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.

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 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 Epié 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).

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.

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%

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

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!
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 Patwood
  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 Patwood
  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 to find our educational handouts for parents and providers

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

Are you in need of NBS collection forms?
You can now email 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.

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.

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 with your suggestions.