

# Minnesota Childhood Blood Lead Screening Guidelines

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## Recommendations for Blood Lead Testing by Age Group

All Children 0–17 Years				
<ul style="list-style-type: none"> <li>Any child that a parent or guardian expresses concern about lead exposure, or asks for their child to be tested for lead poisoning, should receive a blood lead test.</li> <li>If the health care provider becomes aware of changes in possible lead exposure or risk factors in a child, the child should receive a blood lead test.</li> <li>Newly arrived refugees should be tested upon arrival and 3–6 months after initial blood lead test. Additional tests may be warranted based on risk questionnaire.</li> <li>When doing a blood lead test, follow sample collection procedures identified by the <a href="#">CDC Steps for Lead Testing</a>.               <ul style="list-style-type: none"> <li>For capillary samples, make sure to wash the patient’s hands with soap and water before taking a sample.</li> </ul> </li> </ul>				
Newborns	9–15 Months	18–24 Months	25 Months–5 Years	6–17 Years
If a parent has a blood lead level (BLL) $\geq 5$ $\mu\text{g}/\text{dL}$ during pregnancy or while breastfeeding, refer to the <a href="#">MDH Blood Lead Level Guidelines</a> for Pregnancy & Breastfeeding.	All children should receive a blood lead test between 9–15 months of age (recommended at 12 months).	All children should receive a blood lead test between 18–24 months of age (recommended at 24 months).	Children should receive a blood lead test if they did not receive a blood lead test $\leq 24$ months OR if they meet criteria for a blood lead test based on risk questionnaire (see below).	Children should receive a blood lead test if they meet criteria for a blood lead test based on risk questionnaire (see below).
<p><b>ALL BLOOD LEAD TESTS ARE REQUIRED TO BE REPORTED TO THE MINNESOTA DEPARTMENT OF HEALTH (MDH) BY THE LAB OR CLINIC ANALYZING THE SAMPLE. HEALTH CARE PROVIDERS DO NOT NEED TO CALL MDH TO REPORT (UNLESS THEY SUSPECT A FAILURE TO REPORT PROPERLY).</b></p>				

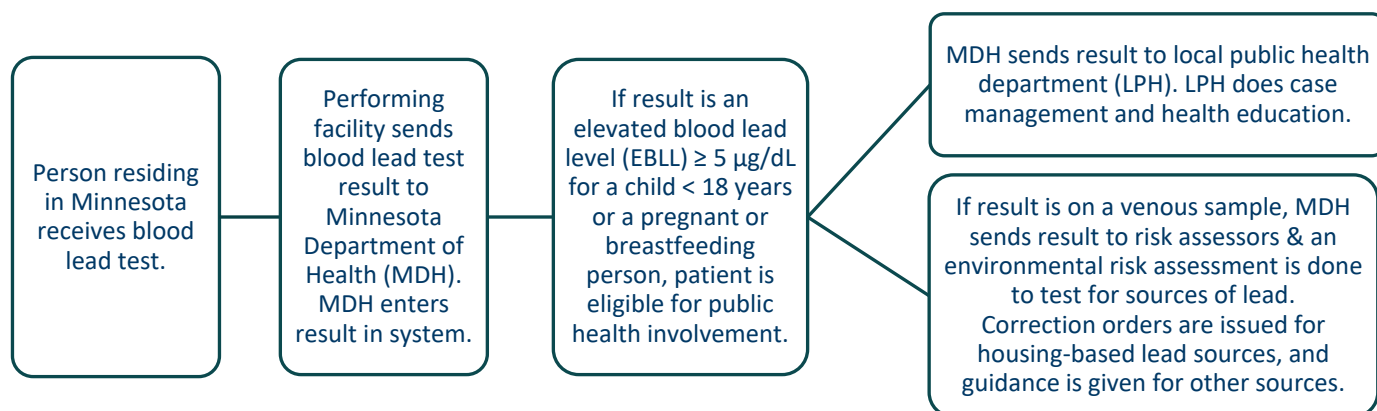
\* For blood lead screening for other populations, refer to [MDH Blood Lead Level Guidelines](#) for Pregnancy & Breastfeeding.

