CHILDHOOD BLOOD LEAD CASE MANAGEMENT GUIDELINES FOR MINNESOTA

(This document is intended for use by local public health agencies and their partners. It should be used in conjunction with the Childhood Blood Lead Case Management Guidelines for Minnesota – Reference Manual)

REMINDER: BLOOD LEAD SCREENING IS REQUIRED AT 12 AND 24 MONTHS FOR ALL CHILDREN RECEIVING MEDICAL ASSISTANCE (MA) (OR UP TO SIX YEARS OF AGE IF NOT PREVIOUSLY TESTED)

<table>
<thead>
<tr>
<th>Capillary</th>
<th>Venous</th>
</tr>
</thead>
</table>
| **CAPILLARY TESTS ARE CONSIDERED A SCREENING TEST ONLY; VENOUS TESTS ARE CONFIRMATORY** | **Provide educational materials** to the family, including an overview of high risk categories.

- **< 5 µg/dL**
  - Provide educational materials to the family, including an overview of high risk categories.
  - Contact the family with the recommendation to have a follow-up venous test within three months.

- **5 – 9.9 µg/dL**
  - Provide educational materials to the family, including an overview of high risk categories.
  - Contact the family with the recommendation to have a follow-up venous test within three months.

  **VENOUS RETEST WITHIN THREE MONTHS**

- **10 – 14.9 µg/dL**
  - Provide educational materials to the family, including an overview of high risk categories.
  - Contact the family with the recommendation to have a follow-up venous test.

  **VENOUS RETEST WITHIN THREE MONTHS**

- **15 – 44.9 µg/dL**
  - Provide educational materials to the family, including an overview of high risk categories.
  - Contact the family to have a follow-up venous test.
  - Offer the medical care provider MDH's screening, treatment, and pregnancy guidelines.

  **VENOUS RETEST WITHIN ONE WEEK**

- **45 – 59.9 µg/dL**
  - Provide educational materials to the family, including an overview of high risk categories.
  - Contact the family to have a follow-up venous test.
  - Offer the medical care provider MDH's screening, treatment, and pregnancy guidelines.

  **VENOUS RETEST WITHIN TWO BUSINESS DAYS**

- **≥ 60 µg/dL**
  - Provide educational materials to the family, including an overview of high risk categories.
  - Contact the family to have a follow-up venous test.
  - Ensure that the medical care provider is aware of the screening, treatment, and pregnancy guidelines available from the MDH.

  **VENOUS RETEST IMMEDIATELY**

1. MDH data shows that approximately 68% of elevated capillary test results are false positives (e.g., a high result was not confirmed by subsequent venous test). The best way to reduce contamination in capillary specimens is by thorough hand washing with soap and water.


3. A high risk child lives in Minneapolis or St. Paul, receives services from Minnesota Care (MnCare) or Medical Assistance (MA), or fits one of the following criteria: a) lived in or regularly visits home built before 1960; b) lived in or regularly visits home built between 1960 and 1978 that is being, or has been, renovated; or c) sibling/playmate has EBL.

4. When possible, it is recommended to complete at least one follow-up home visit.

Additionally, according to Minnesota Statute, all venous results above 15 µg/dL require an environmental assessment.

- **Within one week:** Arrange for initial home visit.
  - Complete an in-depth assessment of: medical, environmental, nutritional, and developmental needs.
  - Provide educational materials to the family, including an overview of high risk categories.
  - Make necessary referrals.
  - Communicate with the risk assessor assigned to the case.
  - Encourage the family to obtain a follow-up venous test within three months from the last blood lead test.
  - Ask questions to identify possible sources of lead in child’s environment (see back for list of sources)

- **Within two business days:** Arrange for initial home visit.
  - Complete an in-depth assessment of: medical, environmental, nutritional, and developmental needs.
  - Provide educational materials to the family, including an overview of high risk categories.
  - Make necessary referrals.
  - Communicate with the risk assessor assigned to the case.
  - Communicate with the risk assessor assigned to the case.
  - Encourage the family to obtain a follow-up venous test within three months from the last blood lead test.

At this level the medical care provider will most likely provide chelation therapy (see MDH treatment guidelines) and the child will need more frequent monitoring of their blood lead level.

- **Immediately:** Arrange for initial home visit.
  - Complete an in-depth assessment of: medical, environmental, nutritional, and developmental needs.
  - Provide educational materials to the family, including an overview of high risk categories.
  - Make necessary referrals.
  - Attempt to facilitate alternative, lead-safe housing.
  - Communicate with the risk assessor assigned to the case.
  - Contact the medical care provider to determine blood lead level, medical status, treatment and follow-up plans.

At this level the medical care provider will most likely provide chelation therapy (see MDH treatment guidelines) and the child will need more frequent monitoring of their blood lead level. The child may be hospitalized at this level.
Sources of Lead
The most common sources of lead are paint, dust, soil, and water. Other sources include:

Products Used in Ethnic Communities
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.
  • azarcon (yellow/orange powder), also known as:
    alarcon, 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

Hobbies
May also include some of the occupations listed.
  • Bronze Casting
  • Collecting, Painting or Playing Games with Lead Figurines
  • Copper Enameling
  • Electronics with Lead Solder
  • Hunting and Target Shooting
  • Jewelry Making with Lead Solder
  • Liquor Distillation
  • Making Pottery and Ceramic Ware with Lead Glazes and Paints
  • Making Stained Glass and Painting on Stained Glass
  • Melting Lead for Fishing Sinkers or Bullets or Lead Figurines
  • Painting/Stripping Cars, Boats, and Bicycles
  • Print Making and Other Fine Arts (When Lead White, Flake White and Chrome Yellow Pigments are Involved)
  • Remodeling, Repairing, and Renovating Homes

Occupations/Industries
  • Ammunition/Explosives Maker
  • Auto Repair/Auto Body Work
  • Battery Manufacturing and Repair
  • Bridge, Tunnel and Elevated Highway Construction
  • Building or Repairing Ships
  • Cable/Wire Stripping, Splicing or Production
  • Ceramics Worker (Pottery, Tiles)
  • Construction
  • Firing Range Work
  • Glass Recycling, Stained Glass and Glass Work
  • Jewelry Maker or Repair
  • Lead Abatement
  • Lead Miner
  • Leaded Glass Factory Worker
  • Manufacturing and Installation of Plumbing Components
  • Manufacturing of Industrial Machinery and Equipment
  • Melting Metal (Smelting)
  • Metal Scrap Yards and Other Recycling Operations
  • Motor Vehicle Parts and Accessories
  • Occupations Using Firearms
  • Paint/Pigment Manufacturing
  • Pottery Making
  • Production and Use of Chemical Preparations
  • Radiator Repair
  • Remodeling/Repainting/Renovating Houses or Buildings
  • Removing Paint (Sandblasting, Scraping, Sanding, Heat Gun or Torch)
  • Steel Metalwork
  • Tearing Down Buildings/Metal Structures
  • Welding, Burning, Cutting or Torching

Mailing Address:
Environmental Health
Lead Program
625 North Robert Street
PO Box 64975
St. Paul, MN 55164-0975

For more information about lead,
contact the MDH Lead Program at (651) 201-4620

If you require this document in another format, call:
(651) 201-5000 • 1 (800) 657-3908
MDH TTY (651) 201-5797

Printed on Recycled Paper

Funded by CDC Grant #US5/CCU518477-01
IC #141-0278