



Newborn Screening News

Spring 2019

The Michigan Department of Health and Human Services (MDHHS) Newborn Screening Follow-up Program works together with the State Newborn Screening Laboratory and coordinating centers to find and treat infants who need early medical care.



NBS Quarterly Reports and Stellar Performance

During the fourth quarter of 2018, six hospitals met all six of the NBS performance goals. We would like to congratulate the following hospitals on their impressive efforts!

- Beaumont Hospital—Troy
- Bronson Methodist Hospital
- Henry Ford Allegiance Health
- Lakeland of Niles
- Munson Healthcare Cadillac Hospital
- UP Health System—Portage

Performance Goals for NBS Quarterly Reports

1. <2% of screens are collected >36 hours after birth
2. >90% of screens arrive in the state laboratory by the appropriate day
3. <1% of screens are unsatisfactory
4. >95% of electronic birth certificates have the NBS card number recorded
5. >90% of specimens have a returned BioTrust for Health consent form that is completed appropriately
6. >90% of newborns with a dried blood spot have pulse oximetry screening results reported
7. >1% of specimens have errors in birth date/time and/or specimen collection date/time on the NBS card

We encourage you to use the information in the quarterly reports to improve your part of the NBS system. If you have any questions, please call the NBS Follow-up Program at 517-335-4181.

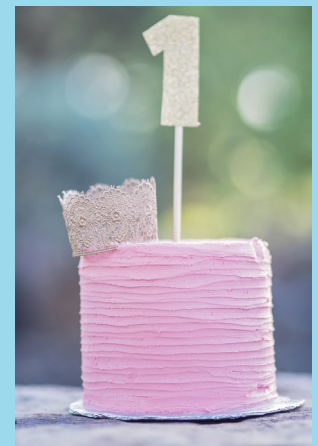
In this newsletter:

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Newborn Screening Testing on Infants more than One Year

Periodically the Newborn Screening Follow-up Program receives calls about newborn screening testing on infants more than one year of age. These are often cases where the family moves here from another country or the child is adopted from another country. The Michigan Newborn Screening Laboratory is certified to screen infants up to one year of age.

For cases where the infant is greater than a year of age, newborn screening can be ordered directly through PerkinElmer Genetics. Their kit is called StepOne Newborn Screening packet and can be ordered by providers through their website or by calling 866-463-6436.



NBS Follow-up Program Contact Information
Phone: 517-335-4181
Email: newbornscreening@michigan.gov



Spotlight on Unsatisfactory Specimens

LAYERED

The state newborn screening laboratory received 1,515 unsatisfactory first and repeat sample specimens in 2018. Of those, 759 (50 percent) were deemed unsatisfactory due to layering (examples shown below). NBS tests are standardized based on a single layer of blood. Layering can result in either false positive or false negative determinations.

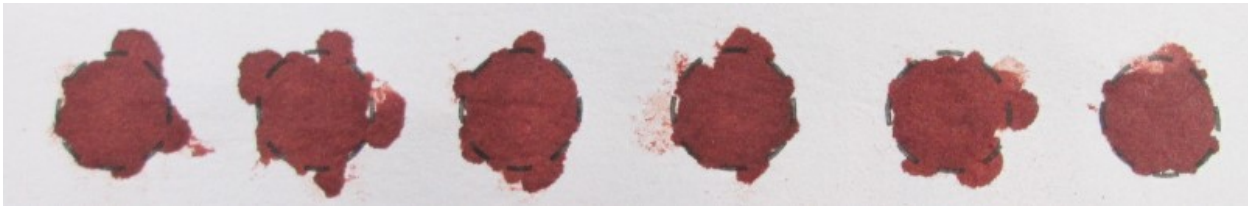
Points to remember when collecting a NBS specimen:

1. Wipe away the first drop of blood
2. Apply *only one large drop of blood* to each preprinted circle
3. Apply blood to *only one side* of the card
4. Make sure the blood has soaked through to the other side

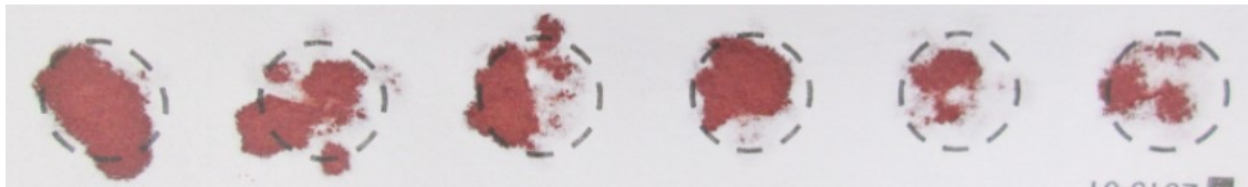
Unsatisfactory specimens can result in:

- Infant distress caused by the need for a repeat specimen collection
- Additional work for hospital and NBS staff
- Unnecessary burden on parents who have to bring their baby back for a repeat screen
- Delayed valid test results that could have a negative impact on the health of the baby
- Increased cost to the hospital

Lois Turbett is available to work with any hospital staff that request help with specimen collection. Contact Lois by phone toll-free: 866-673-9939 or by email: TurbettL@michigan.gov.



