

## Newborn Screening News

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## URGENT NOTICE

#### Did you know that the hot weather during our Texas summers can damage newborn screening specimens?

Exposure to heat and/or humidity can affect the specimens in two ways: (a) the blood may "bake" onto the filter paper making it difficult to dissolve blood off the filter paper for testing and (b) the heat may cause degradation of substances in the blood, such as GALT, and adversely affect test values. Specimens that have been affected by heat or humidity may erroneously test as abnormal. When heat/humidity exposure occurs during mail transport, there is little that a submitter can do to prevent the situation. However, your facility should review your own specimen handling practices to be certain that specimens are not exposed to a hot environment prior to mailing. Mail newborn screening specimens within 24 hours of collection. Specimens should never be left in a hot car before delivering to a post office or placed in direct sunlight near a hot window. DO NOT place specimens in an outdoor metal mailbox. By eliminating risks for heat exposure, you may be able to prevent incorrect abnormal specimen results and avoid the need for specimen re-collection. Please take care to ensure your specimens remain valid by adhering to heat precautions over our hot Texas months.

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**ROTATE YOUR STOCK** 

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## Specimens are UNACCEPTABLE and will be REJECTED when:

- received WITHOUT a date of collection
- received on EXPIRED collection forms

It is <u>very important</u> to rotate your stock when replenishing your supply of newborn screening kits. CLIA regulations require DSHS to discard any specimens received that have exceeded the expiration date. Submitting invalid specimens results in the inconvenience of retesting and delays the screening of the newborn, placing the newborn at risk for delayed diagnosis of a screened condition.

### NEWBORN SCREENING PRACTIONER'S GUIDE

The NBS Practitioner's Guide has been updated and can be found at the NBS web site at <u>www.dshs.state.tx.us/newborn/</u>

We anticipate the hard copy of the guide to be available within the next month. We plan to send copies to everyone on the NBS newsletter mailing list. If you need additional copies, please feel free to call us at 1-800-252-8023, extension 2129.



To order free education materials from the Newborn Screening Program for patients and specimen collection information for

submitters, please call 1-800-252-8023, ext. 2129 or order online:

http://www.dshs.state.tx.us/newborn/pubs.shtm

#### PHENYLKETONURIA (PKU) MONITORING AND CONFIRMATORY TESTING

Tests to monitor phenylalanine levels on diagnosed PKU individuals are available on serum or whole **blood collected on special filter paper cards**. Confirmatory serum phenylalanine and monitoring phenylalanine results are reported as concentrations in mg/dL.

To receive results for <u>confirmatory serum</u> <u>phenylalanine</u>, a **G1B Form** must be completed and forwarded to the DSHS Laboratory. Confirmatory lab testing can be done at metabolic centers in Dallas and Houston. All other areas may send specimens overnight to DSHS Newborn Screening Lab in Austin.

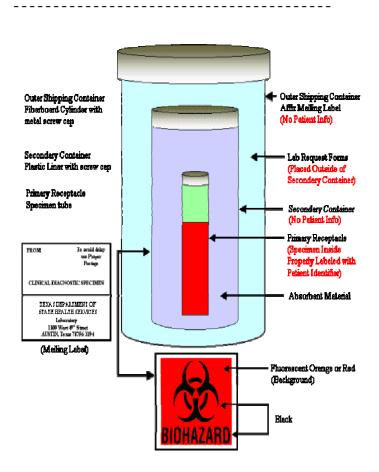
The specimen submission form *must* accompany each specimen. The patient's name listed on the specimen *must* match the patient's name listed on the **G1B Form**. If the <u>Date of</u> <u>Collection</u> field is not completed, the specimen will be rejected.

Treatment and consultation with a pediatric metabolic specialist should be started as soon as possible in any infant with elevated phenylalanine levels and should be continued indefinitely, with careful monitoring of blood phenylalanine levels on **filter paper** at frequent intervals. Young women with PKU must maintain their PKU diet prior to and during pregnancy to prevent fetal loss and fetal brain damage. The dietary treatment requires use of special formula and specially formulated foods obtained through metabolic centers and pharmacies.

Biochemical monitoring of serum phenylalanine is available through the DSHS Newborn Screening Laboratory. PKU blood collection kits can be provided by DSHS, upon request, which include mailing containers and laboratory forms. Call 1-888-963-7111 ext. 7661 for more information.

#### Shipping Overview

Submitters are responsible for shipping specimens in conformity with all safety and labeling regulations. Be aware that many commercial carriers no longer accept specimens. When using any carrier, including the bus service or the U.S. Postal Service (USPS), package specimens to avoid leakage or breakage. All specimen mailing containers supplied by the Laboratory meet USPS and Department of Transportation (DOT) requirements for the shipment of *diagnostic* specimens. Specimens must be packed in triple containment with sufficient absorbent material enclosed to absorb the entire volume of liquid. The container used *must* meet current DOT and USPS regulations.



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