



Massachusetts Department of Public Health

Lead 101

MHOA 2024 ANNUAL CONFERENCE

Wednesday, November 13, 2024

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Agenda



Background & History

Lead in Massachusetts
Lead in Children's health



Massachusetts Lead Law



Lead Hazards

Lead Violations & Abatement
Standards
Deleading Vs. Renovation



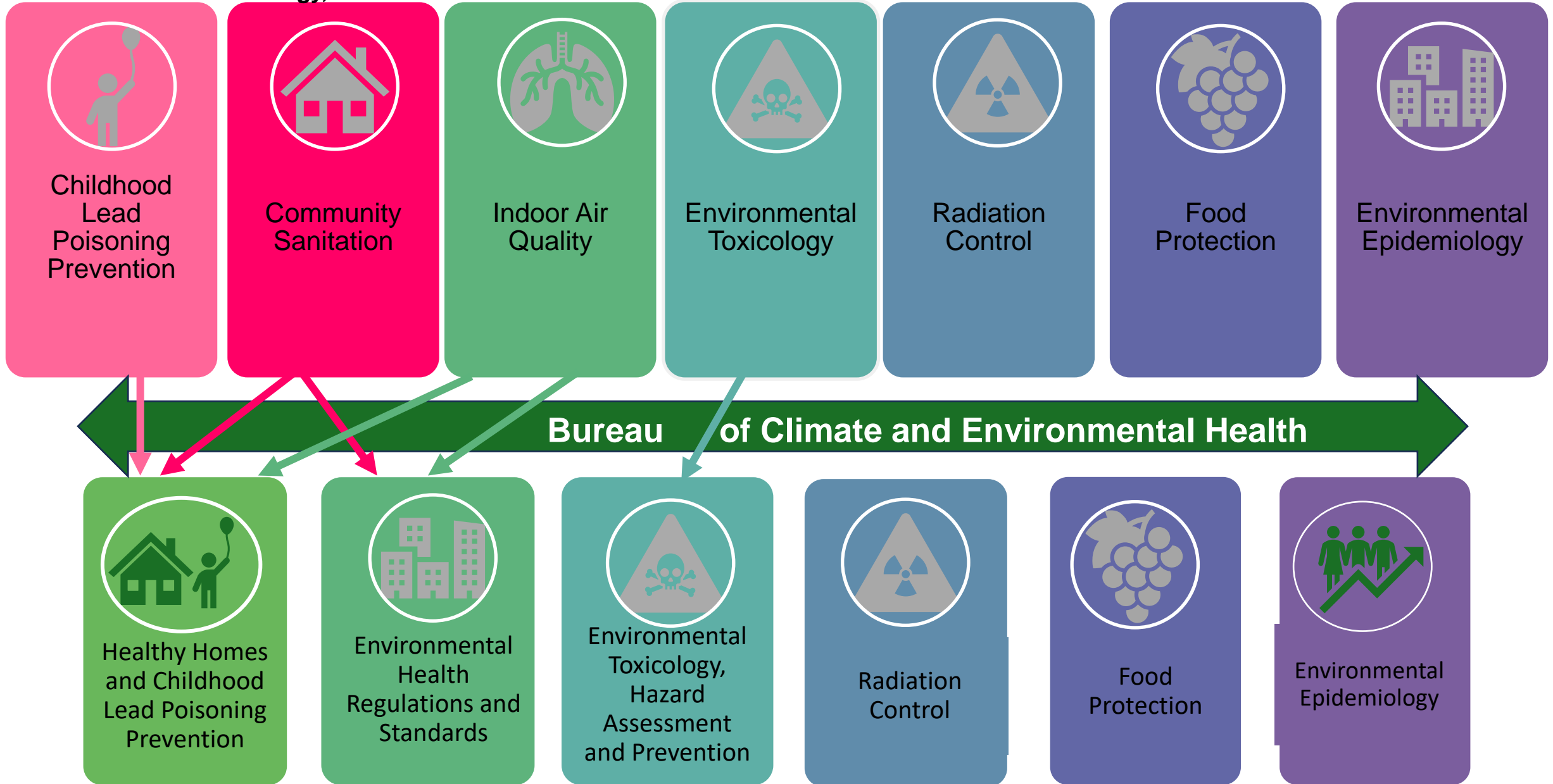
Health Officers Tool Kit

CLPPP Resources
Financial Assistance

Background & History

Lead in Massachusetts
Lead & Children's health

Environmental Toxicology, Hazard Assessment and Prevention



Bureau of Climate and Environmental Health



Healthy
Homes and
Childhood
Lead
Poisoning
Prevention



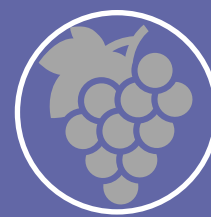
Environmental
Health
Regulations
and Standards



Environmental
Toxicology,
Hazard
Assessment
and
Prevention



Radiation
Control



Food
Protection



Environmental
Epidemiology

Childhood Lead Poisoning Prevention Program

Childhood Lead
Poisoning Prevention
Program (CLPPP)

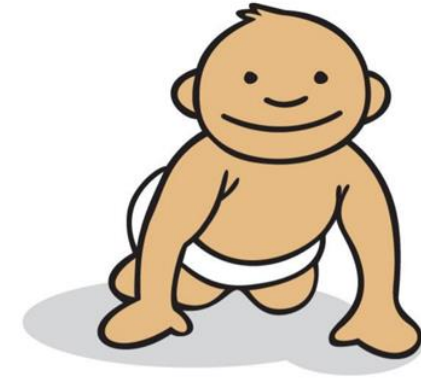


- Case Management of lead poisoned children and children with elevated blood lead levels
- Primary Prevention
- Establishes inspection and deleading standards
- Licenses or authorizes lead inspectors, risk assessors, moderate risk owner/agents and low risk owners/agents
 - Audits individuals licensed or authorized by CLPPP
 - Investigates complaints of unauthorized deleading and inspector conduct
