Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
Presentation to the Public Health Council

Lead Poisoning Prevention and Control

105 CMR 460.000

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Presentation Overview

- Overview
  - Childhood Lead Exposure – significant and continued health risk
  - Massachusetts – A National Leader
  - A Public Health Concern

- Proposed Amendments to 105 CMR 460.000, Lead Poisoning Prevention and Control

- Next Steps

- Questions
Overview

- **Childhood Lead Exposure – significant and continued health risk:**
  - There is no safe level of lead for children. Numerous studies have shown even small amounts of lead can cause severe and irreversible damage to mental and physical development.
  - Studies have documented correlations between childhood lead poisoning and future school performance, unemployment, crime, violence, and incarceration, making lead exposure an important social determinant of health.
  - Despite gains, lead exposure represents a health equity issue and a leading health risk for children in Massachusetts, disproportionately impacting gateway and lower income communities with higher minority populations.
Overview

- Massachusetts – A National Leader:
  - The Lead Law (MGL c. 111, §§ 189A-199B) was enacted in 1971 and requires any dwelling unit where a child under six years of age resides to be deleading, regardless of a child’s blood lead level (BLL) or whether the property is owner occupied.
  - DPH’s accompanying regulation, 105 CMR 460.000, requires that all children be tested for blood lead between the ages of 9 - 12 months, again at ages 2 and 3, and – if they live in a high-risk community – tested again at age 4. Laboratories and health care providers must report results directly to DPH (Universal Screening and Reporting).
  - Financial assistance for deleading for low-income residences through the Get The Lead Out partnership with MassHousing;
  - Medical case management of children with elevated blood lead levels;
  - Health education and outreach;
  - Training of lead inspectors and mandatory reporting of all inspections;
  - Lead Safe Housing database available to the public; and
  - Data collection, trend monitoring, and identification of high risk communities.
A Public Health Concern

- The prevalence of children with elevated BLLs has dramatically decreased, but has recently plateaued.
  - Lead contaminated dust and soil from deteriorated lead paint are the primary sources of lead exposure for Massachusetts children.
  - Massachusetts has the fourth oldest housing stock nationally (71% built before 1978) with only about 10% of homes being reported as inspected and/or delead.

- 2015 data indicates that 3,737 (confirmed and unconfirmed) children may have BLLs that, according to CDC, require case management (>5 µg/dL)
  - 2015 data indicates 629 children were initially reported with BLLs ≥10 µg/dL and of these, 594 were later confirmed with BLLs ≥10 µg/dL.
  - 64 were identified (63 confirmed) as meeting the definition of lead poisoned pursuant to current MA regulation. (BLL of 25µg/dL or greater)
Statewide Prevalence of Children Under 4 with BLLs of ≥ 10 µg/dL

N = 591

N = 1,919
Proposed Amendments to Regulations

- Several factors informed the proposed amendments to the 105 CMR 460.000:

  - Executive Order 562 – Regulatory Review required for all state agencies
  - Medical Review Panel Recommendations
  - Governor’s Advisory Committee for the Lead Poisoning Prevention Program
  - Federal Standards
    - Center for Disease Control and Prevention – blood lead levels
    - Department of Housing and Urban Development – abatement standards
Proposed Amendments to Regulations

- **Medical Review Panel**
  
  - CLPPP convened a Medical Review Panel to advise the program on possible changes to policies, regulations, and ways to enhance screening rates.
  
  - The Panel’s White Paper issued in August 2015 provided support for proposed amendments, including the regulatory definition of lead poisoning and requiring venous confirmatory testing.
  
- **The Governor’s Advisory Committee was convened and voted to support the proposed amendments under consideration.**
CDC Definitions of Lead Poisoned and Reference Value and Confirmation Tests

- CDC committed to a Healthy People 2020 goal of eliminating blood lead levels of 10 µg/dL or above in children under six.

- Additionally, CDC uses a “reference value” of 5 µg/dL, that identifies children who have been exposed to lead and need education about medical care and about preventing additional exposure.

- CDC does not mandate a code enforcement response or identify legal liability.

- CDC recommends that initial capillary test values of 5 µg/dL or greater be confirmed by venous testing.
Proposed Amendments – Lead Poisoning and Blood Lead Level of Concern

- **Current Regulation:**
  - Defines Lead Poisoning at 25 µg/dL or greater venous blood lead in a child
  - Defines a “Lead Level in Excess of a Level Considered Dangerous to a Child’s Immediate Health” between 15-24 µg/dL

- **Proposed:**
  - Define Lead Poisoning at 10 µg/dL or greater venous test result
  - Establish a “Blood Lead Level of Concern” at 5-9 µg/dL, consistent with the CDC standard
Proposed Amendments – Venous Confirmation Tests

- Evaluation analyses of 2011-2012 capillary tests ≥10 µg/dL

- Only about ¼ of initially elevated capillary tests were truly elevated based on follow-up testing

- Fingerstick tests are subject to possible contamination and are therefore not as accurate.
Proposed Amendments – Venous Confirmation Tests

- **MA code enforcement activity requires a venous confirmation**
  - Children without this confirmation may continue to live in homes with dangerous lead hazards.

- **Current Regulation:**
  - Recommends, but does not require, venous screening or confirmation.

- **Proposed:**
  - Require venous confirmation for capillary test values of 5 µg/dL or greater.
HUD abatement standards are, in essence, an intact paint standard with the exceptions of window components and friction surfaces.

- A HUD evaluation done by Battelle and National Center for Healthy Housing in the 1990s found that an intact paint standard on many surfaces was protective for children when windows, friction surfaces, and dust were addressed.

- MA has used Interim Controls for a temporary compliance alternative for approximately 20 years; Interim Controls currently not allowed for lead poisoned children.

- Proposed changes make MA more consistent with federal standards that evaluated a standard of care, which included making accessible surfaces intact.

- Proposed changes would reduce cost by approximately one-third as incentive for preventative deleading.
Proposed Amendments – Definition of Accessible, Mouthable Surfaces

- **Current Regulation:**
  - Define an Accessible, Mouthable Surface as a surface 5ft. or less from the floor or ground that forms a protruding corner or similar edge or protrudes 1/2 inch or more from a flat wall surface.

- **Proposed:**
  - Definition of Accessible, Mouthable Surfaces would remove outside corners of walls, window casings, door casings, chair rails, balusters, or latticework from the deleading requirements.
Proposed Amendments – Other Changes for Streamlining and Clarity

- Proposed:
  - Delete regulations related to the encapsulant material and use approval process and refer to ASTM standards.
  - Move language regarding the abatement and containment methods as well as the procedures for initial inspection and reinspections and code enforcement to policies, procedures, and training materials.
Next Steps

- Following this initial presentation, a public hearing and comment period will be held.

- Upon review of public comments, any further amendments to the regulation will be reviewed with the Governor’s Advisory Council for the Lead Poisoning Prevention Program.

- Approval of the proposed amendments, along with a review of public comments, will be requested at a subsequent meeting of the Public Health Council.

- Following final approval, this regulation will be amended.