

UMCHS
LEAD BLOOD TEST PROCEDURE

1. Wash your hands. Put on disposable gloves to prevent contact with blood borne pathogens. Use a new pair of gloves EACH time this procedure is done. Wear the disposable gloves throughout the procedure. Do not take them off to put on band-aids.
2. Prepare your equipment. Unwrap a band-aid and lay the band-aid, a blood lead sensor, dropper, capillary tube/plunger, a lancet, and treatment reagent and two cellulose swabs on a disposable paper towel. Set the treatment reagent in a location where it will not get knocked over easily. Tightly close the bottle of Blood Lead Sensors after removing one and always check the expiration date on the Blood Lead Sensors before using them to perform a test.
3. Have parent assist child in hand washing. Washing with warm water may help improve blood flow.
4. Ask the parent/guardian of infants and children for permission to do the test. Label the treatment reagent with DOB and child's last name. Explain why you are doing the test in simple terms and how it will be done. For example, "this test tells us if blood has lead in it. I will take a few drops of blood from the finger. We will discuss the results.
5. Ask parents/guardians to hold infants and small children in their laps. If necessary, ask parents to firmly hold the child's arms or legs.
6. Select a site for the blood sample, usually the side of the tip of the middle or fourth (ring) finger or, for an infant, the side of the tip of the big toe. If needed, warm the hands or feet by rubbing them together or between your own hands to help improve blood flow.
7. Moisten the cellulose swab with alcohol or use an alcohol wipe and clean the site to be tested. Let the alcohol evaporate.
8. Using your thumb, lightly press the finger or toe from the top of the knuckle toward the tip. This stimulates blood flow toward the sampling point. Hold the finger in a downward position and lance the palm side surface of the finger. Drop the used lancet into an impervious (Sharps) container with a tight-fitting lid. This type of container is leak proof and cannot be punctured by sharp objects.
9. Wipe away the first drop of blood. Keep the finger in a downward position to maintain blood flow. Hold the capillary tube 10 degrees below the collection site and touch the end of the capillary tube into the droplet of blood. Fill the capillary to the black line.
10. Have the parent/guardian firmly hold a dry cotton ball or cellulose swab on the puncture site for a minute or two to stop the bleeding. Place a band-aid on the puncture site.

11. Wipe off excess blood from the outside of the capillary tube with a clean, dry cellulose swab. Use caution not to drain the blood from the end of the capillary tube.
12. Look for air bubbles in the filled capillary. If present, discard the capillary and obtain a new sample.
13. Place the capillary tube into the treatment reagent tube. Insert a plunger into the top of the capillary tube. Dispense the entire volume into the bottom of the tube. Place tube and plunger into the sharps container.
14. Replace the tube cap to the reagent. Invert the tube 8 to 10 times to mix the sample completely. The sample is ready when the mixture turns brown.
15. Turn on the Lead Care II. Insert the sensor completely into the analyzer until you hear a beep. Make sure the sensor lot number matches the display.
16. Remove the cap from the tube. Squeeze the walls of the dropper and insert into the sample. Release the pressure to draw some sample into the dropper.
17. Touch the dropper to the x on the sensor and squeeze the walls to dispense the sample. The analyzer will “beep” and begin the 3 minute countdown.
18. Remove the used sensor and discard the testing materials in the sharps container.
19. Hold used cellulose swab and paper towel in a gloved hand. Take off one glove at a time, turning gloves inside out as they are taken off. Place gloves in a lined, covered trash can or seal inside a baggie.
20. Wash your hands with soap and warm, running water. Sanitize work area with bleach solution
21. Record the results on the Lead Care II worksheet.
22. Discuss results with parent/guardian and make referrals if appropriate.