- Maintains the database of lead-related environmental information on homes in MA

CLPPP phone # 800-532-9571 and website www.mass.gov/dph/clppp

Importance of Preventing Lead Exposure

- In young children, lead can hurt the brain, kidneys, and nervous system
 - Slows down growth and development
 - Making it difficult to learn
 - Damage hearing and speech
 - Cause behavior issues



Adults can get lead poisoning too!

- Usually exposed to lead through their work or hobbies
- Adults who work with lead run the risk of exposing their own kids

Remember:

There is no safe level of lead and lead exposure is 100% preventable

Lead 101



Lead is a soft, toxic metal that is naturally found in our environment



It has been used several ways throughout history such as gasoline, solder, paint, fishing weights, bullets and batteries



Lead based paint in homes was prohibited in 1978



Lead in gasoline was phased out in the 1980's and banned in 1992



Lead solder used in drinking water pipes was regulated in 1986

Lead in Massachusetts

Lead-Based Paint - lead pigments added to paint to enhance color and durability

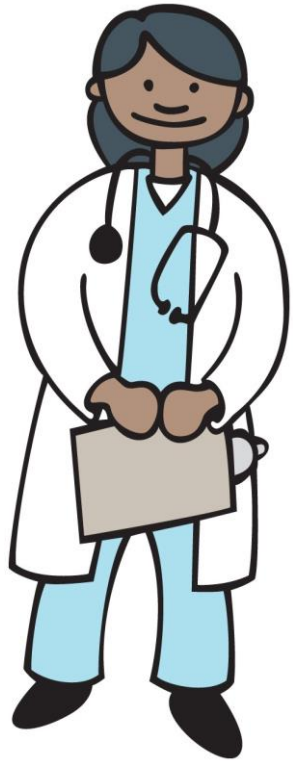
- Massachusetts has the 4th oldest housing stock in the country
- **67%** of housing units were built before 1978
- Banned for residential use in 1978

Leaded Dust

- Windows/doors create dust due to friction
- Renovation work can disturb painted surfaces → more chips and dust
- Surfaces decay and become loose - ground up into dust and soil



