



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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Division of Public Health

March 21, 2022

MEMORANDUM

FROM: Ed Norman, Program Manager
NC Childhood Lead Poisoning Prevention Program
Environmental Health Section

TO: Local Health Directors & Private Medical Providers

RE: Revised Follow-Up Schedule for Blood Lead Testing

Last fall, the Centers for Disease Control and Prevention (CDC) lowered the [blood lead reference value](#) (BLRV) for children from 5 micrograms per deciliter ($\mu\text{g}/\text{dL}$) to 3.5 $\mu\text{g}/\text{dL}$ in response to the [Lead Exposure Prevention and Advisory Committee](#) (LEPAC) recommendation made in May 2021. Children with blood lead levels at or above the BLRV represent those with the highest levels of lead in their blood compared to other children in the U.S. As a result of these recently revised recommendations from the CDC, the NC Childhood Lead Poisoning Prevention Program has revised its follow-up schedule for blood lead levels of children under the age of six.

The most significant revision is the recommendation to perform a diagnostic test for all children who have an initial blood lead test result greater than or equal to 3.5 micrograms per deciliter ($\mu\text{g}/\text{dL}$), and if confirmed, provide recommended clinical follow-up services. North Carolina anticipates that this change will increase the need for diagnostic testing by four-fold under the revised protocol compared to the previous guidelines which recommended diagnostic testing beginning at 5 $\mu\text{g}/\text{dL}$.

Mandated environmental follow-up services are not affected by these revised recommendations; however, clinical case management is recommended for children confirmed to have a blood lead level $\geq 3.5 \mu\text{g}/\text{dL}$. The revised follow-up schedule summarizing these recommendations is attached.

We appreciate your cooperation in implementing these revised recommendations. For more information, please contact Ed Norman at (919) 707-5951 or at ed.norman@dhhs.nc.gov.

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FOLLOW-UP SCHEDULE

Blood Lead Levels for Children Under the Age of Six

All diagnostic (i.e., confirmation) tests should be performed as soon as possible (ASAP), but at a minimum within specified time periods.

- *Diagnostic tests* should be venous; however, capillary tests are accepted if a venous cannot be obtained.
- Diagnostic specimens *must* be sent to an outside reference laboratory for analysis.
- Point of care (POC) blood lead analyzers (i.e., LeadCare) should *NOT* be used for diagnostic tests.
- *Follow-up (post-diagnostic) testing* can be capillary.
- CDC protocol for collecting capillary specimens should be followed (see first link below).

See <https://nchealthyhomes.com/clinical-lead-resources/> for a list of clinical resources.

Users should contact [Children's Environmental Health](#) for further assistance.

For each initial blood lead level range, follow the steps under the corresponding category. If diagnostic test result falls within a lower category, follow the steps within that category. If diagnostic or follow up test result falls within a higher category, conduct another diagnostic test.

INITIAL BLOOD LEAD LEVEL AND RESPONSE

*Children's Developmental Service Agency **Care Management for At-Risk Children

< 3.50 µg/dL	
	<ul style="list-style-type: none"> • Report blood lead test results to parents and document notification • Educate family about lead sources and prevention of lead exposure <ul style="list-style-type: none"> - Retest at age 2, earlier if risk of exposure increases.
3.50 – 4.99 µg/dL	Perform diagnostic test ASAP (but at the latest within 3 months)
	<p>If diagnostic test result is 3.50 – 4.99 µg/dL, take same action as previous category AND</p> <ul style="list-style-type: none"> • Provide clinical management • Conduct <u>nutritional assessment</u> and refer child to the WIC Program • Test other children under the age of six in same household • Conduct follow-up testing every 3 months until 2 consecutive tests are < 3.50 µg/dL
5.00 – 9.99 µg/dL	Perform diagnostic test ASAP (but at the latest within 3 months)
	<p>If diagnostic test result is 5.00 – 9.99 µg/dL, take same action as previous category AND</p> <ul style="list-style-type: none"> • Complete <u>Form 3651: Exposure History of Child with Elevated Blood Lead Level</u> to identify possible lead sources and fax a copy to (919) 841-4015 • Refer case to local health department to offer an environmental investigation • Conduct follow-up testing every 3 months until 2 consecutive tests are < 3.50 µg/dL
10.00 – 44.99 µg/dL	Perform diagnostic test ASAP (but at the latest within 1 month at 10.00 – 19.99 µg/dL and within 1 week at 20.00 – 44.99 µg/dL)
	<p>If diagnostic test result is 10.00 – 44.99 µg/dL, take same action as previous category AND</p> <ul style="list-style-type: none"> • Refer to local health department for required environmental investigation • Refer child to CDSA* Early Intervention or CMARC** as appropriate • Refer to Social Services as needed for housing or additional assistance • For 10.00 – 24.99 µg/dL: Conduct follow-up testing every 1-3 months until 2 consecutive tests are < 3.50 µg/dL • For 25.00 – 44.99 µg/dL: Conduct follow-up testing every 2 weeks to 1 month until 2 consecutive tests are < 3.50 µg/dL
45.00 – 69.99 µg/dL	Perform diagnostic test ASAP (but at the latest within 48 hours at 45.00 - 59.99 µg/dL and within 24 hours at 60.00 - 69.99 µg/dL)
	<p>If diagnostic test result is 45.00 – 69.99 µg/dL, take same action as previous category AND</p> <ul style="list-style-type: none"> • Consult with North Carolina Poison Control (800) 222-1222 for advice on chelation and/or hospitalization • Consider an abdominal X-ray check for ingested object • Alert NC CLPPP by calling (919) 707-5854 • Conduct follow-up testing every 2 weeks to 1 month until 2 consecutive tests are < 3.50 µg/dL
≥ 70.00 µg/dL	Perform emergency diagnostic test immediately
	<p>If diagnostic test result is ≥ 70.00 µg/dL, take same action as previous category AND</p> <ul style="list-style-type: none"> • Hospitalize child and begin medical treatment immediately • Conduct follow-up testing every 2 weeks to 1 month until 2 consecutive tests are < 3.50 µg/dL



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