



State of Tennessee

Department of Health

Newborn Screening Newsletter

<http://health.state.tn.us/NBS/index.htm>



Newborn Screening Follow Up

Phone: 615-532-8462

Fax: 615-532-8555

Special Points of Interest

Important phone/fax number changes

Shipment/collection of dried blood spot specimens

Unsatisfactory Specimens

Inside this issue:	
Guidelines for Shipment of Dried Blood Spot Specimens	1
Phone and Fax number changes	2
Welcome & Goodbye	2
Most Common Reasons for Unsatisfactory Specimens	3

Upcoming State Holidays

- ◆ Jan 01: New Year's Day-State Offices closed on Jan 2
- ◆ Jan 16: Martin Luther King Day
- ◆ Feb 20: President's Day

Important Newborn Screening Phone Numbers at a Glance

NBS F/U - Metabolic & Hearing

Ph 615-532-8462

Toll Free 855-202-1357

Fax 615-532-8555

Filter Papers

Ph 615-262-6391

Fax 615-262-6455

ICD9 Codes

Ph 615-262-6300

NBS State Laboratory

Ph 615-262-6473

Fax 615-262-6447

Billing

Ph 615-262-6300

Fax 615-262-6396

Voice Response System

615-262-3041

866-355-6132

Guidelines for the Shipment of Dried Blood Spot Specimens

Dried blood spot specimens are clinical specimens collected by carefully applying a few drops of blood, freshly drawn by heel stick with a lancet from infants, onto specially manufactured absorbent specimen collection (filter) paper. The blood is allowed to thoroughly saturate the paper and is air dried for a minimum of 3 hours. Caked or clotted specimens are not acceptable and should not be shipped.

Specimen collection material ("collection kits") for newborn screening may include a sturdy paper overlay that covers the absorbent filter paper containing the dried specimen. These are then enclosed and sealed in a high-quality bond envelope. The paper overlay and the sealed bond envelope provide a double-layer barrier that protects casual handlers (i.e., shipping handlers and other non-laboratory, non-technical personnel) from accidental exposure to the dried blood specimens and protects the specimens from exposure to the environment during shipping.

The dried blood spot specimens must NOT be packaged in airtight, leak-proof plastic bags because the lack of air exchange in the inner environment of a sealed plastic bag causes heat buildup and moisture accumulation that can damage the dried blood spot test substances. In addition, various chemicals that can adversely affect the test substances in the dried blood spots could leach from these plastics and thus cause incorrect analytical test results.

Dried blood spot specimens are mailed to laboratories where the specimens are subject to various analytical procedures. One of the most important uses of this specimen collection technique is in screening for congenital and inherited metabolic disorders. Efficient collection, shipment, and analysis of dried blood spot specimens on filter paper comprise the foundation of this important public health service.

For more information please go to:

<http://health.state.tn.us/Lab/Directory/Section4.pdf>

Read this interesting article in the Tennessee Department of Health's Public Health Laboratories Newsletter for Fall 2011 *A 10 Year Summary of Newborn Screening in Tennessee* written by Christine McKeever, Manager, Tandem Mass Spectroscopy, Newborn Screening... go to:

<http://health.state.tn.us/lab/newsletter.htm>

Phone and Fax numbers have changed for the Tennessee Newborn Screening Follow-up Program

Effective **Monday, January 09, 2012**, the contact information for the Metabolic and Hearing screening follow-up programs will be:

New phone number: (615) 532-8462 or Toll Free: 855-202-1357

New fax number: (615) 532-8555

Please fax all follow-up to the new fax number

The Voice Response System (VRS) number for obtaining results will remain the same:
(615) 262-3041/Toll free (866) 355-6132

Newborn Hearing:

- ◆ Send hearing results reported on the pink copies only of the blood spot form to the new address below.
- ◆ Please send all mail for Hearing Section of the NBS Program to the new address below.

New address for Hearing is: Tennessee Department of Health, Newborn Hearing
Cordell Hull Building MCH 4th Floor
425 5th Ave. North
Nashville, TN 37243

State Laboratory:

The phone number for the Newborn Screening State Laboratory has not changed: (615) 262-6300

ATTENTION: CONTINUE TO SEND ALL FILTER PAPERS TO:

BY USPS:

NEWBORN SCREENING
DEPARTMENT OF HEALTH
LABORATORY SERVICES
P.O. BOX 305130
NASHVILLE, TN 37230

BY COURIER (FED EX or UPS):

NEWBORN SCREENING
DEPARTMENT OF HEALTH
LABORATORY SERVICES
630 HART LANE
NASHVILLE, TN 37216

WELCOME:



We are excited to welcome **Carmen Santiago** to serve as the Hispanic Parent Consultant with Family Voices. She joins the team with a background in Spanish interpreting and translation,

family advocacy for the Hispanic community, and assisting families seeking health coverage.

