### Screening Guidelines:
- Screen children at 12 and 24 months of age who are receiving services from publicly supported programs for low-income children, such as Medi-Cal, CHDP, Women, Infants and Children (WIC), and Healthy Families. (2)
- Screen children at 12 and 24 months of age, who are not in a supported program but found to be at-risk when a parent/guardian answers “yes” or “don’t know” to the risk assessment question. (2)
- Screen children between 24 and 72 months who were not previously tested or who missed the test 30 days or more before or when circumstances change that put the child at risk. (2)
- Screen all newly arrived refugees under the age of 7 within two to three weeks of arrival in the U.S. if no test was done within the first 90 days of arrival to Local County. (2)

### Reporting Guidelines:
The analyzing lab will report to the Branch within three (3) days of analysis. All blood lead levels 10 µg/dL or greater must be reported within 30 calendar days. (2)

### Sampling Methods:
- No level of lead in the body is known to be safe.

### Initial Test Results by Blood Lead Level (BLL)

<table>
<thead>
<tr>
<th>Blood Lead Level (BLL)</th>
<th>Primary Care Provider (PCP) Evaluation and Management Activities</th>
<th>CLPPP Case Management Activities</th>
<th>Child Health &amp; Disability Prevention (CHDP) Program Activities</th>
<th>California Children’s Services (CCS) Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5 to 9 µg/dL</strong></td>
<td>Consider an initial retest within 6 months. (2) Blood lead levels may be capillary or venous. Newly Arrived Refugee: Retest in 3 months. (2) If retest BLL is &lt;10 µg/dL, retest per “Screening Guidelines.” In addition to reporting above, the local Refugee Health Assessment Program (RHAP) shall report all BLLs to the CLPPP. Pediatric Evaluation: A. Standard history, physical examination and frequent or more extensive developmental evaluations. B. Evaluate nutrition and consider iron deficiency; Evaluate lead exposure; Retest as for routine screening guidelines. Medical Case Management: A. Evaluate risk to, and consider testing for, other children in the home. Consider lead referral for, other household members (especially pregnant women). Discuss hand to mouth activity, hand washing &amp; sources of lead exposure. B. Encourage good nutrition (iron, calcium and vitamin C). Consider referral to WIC. C. Encourage participation in early enrichment programs (Early Start). PM160 (90901) Billing Instructions: For additional follow-up screening use code 3 or 5 in column “C” or “D”. The BLL is entered in the “comments/problems” section. (7)</td>
<td>Mail provider informational letter and Matrix to primary care provider (PCP) to evaluate risk to and consider testing for, other household members such as children under six (6) years and pregnant or breastfeeding women. Additional Efforts: Contact the family to provide lead poisoning prevention education. For Refugee children: Fax the provider letter and Refugee Screening Algorithm to the PCP.</td>
<td>Maintain PCP policy and reference manual that includes (1) approval process (2) blood lead test and screening policy (3) standards for health assessment guidelines (4) criteria for appropriate referrals for diagnosis and treatment and (5) medical management guidelines for childhood lead poisoning. Conduct periodic provider audits to ensure compliance.</td>
<td>No Action</td>
</tr>
<tr>
<td><strong>10 to 14 µg/dL</strong></td>
<td>Initially retest within 3 months. (2) If retest is in this range, monitor with BLLs every 3 months until trend is downward or stable and then less often as trend indicates. If retest is another range, follow-up as for that range. Newly Arrived Refugee: Retest as above. If retest is another range, follow-up as for that range. If retest BLL is ≥10 µg/dL, consider referral to CLPPP for education and materials. Pediatric Evaluation/Medical Case Management: Evaluate and manage as above and consider referral to CLPPP. PM160 (90901) Billing Instructions: same as above.</td>
<td></td>
<td></td>
<td>No Action</td>
</tr>
</tbody>
</table>
| **15 to 19 µg/dL**     | Confirm within 3 months. To determine eligibility for public health case management and environmental health investigation, retest after an interval of 30 days or more. If retest is another range, follow-up as for that range Pediatric Evaluation: Evaluate as above and Medical Case Management: Manage as above and | Case Management services are facilitated by the Program public health nurse (PHN) who makes a referral to Environmental Health (EH) and Community Health Services (CHS), district PHN (DPHN). The DPHN will: (10)
- Coordinate care between the PCP, patient & parent
- Initiate a home visit within 10 working days of report
- Provide lead awareness education
- Complete and fax pgs. 1-10 of the lead poisoning follow-up form (LPFF) & the Provider Summary and route forms to the CLPPP-EH within 30 calendar days of initial home visit; Conduct case finding; Complete the PHN Assessment form & CDC US Growth Chart
- Provide updates to CLPPP-PHN every 3 months; Route LPFF & PHN Assessment form to a Program PHN within 30 calendar days of the home visit
- Create a Medical Record (MR)
- Monitor case until closure criteria is achieved. | | No Action |