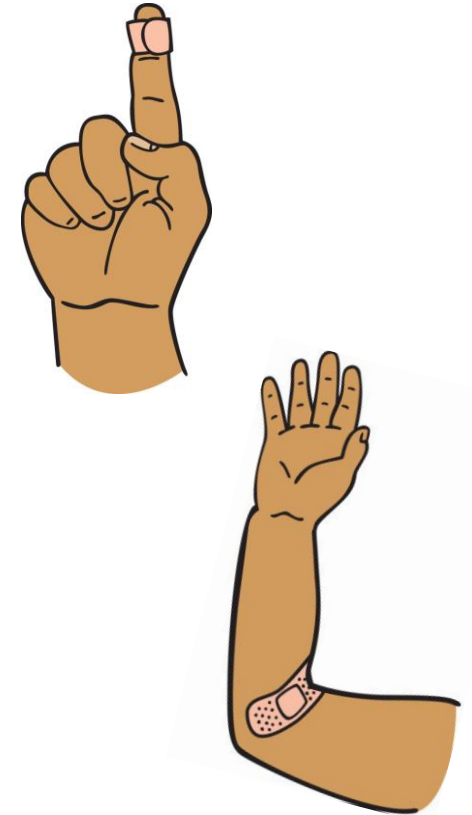
Lead in Massachusetts



| Mandatory Screening Requirements | |
|--|--|
| Age 1 | |
| Age 2 | |
| Age 3 | |
| Age 4 (if living in a high-risk community) | |

| Massachusetts Blood Lead Levels | |
|---------------------------------|------------------------|
| Lead Poisoning | Venous BLL >10 µg/dL |
| Level of Concern | Venous BLL 5-9.9 µg/dL |

| CDC Blood Lead Levels | |
|-----------------------|----------------------|
| Level of Concern | Venous BLL 3.5 µg/dL |



Children must have proof of at least 1 lead test before entering childcare, preschool, or kindergarten

High Risk Communities

How is this calculated?

- 5-year incidence rate of confirmed $\geq 10 \mu\text{g/dL}$ cases
- Exhibit ≥ 15 cases of lead poisoning in the previous 5 years
- Household income (low to moderate income)
- Old housing stock (built pre-1978)



Screen at Age 4

High Risk Communities List (2023)

- New Bedford
- Springfield
- Brockton
- Fall River
- Lowell
- Lynn
- Everett
- Lawrence
- Pittsfield
- Worcester
- Chelsea
- Chicopee
- Westfield
- Boston
- Malden
- Taunton

Massachusetts Blood Lead Levels

2,056 children had an estimated confirmed BLL ≥ 5 $\mu\text{g}/\text{dL}$ in 2023



416 children were identified as being lead poisoned (BLL ≥ 10 $\mu\text{g}/\text{dL}$), in 2023

Lead in Massachusetts

To protect
young
children,
their homes
must be
“deleaded”