Phone 615-589-5786
carmen_s@tndisability.org

LEAVING:

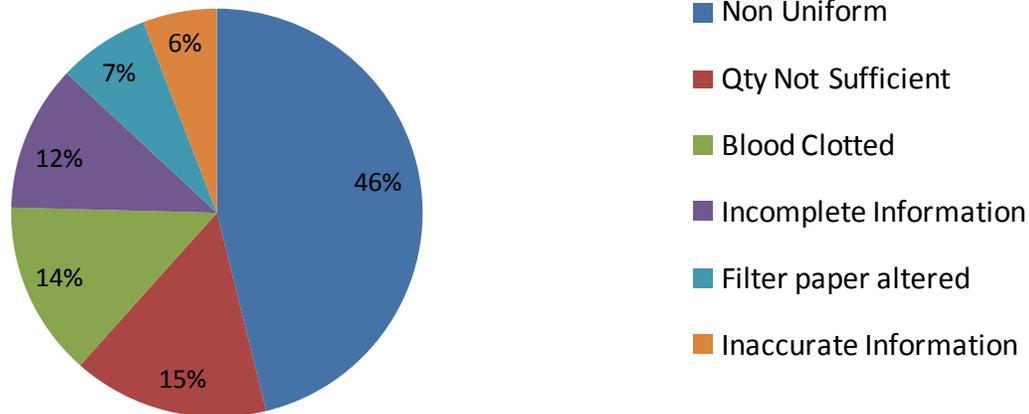
A big **THANK YOU** to **Joyce Sizemore and Fran Myatt**, Nurse Consultants, who assisted the Newborn Hearing Program from 2009–2011 to track infants that had pending hearing results after at least one visit to an audiologist. They conducted over 7,000



phone calls for 1,000 infants. They have done a great job in contacting families, medical providers, audiologists, hospitals, and others to assist with follow-up. They will return to their role working with hospitals for the State Birth Defects Registry Program.

The 6 Most Common Reasons for Unsatisfactory Specimens

6 Month Selection of NBS Specimens in 2011



Unsatisfactory Reason	Possible Causes	Prevention Methods
Non Uniform (NUF)	<ul style="list-style-type: none"> ◆Applying many small drops of blood to each circle ◆Applying blood with any type of capillary tube ◆Touching the blood drops when they are wet ◆Uneven soaking through the filter card caused by exposure to moisture ◆Glove powder touching filter card area before collection ◆The use of hand creams or lotions ◆Contaminated surfaces with any of the above contaminants 	<ul style="list-style-type: none"> ◆It is essential that only one drop of blood be used to fill each circle. If the circle cannot be filled with only one drop, go onto the next circle. DO NOT apply two drops to the same circle. ◆Do not use capillary tubes or syringes to fill the circles. ◆Wash the hands with soap and water prior to starting and use powder free gloves.
Quantity Not Sufficient (QNS)	<ul style="list-style-type: none"> ◆The drops of blood are too small ◆Improper use of lancet or dropping blood from a capillary tube device 	<ul style="list-style-type: none"> ◆Touch the blood drop as close to the center of the circle as possible. It will expand. It is permissible for the blood to go outside circle lines; however, it should not overlap or bleed into the adjacent circle.
Clotted Specimen	<ul style="list-style-type: none"> ◆Improper puncture ◆Application of blood with a capillary tube device ◆Waiting too long for a drop of blood to form 	<ul style="list-style-type: none"> ◆Warm the heel. Puncture the heel with one continuous movement using a sterile automated lancet. Disinfect the skin with alcohol and allow drying. ◆Vigorous rubbing may also stimulate blood flow. ◆Allow the second drop to form by spontaneous free flow of blood.
Incomplete or Inaccurate Information	<ul style="list-style-type: none"> ◆All or part of the blanks on the form were not filled out completely (for example: missing date and/or time of collection) ◆Information on form was inaccurate or incorrect (for example: wrong date of birth, date and/or time of collection) 	<ul style="list-style-type: none"> ◆It is important to fill in all of the blank lines on the form completely, legibly and accurately. ◆If critical areas on the form are left blank, it causes a delay in reporting results and/or treatment.
Filter Paper Altered	<ul style="list-style-type: none"> ◆Use of capillary tube or syringe to apply blood can scratch the filter card ◆Rubbing the spot when it is still wet ◆Pressing the heel to the filter card during the collection process 	<ul style="list-style-type: none"> ◆DO NOT press or touch the filter paper to the puncture site. ◆Do not allow the blood spots to touch any surface. ◆Do not close the fold-over-paper protective flap for at least 3 hours or until the specimen is completely dry. ◆Improper storage of collection forms can result in the form being altered by absorption of ambient moisture in the atmosphere, or by compressing the filter paper if they are stacked on top of each other. ◆Store the forms on their side in a cool, clean, dry place.