

Rady

*Circles of Life **Rady Children's Hospital San Diego**



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99 % HOSPITALS

Area Service Center 99 Newborn Screening Program Rady Children's Hospital San Diego Serving San Diego, Orange, Riverside & Imperial Counties

12-48 HOUR COLLECTION

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FY 15-16 Quarter 1 (July-Sept) Top 99% of all hospitals collecting between 12 and 48 hours

3 ¹ 1946.
NICU RCHSD @ Palomar 100% RCHSD @ Scripps Encinitas 100%
RCHSD @ Scripps La Jolla 100%
Riverside County Regional Medical Center 100 %
Congratulations to our star
performers in
meeting our goals!!





Hemet Valley Medical Center * Parkview Community Hospital Medical Center HOAG Memorial Presbyterian Hospital *

SAVING A BABY'S LIFE!

What did these babies have in common?

At each of these hospitals, a baby was born with a metabolic disorder identified by the Health Resources and Services Administration (HRSA) Discretionary Advisory Committee for Heritable Disorders in Newborn and Children (DACHDNC) as a "time-critical disorder", a condition which may manifest with acute symptoms in the first days of life.

Recommendations by the DACHDNC Laboratory Standards and Procedures Subcommittee state "in order to effectively reduce disability, morbidity and mortality, NBS must occur before onset of symptoms". These infants were rapidly diagnosed and treated for separate metabolic disorders:

Citrullinemia, Type 1,

MCADD- Medium Chain Acyl-CoA Dehydrogenase Deficiency VLCADD-Very Long Chain Acyl-CoA Dehydrogenase Deficiency



The hospitals collected newborn screen specimens on these babies 24 - 36 hours after birth, sent the specimens to the Newborn and Prenatal Screening (NAPS) Lab to arrive 2 days after collection. Results were reported by the NAPS Lab to the Area Service Center staff by the 4th - 6th day of life. All 3 families were urged to take their newborns directly to the Emergency Department for evaluation by a Metabolic Specialist and admission to the hospital, collection of confirmatory tests and initiation of treatment.



Timely collection and transport of specimens does save a baby's life!





The Newborn and Prenatal Screening (NAPS) Lab determines whether a Newborn Screening Test is Adequate or Inadequate. Anytime blood is collected on the filter paper, the specimen must be sent to the NAPS

Heel stick Gold Standard

Why is the heel stick collection method the "Gold Standard"?

Normal values and cutoffs for the newborn screening assays are determined from samples collected by heel stick, so the national standards require that all newborn screening specimens be collected in this manner. Alternate collection methods can result in falsely abnormal analyte values, possibly leading to delays in diagnosis of true positive disorders or errors in diagnosis that can even result in a catastrophic outcome for the baby.

Are there any times when an exception is acceptable?

If a baby's feet are bruised or injured, or the baby has fragile, tiny and poorly perfused feet In these situations, a line specimen is preferable to not screening at all. Please remember that capillary tube collection is never acceptable.

In summary, heel stick is the GOLD STANDARD of specimen collection.

Shipping Specimens

TRANSIT TIMELINESS –2 DAYS COLLECTION TO ARRIVAL AT NAPS LAB

SEND SPECIMENS DAILY via GSO Courier to NAPS LAB (Must NOT BATCH or HOLD SPECIMENS)

CDC DIRECTION FOR PACKAGING NEWBORN SCREEN SPECIMENS Plastic Bags and Shipping Dried Blood Spot Specimens from CDC:

"we do not recommend shipping packaged DBS specimens in plastic, foil shipping bags, or other airtight, leak-proof sealed containers. The lack of air exchange considerations in the inner environment of a sealed container causes heat buildup and moisture accumulation."

http://www.cdc.gov/labstandards/pdf/nsqap/

Timely Collection AND Timely Transit SAVES BABIES' LIVES

<u>12 TO 48 HOURS* COLLECTION TIME</u> 2 DAYS TRANSIT TIME-COLLECTION TO NAPS LAB

*California Newborn Screening data analysis has shown no substantial difference in results collected at 12-24 vs. 24-48 hours of life.

What's new in Newborn Screening? * WHAT IS THIS NEW TERM?

TPN INTERPRETATION

The Newborn Screen Result is "TPN Interpretation" Please repeat the Newborn Screen when off TPN 24 hours"

Some newborns have gastrointestinal systems that are too immature to absorb nutrients safely, and therefore receive their initial nutrients (amino acids, sugars and lipids) through intravenous (IV) feeding, which is called total parenteral nutrition (TPN). TPN may interfere with the newborn screen by causing elevated results for many of the analytes masking a true disorder. This is a particular concern with the Amino Acid Disorders. Please do not collect the newborn screening sample directly off the TPN line. Please remember to note on the specimen collection card when the newborn is on TPN.