## Follow-up Blood Lead Testing

Follow-Up Blood Lead Testing
<ul style="list-style-type: none"> <li>If blood lead test result was <math>&lt; 5</math> <math>\mu\text{g}/\text{dL}</math> for either a blood lead test on a capillary or venous sample, no further testing is needed until the next time they are scheduled to receive a blood lead test according to the above screening guidelines, or if their risk factors change.</li> </ul>
<ul style="list-style-type: none"> <li>If blood lead test was done on a capillary sample and the blood lead level (BLL) was elevated (<math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math>), confirm with a venous draw as soon as possible and no later than:           <ul style="list-style-type: none"> <li><i>Immediately</i> for BLLs <math>\geq 60</math> <math>\mu\text{g}/\text{dL}</math>,</li> <li>48 hours for BLLs 45.0–59.9 <math>\mu\text{g}/\text{dL}</math>,</li> <li>1 week for BLLs 15.0–44.9 <math>\mu\text{g}/\text{dL}</math>,</li> <li>1 month for BLLs 5.0–14.9 <math>\mu\text{g}/\text{dL}</math>.</li> </ul> </li> <li>If a clinic is unable to do a venous draw, refer the child to a laboratory or facility able to perform a venous draw.</li> </ul>
<ul style="list-style-type: none"> <li>If blood lead test was done on a venous sample and the BLL was elevated (<math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math>), follow the <a href="#">MDH Blood Lead Level Guidelines</a> for Childhood Blood Lead Treatment.</li> </ul>

To obtain this information in a different format, call: 651-201-4620.

## Process and Role of Public Health



## Blood Lead Reference Value

An Elevated Blood Lead Level (EBLL) is  $\geq 5$   $\mu\text{g}/\text{dL}$  in MN according to statute. The CDC defines their blood lead reference value (BLRV) as 3.5  $\mu\text{g}/\text{dL}$ . The BLRV is based on the 97.5th percentile of blood lead level (BLL) distribution in U.S. children ages 1–5 years, and is not based on evidence of a direct benefit or harm to individual children. For more information, please see the press release [CDC Updates Blood Lead Reference Value for Children \(https://www.cdc.gov/media/releases/2021/p1028-blood-lead.html\)](https://www.cdc.gov/media/releases/2021/p1028-blood-lead.html). Children in Minnesota with BLLs  $< 5$   $\mu\text{g}/\text{dL}$  do not receive public health case management or intervention.

## MDH Lead Poisoning Prevention Contacts

- Call 651-201-4892 for questions regarding:
  - elevated blood lead case management
  - guidance on blood lead testing
- Call 651-201-4919 or email [health.bloodleadresults@state.mn.us](mailto:health.bloodleadresults@state.mn.us) for questions regarding:
  - reporting blood lead results to MDH
  - incoming/outgoing blood lead results
- Fax number to send blood lead results: 651-201-4909
- Mailing address:
 

Minnesota Department of Health (MDH)  
Health Risk Intervention Unit  
P.O. Box 64975  
St. Paul, MN 55164-0975

## Resources

- [MDH Blood Lead Level Guidelines \(https://www.health.state.mn.us/communities/environment/lead/prof/guidelines.html\)](https://www.health.state.mn.us/communities/environment/lead/prof/guidelines.html)
- [MDH Test Result Reporting \(https://www.health.state.mn.us/communities/environment/lead/prof/surv.html\)](https://www.health.state.mn.us/communities/environment/lead/prof/surv.html)
- [MDH Lead Fact Sheets and Brochures \(https://www.health.state.mn.us/communities/environment/lead/fs/index.html\)](https://www.health.state.mn.us/communities/environment/lead/fs/index.html)
- [CDC Laboratory Considerations \(https://www.cdc.gov/nceh/lead/lab/default.htm\)](https://www.cdc.gov/nceh/lead/lab/default.htm)
- [CDC Steps for Lead Testing \(CDC Steps for Lead Testing \(https://www.cdc.gov/biomonitoring/pdf/Lead\\_Fingers\\_tick\\_Poster-508.pdf\)\)](https://www.cdc.gov/biomonitoring/pdf/Lead_Fingers_tick_Poster-508.pdf)
- [MN Refugee Blood Lead Screening \(https://www.health.state.mn.us/communities/rih/guide/9lead.html#1\)](https://www.health.state.mn.us/communities/rih/guide/9lead.html#1)
- [MDH Child and Teen Checkups Fact Sheets \(https://www.health.state.mn.us/people/childreneyouth/ctc/factsheets.html\)](https://www.health.state.mn.us/people/childreneyouth/ctc/factsheets.html)

