Tennessee Childhood Lead Poisoning Prevention Program
Lead Screening Guidelines

The Tennessee Childhood Lead Poisoning Prevention Program's (TN CLPPP) screening and follow-up guidelines align with those of the Centers for Disease Control and Prevention (CDC).

Who Should Be Screened?

- Children, aged 12 and 24 months*
- Children, aged 36-72 months without a documented blood lead level*
- Children whose parent/guardian requests a blood lead level
- Children whose parent/guardian responds "Yes" or "Don't know" to any question on the Risk Assessment Questionnaire or whose lead risk status has changed

***Required for all TennCare recipients.**

Screening Guidelines

- Blood lead screening is performed as a capillary finger stick
- Any screening revealing a blood lead level at or exceeding **5 µg/dL** requires a venous confirmatory blood test.
  a venous confirmatory blood test.

Venous Confirmatory Schedule for a Capillary Blood Lead Level of ≥5 µg/dL

Screening Test Result (µg/dL)	Time to Confirmatory Test
5 – 9	0 – 3 months*
10 – 44	1 week – 1 month#
45 – 59	48 hours
60 – 69	24 hours
≥ 70	Urgently, as an emergency test

***Confirmatory test can be conducted on the same day, as warranted by the physician.**
#The higher the blood lead level of the screening, the more urgent the need for confirmatory testing.

Follow-Up Testing Schedule for Confirmatory Venous Blood Lead Levels of ≥5 µg/dL [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 variations of BLLs exist and may be more apparent in colder climates. Greater exposure in the summer months may necessitate more frequent follow-ups.

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

Recommended Actions for Children Based on Blood Lead Level
Blood Lead Level (µg/dL)

Less than 5	5 – 44	45 - 69	≥70
Lead education* Dietary Environmental Lead risk assessment and environmental sampling, if appropriate	**Lead education*** Dietary Environmental Follow-up blood lead monitoring (see guidelines) Complete history and physical exam **Lab work:** Iron status Consider hemoglobin or hematocrit Environmental investigation (venous BLLs of **≥20** or persistently elevated levels) Lead hazard reduction Neurodevelopmental monitoring Abdominal x-ray (if particulate lead ingestion is suspected) with bowel decontamination if indicated	**Lead education*** Dietary Environmental Follow-up blood lead monitoring (see guidelines) Complete history and physical exam **Lab work:** Hemoglobin or hematocrit Iron status Free erythrocyte protoporphyrin (FEP) Environmental investigation Lead hazard reduction Neurodevelopmental monitoring Abdominal x-ray (if particulate lead ingestion is suspected) with bowel decontamination if indicated Oral chelation therapy; (Consider hospitalization if lead-safe environment cannot be assured.)	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. Proceed according to actions for 45-69 µg/dL.

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

These 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