**INSTRUCTIONS FOR SAMPLE COLLECTION FOR LEAD TESTING**

**CHILDHOOD LEAD SCREENING LABORATORY MA STATE PUBLIC HEALTH LABORATORY**

**305 SOUTH STREET, JAMAICA PLAIN, MA 02130**

* **Specimen Type/Containers:** Collect samples in lead-free, anticoagulant tubes.
  + **Venous whole blood:** K2EDTA (tan-top) tube or K2EDTA or Na2EDTA (royal blue-top) tubes.
  + **Fingerstick:** Sarstedt Microvette CB300 or similar.
* **Verify tube expiration date;** do not use expired tubes.
* **Labeling of Primary Specimen Container:** Clearly label the specimen tube with the patient’s full name and date of birth.
* **Clearly mark STAT samples:** If received at the MASPHL before 3:00pm, they will be tested and reported same day.
* **Requisition to Use:** Complete the Childhood Lead Screening Sample Submission form.

# SPECIMEN COLLECTION INSTRUCTIONS:

**VENIPUNCTURE:**

1. Use universal precautions when collecting samples and follow your facility’s blood collection protocols.
2. Fill the container ¾ full to ensure proper blood to EDTA ratio. Underfilling or overfilling the tube may result in poor specimen quality due to an improper blood to EDTA ratio.
3. Invert the tube several times after collecting the sample to thoroughly mix the anticoagulant with the sample.

**NOTE**: To prevent contamination, **do not pour the venous samples over into any other container**. Venous samples that have been poured into fingerstick tubes will be considered fingerstick samples.

# FINGERSTICK CAPILLARY:

1. Use universal precautions when collecting blood samples and follow your facility’s blood collection protocol.
2. Clean the finger with alcohol and avoid contact with the cleaned area to decrease the chance of contamination.
3. Puncture the finger with a sterile lancet (t*o facilitate proper capillary collection a 2mm, 21-gauge lancet is recommended)* and wipe off the first drop of blood with gauze. Gently milk the finger to establish blood flow.
4. Tap the fingerstick tube to release the anticoagulant, hold the tube upright, and touch the center of the blood drop with the tip of the capillary tube. The tube fills automatically by capillary action.
5. When the blood begins to flow into the tube, hold tube at a 45-degree angle. Turn the tube slowly to facilitate the mixing of the anticoagulant and the blood.
6. Massage the finger to maintain a free flow of blood and fill the tube at least ¾ full. Underfilling or overfilling the tube may result in poor specimen quality due to an improper blood to EDTA ratio.
7. Once tube is full, seal the capillary tip with the small cap and keep the large opening sealed with the large cap attached to the tube. Insert the collection tube into the amber protective tube. Vortex, shake or invert the tube to mix anticoagulant with the blood specimen.

**NOTE:** Avoid interrupting the flow of blood. To decrease the chance of contamination, do not spread the blood over a large area and avoid collecting smeared blood.

# Specimen Storage Condition after Collection:

All samples should be refrigerated until they can be transported or mailed to the MASPHL. Samples should be submitted daily to prevent delayed results, although weekly delivery is acceptable.

# Packaging and Shipping Instructions:

The collected specimen should be placed in a ziplock specimen transport bag with absorbent material such as gauze or cotton pad. The submission form and other paperwork should be folded and placed inside the outer pouch of the specimen transport bag. **Do NOT use transparent/office tape to affix the specimen to the requisition form or to seal the finger stick tube**. All blood lead specimens sent to MASPHL through the US Postal, UPS or Federal Express must comply with the USPS, DOT, and IATA regulations for “**Exempt Human Specimens/Non-regulated Materials**”. Padded envelopes are not acceptable as a tertiary container and should **NOT** be used as outer packaging.

Mail or deliver samples to:

Childhood Lead Screening Laboratory MA State Public Health Laboratory

305 South Street, Jamaica Plain, MA 02130

Specimen collection fingerstick capillary tubes, submission forms, biohazard specimen transport bags, and outer pre-printed cartons are available, free of charge by calling (617) 983-6640 or [MASPHL.SpecimenKitOrders@mass.gov](mailto:MASPHL.SpecimenKitOrders@mass.gov)

**Questions regarding testing or results:** Contact Childhood Lead Screening Laboratory at (617) 983-6665.

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