

Pediatric Blood Lead Testing Guidelines

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If you need help accessing or understanding this information, contact

AHS.HealthyHomes@vermont.gov.

When to Test if a Child Doesn't Have Symptoms

- Test all children at **12 months** and **24 months**. (Vermont law requires this.)
- Test all children ages 36 to 72 months who have **not previously been tested**.
- **For refugees:** Test all children ages 6 months to 16 years old upon entry to the U.S. Do a follow-up blood lead test on all refugee children ages 6 months to 6 years within three to six months, regardless of initial test result.
- **For other at-risk populations:** Test children who are international adoptees, immigrants, children of migrant workers, in foster care, and are diagnosed with pica or special health needs that increase hand-to-mouth behavior.

When to Test if a Child of Any Age Has Symptoms

- Ingestion of an object that may contain lead
- Signs or symptoms consistent with lead poisoning
- Live in an older home undergoing renovation
- Live with someone who has a blood lead level of 5 µg/dL or greater
- Are an at-risk population (children who are international adoptees, immigrants, children of migrant workers, in foster care, and are diagnosed with pica or special health needs that increase hand-to-mouth behavior).

When to Confirm with a Venous Test

If a capillary blood level is:	Confirm with a venous test:
Not detected	Confirmation not needed
DL* - 3.4 µg/dL	Within 6 months (capillary sample or venous)
3.5 - 9 µg/dL	Within 3 months
10 - 19 µg/dL	Within 1 month
20 - 44 µg/dL	Within 2 weeks
45 - 59 µg/dL	48 hours
60+ µg/dL	Immediately as an emergency test

*Detection limit (DL) varies across laboratories from <1 µg/dL to 3.3 µg/dL.

When to Follow Up with a Venous Retest

If venous blood level is:	Do a follow-up venous test within:	Late follow-up within (when blood lead level is declining):
Not detected	Venous retest is not required	
DL* – 3.4 µg/dL	6 – 9 months	
3.5 – 9 µg/dL	3 months	6 – 9 months
10 – 19 µg/dL	1 – 3 months	3 – 6 months
20 – 44 µg/dL	2 weeks – 1 month	1 – 3 months
45+ µg/dL	Initiate chelation and retest in 7 – 21 days	As clinically indicated

*Detection limit (DL) varies across laboratories from <1 µg/dL to 3.3 µg/dL.

Clinical Treatment Guidelines for Venous Confirmed Blood Lead Levels

- These treatment guidelines are for children 6 to 72 months old with confirmed venous blood lead levels.
- Detection limit (DL) varies across laboratories from <1 µg/dL to 3.3 µg/dL.
- The Health Department offers environmental inspection for lead levels 5 µg/dL and higher.

Medical evaluation

	Under DL	DL – 3.4 µg/dL	3.5 – 9 µg/dL	10 – 19 µg/dL	20 – 44 µg/dL	45 – 59 µg/dL	60+ µg/dL
Treat as an emergency – potential encephalopathy						Yes	Yes
Check abdominal x-ray; test BUN, CBC, creatinine, UA and liver enzymes						Yes	Yes
Monitor neurodevelopment, especially language skills and ability to concentrate					Yes	Yes	Yes
Check nutrition status, especially iron and calcium. Rule out or treat iron deficiency.			Yes	Yes	Yes	Yes	Yes

Medical management

	Under DL	DL – 3.4 µg/dL	3.5 – 9 µg/dL	10 – 19 µg/dL	20 – 44 µg/dL	45 – 59 µg/dL	60+ µg/dL
Chelation required. Recommend succimer per routine dosage.						Yes	Yes
Discharge inpatient cases only to a lead-free environment .						Yes	Yes
In-home treatment indicated only if: <ul style="list-style-type: none"> • Lead-free environment • Highly compliant family • Home health care monitoring 						Yes	Yes
Recommend an iron supplement if deficient. Stop iron therapy prior to chelation.			Yes	Yes	Yes	Yes	Yes
Educate family on: <ul style="list-style-type: none"> • Potential sources of lead and ways to reduce exposure • Dangers of improper lead abatement or remodeling • Diet, including high iron and calcium • The need to re-test 	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Provide lead poisoning prevention materials	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Follow up

	Under DL	DL – 3.4 µg/dL	3.5 – 9 µg/dL	10 – 19 µg/dL	20 – 44 µg/dL	45 – 59 µg/dL	60+ µg/dL
Phone education from the Health Department		Yes	Yes				
Environmental inspection from the Health Department (prompted with lab result)			Yes	Yes	Yes	Yes	Yes
Follow venous retesting schedule		Yes	Yes	Yes	Yes	Yes	Yes
Screen other children in the home ages 6 and under		Yes	Yes	Yes	Yes	Yes	Yes