



Newborn Screening News

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Neonatal Screening Blood Specimen Collection



Every baby deserves the best chance to have a healthy future. That is why all children born in Texas are tested for certain serious birth defects.

The most critical step in preventing the damage caused by five diseases is to check a newborn's blood within the first 72 hours of life and a second test at one to two weeks of age. *A satisfactory or valid newborn screening specimen is most important.* These specimens must be submitted to the Texas Department of Health (TDH) Laboratory on a properly completed filter paper collection form obtained from the department.

Specimen Collection

Unsatisfactory specimens cause problems for everyone involved in the collection process:

- C time expended by hospital and clinic staff is wasted when a specimen must be repeated
- C an extra test means extra cost to the health care system
- C families must arrange for the additional clinic visit
- C our youngest Texans are needlessly subjected to a heel-stick

but most importantly...

- C unsuitable specimens cause delays that can seriously affect the health of a newborn.

Newborn Screening Program

The Newborn Screening (NBS) Program staff is available to assist you with neonatal screening blood specimen collection and handling procedures.

By using our toll-free number, **1-800-422-2956**, you can contact the Laboratory at **extension 7333** with any questions you may have regarding:

- / Specimen collection procedures and techniques to avoid unsatisfactory test results; and,
- / Technical information on test procedures and reports.

By calling the Case Management Program at **extension 2129**, you can receive free literature and training materials about specimen collection:

- / Posters, 11"x 17" and 8½" x 11" (Eng./Sp.)
- / CD-ROM
- / Practitioner's Guide
- / Handbook - **NEW**

Finally, NBS Program staff will be reviewing unsatisfactory specimen reports to identify providers who appear to need assistance with collection and handling procedures. If your facility has a large percentage of unsatisfactory specimens relative to the total number of specimens submitted, you may be contacted by a member of the NBS staff to discuss with you possible solutions to the invalid specimen problems.



Remember, their future is in your hands.

Anticoagulants Cause Interference with Newborn Screening Results

Invalid newborn screening results for Congenital Adrenal Hyperplasia (CAH) and Congenital Hypothyroidism (CH) will occur from improper collection techniques. Anticoagulants such as EDTA (purple top tube or purple-ringed capillary tube) and sodium citrate (blue top tube or blue-ringed capillary tube) used during the collection of blood from the infant's heel for newborn screen testing will cause the specimens to give false and misleading test results for CAH and CH.

A false negative result from the T4 (thyroxine) testing can be serious. **The diagnosis for an infant with CH can be missed since the anticoagulants will cause invalid normal results.** A falsely elevated 17-hydroxy-progesterone test result is interpreted as CAH and means extra expense and time for the infant's family, physician, Newborn Screening Follow-Up nurses and the laboratory. In addition, the family suffers undue worry and the infant is put through unnecessary additional testing.

Proper collection technique as described on the Newborn Screening Filter Paper Collection Form or in the *Texas Newborn Screening Program - A Practitioner's Guide* must be followed:

- C After the collection site is properly prepared, the infant's heel is pricked with a sterile lancet.
- C Blood from the infant's heel is applied directly to the filter paper collection card using a single application of blood per circle.
- C Time is allowed for complete saturation and absorption of the blood onto the filter paper.

Blood is not collected into capillary tubes, test tubes (e.g. Vacutainer®) or syringes before applying to the filter paper card. Adhering to proper collection techniques for Newborn Screening specimens will help to ensure accurate and timely test results.

For a free copy of the *Texas Newborn Screening Program - A Practitioner's Guide*, please call 1-800-422-2956 extension 2129.

It's Not Just PKU

There has been much confusion among doctors, hospitals and parents when newborn screening tests are called "PKU tests" or "PKU's".

Parents are upset unnecessarily for fear their child has PKU, when in fact, a routine repeat filter for another disorder has been requested.

Please make every effort to call the test a "newborn screening test" rather than a "PKU".

THANK YOU.

Change of Address

If you will be changing your address or if you would like additional staff to receive this newsletter, please complete the following and fax to: **512/-458-7421**

Facility: _____

Address: _____

City: _____ Zip _____

ATTN: _____

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