

West Virginia Bureau for Public Health  
 Office of Laboratory Services  
 167 11<sup>th</sup> Avenue  
 South Charleston, WV 25303  
 (304) 558-3530  
 Newborn Screening Tests

To help protect infants born in West Virginia from mental and physical disabilities, state statutes **require** that all newborn babies be tested for Galactosemia, Biotinidase Deficiency, Congenital Adrenal Hyperplasia, Cystic Fibrosis, Fatty Acid Disorders, Organic Acidemias, Amino Acidopathies, Hemoglobinopathies, and Severe Combined Immunodeficiency.

Specimen Collection: See the enclosed instructions for blood collection.

1. **Collect blood specimen 24 hours after birth or prior to discharge**
2. Your blood specimen collection kits should contain:
  - Collection instruction
  - Blood collection forms
  - Mailing envelopes or UPS mailers to send specimens to laboratory
3. Complete ALL the requested information. Missing information can result in specimen being deemed unacceptable.
4. The blood spot collection form has two carbon copies. Check to make certain all copies can be read. WRITE LEGIBLY.
5. If this is the first time the infant has been tested, mark as initial specimen. If this is a repeat specimen, please indicate this by marking the appropriate box.
6. Questions regarding specimen collection should be directed to the Newborn Screening Laboratory at 304-558-3530 ext. 2510 or 2501.

<b>DO</b>	<b>DO NOT</b>
Read and follow provided collection instruction.	<b>Use a capillary to apply blood to filter paper</b>
Provide ALL requested information	<b>Collect specimen prior to 24 hour unless the baby is leaving the facility</b>
Mark as initial or repeat specimen	<b>Return collection instruction sheet or facility copy of form (pink copy)</b>
Fill ALL circles with blood. Apply blood to front side of specimen card only and allow to soak through to the back side of the card	<b>Mark initial tests as repeat specimens or repeat specimens as initial</b>
Mail specimen within 24 hours of collection	<b>Write, stamp, fold, or tape in the area provided for State Lab</b>
	<b>Contaminate specimen in any manner</b>
	<b>Stamp hospital ID information on back of card</b>

**Newborn Screening test results are only as good as the specimens provided.**

## Collection Technique

1. Complete ALL information. Do not contaminate filter paper circles by allowing the circles to come in contact with spillage or by touching before or after blood collection. Keep "SUBMITTER COPY".
2. Hatched area indicates safe areas for puncture site.



3. Warm site with soft cloth, moistened with warm water up to 41° C or a heel warmer for three to five minutes.
4. Cleanse site with alcohol prep. Wipe DRY with sterile gauze pad.
5. Puncture heel. Wipe away first blood drop with sterile gauze pad. Allow another LARGE blood drop to form.
6. Lightly touch filter paper to LARGE blood drop. Allow blood to soak through and completely fill circle with SINGLE application of LARGE blood drop. (To enhance blood flow, VERY GENTLE intermittent pressure may be applied to area surrounding puncture site). Apply blood to one side of filter paper only.
7. Fill remaining circles in the same manner as step 6, with successive blood drops. If blood flow is diminished, repeat steps 4 through 6. Care of skin puncture site should be consistent with your institution's procedures.
8. Dry collected blood spots on a dry, clean, flat non-absorbent surface or on a card drying rack for a minimum of four hours.
9. Mail completed form to the WV Newborn Screening laboratory within 24 hours of collection.

## Unsatisfactory Specimens:

1. QNS – quantity not sufficient for testing
2. Under-saturated – blood did not soak all the way through to the back of the card
3. Layered – blood spot applied on top of another blood spot
4. Contaminated – touching or water, feeding formula, antiseptic solutions, etc. coming into contact with specimen
5. Wet Specimen – specimen not allowed to dry completely before mailing
6. Missing information – specimen date, mother's information, baby's name, gestational age must be provided.

NOTE: Several sub-punches are taken from blood spots. Calculations are based on the VOLUME of blood in the sub-punch. Results from poorly collected specimens cannot be relied upon.