

Environmental Health Division 2601 Agriculture Drive P.O. Box 7996 Madison, WI 53707-7996 Phone: (608) 224-6202 • (800) 442-4618

FAX: (608) 224-6213

**University of Wisconsin** 

# ABBREVIATED PROCEDURE FOR THE COLLECTION OF FINGERSTICK BLOOD LEAD SPECIMENS

This is an abbreviated procedure for the collection of blood lead specimens by fingerstick. Specimen collectors should be thoroughly familiar with the comprehensive procedure before collecting patient specimens. Copies of the comprehensive procedure are available from the WI State Laboratory of Hygiene at (608) 224-6252. The staff can also answer questions regarding collection kits, collection procedures, result interpretation, and other issues related to lead poisoning detection and prevention. To order kits, telephone the WSLH at 608-224-6257 or (800) 442-4618, and request kit #6 for fingerstick blood lead collection. 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 bloodborne pathogen guidelines.

- 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. 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. Blot the sampling area once with a dry gauze pad.
- 7. Puncture the finger, nail side up, using a sterile lancet. The puncture should be slightly to the side of the pad of the finger.
- 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 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 purple cap of the Multivette. This will provide approximately 100  $\mu$ L of blood. Unscrew the capillary assembly and remove. Blood will be drawn from the tip into the Multivette tube.
- 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. August, 2007

- 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 ziplock or glue-sealed bag. For convenience, several labeled Multivettes and absorbents may be placed in one bag for mailing. Properly seal the bag.
- 2. Place the specimens and completed test request forms in the shipping container. Affix address label to cardboard sleeve and place shipping container in the sleeve. Affix an "exempt human specimen" label to the cardboard sleeve. You should NOT affix a biohazard or other similar identifying label. The application of other labels may actually slow delivery.

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 SLH. 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 Margie Coons, (608) 267-0473, at the WI Division of Health.

### D. BILLING INFORMATION

- Medicaid HMO or other insurance information should always be provided for eligible children. The HMO/Insurance company name, subscriber ID number, ICD-9 diagnosis code, and national provider index (NPI) number are all required for proper billing.
- 2. Fee exempt billing can be used only for WI children ≤ 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.

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