### Case Definition:
- For the purpose of initiating case management, a child from birth up to 21 years of age with:
  - One venous BLL ≥20 µg/dL (A) OR
  - Two BLLs ≥15 µg/dL drawn at least 30 days and no more than 600 days apart. The first specimen may be a capillary specimen. (B)(9) Second specimen must be venous.

### Note:
- Blood lead test results should be rounded to the nearest whole number, with numbers with decimals equal to and above 0.5 rounded up and numbers with decimals below 0.5 rounded down (e.g. treat 4.5 mcg/dL as 5 mcg/dL, 4.3 mcg/dL as 4 mcg/dL and 14.5 mcg/dL as 15 mcg/dL). (2)

### Closure Criteria:
- Two consecutive blood lead levels below 15 µg/dL measured at least 6 months apart. (8)

### Note:
- When the source of lead is known, always consult with the assigned Program PHN prior to closing a case. (10)
### Process Service Authorization Request (SAR) (DHCS 4488) and CCS application (DHCS 4480)

#### CLPPP Case Management Activities

- **Case Management (CM) services are provided by the Program PHN.** The Program PHN will:
  - Coordinate care between the PCP, patient & parent
  - Initiate a PHN home visit/ EH investigation (EI) within **five (5) working days**
  - Initiate and fax a DHCS 4488, application DHCS 4480 and the laboratory report to CCS within **two (2) working days** of the initial home visit
  - Contact CCS within seven (7) working days to document receipt of the referral forms and determine care management needs: Refer to Early Intervention/ Stimulation Programs
  - Complete pages 1-10 of LPFF, Provider Summary, & Visual PHN Survey Report.; Provide lead awareness education; Conduct nutritional assessment and counseling; Complete the Medi-Cal Questionnaire
  - Maintain a medical record (MR) & a nursing care plan
  - Maintain a MR and nursing care plan
  - Make referral to an Early Intervention Program (i.e. Early Start and Regional Center (if applicable).
  - Blood work includes: hemoglobin, hematocrit, ferritin, and Fe/TIBC, complete blood count and renal function test.
  - Make additional visits as needed
  - Monitor case until closure criteria is achieved.

