LeadCare® II Blood-Lead System

LeadCare is a Magellan Biosciences business

SKILLS CHECKLIST

LeadCare II System

A user is certified to perform blood lead analysis with the LeadCare II system upon successfully performing the activities below. 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:
   - Clean the collection site
   - Fill capillary tube to 50 µL line (no bubbles)
   - Dispense into treatment reagent ASAP and mix

2. Venous samples can also be used
   - Acceptable anticoagulants: EDTA or Heparin
   - Homogeneous samples (no clots present)
   - Patient samples should NOT be refrigerated 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 calibration (sensor and analyzer lot codes must match).
3. Check expiration dates on all reagents (sensors, treatment reagent, controls).

When Running Controls

1. Make sure controls are at room temperature and mix thoroughly.
2. Transfer 50 µL from control vial to treatment reagent tube and mix.
3. Insert sensor fully into analyzer.
4. Use a dropper to draw up the treatment reagent/control solution, place dropper tip on the sensor X, and press the side walls of the dropper. (Practice filling the transfer 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 µl of fresh blood into treatment reagent tube and mix.
2. Insert sensor fully into analyzer.
3. Use a dropper to draw up the treatment reagent/blood 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.
4. Record the test result. Note: a “LOW” result is <3.3 µg/dL; a “HIGH” result is >65 µg/dL.

Spill Clean-up using 10% bleach

1. Remove sensor retainer and sensor, clean the deck and sensor retainer with 10% bleach, air dry and reinstall the sensor retainer.