

Heel Stick Method for Blood Lead Screening

(Preferred method for children less than one year of age.)

FOLLOW CDC RECOMMENDED UNIVERSAL PRECAUTIONS FOR OBTAINING BLOOD

For accurate test results, environmental lead contamination must be avoided. Use clean white paper towel as a work surface as recycled or colored towels can contain trace levels of lead.

Procedure:

1. Explain to the parent the reason for the test and how important it is to the child's learning ability to have the test done.
2. Wash your hands and put on clean gloves.
3. Thoroughly clean the child's heel with soap and warm water; rinse well, then dry the heel. Remember to use clean white paper towels as recycled or colored towels can contain trace levels of lead. (Once washed, the heel must not be allowed to come into contact with any surface.)
4. Select the puncture site on the heel. The preferred puncture site is indicated by the shaded areas on the following diagram. The least hazardous sites for heel puncture are at the sites indicated below.
5. Thoroughly wash the puncture site with soap and water.
6. Clean the area of the heel to be punctured with the alcohol swab and let air dry. Vigorous rubbing during this step stimulates blood flow in the area.
7. Puncture the skin with one continuous motion using a sterile lancet with a 2.5 mm tip. Longer tips may cause excessive tissue damage.
8. Wipe away and discard the first drop of blood since it is contaminated by the disinfectant or tissue fluid.
9. Allow the second drop to form by the spontaneous free flow of blood.

10. Grasp the heel, touch the tip of the collection container to the beaded drop of blood. Collect the second and third drops of blood in the microtube and mix with the EDTA in the tube to prevent clotting. Continue collecting blood and periodically mixing the blood with the EDTA throughout the collection until 250 microliters are collected.
11. Once the required amount of blood is collected, cap the tube and rock it 8-10 times to further mix the blood with the EDTA.
12. Once the blood collection is completed, and while the patient's foot is held above the heart level, press a sterile gauze to the puncture site until the bleeding has stopped.
13. Send specimen to the lab for analysis.



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