### Initial BLL

<table>
<thead>
<tr>
<th>Initial BLL</th>
<th>PCP Evaluation and Management Activities</th>
<th>CLPPP Case Management Activities</th>
<th>CHDP Activities</th>
<th>CCS Activities</th>
</tr>
</thead>
</table>
| 20 to 44 µg/dL | If initial BLL is a capillary sample, perform a confirmatory (venous) test, based on the initial BLL below:  
  - 20-24 µg/dL, Confirm within one month (2).  
  - 25-44 µg/dL, Confirm within 1 week – 1 month (2)  
  - If retest is another range, follow-up as for that range. | Same as above. | Process Service Authorization Request (SAR) (DHCS 4488) and CCS application (DHCS 4480). Screen for eligibility and if indicated, issue authorization for treatment to a CCS paneled physician. Contact caregiver and CCS within five (5) working days of receipt of the referral to coordinate and determine care management needs. | Same as above. |
| 45-59 µg/dL | Perform a confirmatory (venous) test, based on the initial BLL below:  
  - Within 48 hour, if BLL is 45-59 µg/dL (2).  
  - Within 24 hours, if BLL is 60-69 µg/dL (Urgent Situation) (2, 9).  
  - Immediately, if BLL is ≥ 70 µg/dL (Emergency) (9). | Same as above. | Screen for eligibility and if indicated, issue authorization for treatment to a CCS paneled physician. Contact caregiver and Program PHN within five (5) working days of receipt of the referral to coordinate and determine care management needs. | Same as above. |
| ≥ 70 µg/dL | If the confirmatory BLL is ≥45 µg/dL; (2, 9) Evaluate as above and  
  - Complete and fax service authorization referral DHCS 4488 (SAR) to CCS for a CCS Hem/Onc Special Care Center to facilitate consultation and potential hospitalization for chelation therapy. Initiate a referral for public health case management, environmental investigation and recommendation for remediation of lead source.  
  - Test renal function before and during chelation therapy. Order bowel decontamination prior to chelation.  
  - Make referral to an Early Intervention Program (i.e. Early Start and Regional Center (if applicable).  
  - Blood work includes: hemoglobin, hematocrit, ferritin, and Fe/TIBC, complete blood count and renal function test. | Same as above. | Process Service Authorization Request (SAR) (DHCS 4488) and CCS application (DHCS 4480). Screen for eligibility and if indicated, issue authorization for treatment to a CCS paneled physician. Contact caregiver and Program PHN within five (5) working days of receipt of the referral to coordinate and determine care management needs. | Same as above. |

#### Pediatric Evaluation

- **Evaluate as above and**
  - A. Take history and conduct physical exam with attention to neurodevelopment.  
  - B. Evaluate lead exposure, nutrition, & iron deficiency; Hgb/Hct, ferritin, and Fe/TIBC are good measures).  
  - C. Consider abdominal x-ray and/or bowel decontamination (if particulate lead ingestion is suspected). (2)

#### Medical Case Management

- **Manage as above and**
  - A. Monitor BLLs every 2 weeks to 1 month (5) until trend is downward or stable and then less often as trend indicates.  
  - B. Provide nutritional education using USDA “My Pyramid”. For children with iron-deficiency (hemoglobin is <11 mcg/dL). Recommend a diet high in vitamin C, calcium, and iron, and limit high fat intake.  
  - C. Refer to California Children’s Services (CCS) (6) and WIC.

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### PHN Instructions

- **PM160 (09/01) Billing Instructions:** same as above (7).

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### References

(1) Providers using a LeadCare II blood lead analyzer must have a certificate of waiver and be registered or licensed with state laboratory field services (LFS) for more information visit the website at www.dhs.ca.gov/lfs/ or contact the state Branch at (510) 801-2652.

(2) CDC. Managing Elevated BLL Among Young Children. Medical Assessment and Interventions, March 2002.


(4) To obtain a SAR or CCS application -HCS 4480 form) visit the website: www.cdph.ca.gov/services/ccs/

(5) California Code of Regulations, Title 17, Section 37000-37100.

(6) For a list of laboratories proficient in blood lead analysis & reimbursed by CHDP, view: www.cdph.ca.gov/programs/BioChemPages/default.aspx

(7) CHDP Provider Information Notice: Number 0202, February 6, 2002.

(8) CHDP Provider Letter No.: 08-10 and CLPPB Program letter No.: 08-02, December 17, 2008.

(9) Reference: Child Lead Poisoning Prevention Program; 5555 Ferguson Dr., Ste. 210-02, Commerce, CA 90022 (323) 869-7171.

(10) CHDP Provider Information Notice: Number 0202, February 6, 2002.

EFP: 10/02 Rev. (10/09/03, 4/5/04, 7/18/06, 10/20/08, 4/1/09 rev. 3/22/11). L:\sections\casemgmt\matrix6.wpd