

OUR BEST FOOT FORWARD

A Specimen's Success Story: On Time Every Time

In 2014, the On Time Every Time initiative began in collaboration with the South Carolina Hospital Association. The focus of this initiative was to improve the process in which the newborn screening samples were collected, mailed, and received at the Public Health Laboratory. The intent of this initiative was to reach the Clinical Laboratory Standard Institute (CLSI) national guideline for newborn screening of time-critical conditions to be identified by 5 days of life.

This guideline was met in the case of an infant who had Salt-Wasting Congenital Adrenal Hyperplasia (CAH). Due to the timeliness of specimen collection and submission, a positive screen for 17-OH Progesterone (17-OHP) resulted, the appropriate provider was notified and the infant was assessed at 3 days of life.

What is Congenital Adrenal Hyperplasia or CAH? Why is early detection so important?

CAH is a collection of inherited conditions that affect the body's adrenal glands. About 1 in every 15,000 infants in the US is affected with CAH. In a person affected with CAH, the adrenal glands are very large and are unable to produce certain hormones, including cortisol. Cortisol is a chemical that helps protect the body during stress or illness and helps the body regulate the amount of sugar in the blood. If left untreated, the adrenal glands produce too much androgen. This increase in production of androgen can lead to the production of male sex traits in females.

CAH can vary from person to person and by the form of CAH. There are three main forms of CAH: the "salt-wasting form," the "simple virilizing form," and non-classic CAH. Salt-wasting classic CAH accounts for about 75% of classic CAH cases and is also the most severe form. Many of the signs and symptoms listed below are caused by severe dehydration and can be very dangerous for an infant.

- Poor feeding
- Sleep longer or more often
- Tiredness
- Vomiting
- Diarrhea
- Weight loss
- Irritability
- Male-like genitals in females
- Rapid heart rate

Early detection, treatment, and referral to an endocrine specialist can help children with CAH develop appropriately. Treatment may include replacement cortisol medications, such as hydrocortisone and salt supplements to help retain salt.

Source:

<http://www.babysfirsttest.org/newborn-screening/conditions/congenital-adrenal-hyperplasia>

WE NEED YOUR HELP!

Follow-up Documentation

Confirmation documentation is needed to complete an abnormal newborn screening file. This documentation could include repeat lab results, diagnosis information, or further testing that was required for a positive screen. If this documentation isn't received by newborn screening follow up, it is not possible to close an infant's newborn screening file. Please assist us by faxing this documentation when available to (803) 898-0337.

Faxed Requests for Normal Newborn Screening Results

When faxing requests for Newborn Screening results, please review your facility's schedule and prepare a list of requests well in advance of the patient's arrival. Allow a minimum of 24-48 hours for your request to be filled. We are more than happy to fill requests of 9 or less lab reports for patients coming into your office the next day. Requests for 10 or more lab reports will be mailed to the requesting office.

ON THE RUN

We have had a name change! "Bureau of Laboratories" is now the "Public Health Laboratory." We are performing the same high-quality services for you and the community.

Preparation for the collection of the newborn screen begins with the NBS form!

Did you know that the NBS bloodspot card is an FDA-regulated Class II medical device and how you store them may damage the integrity of the card?

How should NBS forms be stored?

NBS forms should be stored vertically on their side in the original packing.

How shouldn't NBS forms be stored?

- Do **NOT** allow forms to compress by *stacking* them
- Do **NOT** allow forms to be scratched by *putting* them in drawers, on shelves, etc.
- Do **NOT** *place* any objects on the forms while stored

Most common cause of specimen rejection at the Public Health Laboratory:

Specimen appears clotted and layered. This means:

- Multiple drops of blood to the same circle on the NBS form
- Blood specimen could have been applied to both sides of the NBS form

Lab Closings: May 29th and July 4th.

Note: Please do not delay mailing your specimens to the Public Health Laboratory. There is someone to receive specimens daily regardless of Lab Closings.



ON THE SPOT

The hospitals listed below had 0% unsatisfactory specimens for the 1st quarter of 2017:

- Georgetown Memorial Hospital
- GHS Oconee Memorial Hospital
- Hilton Head Hospital
- McLeod Health Cheraw
- McLeod Loris

CONTACT US. WE'RE HERE TO HELP!

DHEC Newborn Screening Follow Up: (803) 898-0593 or (803) 898-1969

Public Health Laboratory: (803) 896-0891

Keep us on our toes. Please give us feedback on what you would like to see in our next Footnotes Edition. Email newbornscreening@dhec.sc.gov with your suggestions.

EDUCATIONAL INFORMATION:

To order more NBS brochures (ML-000032, Eng; ML-025096, Spa.):

Please go to http://www.scdhec.gov/Agency/EML/place_order.aspx.

Are you in need of newborn screening filter paper forms?

Contact Lab Supply at (803) 896-0913

If you have an infant born in another state and need their newborn screening results:

Go to www.newsteps.org

- **Step one:** Click on state profiles
- **Step two:** Click on state of birth
- **Step three:** Click on contacts then follow up tab for state coordinator information.

Are you educating your parents about Newborn Screening? Visit our website at www.scdhec.gov/newbornmetabolicscreening to find our newborn screening brochure and educational handouts for parents and providers.