



## OUR BEST FOOT FORWARD

### Newborn Screening (NBS) Champions Rise During 2020:

The COVID-19 pandemic presented many new challenges to our South Carolina birthing facilities in 2020. However, each facility made the impressive decision to prioritize quality improvement measures for collecting and shipping newborn screening specimens. What did this look like?

DHEC's NBS champion team increased facility communication with nurseries, NICU, Hospital Lab, materials management and hospital quality improvement (QI) staff. This increase in communication allowed the NBS team to:

- Navigate transit challenges
- Provide visual aids and technical assistance for unsatisfactory specimens
- Assist with interpretation and guidance on specific QI data metrics

Hospitals also received individual patient level unsatisfactory and transit information. This information allowed facilities to provide specimen collection training to individual staff and a more thorough individual specimen tracking process. These efforts led hospitals to share NBS best practices, spot check and specimen transit resources and discover that small changes can lead to better outcomes.

### Here's a brief overview of a few of those outcomes:

- 36 hospitals enrolled in the new Sunday courier specimen pickup process
- DHEC's NBS Champion team hosted:
  - 66 virtual meetings
  - 27 spot check trainings
  - 61 transit process assistance meetings
- Current unsatisfactory percentage is >5% with continued strides towards improvement
- Transit time has decreased by 14.2% on average since the implementation of STAT courier

If you would like to learn more about implementing NBS champion processes at your birthing facility, please email [newbornscreening@dhec.sc.gov](mailto:newbornscreening@dhec.sc.gov).

### NBS Program Update:

Please be advised that you may receive faxes and/or calls from **Gianna D'Apolito**, our new Health Information Technology Coordinator. She will be working to close out all newborn screening cases involving infants with an abnormal finding or confirmed diagnosis. Thank you in advance for your assistance in this effort.

Please direct any questions about this matter to Gianna at [dapoligc@dhec.sc.gov](mailto:dapoligc@dhec.sc.gov) or (803) 898-2902.



## ON THE RUN

The SC Public Health Laboratory and NBS section have experienced growth over the past year.

- In January 2021, **Dr. Nicolas Epie** became the lab director at the Public Health Laboratory.
- **Aryel Toup** is a Laboratory Technologist III who joined the NBS lab in March 2020.
- **Rodger Givens** joined the NBS lab as a Laboratory Technologist II in June 2020
- **Kimberly Roundtree** joined the NBS lab as a Laboratory Technologist II in July 2020.
- **Beth Bair** was hired in July 2020 as the Chemistry Division Director, overseeing the Chemistry Division including the NBS lab.
- In July 2020, **Haley Davis-Martin** joined the NBS lab as the Field Training Coordinator for the Sunday courier grant.

## LSD Implementation

The NBS laboratory started screening for two Lysosomal Storage Disorders (LSDs) at the Public Health Laboratory on February 22, 2021.

The two LSDs are:

- MPSI (mucopolysaccharidosis type I)
- Pompe

MPSI tests for IDUA (alpha iduronidase) and Pompe tests for GAA (acid alpha glucosidase).

## Courier QI Update

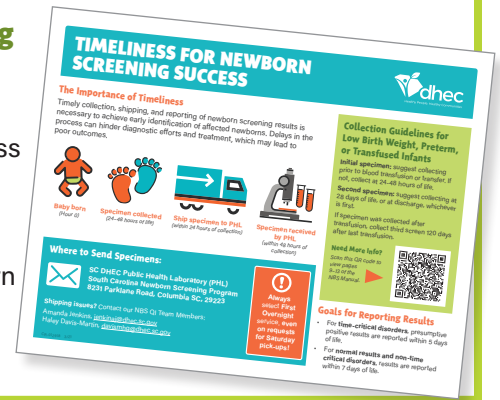
The SC DHEC NBS program has been working closely with the Association of Public Health Laboratories (APHL) on improving NBS specimen turn-around-time (TAT) with our Continuous Quality Improvement (CQI) grant.

The key improvements that have been made through this grant include the implementation of the Sunday/holiday courier service, increased monitoring of FedEx services and increased hospital trainings. The goal of this grant project has been to decrease TAT by 5% for 75% of the hospitals. Currently, 76.3% of birthing hospitals have seen at least a 5% improvement in TAT and, on average, birthing hospitals have seen a 14.5% decrease in TAT.

If you would like to schedule an in-person or virtual training session on specimen collection or specimen transit, receive an emailed copy of the NBS shipping resource, or if you have any questions about the CQI grant project, please email Amanda Jenkins at [jenkinaj@dhec.sc.gov](mailto:jenkinaj@dhec.sc.gov).

## New NBS Shipping resource

This material was created to help stress the importance of timely collection, shipping and reporting of newborn screening results.



## ON THE SPOT

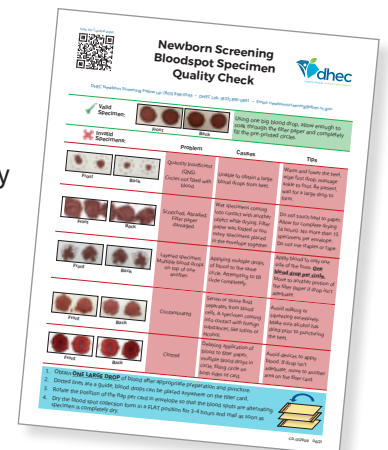
These hospitals had the lowest percentage of unsatisfactory newborn screening specimens for 2020!

