



Instant diagnosis + early intervention = healthier kids

LeadCare® II System

A user is certified to perform blood lead analysis with the LeadCare II System upon successfully performing the activities below and completing the User Certification Exam. The trainer is responsible for verifying that the trainee demonstrates the knowledge and ability to perform the following steps.

Sample Collection

1. Refer to CDC guidelines for capillary collection of blood lead samples. The key elements include:
 - Clean the collection site with soap and water.
 - Fill capillary tube to the 50 μ L line (no bubbles).
 - Dispense into treatment reagent immediately and mix.
 - Acceptable anticoagulants: EDTA or Heparin.
 - Homogeneous samples only (no clots present).
 - DO NOT refrigerate patient samples prior to mixing with treatment reagent.

System Setup

1. Turn on analyzer to initiate self-test and verify the sensor retainer is in place.
2. Verify that the calibration code matches the lot number on the sensor vial.
3. Check expiration dates on sensors, treatment reagents and both controls.

Running Controls

1. Make sure controls are at room temperature and mix thoroughly.
2. Transfer 50 μ L from control vial to treatment reagent tube and mix.
3. Insert sensor fully into the analyzer.
4. Use a dropper to draw up approximately $\frac{1}{4}$ inch of the treatment reagent/control solution, place dropper tip on the sensor X and press the side walls of the dropper. The analyzer will start a 180-second countdown automatically.
5. Document result and verify the result is within acceptable range.

Sample Preparation and Assay Performance

1. Transfer 50 μ L of fresh blood into treatment reagent tube and mix.
2. Insert sensor fully into the analyzer.
3. Use a dropper to draw up approximately $\frac{1}{4}$ inch of the treatment reagent/blood mixture, place dropper tip on the sensor X and press the side walls of the dropper. The analyzer will start a 180-second countdown automatically.
4. Record the test result. Note: a "Low" result is $<3.3 \mu\text{g/dL}$; a "High" result is $>65 \mu\text{g/dL}$.
5. Remove and discard the sensor immediately after documenting the result.

Spill Clean-up Using 10% Bleach

1. Clean the black deck with a 10% bleach solution and let air dry. Do NOT get the metal pins in the sensor connector wet.