Properties that are **“deleaded”** are made **“lead safe”**

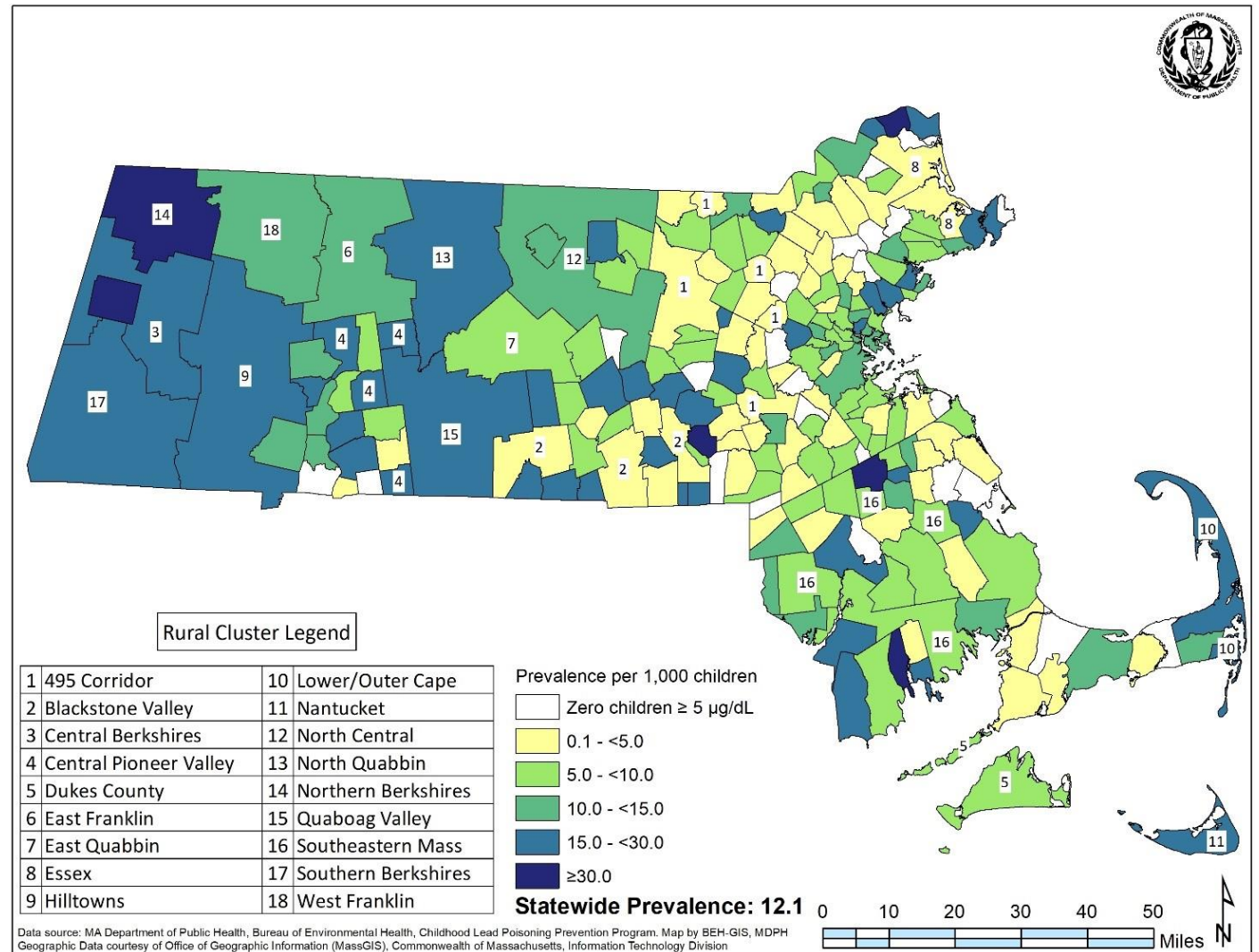
MA does not have a **“lead free”** standard

Parents/owners should not wait for a child to be exposed to lead before undertaking deleading

Determinators play a vital role in primary prevention efforts!

Rural Communities

- Rural communities with small populations may not meet the definition of a high-risk community
- Non-high-risk communities can still have high incidence rates of childhood lead poisoning
 - Individual children living in these communities **are** at high risk



Health Inequities



Lead exposure disproportionately impacts lower income communities and communities of color, making lead exposure a critical health equity issue



Children living in low-income communities with older housing are at increased risk of lead exposure



According to the 2019-2023 data, white children have the lowest risk of lead exposure in MA

[2023 Annual Childhood Lead Poisoning Surveillance Report](#)

Sources of Lead



Homes built before 1978



Swallowing or breathing in lead dust/paint chips is the most common way children are exposed to lead in Massachusetts.

Primary Sources of Lead Exposure

Young children are most often exposed to lead from their home environment.

