Childhood Blood Lead Testing: Getting a Good Specimen

Obtaining a good fingerstick specimen avoids a false positive result and eliminates the trauma of a follow-up venous collection.

Washing with soap and water is crucial to remove possible lead contamination on the skin.

The DSHS Laboratory provides safety lancets, needles with pre-attached holders, and blood collection tubes at no cost to THSteps providers.

Finger Stick (Capillary) Collection Method

1. Wash your hands and the patient’s thoroughly with soap and water, rinse and dry well.
2. Put on gloves.
3. Assemble equipment.
4. Clean the puncture area with an alcohol swab and allow to air dry.
5. Warm and/or massage the finger to increase circulation prior to puncturing the skin.
6. Grasp the patient’s finger between your thumb and index finger, with the palm of the patient’s hand facing up.
7. For pediatric patients, use a sterile lancet designed for finger stick collection in children.
8. Make a quick, clean puncture that is deep enough to allow for adequate blood flow. Keep the finger below the level of the patient’s heart.
9. Wipe off the first droplet of blood with a sterile gauze or cotton ball. If blood flow is inadequate, gently massage the finger. A well-beaded drop of blood should form at the collection site.
10. Collect the blood into a DSHS-specified blood collection device.
11. Fill the blood collection tube as quickly as possible to keep the specimen from clotting in the tube before it is mixed. If possible, tap the collection tube with your finger while collecting the specimen. Draw time should be under two minutes.
12. Immediately after collection, thoroughly mix the capillary blood collection tube to prevent clotting. Be sure that the blood comes in contact with the entire inner surface of the blood collection tube so all the anticoagulant is mixed with the blood.
13. Apply pressure to stop the bleeding, and cover the puncture site with an adhesive bandage.
14. Label the specimen: print legibly and ensure that the name on the specimen and on the submission form match exactly or the specimen will be rejected.

Venipuncture (Venous) Collection Method

1. Wash your hands and put on gloves.
2. Assemble equipment.
3. Select site for venipuncture, and place a tourniquet above the venipuncture site.
4. Ask the patient to close his or her fist. Then palpate the site and locate the vein.
5. Disinfect the site with an alcohol swab. Wipe the skin concentrically from the center of the venipuncture site outward.
6. Allow the site to air dry. Do not palpate the vein again.
7. Tell the patient there may be slight discomfort when the needle is inserted.
8. Insert the needle in the vein at a 45-degree angle, and press the blood collection tube into the needle holder.
9. Fill the blood collection tube to the volume specified on the tube.
10. Remove the tourniquet.
11. Allow the vacuum in the blood collection tube to exhaust before removing the needle from the vein.
12. Remove the blood collection tube from the needle holder.
13. Place gauze over the puncture site and remove the needle.
14. Immediately after collection, mix the specimen thoroughly, ensuring that the blood comes in contact with the entire inner surface of the tube.
15. Apply pressure to stop bleeding, and cover the puncture site with a gauze pad and an adhesive bandage.
16. Label the specimen: print legibly and ensure that the name on the specimen and on the submission form match exactly or the specimen will be rejected.

Reporting: It’s the Law

Report all blood lead test results for persons age 14 or younger to the Texas Child Lead Registry.
- Call: 1 (800) 588-1248
- Fax: (512) 458-7699
- Mail: (address below)

Contact the DSHS Laboratory Specimen Logistics at 1-888-963-7111 ext 6236 for assistance with specimen requirements and meeting fill volumes.

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