

North Carolina
Minimum Recommendations for Lead Poisoning Prevention
Effective Date: October 1, 1999
Revised Date: September 5, 2019

Distribution of Educational Materials

Educational materials regarding lead exposure should be made available to families of all children less than 72 months of age. Distribution of these materials should occur during all well-child visits. Educational materials are available on the web at <https://nchealthyhomes.com/lead-poisoning/> or by calling the NC Childhood Lead Poisoning Prevention Program (NC CLPPP) at (919) 707-5950.

Assessment for Risk of Exposure

Lead poisoning remains a principle environmental concern for young children, universal blood lead testing at 12 months and again at 24 months of age (or at first contact between 25 and 72 months if the child has not been previously tested) is strongly encouraged.

Immigrant children: Testing for all immigrant children should be conducted at the time of arrival to the United States. Internationally adopted children and refugee children are considered high risk as they may be malnourished. Malnourished children may be at increased risk, especially those deficient in iron, calcium and/or zinc. All refugee children 6 months to 16 years of age to the United States should be tested at the time of arrival and again after 3-6 months.

Coordinated Approach to Testing

Note: Local health departments should take the initiative to assure a coordinated approach to the universal blood lead testing of young children participating in Health Check (Medicaid), N.C. Health Choice, or WIC as well as refugee children. All primary care providers should be included in this process.

At a minimum, for children who are not required to be tested, the "EHS 3958: Lead Risk Assessment Questionnaire" should be administered on all children at 12 months and 24 months of age or at first contact between 25 and 72 months if the child has not been previously assessed or does not meet the above criteria. The questionnaire protocol determines those children who should receive blood lead testing at those ages. Questionnaires are available at <http://ehs.ncpublichealth.info/forms.htm> or by calling the NC CLPPP at (919) 707-5950.

Blood lead testing and risk assessment (when indicated) should occur during well-child visits to the child's primary care provider. Referral solely for risk assessment or blood lead testing is strongly discouraged.

Testing Methodology

Direct blood lead measurement is the screening test of choice. Finger stick, capillary blood specimens are adequate for initial testing and follow-up testing provided proper washing of the child's hands with soap and water before the finger stick to minimize the risk of contamination from lead residue on skin. Venous blood specimens should be collected for confirmation of all initial blood lead test results $\geq 5\mu\text{g/dL}$; however, capillary tests are accepted if a venous cannot be obtained.

Please note: As of July 1, 2017, clinical and environmental follow-up is according to the **truncated blood lead levels** rather than rounded, due to the legal interpretation of the NC General Statute § 130A-131.7. **Definitions.** This means that a test result of ≥ 4.0 but $< 5.0\mu\text{g/dL}$ should be truncated to $4\mu\text{g/dL}$ and should be followed-up according to the guidelines for test results $< 5\mu\text{g/dL}$. Numbers after the decimal place will not be considered in follow-up.

The State Laboratory of Public Health (State Lab) offers analysis of blood specimens for all children less than six years of age, refugee children 16 years of age or younger, and pregnant women receiving prenatal care at local health departments in North Carolina at no charge to the Medicaid or N.C. Health Choice (NCHC) beneficiary. Providers are encouraged to use the State Lab as this expedites test result reporting.

Point-of-Care (POC) Blood Lead Analyzers

The Clinical Laboratory Improvements Amendments (CLIA) designates facilities that use POC blood lead analyzers (e.g., LeadCare[®] II) as laboratories. As such, they are required to report all blood lead test results for children less than six years old to the NC CLPPP even if determined in a clinical setting, per NC General Statute § 130A-131.8. **Laboratory reports.** Use of POC blood lead analyzers are NOT acceptable for analyzing diagnostic (i.e., confirmation) blood lead specimens.

Medical and Environmental Response to Test Results

An outline of medical and environmental responses to test results can be found in the **Quick Reference Section** or for more detail, **Chapter 4 (Diagnostic Lead Testing and Management of Children with Elevated Blood Lead Levels)**. This outline is not intended to replace professional judgment, which must be based on the blood lead level, the presence of symptoms and other circumstances particular to an individual child in question.

Reference and background information can be found on the Lead Publications website of the Centers for Disease Control (<https://www.cdc.gov/nceh/lead/publications/default.htm>).