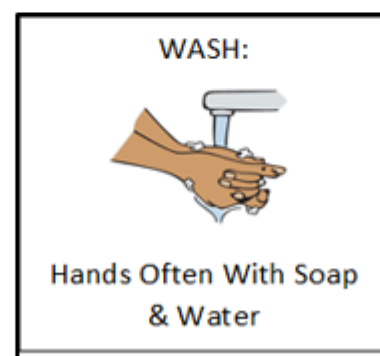
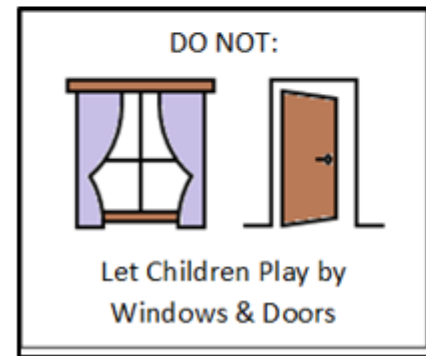
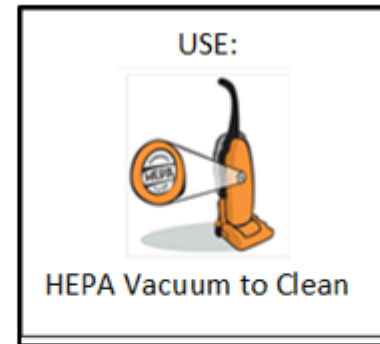
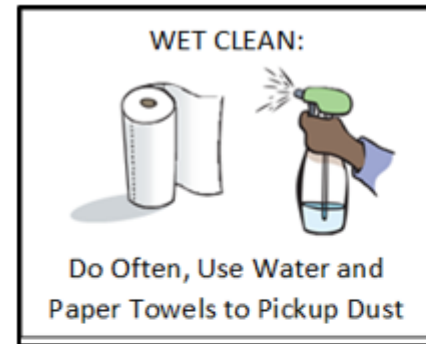
- Old leaded windows (usually in poor condition)
 - Loose and chipping lead paint (interior and/or exterior)
 - Unsafe Renovations
- ✓ Lead dust gets on hands and toys when children play
 - ✓ Children put their hands and toys in their mouths
 - ✓ Children can also breathe in lead during renovations



Level of lead in floor dust correlates directly with Blood Lead Level of toddlers living in the home

Temporary Hazard Reduction

- There are many practices that families and occupants can do to reduce lead exposure and protect children
- Temporary hazard reduction are tools Public Health Officers can educate occupants on in addition to finding and removing lead in their homes



Lead Laws

Massachusetts Lead Law 105 CMR 460.00

Massachusetts Lead Law

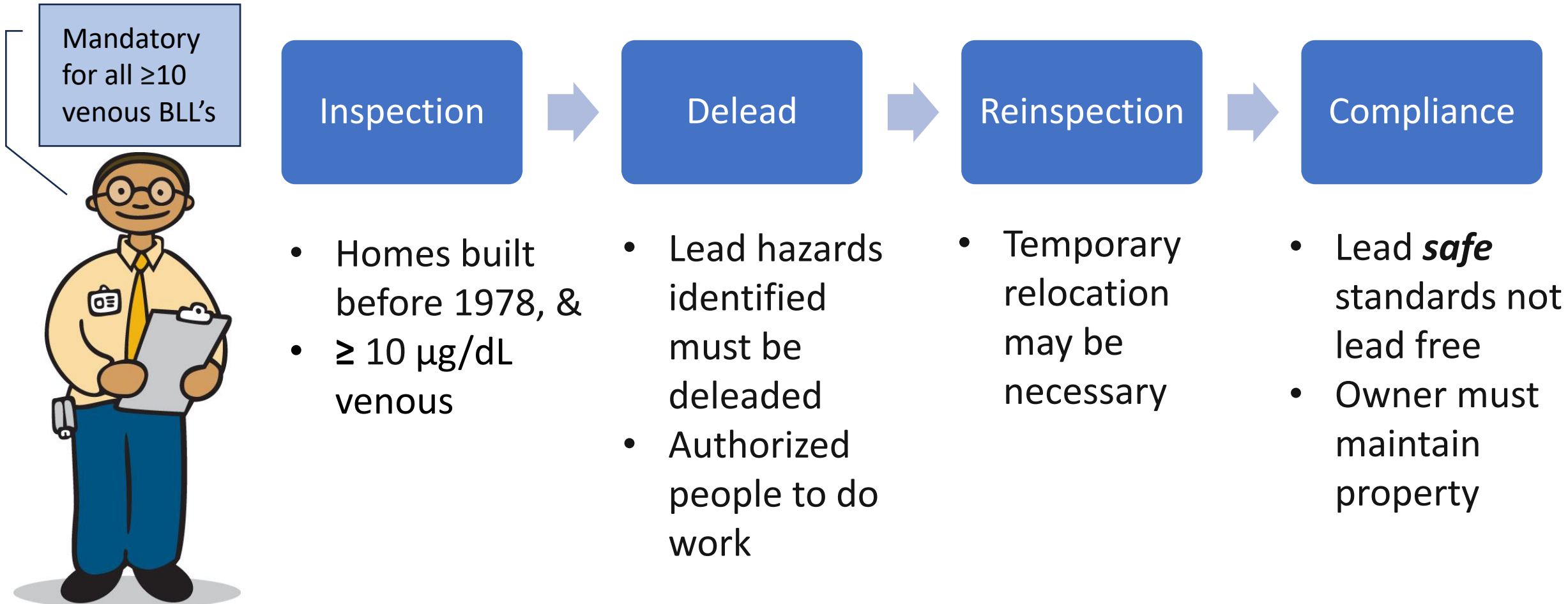
- One of the oldest and most comprehensive in the U.S.
- Requires the removal or control of lead paint hazards in ***homes built before 1978*** with ***children under 6***
- Protects a child's right to a lead-safe home
- Sets a universal screening requirement
- Permits state DPH and local code enforcement agencies to inspect units and enforce the Lead Law
- Requires property owners to comply with Orders to Correct



