



ABBREVIATED PROCEDURE FOR THE COLLECTION OF CAPILLARY BLOOD LEAD SPECIMENS

January 2024

This is an abbreviated procedure for the collection of capillary blood lead specimens. Specimen collectors should be thoroughly familiar with the comprehensive procedure before collecting patient specimens. Copies of the comprehensive procedure are available from the Wisconsin State Laboratory of Hygiene (WSLH) at (608) 224-6252 or clinicalmetals@slh.wisc.edu. The staff can also answer questions regarding collection procedure, interpretation of results, or other lead-related questions. Kits can be requested from the WSLH by completing the form at the following link: <http://www.slh.wisc.edu/clinical/metals/test-kit/test-kit-order-form>. The kit should be identified as Kit #6 - the capillary blood lead collection kit. Each kit contains sufficient supplies to collect 100 specimens.

A. COLLECTION PROCEDURE

Caution must be taken throughout the procedure to prevent environmental contamination of the specimens. This contamination most often occurs due to insufficient cleansing of the child's hand or contact between the Multivette capillary tip and a contaminated surface.

NOTE: Powder-free gloves should be worn during collection procedures. Follow appropriate universal precautions for the prevention of transmission of bloodborne pathogens.

1. Become familiar with the comprehensive collection instructions mentioned above.
2. Open and arrange equipment and check to see that all collection materials are within easy reach.
3. Using the white tape provided, label the Multivette with the child's name and a second identifier (i.e. date of birth, age). Avoid allowing the capillary tip to contact environmental surfaces.
4. Wash, rinse, and dry the child's hand. Following washing, the finger to be punctured must not be allowed to touch any surface, including the other fingers.
5. Scrub the finger (usually the middle or ring finger) with an alcohol pad.
6. Dry the sampling area with a sterile gauze pad.
7. Puncture the finger using a sterile lancet. The puncture should be slightly to the side of the pad of the finger. Position the finger with the fingernail facing up to facilitate collection.
8. Absorb the first drop of blood with the corner of a gauze pad.
9. Touch the capillary tip of the Multivette to the second blood drop, minimizing direct contact with the skin surface. The Multivette should be horizontal or with the bottom angled downward slightly for proper blood flow. Blood will be drawn into the tip.
10. If necessary, gently massage the base of the finger to improve blood flow. Do not 'milk' the finger as this may dilute the blood with tissue fluids.
11. Fill the capillary tip until blood is flush with the top of the screw cap of the Multivette. This will provide



approximately 100 μ L of blood. Unscrew the capillary assembly and remove. Blood will be drawn from the tip into the Multivette tube. **Note: The presence of air gaps in the capillary tip will prevent successive blood drops from being drawn into the tip. An air gap can be eliminated by tipping the top of the Multivette down so that blood flows back to the end of the capillary tip. Contact WSLH staff for additional information.**

12. Screw the cap onto the Multivette, and shake vigorously to mix. You should be able to hear the mixing doughnut while shaking.

B. PACKAGING AND SHIPPING INSTRUCTIONS

Disclaimer: The following information is based on WSLH interpretation of current shipping regulations. Customers should consult their own legal advisors for interpretation of all laws and regulations that may apply to their organizations. January 2024

1. The shipping supplies provided by WSLH meet current regulations for shipment of blood specimens not known or suspected of being infectious. Place the labeled tube and absorbent material into the provided reclosable plastic bag or glue-sealed biohazard bag. Properly seal the bag.
2. Place the specimens and completed test request forms in the shipping container. For convenience, several biohazard bags containing labeled tube and absorbent material may be placed in one shipping container. Affix address label to the shipping container. Also, affix an "Exempt Human Specimen" label to the shipment container. You should NOT affix a biohazard or other similar identifying label. The application of other labels may actually slow delivery. Ensure that the shipping container is sealed closed prior to shipment.

Note: If the specimen is known or suspected to contain an infectious agent, different packaging may be required. Contact the laboratory or Postal Service for more information.

3. Mail specimens promptly to the WSLH. The specimens are stable at room temperature, but please refrigerate the specimens if possible when shipment will be delayed.

C. INFORMATION ON CASE MANAGEMENT

For information regarding the appropriate medical and environmental follow-up for children with elevated blood lead levels, contact the Wisconsin Childhood Lead Poisoning Prevention Program (WCLPPP) at the Wisconsin Department of Health Services, by calling 608-266-5817 or emailing DHSLeadPoisoningPrevention@dhs.wisconsin.gov.

D. BILLING INFORMATION

1. Medicaid HMO or other insurance information should always be provided for eligible children. The HMO/Insurance company name, subscriber ID number, ICD-10 diagnosis code, and national provider index (NPI) number for the authorizing individual (not the agency NPI) are all required for proper billing.
2. Fee exempt billing can be used only for WI children \leq 6 years of age who have no Medical Assistance or other insurance. This is restricted to local public health agencies and other public health providers.