties

### State of Maine

- Passed legislation in 2015 mandating environmental investigation at 5 μg/dL and providing funding for new sanitarians
Actions Needed: HB 644 (2012) Implementation

As of 1/1/15, all components were to be in full effect.

- Implementing regulations have still not been adopted
HB 644: Mandatory Lead Dust Testing following renovation in older properties (owner occupied and rental)

- Mandatory lead dust testing was passed as part of HB 644 for covered renovation activities that disturb painted, but was not included by MDE in the proposed regulations

- Requiring lead dust testing is the only way to insure that properties are safe for occupancy after renovation

- Lead dust testing is affordable and obtainable throughout the State
HB 644: The Case for Mandatory Lead Dust Testing

HUD Funded Research Study of the Maryland Reduction of Lead Risk in Housing Law Treatment and Inspection Process by the National Center for Healthy Housing

- Passed visual inspection & lead dust clearance testing - 40%
- Passed visual inspection but FAILED lead dust clearance testing - 60%
Market Share Liability Bill

- 1,221,877 housing units in Maryland were constructed prior to 1978 and may contain lead-based paint

- Existing resources are inadequate to meet the demand for lead hazard reduction grant programs

- If introduced, GHHI would support a Market Share Liability Bill that would increase lead hazard reduction funding and other prevention resources in Maryland to help expedite the elimination of lead poisoning
Action Needed: Reducing Other Sources of Lead in Environment

• Pass Bill banning lead in wheel weights
• Reduce lead in consumer products

Action Needed: Increase blood lead testing rates

• Maryland’s universal testing law implementation
Actions Needed: Lead Safe Demolition

Credit: Baltimore City, Baltimore Sun, Baltimore Brew, The Afro Newspaper
Actions Needed: Lead Safe Demolition Practices

During housing demolition and debris removal, lead dust levels in the air and on adjacent surfaces/properties can drastically increase if lead safe demolition practices are not followed.

• Follow EBDI Standards established in 2005 by the Green & Healthy Homes Initiative and the Annie E. Casey Foundation

• The standards are effective and implementation costs are minimal

• New enhanced Baltimore City standards (Maryland Stadium Authority)
Pay for Success

• Developments in Asthma Pay for Success
  - CNCS Social Innovation Fund (5 projects)
  - Robert Wood Johnson Foundation Grant (5 projects)
  - Johns Hopkins Medical Systems Project

• Potential Opportunities for Lead Poisoning Prevention PFS
  - Special Education Cost Savings
  - Criminal Justice Cost Savings

Maryland Medicaid Lead Poisoning Prevention Pilot Program
Strategic Plan to End Childhood Lead Poisoning -
A Five Year Blueprint for Action

Green & Healthy Homes Initiative
October 2016
Ruth Ann Norton
President & CEO
ranorton@ghhi.org
410-534-6447
www.ghhi.org

Follow us on Twitter @HealthyHousing
Like us on Facebook GHHINational
Learn more on YouTube GHHI Videos
Follow us on LinkedIn green-and-healthy-homes-initiative

Wes Stewart
Senior Director of Technical Assistance and Legal Services
gwstewart@ghhi.org