It is illegal to raise rent, evict, or discriminate against a family with young children by refusing to rent or lease because of the lead status

Code Enforcement Lead Inspection

CLPPP Mandated Inspections



Lead Hazards

Lead Violations & Abatement Standards
Renovation vs. Deleading

Lead Hazards/Violations

| Type of Hazard & Abbreviation | Components | Deleading Standard |
|--|---|--|
| Loose paint, plaster, putty, etc. (L) | Any | Make intact (minimum) Can also cover components |
| Accessible/mouthable surfaces (A/M) | Windowsills 5ft or less from the floor, stair tread, or ground; handrails; & railing caps. | Deleaded 5ft below & in 4in from each edge |
| Moveable/impacted parts (M/I) | Parts of a window 5ft or less from the floor. Include, but not limited to window sashes, wells, parting beads, stops & windowsills. | Deleaded in their entirety |
| Friction Surfaces (F) | Door edges, door jambs, & stair treads | Deleaded in their entirety at all points of possible friction. Stair treads are Deleaded from the wall or baseboard to the balusters or can be covered |

Deleading Authorizations

| DELEADING TYPE | PERMITTED ACTIVITIES | TRAINING REQUIREMENTS |
|--|---|---|
| Low-Risk | <ul style="list-style-type: none"> Removing doors, cabinet doors, and shutters <u>from hinges</u> Covering surfaces Applying vinyl siding to buildings | Read booklet and pass at-home quiz →File deleading notifications once you receive authorization number |
| Encapsulation | <ul style="list-style-type: none"> Applying a special liquid coating (encapsulant) over lead paint | Read booklet and pass at-home quiz →File deleading notifications once you receive authorization number and prepare testing & documentation |
| Moderate-Risk | <ul style="list-style-type: none"> Removing windows, woodwork and other surfaces Repairing or repainting (making intact) small amounts of lead paint (no more than 2 sq. ft per interior room or 20 sq. ft on the exterior) | <p><u>Property Owners & their agents:</u> Complete Owner/Agent MR Course Take/pass the Moderate-Risk exam →File deleading notifications once you receive authorization number</p> <p><u>Professional Contractors / fee for service:</u> Take Lead Safe Renovator Course, pass LSR exam, obtain LSR license, THEN take 4-hr Moderate Risk Deleading course, pass exam, apply for license (“MR_ _ _ _ _”) with Dept. Labor Standards</p> |
| High-Risk (Licensed Deleader) | <ul style="list-style-type: none"> Scraping paint Using chemical paint strippers Demolition (of decks, walls, etc.) Making large amounts of lead paint intact | <ul style="list-style-type: none"> Deleading Supervisor Course (32hrs) for supervisors of Deleading Workers (24 hrs) Pass written exam AND Physical exam Apply for license with Dept. Labor Standards |

