

Child Case Management

Types of Lead Blood Tests:

- o **Blood Lead Screening**
(Capillary/finger stick)
(Capillary/heel stick)
- o **Blood Lead**
(Venous)



Local health departments should receive copies of all venous test results $\geq 5 \mu\text{g/dL}$ and all capillary results $\geq 10 \mu\text{g/dL}$!

Child Case Management

- o What does it involve?
- o What is the new reference value: an overview of the current "Requirements and Guidance for Childhood Lead Screening by Health Care Professionals in CT"?
- o What are a Local Health Department's Responsibilities?
- o Who is supposed to do it?

BLL Notification to DPH

- All blood lead levels/test results are required to be reported to DPH
- BLLs $\geq 10\mu\text{g/dL}$ are to be reported within 48 hours
- Comprehensive report is to be submitted at least monthly

BLL Notification to LHD

- Laboratories will be required to report any BLLS $\geq 5 \mu\text{g/dL}$ to local health departments
- Primary Care Providers are required to send the State of CT Reportable Disease Confidential Case Report Form (PD-23) for venous BLLS $\geq 15 \mu\text{g/dL}$

2013 Update

- 2012: CDC and Advisory Committee for Childhood Lead Poisoning Prevention (ACCLPP) publish report
- The term "level of concern" has been replaced by "reference value"
- ACCLPP presented evidence that IQ deficits, attention-related behaviors and poor academic achievement are associated with low blood lead levels
- Therefore, the current reference value has been lowered to $5 \mu\text{g/dL}$

Requirements and Guidance for Childhood Lead Screening by Health Care Professional in CT

B: Diagnostic Testing and Follow-up

- o If a capillary blood test is elevated (equal to or greater than 5 ug/dL), confirm with a diagnostic (venous) blood lead test
- o Children with an elevated diagnostic blood lead test require additional follow-up blood testing at appropriate intervals
- o Children should be tested according to schedule above until BLL is below the reference value of <5ug/dl
- o Providers can contact one of Connecticut's Regional Lead Treatment Centers for guidance and assistance with clinical management of a lead poisoned child (see below)

Requirements and Guidance for Childhood Lead Screening by Health Care Professional in CT

B: Diagnostic Testing and Follow-up

Consultation and supportive services are available by contacting:
Hartford Regional Lead Treatment Center, (860-714-5184)
Yale-New Haven Regional Lead Treatment Center, (203-764-9106)

For more information contact:
State of CT Department of Public Health Lead and Healthy Homes Program (860-509-7299)

Requirements and Guidance for Childhood Lead Screening by Health Care Professional in CT

C: Provide Anticipatory Guidance to Families

- o Provide educational information about lead poisoning
- o Written materials, along with verbal education should be provided the family's primary language (at an appropriate reading level)
- o Resources available at www.ct.gov/dph

Requirements and Guidance for Childhood Lead Screening by Health Care Professional in CT

D: Risk Assessment

- In addition to testing children at the recommended time intervals, at each well-child visit, health care providers shall evaluate children 6 months to 72 months of age for risk of lead exposure using the following risk assessment questions

Requirements and Guidance for Childhood Lead Screening by Health Care Professional in CT

D: Risk Assessment

Risk Assessment Questions

- Does your child live in or regularly visit a house built before 1978?
- Does your child have a brother or sister, housemate, or playmate being followed or treated for lead poisoning?
- Does your child frequently come in contact with an adult whose job or hobby involves exposure to lead (e.g., construction, welding, automotive repair shop, other trades, stained glass making; using lead solder, artist paints or ceramic glazes; etc.)?
- Has your child been exposed to any imported products (spices, foods/vitamins, ethnic home remedies, or ethnic cosmetics)?
 - Some examples include: azarcon (also known as rueda, Maria Luisa, alarcon, liga); albayalde; greta; pay-loo-ah; ghasard; bala goli; kandu; kohli; litargirio; bebetina; chyawan prash.

Requirements and Guidance for Childhood Lead Screening by Health Care Professional in CT

D: Risk Assessment

- Ask any additional questions that may be specific to situations that exist in a particular community (e.g. operating or abandoned industrial sources; waste disposal sites; drinking water; has your child ever lived outside the U.S.; does your family use pottery for cooking, eating or drinking; etc.?)
- **If the answer to any of the above questions is YES or UNKNOWN, then the child is considered to be at risk and should be tested**

Requirements and Guidance for Childhood Lead Screening by Health Care Professional in CT

D: Risk Assessment

NOTE: Blood lead testing shall also be considered for any child regardless of age, with:

- o Unexplained seizures, neurologic symptoms, hyperactivity, behavior disorders, growth failure, abdominal pain, or other symptoms consistent with lead poisoning or associated with lead exposure;
- o Recent history of ingesting, or an atypical behavior pattern of inserting, any foreign object (even if the foreign object is unleaded) into a body orifice

Local Health Departments Case Management Responsibilities

- o Initiate management of a BLL:
 - o $\geq 5 \mu\text{g/dL}$ (venous)
 - o $\geq 10 \mu\text{g/dL}$ (capillary)
- o Manage all BLL increases and decreases
- o Notify guardians when testing is due
- o Provide education and outreach to guardians and primary care providers

