Childhood Lead Poisoning Prevention in Maine
Quick Guide

Health Effects of Lead Exposure
- Damage to the brain and nervous system
- Slowed growth and development
- Learning and behavior problems
- Speech and hearing problems

Leading to:
- Lower IQ
- Decreased ability to pay attention
- Underperformance in school

Key Messages for Parents
- Dust from lead paint in older homes is the most common cause of childhood lead poisoning.
- Children, especially those under 3, often put their hands and toys in their mouths.
- This makes it very easy for lead dust to get into, and damage, their growing bodies.
- The only way to know if a child has lead poisoning is to test them.

Ways to Limit Exposure
- Keep children away from peeling or chipping paint.
- Wash children’s hands before eating and sleeping.
- Feed children at a table or in a highchair and not on the floor.
- Wash toys once a week and keep toys away from areas with chipping paint.
- Clean floors, windowsills, and tabletops with wet mops or rags once a week.
- Cover chipping and peeling paint to keep lead from spreading to surrounding areas.
- Avoid sanding and scraping paint in old homes.

Primary Prevention Spotlight
- Providers and families may request a free, do-it-yourself lead dust test kit to identify lead dust in a child’s home before a child becomes poisoned.
- These test kits are ideal for families who live in pre-1950 housing, and that have infants (<1 year old), are expecting a new baby, or have a child with a blood lead level <3.5 µg/dL.
- To order a test kit call 207-287-4311 or visit https://bit.ly/3DcAuSp
Maine CDC Pediatric Blood Lead Testing Guidelines
Identifying Children with Lead Poisoning

Maine CDC provides services based on venous lead levels >3.5 µg/dL.
- The initial blood lead screening test may be either a venous or capillary sample.
- An elevated capillary sample (>3.5 µg/dL) must be confirmed with a venous sample.

<table>
<thead>
<tr>
<th>Age</th>
<th>Blood Lead Testing Requirements</th>
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<tbody>
<tr>
<td>1 year (9 to &lt;18 months)</td>
<td>Mandatory under Maine law</td>
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<tr>
<td>2 years (18 to &lt;36 months)</td>
<td>Mandatory under Maine law</td>
</tr>
</tbody>
</table>
| 3-5 years (36 to 72 months) | For children covered by MaineCare:  
  - If not previously tested: Mandatory blood lead test  
  - If previously tested: Recommend blood lead test yearly unless risk assessment questionnaire is negative.  
For children not covered by MaineCare:  
- Recommend blood lead test yearly unless risk assessment questionnaire is negative. |

Risk Assessment Questionnaire – Identifies at-risk children under 6 years of age
If a child’s parent or guardian answers ‘yes’ or ‘don’t know’ to any of the questions below, test the child for lead.
- Does your child spend more than 10 hours per week in any house built before 1950?
- Does your child spend more than 10 hours per week in any house built before 1978 that was renovated or remodeled within the last 6 months?
- Does your child spend time with an adult whose job exposes him/her to lead? (i.e., construction, painting)
- Does your child have a sibling or playmate that has been diagnosed with lead poisoning?

Test at-risk populations annually through 5 years of age, and as clinically indicated, even if the risk assessment questionnaire is negative.

At-risk populations:
- Recent immigrants or international adoptees
- Children whose parents immigrated to the U.S.
- Children with pica behavior
- Children with neurodevelopmental disabilities or conditions such as autism that put them at higher risk for hand-to-mouth behavior
- Children entering foster care

Test all recently arrived refugee children.
- Perform a blood lead test for children 6 months to 16 years upon entry to the U.S.
- Within 3-6 months of initial test, conduct follow-up test for children 6 months to 6 years, regardless of initial test result.
Recommended Confirmation and Follow-up Schedule
Clinical Actions for Pediatric Blood Lead Levels ≥3.5 µg/dL

- The pediatric blood lead reference level is 3.5 µg/dL. Confirm capillary screening test results ≥3.5 µg/dL with a venous test.
- The sooner providers confirm capillary blood lead tests with venous specimens, the sooner Maine CDC can initiate services to identify and eliminate the sources of their lead exposure.
- The higher the capillary test result, the more urgent the need for a timely confirmatory venous test.
- Confirmatory testing is not required when an initial screening test is performed using a venous sample.

