NH DIVISION OF Public Health Services
Improving health, preventing disease, reducing costs for all
Department of Health and Human Services

HEALTHY HOMES & LEAD POISONING PREVENTION PROGRAM

LEAD POISONING

CHILD MEDICAL MANAGEMENT

Quick Guide for Lead Testing & Treatment

Initial Capillary Blood Lead Level
Schedule For Obtaining Venous Sample

Capillary Blood Lead	Confirm With Venous Test
< 5mcg/dL	Confirmation not necessary unless other risk factors. Test child < 12 mos. old in 3 - 6 months as BLL may increase with mobility. Retest child at 1 and 2 years old.
5 – 9 mcg/dL	Within 1 month
10 - 19 mcg/dL	Within 2 weeks
20 - 44 mcg/dL	Within in 1 week
45 - 64 mcg/dL	**Re-Test:** Wash child's hands with soap and water. Collect new sample and retest. If same results: confirm within 48 hours.*
65+ mcg/dL 'HIGH' result on Lead Care II.	Confirm BLL immediately - emergency test. Contact NH Lead RN: 1-800-897-5323 *Note: No STAT PB venous available in NH.

Initial Venous Blood Lead Level

Venous	Follow-Up and Re-testing
< 5 mcg/dL	Retest child at 1 and 2 years old. Retest child in 6 – 12 months if child is at high risk, or risk changes during time frame.
5 - 9 mcg/dL	Every 3 months* Child enters nurse case management.
10 - 19 mcg/dL	Every 3 months
20 - 39 mcg/dL	Every 1-2 months
40 - 64 mcg/dL	Every 1-2 weeks (even after chelation)
65+ mcg/dL	Initiate chelation and re-test within 1-2 weeks

*Some providers may choose to repeat BLL tests within 1 month to ensure BLL is not rising quicker than anticipated.

Clinical Treatment Guidelines for Venous Confirmed Blood Lead Levels

3 - 4.9 mcg/dL

- Provide parents three factsheets
  -Lead & Children
  -Lead & Nutrition
  -Lead Hazards
- Follow-up BLL monitoring
- Retest infants earlier than 3-6 months
- Test siblings for EBLL
- The HHLPPP sends letter notifying parents of EBLL

5 - 44 mcg/dL

Continue management, AND:

- Rule out iron deficiency & prescribe iron if needed
- Neurodevelopmental monitoring & consider referral for evaluation
- For BLL 25 - 44mcg/dL, CHEMET (succimer) is NOT recommended as there is no cognitive benefit
- The HHLPPP provides nurse case management & an environmental lead investigation.

45 - 64 mcg/dL

EMERGENCY!

- Contact Northern New England Poison Control for immediate consultation on lead toxicity therapy at 1-800-222-1222. Available 24/7.
- Contact NH Lead RN: 1-800-897-5323
- Stop iron therapy prior to chelation
- Begin chelation in consultation with clinician experienced in lead toxicity therapy
- Consider directly observed therapy with CHEMET (succimer)
- Child should be discharged to a lead-free environment.

65 + mcg/dL

EMERGENCY! AND:

- Hospitalize even if asymptomatic

NH DIVISION OF Public Health Services
Improving health, preventing disease, reducing costs *for all*
Department of Health and Human Services

HEALTHY HOMES & LEAD POISONING PREVENTION PROGRAM

LEAD POISONING

CHILD MEDICAL MANAGEMENT

Quick Guide for Clinical Evaluation & Management

NH UNIVERSAL TESTING LAW

- Test ***all*** children at 12 mos. and ***again*** at 24 mos. **(2 tests)**
- Test all children 3 to 6 yrs. old who haven't been tested

Nurse Case Management Services

- Children with EBLLs ≥ 5 mcg/dL enter nurse case management.
- Public health nurse visits home and provides family education.
- Environmental lead investigation to determine source(s) of lead exposure provided.

Interventions to Help Limit Exposure

Educate caregivers by providing three DHHS factsheets: "Lead and Nutrition", "Lead and Children" and "Lead Hazards"

- Hand washing with soap and water
- Clean child's toys, bottles & pacifiers often
- Feed child foods with Calcium, Iron & Vitamin C daily
- Have barriers blocking access to lead hazards
- Wet wipe window sill, door jams, & door frames
- Wet mop floors and stairs once a week or more
- Use HEPA filter vacuum to clean up dust and paint chips

Lead Risk Questions To Ask Parents of Children with EBLL's ≥ 5 mcg/dL

- Developmental delays or learning disabilities?
- Behavioral problems? (*e.g. aggression & attention issues)*
- Excessive mouthing or pica behavior?
- Ingestion of non-food items?
- Living in pre-1978 housing?
- Attending child care in pre-1978 building?
- Recent renovations in pre-1978 housing?
- Recent renovations in pre-1978 child care?
- Recent immigrant, refugee, or international adoption?
- Parent occupation or hobbies have lead exposure?
  (e.g. renovations, painting, welding, fishing, target shooting, stain glass, jewelry making)
- Imported ethnic spices/ powders that contain lead?
  (e.g. *sindoor, surma, greta, orange shringar, asafetida, turmeric)*
- Does child have sibling or playmate with an EBLL?

Developmental Assessment & Intervention for Children with EBLL

For any child with a **venous BLL ≥ 5mcg/dL**

- Annual developmental surveillance and screening at ages 3, 4 and 5 years is recommended
- Developmental surveillance at annual visit for all ages to identify emerging/unaddressed behavioral, cognitive, or developmental concerns

For any child with a **venous ≥ 20 mcg/dL** or **persistently ≥ 15 mcg/dL with other developmental risk factors**: neurodevelopmental monitoring is needed

Action Steps

- Long term developmental monitoring should be a component of the child's management plan.
- A history of EBLL should be included in the problem list maintained in the child's permanent medical record, even if BLL is reduced.
- Refer child to early intervention or child-check for developmental screening.
- Recommend early childhood education and stimulation programs.
- Refer to NH Division of Developmental Services for a list of local Family-Centered Early Supports & Services at (603)-271-5143

Developmental Surveillance should include:

- Vigilance for physical, social, emotional, academic challenges at critical transition points in childhood (e.g. preschool, 1st, 4th, 6th & 7th grades).
- Vigilance for in-attention, distractibility, aggression, anti-social behavior, irritability, hyperactivity, low impulse control and poor emotional regulation.
- Refer children experiencing neurodevelopmental problems for a complete diagnostic medical evaluation.
- Continue to monitor development through a child's early and middle-school years, even if BLL is reduced.

For children of any age: if issues arise between annual visits, encourage parents to bring them to attention of the medical office and school personnel.