Capillary BLLs $\geq 5 \mu\text{g/dL}$

- o A follow-up test reminder must be provided to the guardians of any child that has a capillary BLL between $5 \mu\text{g/dL}$ and $9 \mu\text{g/dL}$
- o Pediatricians are required to provide guardians with DPH approved educational materials
 - o Although local health departments are not required to send educational materials, they may do so if they would like

**Venous BLLs \geq 5 $\mu\text{g}/\text{dL}$
Capillary BLLs \geq 10 $\mu\text{g}/\text{dL}$**

- Educational materials must be provided to the guardians of any child that has a **venous BLL \geq 5 $\mu\text{g}/\text{dL}$** and/or a **capillary BLL \geq 10 $\mu\text{g}/\text{dL}$**
- Educational information packet can be downloaded from the DPH website
 - Packet materials comply with statute
- Capillary test results \geq 10 $\mu\text{g}/\text{dL}$ require a confirmatory venous test

Venous BLLs \geq 15-19 $\mu\text{g}/\text{dL}$

- Two venous BLLs \geq 15-19 $\mu\text{g}/\text{dL}$ taken >90 days apart the local health department is responsible for performing a **comprehensive lead inspection**
- Need to initiate contact with the child's family within five working days
- Educational materials must be provided to the guardians
- Although an epidemiological form is not required, it is highly **RECOMMENDED**

Venous BLLs \geq 20 $\mu\text{g}/\text{dL}$

- Need to initiate the **epidemiological investigation** within five working days
 - Epidemiological investigation consists of
 - comprehensive lead inspection
 - completing the epidemiological form
- All related investigation information must be entered in Maven within 30 working days of receiving all environmental results

Confirmation Test Schedule

If result of screening test (µg/dl) is	Perform Venous Blood test within:
5-19	3 months
20-44	1 month-1 week
45-59	48 hours
60-69	24 hours
≥ 70	Immediately

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

Venous Re-test Schedule

Blood Lead Level (µg/dl)	Early follow-up (1 st 2-4 tests after identification) test within:
5-14	3 months
15-19	1 - 3 months
20-24	1 - 3 months
25-44	2 weeks - 1 month
> 45	As soon as possible

Other Medical Testing

- **Zinc Protoporphyrin (ZPP)**
 - Reflects average lead level over the previous 3-4 months
 - Child normal range ZPP usually below 34 µg/dL
 - Can be early indicator of iron deficiency
 - Can indicate chronic lead exposure

- **Abdominal radiograph (X-ray)**
 - Lead foreign bodies in gastrointestinal tract

Some Important Things to Know and Consider.....

Child's Individual Case File Should Contain:

- o All BLL results
- o The Epidemiological Investigation Form
- o All Correspondence
 - o Letters, contact attempts, notes of telephone conversations
- o All child information

*** Child information is CONFIDENTIAL ***

Key Points in Documentation

- o Document dates, times and type of contact made with the PCP & family
- o Confirm that educational material provided is understood
- o Monitor compliance with follow up care and re-testing
 - o Log into Maven weekly

Relocation

If a child relocates: Within your jurisdiction	If a child relocates: Out of your jurisdiction
<ul style="list-style-type: none">o Risk assessment at new address prior to child moving	<ul style="list-style-type: none">o Notify new local health department prior to child moving

Use Interdepartmental Referral Form

Problems with retesting

- o If PCP is not following guidelines, notify the Lead and Healthy Homes Program
 - o Request RLTC to contact PCP
- o If guardians are refusing to get child re-tested as needed refer case to DCF for medical neglect
 - o The DCF referral number is 1-800-842-2288

Case Closure Criteria

- o Environmental case closed and BLL drops < 5 µg/dL
- o Child relocates to a different jurisdiction
- o Administrative closure – *not to be used often*
 - o Three separate unsuccessful documented attempts to locate family, can close case with DPH permission
 - o (MD does not know where family is, no one lives at house, no working phone, mail undeliverable, etc.)

Epidemiological Form

Epidemiological Form

- Questionnaire for an EIBLL case of >20 µg/dL
- Identify sources of lead poisoning, review of potential sources of lead, summary of pertinent information
- Confidential health data document
- Must use current version, EpiForm8_10-25-11

All Epidemiological Form data must be entered into Maven

Important points to remember when completing the Epi Form...

- Complete and accurate data
- Information is from the family
- Reference for follow up with family and provider
- Educational tool
- Great way to get to know the family

Epi Form Sections

- o General information
- o Other children living in the dwelling
- o Medical Provider and Insurance
- o Medical Status
- o Residency information and history
- o Child risk behavior indicators
- o Lead based paint hazards
- o Lead dust hazards
- o Lead in soil
- o Lead in water
- o Other household risks
- o Housekeeping practices
- o Occupational/Hobby Exposures
- o Educational Materials
- o Social Service Referrals
- o Interim Measures
