Instructions for Submission of Specimens for Blood Lead Testing

Note: If the specimen container is received leaking, not properly labeled, test requisition not completed, or the specimen label does not match the test requisition exactly, the lab reserves the right to not test the specimen.

Filter Paper Collection Instructions

1. The individual collecting the specimen positively identifies the patient before collecting a specimen and labels the specimen in the presence of the patient.
2. Label collection card, prior to specimen collection, with the patient’s first and last name and a second unique ID (e.g., date of birth or identifier entered on the test requisition under tube/submitter ID). Use care to avoid contaminating the collection circles, by touching them.
3. Thoroughly wash patient’s hand or foot with mild soap and warm water.
4. Warm the skin-puncture site with a warm moist towel for three minutes at a temperature no higher than 42ºC to increase blood flow.
5. Disinfect site from which blood is to be collected with alcohol prep pad and allow the skin to air dry.
6. Puncture finger/heel with supplied lancet, following guidelines recommended by the manufacturer of the lancet. Use of heel is preferable for children up to one year of age.
7. Wipe away first drop of blood with sterile gauze.
8. Allowing large drops of blood to form, apply blood directly to filter paper, saturating circle. Avoid direct contact of the finger/heel with the filter paper.
9. Blood flow from the puncture site is enhanced by holding the puncture site downward. Do not squeeze/milk as this will introduce tissue fluid which dilutes blood serum.
10. Spot a minimum of three circles with a single drop of blood each. Do not layer successive drops.
11. Note: The circles are provided as a guide for the approximate size and location of the blood spots. The sample is acceptable if the blood spot is larger than a typical paper hole punch and soaked completely through to the back of the card.
12. Allow the blood spots to dry at room temperature in a horizontal position for two or more hours.
13. Do not stack wet specimens on top of each other.
14. Do not expose specimens to heat or direct sunlight.
15. After specimens are completely dry, fold the flap over the blood spot prior to mailing.
16. Place specimen and completed test requisition form in provided envelope and mail within 24 hours of collection.

Capillary Whole Blood Collection Instructions

1. The individual collecting the specimen positively identifies the patient before collecting a specimen and labels the specimen in the presence of the patient.
2. Follow steps 3 – 6 of the filter paper collection instructions above.
3. To prevent lead contamination, do not allow the capillary tube to touch the skin.
4. Fill the blood lead EDTA micro-tube at least 1/3 full.
5. Blood flow from the puncture site is enhanced by holding the puncture site downward. Do not squeeze/milk as this will introduce tissue fluid which dilutes blood serum.
6. After filling, close tube with attached cap and gently flick/invert the tube for 15 seconds to mix the blood with the EDTA.
7. Label the tube with the patient’s first and last name and a second unique ID (e.g., date of birth or identifier entered on the test requisition form under tube/submitter ID).
8. Refrigerate the specimen at 2-8 ºC until ready to ship to the laboratory. Mail samples as soon as possible, but no later than 7 days from the date of collection.
9. Place no more than 3 tubes wrapped in absorbent material into a plastic bag with a biohazard symbol. Place the bagged specimens into the aluminum screw-capped can and tighten the cap.
10. Place the aluminum can with completed test requisition on the outside of the container into the screw-capped cardboard container and secure tightened cap with tape.
11. Complete the return mailing label and apply it to the cardboard container and send by U.S. Mail. Take samples to the post office; do not deposit them in a mailbox.
Venous Whole Blood Collection Instructions

1. The individual collecting the specimen positively identifies the patient before collecting a specimen and labels the specimen in the presence of the patient.
2. Determine skin-puncture site and place a tourniquet above the collection site.
3. Disinfect site from which blood is to be collected with an alcohol prep pad and allow the skin to air dry.
4. With the bevel of the needle up, perform the venipuncture.
5. Fill the blood lead EDTA tube at least 1/3 full.
6. After filling, gently invert the tube for 15 seconds to mix the blood with the EDTA.
7. Label the tube with the patient’s first and last name and a second unique ID (e.g., date of birth or identifier entered on the test requisition form under tube/submitter ID).
8. Refrigerate the specimen at 2-8 °C until ready to ship to the laboratory. Mail samples as soon as possible, but no later than 7 days from the date of collection.
9. Place no more than 2 tubes wrapped in absorbent material into a plastic bag with a biohazard symbol. Place the bagged specimens in the aluminum screw-capped can and tighten the cap.
10. Place the aluminum can with completed test requisition on the outside of the container into the screw-capped cardboard container and secure tightened cap with tape.
11. Complete the return mailing label and apply it to the cardboard container and send by U.S. Mail. Take samples to the post office; do not deposit them in a mailbox.