

Tennessee Childhood Lead Poisoning Prevention Program Screening Guidelines

The Tennessee Childhood Lead Poisoning Prevention Program (CLPPP) screening and follow-up guidelines are based on the latest recommendations of the Advisory Committee on Childhood Lead Poisoning and Prevention of the Centers for Disease Control and Prevention (CDC) and the endorsement of the CDC. More information is available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6120a6.htm>

Who Should Be Screened?

1. Children at 12 and 24 months old*
2. Children 36-72 months old without a documented blood lead level*
3. Children whose parent/guardian requests a blood lead level.
4. Children whose parent/guardian answers “yes” or “don’t know” to any questions on the risk assessment questionnaire used at well-child checks between 6-72 months of age or when child’s risk status changes.

*Required for **all** TennCare recipients

Screening Guidelines

1. Blood lead test may be done as a capillary finger stick.
2. If the blood lead level (BLL) is 5 µg/dL or greater, the level must be confirmed by a venous BLL.

If the Capillary Blood Lead Level is ≥ 5 µg/dL follow the Recommended Schedule for a confirmatory Venous Sample

Screening test result (µg/dL)	Time to confirmation testing:
5-9	1-3 months
10-44	1 week - 1 month*
45-59	48 hours
60-69	24 hours
≥ 70	Urgently as emergency test

*The higher the BLL on the screening test, the more urgent the need for confirmatory testing.

If the Confirmatory Venous Sample is ≥ 5 µg/dL follow the Recommended Schedule for Follow-Up Testing ^a

Venous Blood Lead Level (µg/dL)	Early Follow-Up (first 2-4 tests after identification)	Late Follow-Up (after BLL begins to decline)
5-9	3 months ^b	6-9 months
10-19	1-3 months ^b	3-6 months
20-24	1-3 months ^b	1-3 months
25-44	2 weeks-1 month	1 month
≥ 45	As soon as possible	As soon as possible

a Seasonal variation of BLLs exists and may be more apparent in colder climate areas. Greater exposure in the summer months may necessitate more frequent follow-ups.

b Some case managers or PCPs may choose to repeat blood lead tests on all new patients within a month to ensure that their BLL is not rising more quickly than anticipated.

Summary of Recommended Actions for Children Based on Blood Lead Level Value

Blood Lead Level ($\mu\text{g}/\text{dL}$)			
< 5	5 - 44	45 - 69	≥ 70
<p>Lead education*</p> <ul style="list-style-type: none"> -Dietary -Environmental <p>Lead risk assessment and environmental sampling if appropriate</p>	<p>Lead education*</p> <ul style="list-style-type: none"> -Dietary -Environmental <p>Follow-up blood lead monitoring (see guidelines)</p> <p>Complete history and physical exam</p> <p>Lab work:</p> <ul style="list-style-type: none"> -Iron status -Consider hemoglobin or hematocrit <p>Environmental investigation (Venous BLL's ≥ 20 or persistently elevated levels)</p> <p>Lead hazard reduction</p> <p>Neurodevelopmental monitoring</p> <p>Abdominal X-ray (if particulate lead ingestion is suspected) with bowel decontamination if indicated</p>	<p>Lead education*</p> <ul style="list-style-type: none"> -Dietary -Environmental <p>Follow-up blood lead monitoring (see guidelines)</p> <p>Complete history and physical exam</p> <p>Lab work:</p> <ul style="list-style-type: none"> -Hemoglobin or hematocrit -Iron status -Free erythrocyte protoporphyrin (FEP) <p>Environmental investigation</p> <p>Lead hazard reduction</p> <p>Neurodevelopmental monitoring</p> <p>Abdominal X-ray (if particulate lead ingestion is suspected) with bowel decontamination if indicated</p> <p>Oral Chelation therapy Consider hospitalization if lead-safe environment cannot be assured</p>	<p>Hospitalize and commence chelation therapy (following confirmatory venous blood lead test) in conjunction with consultation from a medical toxicologist or a pediatric environmental health specialty unit.</p> <p>Proceed according to actions for 45-69 $\mu\text{g}/\text{dL}$</p>

* <http://www.cdc.gov/nceh/lead/tips.htm>

The following actions are **NOT** recommended at any blood lead level:

- Searching for gingival lead lines
- Testing of neurophysiologic function
- Evaluation of renal function (except during chelation with EDTA)
- Testing of hair, teeth, or fingernails for lead
- Radiographic imaging of long bones
- X-ray fluorescence of long bones

Additional Contact Information

Tennessee Department of Health: <http://health.state.tn.us/lead/index.htm> or Call (615) 532-8462

Tennessee Department of Environment and Conservation: <http://www.tn.gov/environment/> or Call (615) 532-LEAD or the in-state-only hotline at 1-888-771-LEAD (5323)

Lead-based inspectors, Risk Assessors: <http://health.state.tn.us/lead/abatement.htm>

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