- Prisma Health Oconee - 0.45%
- Beaufort Memorial Hospital - 1.41%
- McLeod Health Clarendon - 1.57%
- Prisma Health Greer - 1.61%
- Newberry Memorial Hospital - 1.69%



## Check out our Spot Check resource's new look!

This material was recently updated to make it even easier to perform quality checks on blood spot specimens!



Thank you for being champions for dried blood spot collection in your facilities!

## Newborn Screening Diagnosed Cases

To date, the following hospitals collected newborn screens that had confirmed diagnosed cases in 2020:

### Amino Acid Disorders

- **PKU**  
Charleston Birthplace  
East Cooper Medical Center  
Grand Strand Medical Center  
Labors of Love Birth Center  
McLeod Health  
MUSC  
Spartanburg Medical Center  
St. Francis Eastside  
Summerville Medical Center

- **Homocystinuria**

Prisma Health Richland

### Acylcarnitine Disorders

- **LCHAD**  
AnMed
- **MCADD**  
Aiken Regional Medical Center  
AnMed Health  
Lexington Medical Center  
Prisma Health Patewood  
Spartanburg Medical Center
- **CUD**  
Prisma Health Greenville
- **CPT1A Deficiency**  
MUSC
- **Galactosemia**  
Prisma Health Baptist
- **Congenital Adrenal Hyperplasia**  
Prisma Health Baptist  
Spartanburg Medical Center
- **Congenital Hypothyroidism**  
Aiken Regional Med Center  
Bon Secours St. Francis  
Conway Medical Center Grand Strand  
Lexington Medical Center  
Piedmont Medical Center  
Prisma Health Greenville  
Prisma Health Oconee  
Prisma Health Richland  
Prisma Health Tuomey  
Self Regional  
Summerville Med Center

- **Cystic Fibrosis**  
Aiken Regional Med Center  
AnMed Health  
Coastal Carolina  
East Cooper Medical Center  
Prisma Health Greer  
Prisma Health Patewood  
Prisma Health Richland  
Spartanburg Regional Medical Center
- **Hemoglobin disorders**  
Aiken Regional Med Center  
AnMed Health  
Beaufort Memorial  
Bon Secours St. Francis Xavier  
Carolina Pines  
Colleton Medical Center  
Conway Medical Center  
Kershaw Health  
Lexington Medical Center  
McLeod Health Clarendon  
McLeod Health Loris  
MUSC Charleston  
MUSC Florence  
Prisma Health Baptist  
Prisma Health Baptist Parkridge  
Prisma Health Greenville  
Prisma Health Tuomey  
Regional Medical Center  
Roper St. Francis Mt. Pleasant  
Roper St. Francis Berkeley  
Self Regional  
Spartanburg Regional Medical Center  
St. Francis Eastside  
Tidelands Georgetown  
Tidelands Waccamaw
- **SCID**  
McLeod  
Prisma Health Baptist

## EDUCATIONAL INFORMATION:

**Are you educating parents about Newborn Screening?**

Visit [scdhec.gov/health-professionals/newborn-screening](https://scdhec.gov/health-professionals/newborn-screening) to find our educational handouts for parents and providers

**Are you in need of NBS brochures (ML-000032, Eng. and ML-025096, Spa.)?**

Visit [scdhec.gov/about-dhec/educational-materials-library-product-order-site](https://scdhec.gov/about-dhec/educational-materials-library-product-order-site).

**Are you in need of NBS collection forms?**

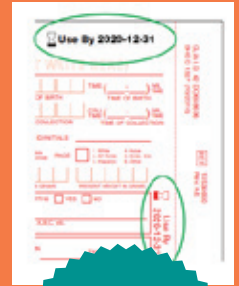
You can now email [PHL-supply@dhec.sc.gov](mailto:PHL-supply@dhec.sc.gov) to receive collection forms for your office or facility or call 803-896-0913.

### Training Video

The SC DHEC NBS laboratory now has a short 5-minute video to assist with proper collection and handling of the newborn screening forms. You can view this video on Youtube via the following link: [youtube.com/watch?v=5uGS0Xyh6XQ](https://youtube.com/watch?v=5uGS0Xyh6XQ).

### Schedule a Training

To schedule either a virtual or in-person training on specimen collection, packaging, shipping, or receive an emailed copy of the resources listed above, please email Amanda Jenkins at [jenkinaj@dhec.sc.gov](mailto:jenkinaj@dhec.sc.gov).



**NOTE:**  
The next expiring batch of filter paper expires 12-31-2021

## CONTACT US. WE'RE HERE TO HELP!

### DHEC Newborn Screening Program:

(803) 898-0767

### Newborn Screening Lab:

(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](mailto:newbornscreening@dhec.sc.gov) with your suggestions.

