

# 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), the Supplemental Food Program for Women, Infants, and Children (WIC), 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. An elevated blood lead test is a result greater than or equal to 10 micrograms lead per deciliter (µg/dL) of blood. Laboratories performing blood lead analysis are required to report all results to the Minnesota Department of Health.



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The following are general guidelines. For Childhood Blood Lead Clinical Treatment Guidelines for Minnesota, please call the MDH at (651) 201-4620, or visit our website at: [www.health.state.mn.us/divs/eh/lead/reports](http://www.health.state.mn.us/divs/eh/lead/reports).

## Follow-up Care

If result of capillary screening test ( $\mu\text{g}/\text{dL}$ ) is:	Perform diagnostic test on venous blood within:
10-14.9	3 months
15-44.9	1 week
45-59.9	48 hours
$\geq 60$	<b>Immediately</b> (as an emergency lab test)

### Follow-up testing for children with elevated diagnostic BLLs

- Children with diagnostic BLLs of 10-14.9  $\mu\text{g}/\text{dL}$  should have at least one follow-up test within 3 months.
- If the result of the follow-up testing is  $\geq 15$   $\mu\text{g}/\text{dL}$ , 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  $\geq 45$   $\mu\text{g}/\text{dL}$  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.

## 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.*

- 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

### 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/stripping 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