

## **Screening: How to Collect the Specimen**

### **Newborn Screening Forms**

The filter paper forms should be stored in a cool, dry place. Be sure to take note of the form expiration date printed on the green top copy of the collection form. The filter paper forms are to be used on or before the expiration date. Destroy all outdated forms immediately and request a new supply from the Georgia Public Health Laboratory. Order no more forms than can be used in 6 months. To order specimen cards, please complete the on-line order form, print and fax to (404) 327-7922 or call (404) 327-7920.

**Completing the Screening form 3491** need a new link to forms located at the end of this document

All information requested on this form is vital for the Screening, Follow-up, and Diagnosis components of the newborn screening process. It must be accurate, legible and complete.

The laboratory uses this information to determine whether results are normal or abnormal based on date of birth, date of collection, birth weight, time of birth, and time of collection. Omitting this information can cause unnecessary repeats.

The laboratory also reports this information to the Follow-up Programs, which then use this information to locate the child and make appropriate follow-up decisions and recommendations. Omitting this information can delay the follow-up program in locating a child, possibly resulting in a delayed diagnosis or an unnecessary death.

### **Blood Collection**

Gloves should be worn for personal safety. Care should be taken to avoid contamination of blood collection circles with antiseptic solutions, powders, petroleum jelly, lotions or other materials, which may adversely affect the testing process.

1. When collecting blood, fold back the cover sheet to expose the filter paper. Do not touch or handle the filter paper before or after applying blood.
2. Position the infant with feet lowered below the heart to help to increase the blood flow.
3. Warm the heel to increase the blood flow to the area by covering the puncture site for three to five minutes with a warm, moist towel, which has been run under tap water at a temperature of not more than 42 degrees centigrade or 107.6 degrees Fahrenheit.
4. Clean the puncture site with a sterile alcohol pad. Allow to air dry. Excess alcohol may cause hemolysis and denature some of the enzymes tested.
5. Use a sterile disposable automatic lancet e.g., Tenderfoot™ device, to make a standard incision 1.0mm deep by 2.5 mm long in the areas indicated on the diagram. Wipe away the first drop of blood with dry sterile gauze.

6. Allow a large drop of blood to form. To enhance blood flow during collection, very gentle intermittent pressure may be applied to the area surrounding the puncture site. Excessive "milking" causes an admixture of tissue fluids with the blood specimen, resulting in an unsatisfactory specimen.
7. Do not use capillary tubes for blood collection. Capillary tubes contain heparin which may lead to diluted or contaminated specimens. Lightly touch the filter paper card to the blood drop and fill each printed circle with a single drop, allowing the blood to soak through completely. Apply blood to one side of the filter paper only, either side may be chosen for this procedure. Fill all circle areas. Do not layer successive small drops of blood to the same circle. Avoid touching or smearing the blood spots.
8. If blood flow is diminished, repeat steps three through six with sterile equipment. If you are having trouble collecting blood, alternative methods of collection can be used. An umbilical catheter and or venipuncture specimen may be used. Refer to the Clinical And Laboratory Standards Institute (CLSI) Blood Collection on Filter Paper for Newborn Screening Programs; Approved Standard-Fifth Edition. LA4-A for additional information.
9. Allow the blood specimens to air-dry for a minimum of 3 hours, on a flat, nonabsorbent surface protected from heat or direct sunlight. Do not refrigerate the samples.
10. Ship collection forms to the Georgia Public Health Laboratory within 24 hours of collection. Do not accumulate or "batch" specimens before shipping since this may result in specimens too old to test. When placing more than one specimen in an envelope, alternate orientation of collection forms so that blood spots on adjacent forms are not in contact. Delayed submission to the laboratory may result in significant delay in identification of an infant with a disorder.

After completing the form and collecting the specimen, ship to:  
Georgia Public Health Laboratory  
1749 Clairmont Road  
Decatur, GA 30033-4053

We **STRONGLY** recommend that you promptly ship specimens within 24 hours of collection (via next day courier, UPS, or FedEx for tracking purposes). Effective January 1, 2007, the Georgia Public Health Laboratory (GPHL) will provide preaddressed United Parcel Service (UPS) labels to hospitals. GPHL will pay for one shipment, per day, per hospital for transport of specimens, Monday through Friday to the laboratory. To order specimen cards, call 404.327.7920.

The State Laboratory assumes responsibility for testing only; whoever submits specimens must assume liability for proper identification, collection and prompt delivery of specimens to the State Lab.