



# Newborn Screening News

SPECIAL EDITION

August 2004

## Texas Newborn Screening is Changing Computer Systems

**Texas Newborn Screening (NBS)** is changing computer systems. A contract has been put in place with the PerkinElmer company to design a computer system for both the State Newborn Screening Laboratory and Case Management for follow-up of abnormal specimens.

NBS anticipates going “live” with the new system on September 1, 2004. While the system is being fine-tuned, we have begun utilizing the new program for mailing laboratory results (mailers) and forwarding case management notifications of abnormal specimens (letters) to physicians and parents.

## Changes in Format

**There will be several format changes on the NBS Laboratory “mailers.”** Mailers are the test result reports of newborn screening specimens that are mailed to the submitters of the specimens. The design of the new mailer will now include the *State Laboratory’s* header and mailing address. Beneath the header is the submitter’s name and mailing address.

Following the submitter address, there are two columns of demographic information about the baby. This information includes: Patient, Lab Number, Form Serial Number, Date of Birth, Date Collected, Date Received, Date Reported, Revised Report Date, Mother, Address, Phone, Medical Record, Weight, Race/Ethnicity, Sex, Birth Order, Test, Feed, Status, Mother SSN, Physician, Phone.

Below the demographic information are the results of the newborn screen. There are three columns of information: Condition, Abnormal, Result. Under Condition, the five disorders for which we test are listed. The middle column, Abnormal, will indicate whether one or more of these conditions resulted in an abnormal value. Two asterisks (\*\*) next to a condition will indicate ABNORMAL RESULT – DOES NOT COMPARE WITH EXPECTED RESULT. One asterisk (\*) means that the test was UNSATISFACTORY and repeat testing is needed.

The third column will indicate the Result of the test. The results will either be normal for T4, Phenylalanine, 17-OHP, Galactose, and Hemoglobinopathies (Hb F and Hb A present), or, if the screening results are abnormal, the abnormality for that disorder will be presented in the Result column.

**There will also be several format changes on the NBS Case Management letters.** Letters are mailed to the attending physician of the infant when the newborn screen results are abnormal. The new letters will now include the *Department’s* header with the names of the Commissioner and Executive Deputy Commissioner, mailing address, web site, and toll-free number.

Beneath the header are three sections of information about the baby. The first section represents information about the baby’s physician including name, address, phone, fax. This section also provides information about the submitter of the specimen including submitter number, facility name, address, phone, and fax.

The second section represents the demographic information about the baby. This information includes the baby’s name, mother’s name, address, mother’s phone number, medical record number, date of birth, specimen collection date, and lab number.

The third section is the test results of the baby’s screen. Unlike previous physician letters, the new letters will not include expected results. The results presented in the letter will either be normal or indicate a specific result as an abnormal screen. The protocol for responding to an abnormal result will be included in the content of the letter directly below the lab results.

**ProtectTexas™** Texas Department of Health To order free literature from the Newborn Screening Program for patients and specimen collection information for submitters, please call 1-800-422-2956, ext. 2129 or order online:  
<http://www.tdh.state.tx.us/newborn/pubs.htm>

Texas Newborn Screening  
Laboratory Result Codes  
Condensed List

**This list does not contain all result descriptions or changes**  
**\*\*\*this is only an example list\*\*\***

<b>Assay</b>	<b>MSDS Result Description (old system)</b>	<b>PE Result Description (new system)</b>
Thyroid	T4 Normal/TSH High; Rescreen	Abnormal Thyroid Screen:(TSH Slightly Elevated)
Thyroid	T4 Normal/TSH High; Test Serum	Abnormal Thyroid Screen:(TSH Moderately Elevated)
Thyroid	T4 Normal/TSH Very High; Test Serum	Abnormal Thyroid Screen:(TSH Very Elevated)
Thyroid	T4 Low/TSH Normal; Rescreen	Abnormal Thyroid Screen:(T4 Low)
Thyroid	T4 Low/TSH High; Rescreen	Abnormal Thyroid Screen:(T4 Low,TSH Slightly Elevated)
Thyroid	T4 Low/TSH High; Test Serum	Abnormal Thyroid Screen:(T4 Low,TSH Moderately Elevated)
Thyroid	T4 Low/TSH Very High; Test Serum	Abnormal Thyroid Screen:(T4 Low,TSH Very Elevated)
Thyroid	T4 High/TSH Normal; Test Serum	Abnormal Thyroid Screen:(T4 Elevated)
Thyroid	T4 High/TSH High; Rescreen	Abnormal Thyroid Screen:(T4 Elevated,TSH Elevated)
PKU	PKU Normal	Normal Phenylalanine
PKU	Slightly Elevated	Phenylalanine Slightly Elevated
Gal	Normal	Normal Galactose
Gal	Slightly Elevated - Rescreen ASAP	Galactose Slightly Elevated
HB	F,A,Other	F,A,Other "Probable Unidentified Hb Variant Trait"
HB	A,A Probable Normal	A,A "Probable Normal"; Rescreen if Result is due to Transfusion
HB	A,D or G Probable D or G-Trait	A,D "Probable D Trait"
HB		A,G "Probable G Trait"
HB		F,A,S,Other "Probable S Trait and Unidentified Hb Variant"
HB	A,Other	A,Other "Probable Unidentified Hb Variant Trait"
HB	F,A, ?Barts-Alpha Thalassemia Trait?	F,A,Barts "Probable Alpha Thalassemia"
HB		F,A,elevated Barts "Probable H Disease"
HB	F,S ?Barts? Probable SS/Alpha Thal Trait	F,S,Barts "Probable SS Disease and Alpha Thalassemia"
HB	F,A,Other ?Barts-Alpha Thal Trait?	F,A,Other,Barts "Probable Unidentified Hb Variant Trait and Alpha Thalassemia"
HB		A,F,S,Barts "Probable S Trait and Alpha Thalassemia"
HB	Other	Free Text:
CAH	17 OHP Normal (Birthweight > 2500 G)	Normal 17-OHP for birth weight greater than or equal to 2500 grams
CAH	17 OHP Normal (Birthweight < 2500 G)	Normal 17-OHP for birth weight less than 2500 grams
CAH	17 OHP Abnorm (Low BW ) Rescreen ASAP	17-OHP Abnormal for birth weight less than 2500 grams
CAH	17 OHP Mildly Abnormal - Rescreen	17-OHP Slightly Elevated for birth weight greater than or equal to 2500 grams
CAH	17 OHP Abnormal - Rescreen ASAP	17-OHP Moderately Elevated for birth weight greater than or equal to 2500 grams
CAH	17 OHP Very High-Serum/Rescrn ASAP	17-OHP Very Elevated for birth weight greater than or equal to 2500 grams