This is the front of a layered specimen. More than one drop of blood was applied to each circle.



This is the back of the same layered specimen. Note how layering the blood prevented it from soaking through evenly to the back.

Critical Congenital Heart Disease Online Training Module



Great news! The Newborn Screening Program has partnered with Michigan Public Health Institute (MPHI) to create an online training module for critical congenital heart disease. Nurses are awarded one continuing education unit (CEU) upon

completion of the course. Find the course at www.Michigan.gov/NewbornScreening. Click on "[Resources for hospitals and health professionals](#)" then scroll down to "Trainings" and click on "[The Newborn Screening Educational Online Tutorial](#)".



Screens for Transferred Newborns

Keeping track of the newborn screening (NBS) status can be challenging when infants are transferred. The birth hospital is responsible for ensuring that NBS specimens are collected on all newborns and sent to the NBS Laboratory regardless of age. However, extenuating circumstances may interfere with collection of the screen. Communication is critical between the birth hospital and receiving facility to ensure the infants are screened. The responsibilities of each hospital are listed below.

Birth Hospital:

- Notify receiving facility of NBS status
- Include verification of screen in transfer paperwork
- Write 'transfer to' and name of receiving hospital on top of NBS card
- Do not send incomplete NBS card to receiving hospital with infant
 - * Submit card for replacement to the NBS Program

Receiving Hospital:

- Verify the NBS status of all transferred newborns
- Collect screen if:
 - * Initial screen was collected prior to 24 hours
 - * NBS status cannot be verified



Early Hearing Detection and Intervention (EHDI) Program

A family refused the blood spot test but not the hearing test. What should I do?



EHDI recommends filling out the initial hearing results on the EHDI reporting form. It is located at https://www.michigan.gov/documents/FORMAUDMED_53429_7.pdf. After it is filled out, fax it to EHDI at 517-763-0183 or mail the form in with the rest of your hearing cards. This same form can also be used if the hearing card was lost.

A baby had more than one blood spot test, what should I do with the hearing results?

The final hearing results can be written on either hearing card. The EHDI Program will ensure the results are matched with the correct baby. If you send in both hearing cards, please do not staple the cards together, as this will jam the card scanner.

If you have any questions regarding newborn hearing screening, please contact Michelle Garcia at 517-335-8878 or garciam@michigan.gov.



Perinatal Hepatitis B Update

It is critical for the Perinatal Hepatitis B Prevention Program (PHBPP) to identify hepatitis B surface antigen (HBsAg) positive women prenatally, so that their infants receive the appropriate prophylaxis at birth. Babies born to HBsAg-positive women need to receive hepatitis B immune globulin (HBIG) and hepatitis B vaccine within 12 hours of birth. If the PHBPP is not made aware of these HBsAg-positive moms prenatally, we may miss the opportunity to protect their babies at birth. Approximately 6 percent of our cases are identified through mom's HBsAg status being documented as positive on the newborn screening (NBS) card. However, often mom's HBsAg test date and results are blank.

HEPATITIS B SURFACE ANTIGEN (HBsAg)						RESULT
TEST DATE						
M	M	D	D	Y	Y	<input type="radio"/> POSITIVE
						<input type="radio"/> NEGATIVE

To continue to ensure all babies receive the appropriate prophylaxis, please make sure to complete the field with mom's HBsAg test date and result, prior to submission to MDHHS. For more information, please contact Pat Fineis at 517-335-9443 or at fineisp@michigan.gov.

Upcoming Holiday Courier Schedule

Lower Peninsula Hospitals:

Monday, May 27 – holiday/Sunday schedule
Thursday, July 4, 2019 – holiday/Sunday schedule
Monday, September 2, 2019 – holiday/Sunday schedule

Upper Peninsula Hospitals:

Monday, May 27, 2019 – no UPS pickup
Thursday, July 4, 2019 – no UPS pickup
Monday, September 2, 2019 – no UPS pickup



TECHNICAL ASSISTANCE

Lois Turbett, NBS nurse consultant, is available to work with staff in any hospital that requests help with specimen collection. She can be reached toll-free at 866-673-9939 or by email at turbettl@michigan.gov to answer your questions. Kristen Thompson, NBS Coordinator, is also available to work with hospitals on CCHD pulse oximetry screening and reporting and can be reached at thompsonk23@michigan.gov. Together we can achieve our goal that all children diagnosed through newborn screening receive prompt and careful treatment in order to live the healthiest lives possible.

Please remember to share the quarterly newsletter with staff!

If you have questions please contact the NBS Follow-up Program at 517-335-4181 or newbornscreening@michigan.gov or visit our website at www.Michigan.gov/NewbornScreening