## Lead Risk Screening Questionnaire for Children 3–17 Years of Age

**All children in MN should receive a blood lead test at 12 and 24 months. Refer to blood lead screening guidelines.**

### Questions for Children 3–5 Years of Age

In the following questions, the “child” refers to the person getting screened for a blood lead test. If you are a parent or guardian, answer the following questions for your child.	Yes	Don't Know	No
Did the child miss their blood lead tests at 12 or 24 months?			
Since the child's last blood lead test has the child's sibling, housemate, or playmate been diagnosed with an elevated blood lead level (EBLL) greater than or equal to $\geq 5 \mu\text{g/dL}$ ?			
Since the child's last blood lead test has the child moved to or started regularly visiting a home, childcare, or other building built before 1978?			
Has the child moved to Minnesota from a major metropolitan area within the last 12 months?			
Does the child's diet lack sources of iron or calcium?			
Has the child been diagnosed with low hemoglobin, low iron levels, or anemia?			

### Questions for Children 3–17 Years of Age

In the following questions, the “child” refers to the person getting screened for a blood lead test. If you are a parent or guardian, answer the following questions for your child. If you are a teenager filling this out for yourself, answer the questions for yourself.	Yes	Don't Know	No
Do you think the child may have been exposed to lead?			
During the last 12 months, did the child arrive in Minnesota from another country or spend significant time in another country?			
Does the child live in a house built before 1978 that is currently being renovated or has been renovated within the past 12 months?			
Does the child have any bullets in their body from past gunshot wounds?			
Does the child have any developmental disabilities?			
Does the child eat, mouth, or chew on any nonfood items, such as clay, soil, paint chips, painted wood, keys, fishing sinkers, jewelry, or antique furniture or toys?			
Does the child eat venison or other game that was harvested with lead bullets?			
Does the child eat candy (like chili or tamarind) or spices (like turmeric, chili, or curry) from other countries, especially spices purchased in bulk?			
Does the child eat food cooked or served in handmade, imported, or terra cotta pottery, cookware, or leaded crystal?			
Does anyone in the household use any traditional or cultural medicines?			
Does anyone in the household use any traditional or cultural cosmetics such as kohl, kajal, surma, sindoor, or thanakha?			
Does anyone in the household have an occupation, hobby, or activity that involves lead exposure? See below list for examples.			

**If the answer “Yes” or “Don't Know” to ANY of the above questions, the child should receive a blood lead test.  
Children should also be tested if they or their parents/guardians have any concerns about lead not addressed here.**

### Examples of Lead-Related Hobbies, Occupations, and Industries

- Manufacturing: lead, batteries, bullets, fishing sinkers, ceramics, electrics, cable, wire, industrial, glass, paint, plastic, rubber
- Shooting teams, hunters, firing range users and workers, gunsmiths, police officers, armed forces
- Painters, remodelers, renovators, restorers, and refinishers of old buildings or antiques
- Auto repair, plumbers and pipe fitters, radiator repairers, welders, splicers, shipbuilders
- Recycling: metal, glass, electronics, and batteries, solid waste incinerators
- Artists (Painting, Ceramics, Pottery, Jewelry, Stained Glass, Printmaking)
- Construction and demolition work, lead abatement workers