<table>
<thead>
<tr>
<th>Capillary Blood Lead Level</th>
<th>Confirm with Venous Test</th>
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<tbody>
<tr>
<td>3.5 - &lt;10 µg/dL</td>
<td>As soon as possible, but no later than 3 months</td>
</tr>
<tr>
<td>10 - &lt;20 µg/dL</td>
<td>As soon as possible, but no later than 1 month</td>
</tr>
<tr>
<td>20 - &lt;45 µg/dL</td>
<td>As soon as possible, but no later than 2 weeks</td>
</tr>
<tr>
<td>≥45 µg/dL</td>
<td>Immediately, but no later than 48 hours (place order as STAT)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Venous Blood Lead Level</th>
<th>Follow-up Venous Test Schedule</th>
<th>Recommended Actions Based on Confirmed Venous BLL</th>
</tr>
</thead>
</table>
| 3.5 - <10 µg/dL             | Within 3 months*                | • Complete risk assessment questionnaire to identify potential sources of exposure  
                               |                                  | • Educate on key messages (see Quick Guide page)  
                               |                                  | • Inform patient that Maine CDC will be reaching out |
| 10 - <20 µg/dL              | Within 2 months*                | • Items above plus:  
                               |                                  | • Ensure child does not have iron deficiency  
                               |                                  | • Check child’s development to ensure appropriate milestones are being met |
| 20 - <45 µg/dL              | Within 1 month*                 | • Items above plus:  
                               |                                  | • Consider performing an abdominal x-ray to check for lead-based paint chips and other radiopaque foreign bodies |
| ≥45 µg/dL                   | Immediately (place order as STAT) | • Items above plus:  
                               |                                  | • Perform complete history and physical exam including detailed neurological exam  
                               |                                  | • Urgent consult with Northern New England Poison Center:  
                               |                                  | 1-800-222-1222 |

*You may elect to repeat blood lead tests on children with an elevated venous blood lead level within 1 month to ensure that the blood lead level is not rising. Consult U.S. CDC guidelines: https://bit.ly/3QyeaFZ
Maine CDC’s Public Health Response
For Confirmed Venous Blood Lead Levels $\geq 3.5$ µg/dL

<table>
<thead>
<tr>
<th>Maine CDC Childhood Lead Poisoning Prevention Unit Response for Children (Ages 0 - &lt;72 months) With Venous Lead Levels</th>
<th>3.5 - &lt;5</th>
<th>5 - &lt;10</th>
<th>10 - &lt;45</th>
<th>$\geq 45$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer free home lead dust test and if dust levels are high, provide environmental investigation and case management services described below</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct environmental investigation of the child’s home to identify and remove lead hazards</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Provide case management services to: discuss outcomes of investigation, prevent further exposure, and monitor blood lead level</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Offer home visit from a public health nurse</td>
<td>As Needed</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CDS referral (lead poisoning is a qualifying diagnosis for CDS)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Coordinate with providers and Northern New England Poison Center on urgent evaluation for chelation therapy and investigation of the child’s home environment for lead hazards</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Additional Resources

For questions or concerns about blood lead testing, talk to the physician or a nurse on our health team. 207-287-4311

Call the State of Maine Health and Environmental Testing Laboratory to order free blood collection supplies and mailers. 207-287-2727


Learn more about using the Blood Lead Module in ImmPact to identify patients needing a blood lead test. https://bit.ly/3RTZamC

Order Maine lead poisoning prevention educational materials for your office. ehu@maine.gov