

# Medical Case Management of Childhood Blood Lead Levels

To be used in coordination with [Virginia Blood Lead Testing and Case Management Guidelines](#). Action by confirmed\* BLL.

Capillary sample  $\geq 3.5 \mu\text{g/dL}$

Venous sample  $\geq 3.5 \mu\text{g/dL}$

Refer to “Schedule for Obtaining a Confirmatory Venous Sample”

Refer to “Schedule for Follow Up Blood Lead Testing”

< 3.5 $\mu\text{g/dL}$	3.5 – 14 $\mu\text{g/dL}$	15 – 44 $\mu\text{g/dL}$	$\geq 45 \mu\text{g/dL}$
<ul style="list-style-type: none"> <li>Report the test result to your State Health Department.</li> <li>Perform routine health maintenance including assessment of nutrition, physical and mental development, as well as iron deficiency risk factors.</li> <li>Provide guidance about sources of lead and lead safe home practices for reducing lead exposure.</li> <li>Consider retesting in 6-12 months if the child is high risk** for lead exposure or if their environmental risk changes.</li> </ul>	<ul style="list-style-type: none"> <li>Report the test result to your State Health Department.</li> <li>Perform all actions listed for &lt; 3.5 <math>\mu\text{g/dL}</math>.</li> <li>Take environmental history to determine potential exposure sources.</li> <li>Test siblings or other children who may have been exposed.</li> <li>Provide nutrition information.</li> <li>Assess the child’s eligibility for WIC or SNAP benefits.</li> <li>Ensure iron sufficiency with laboratory testing and treatment. Consider a multivitamin or iron supplement.</li> <li>Perform <a href="#">developmental screenings</a> at child well-visits to assess possible long-term impacts of the exposure.</li> <li>Perform follow-up testing at recommended intervals.</li> </ul>	<ul style="list-style-type: none"> <li>Report the test result to your State Health Department.</li> <li>Perform all actions listed for 3.5-14 <math>\mu\text{g/dL}</math>.</li> <li>Work with family to identify and remove potential lead exposure sources.</li> <li>Refer to Local Health Department to coordinate an in-home environmental investigation.</li> <li>Complete history and physical exam for signs and symptoms related to lead.</li> <li>Consider conducting abdominal x-ray if particulate lead consumption is suspected (pica, mouthing behaviors, etc).</li> <li>Perform follow-up testing at recommended intervals.</li> </ul>	<ul style="list-style-type: none"> <li>Report the test result to your State Health Department.</li> <li>Perform all actions listed for 15-44 <math>\mu\text{g/dL}</math>.</li> <li>Obtain a complete blood count, electrolytes, blood urea nitrogen, creatinine, liver transaminase enzyme levels, and urinalysis.</li> <li>Conduct abdominal x-ray if possible particulate lead consumption is suspected.               <ul style="list-style-type: none"> <li>Consider gastrointestinal decontamination if foreign bodies are visualized on x-ray.</li> </ul> </li> <li>Consider chelation after consulting the <b>Pediatric Environmental Health Specialty Unit (610-519-3478)</b> or <b>Virginia Poison Center (1-800-222-1222)</b>.</li> <li>After chelation (if conducted), continue to monitor child’s BLL to ensure it is declining.</li> </ul>



## Definitions & Links

**\*Confirmed BLL  $\geq$  CDC's blood lead reference value:** A child with one **venous** blood test  $\geq$  3.5  $\mu\text{g}/\text{dL}$  or **two capillary** blood tests  $\geq$  3.5  $\mu\text{g}/\text{dL}$  drawn within 12 weeks of each other. *The second capillary test must occur at least 48 hours after the initial capillary test.*

**\*\*[Virginia Blood Lead Testing and Case Management Guidelines](#)**

- [CDC Developmental Milestones](#)

**American Academy of Pediatrics:**

- [Bright Futures Guidelines for Health Promotion and Disease Prevention](#)
- [Diagnosis and Prevention of Iron Deficiency and Iron-Deficiency Anemia in Infants and Young Children \(0–3 Years of Age\)](#)

### **Report a Blood Lead Level to the VDH:**

- Fill out the online VDH EPI-1 Form: [Virginia's Confidential Morbidity Report Portal](#), or
- Fax the report to **804-864-8102**

## References

AAP COUNCIL ON ENVIRONMENTAL HEALTH. Prevention of Childhood Lead Toxicity. Pediatrics. 2016;138(1):e20161493

Pediatric Environmental Health Specialty Units, 2021. Management of Childhood Lead Exposure: [https://www.pehsu.net/Lead\\_Exposure.html](https://www.pehsu.net/Lead_Exposure.html)

Centers for Disease Control and Prevention. (2022, June 17). *Recommended Follow Up Action Based on Blood Lead Level*. Childhood Lead Poisoning Prevention Program. <https://www.cdc.gov/nceh/lead/advisory/acclpp/actions-blls.htm>