Childhood Blood Lead Screening Guidelines for Minnesota

A Physician Should Test a Child at Any Age:
- If the parent expresses a concern about, or asks for their child to be tested for, blood lead poisoning
- If the child moved from a major metropolitan area or another country within the last 12 months

Routine Screen:
Child health-care providers should use a blood lead test* to screen children at one and two years of age, and children up to six years of age who have not previously been screened, if:

The child lives within the city limits of Minneapolis or St. Paul;

or

The child receives services from Minnesota Care (MnCare) or Medical Assistance (MA) - which includes the Prepaid Medical Assistance Program (PMAP);

or

The child does not fit the criteria above, and the answer to any of the following questions is “Yes” or “Don’t Know:”

- During the past six months has the child lived in or regularly visited a home, childcare, or other building built before 1950?
- During the past six months has the child lived in or regularly visited a home, childcare, or other building built before 1978 with recent or ongoing repair, remodeling or damage (such as water damage or chipped paint)?
- Has the child or his/her sibling, playmate, or housemate had an elevated blood lead level?

Periodic Evaluation:
In order to monitor a change in the child’s status, administer the following questions annually to all children three to six years of age whose previous test results were less than 10 µg/dL. Screen the child with a blood lead test* if the answer to any of the following questions is “Yes” or “Don’t Know.”

Since the child’s last blood lead test:
- Does the child have a playmate, housemate, or sibling who has recently been diagnosed with an elevated blood lead?
- Has the child moved to or started regularly visiting a home, childcare, or other building built before 1950?
- Has there been any repair, remodeling, or damage (such as water damage or chipped paint) to a home childcare, or other building built before 1978 that the child lives in or regularly visits?

* A blood lead test for lead poisoning is a laboratory analysis for lead in the blood of a child or adult. Laboratories performing blood lead analysis are required to report all results to the Minnesota Department of Health.
Follow-up Care

<table>
<thead>
<tr>
<th>If result of capillary screening test (µg/dL) is:</th>
<th>Perform diagnostic test on venous blood within:</th>
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</thead>
<tbody>
<tr>
<td>5-14.9</td>
<td>3 months</td>
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<tr>
<td>15-44.9</td>
<td>1 week</td>
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<tr>
<td>45-59.9</td>
<td>48 hours</td>
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<tr>
<td>≥ 60</td>
<td>Immediately (as an emergency lab test)</td>
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Follow-up testing for children
- Children with diagnostic BLLs of 5-9.9 or 10-14.9 µg/dL should have at least one follow-up test within 3 months.
- If the result of the follow-up testing is ≥ 15 µg/dL, the child should receive clinical management, which includes follow-up testing.

Clinical management includes
- Clinical evaluation for complications of lead poisoning.
- Family lead education and referrals.
- Chelation therapy, if appropriate.
- Follow-up testing at appropriate intervals.

Provide appropriate chelation therapy
- A child with a BLL ≥ 45 µg/dL should be treated promptly with appropriate chelating agents and be removed from sources of lead exposure.

Environmental Management
- Contact the Minnesota Department of Health/Local Public Health Agency.
- Any diagnostic BLL above 15 µg/dL requires an environmental investigation. Contact MDH at 651-201-4620.

Sources of Lead

The most common sources of lead are paint, dust, soil, and water. Other sources include:

Traditional Remedies/Cosmetics
- In Asian, African, & Middle Eastern Communities: As a cosmetic, or a treatment for skin infections or umbilical stump.
  - alkohl, kajal, kohl, or surma (black powder)
- In Asian Communities: For intestinal disorders.
  - bali goli (round flat black bean)
  - ghasard/ghazard (brown powder)
  - kandu (red powder)
- In Hmong Communities: For fever or rash.
  - pay-loo-ah (orange/red powder)
- In Latino Communities: Some salt-based candies made in Mexico For abdominal pain/empacho.
  - aazarcon (yellow/orange powder), also known as: alacon, cora, coral, liga, maria luisa, and rueda
  - greta (yellow/orange powder)
- In South Asian (East Indian) Communities: For bindi dots.
  - sindoor (red powder)
  - As a dietary supplement.
  - Ayurvedic herbal medicine products

Occupations/Industries
- Ammunition/explosives maker
- Auto repair/auto body work
- Battery maker
- Building or repairing ships
- Cable/wire stripping, splicing or production
- Construction
- Ceramics worker (pottery, tiles)
- Firing range worker
- Leaded glass factory worker
- Industrial machinery/equipment
- Jewelry maker or repair
- Junkyard employee
- Lead miner
- Melting metal (smelting)
- Painter
- Paint/pigment manufacturing

- Plumbing
- Pouring molten metal (foundry work)
- Radiator repair
- Remodeling/repainting/renovating houses or buildings
- Removing paint (sandblasting, scraping, sanding, heat gun or torch)
- Salvaging metal or batteries
- Welding, burning, cutting or torching
- Steel metalwork
- Tearing down buildings/metal structures

Hobbies/Miscellaneous

May include above occupations.
- Some children’s jewelry
- Antique/imported toys
- Chalk (particularly for snooker/billiards)
- Remodeling, repairing, renovating home
- Painting/striping cars, boats, bicycles
- Soldering
- Melting lead for fishing sinkers or bullets
- Making stained glass
- Firing guns at a shooting range
- Wild game shot with lead ammunition