Lead Safe Renovation Rule

- EPA issued a final rule to address lead-based paint hazards created by **Renovation, Repair, and Painting (RRP)** activities that disturb lead-based paint in *target housing* and *child-occupied facilities*.
 - MA Department of Labor Standards (DLS) implements this rule under **Lead Safe Renovation (LSR) (454 CMR 22.11)**
 - Sets safe work practices
 - <https://www.mass.gov/dls>

Renovation vs. Deleading

- ***Renovation work*** is done to upgrade and maintain the property
 - Lead may be disturbed in the process of renovation work
 - The intent is ***not to delead the home***
- ***Deleading work*** is done to remediate lead hazards, protect children and property owners from strict liability, and obtain compliance with the Lead Law

The difference lies with the intent of the work!

Renovation Projects

- Dangerous renovation practices the inspector should be mindful of while renovation work is taking place on a pre-1978 building: **Red Flags**
 - Power sanding/grinding
 - No exterior containment
 - No containment/protection in child play areas
 - Open flame/torch/sandblasting
 - Work areas are not isolated/contained
- Health Officers can issue Cease Work Orders when a BOH Inspector encounters unauthorized or unsafe deleading or renovation work

Health Officers' Tool Kit

CLPPP Resources
Financial Assistance

Lead Safe Homes

Database available to the public providing lead inspection reports and compliance documents for MA properties

[Lead Safe Homes 1.0](#)
[Lead Safe Homes 2.0](#)



Massachusetts Lead Income Tax Credit

As of January 1, 2023 deleading tax credit increase as follows:

Letter of Full Deleading Compliance:

- Eligible for a State Tax Credit equal to the cost of the deleading expenses, or \$3,000
 - Whichever is less

Letter of Interim Control:

- Eligible for a State Tax Credit of up to \$1,000
 - This amount applies toward the \$3,000 limit



Get the Lead Out (GTLO)

- Low-cost financing available to owners of 1-4 family properties to abate lead paint hazards
 - Single Family-\$30,000
 - 2-Family-\$35,000
 - 3-Family-\$40,000
 - 4-Family-\$45,000
- Owner-occupants meeting the income guidelines, 0% deferred payment loans available
- Investor-owned properties rented to income eligible households; 3% fully amortizing loans available



[MassHousing](https://www.mass.gov/masshousing)

HUD Lead Hazard Programs

Federally funded local programs designed to assist property owners with the cost of lead paint abatement in income-eligible properties



[Lead Safe Boston](#)

[Malden Lead & Healthy Homes Program](#)

[Worcester Lead Abatement Program](#)

[Quincy Lead Abatement Program](#)

[Lynn Lead Abatement & Healthy Homes](#)

[New Bedford Lead Paint Reimbursement Program](#)

[Lawrence Lead Abatement Program](#)

Licensed Individuals in MA

[MA Deleading Contractors](#)

[MA Private Lead Inspectors](#)

[MA LSRs and RRP](#)

[LSR-MR Contractors](#)

Lead Tool Kit

CLPPP General Information Line 1-800-532-9571

[Do You Rent Your Home? Look Out for Lead! \(mass.gov\)](#)

[Information for Property Owners - 2015 \(mass.gov\)](#)

[Lead Poisoning Information for Real Estate Agents \(mass.gov\)](#)

[MA Tenant Lead Law Notification](#)

[CLPPP Property Transfer Lead Paint Notification](#)

[Tenant rights | Mass.gov](#)



Massachusetts Department of Public Health

Thank you!

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Healthy Homes & Childhood Lead Poisoning Prevention Program

Bureau of Climate & Environmental Health

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Massachusetts Department of Public Health



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