



# Michigan Department of Community Health

# Newborn Screening News

Winter 2015

*The Michigan Department of Community Health (MDCH) Newborn Screening Follow-up Program works together with the State Newborn Screening Laboratory to find and treat infants who need early medical care.*

## Celebrate 50 years of Newborn Screening!

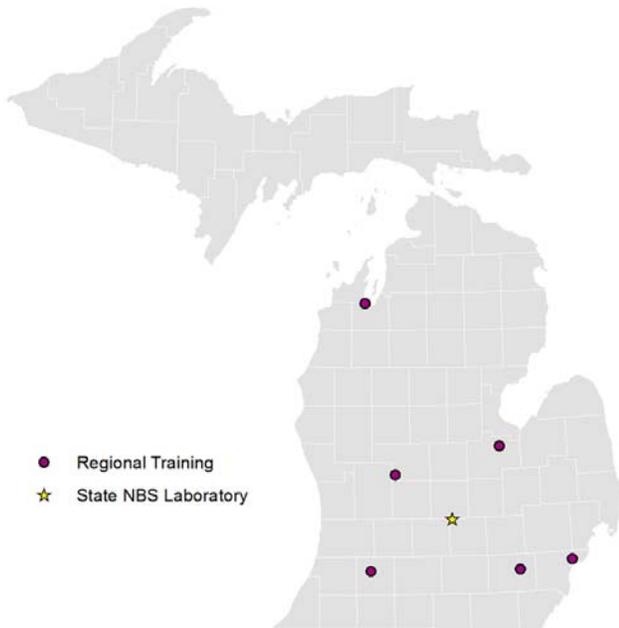


Throughout 2015, Michigan will be celebrating its 50th Anniversary of Newborn Screening. This yearlong event will acknowledge all of the hard work done by hospital staff, the Michigan Newborn Screening Laboratory, Follow-Up and Medical Management centers as well as by the pioneers of Michigan screening, all of which has led to improving and saving the lives of newborns across the state.

If you would like to host an event during the year or want materials to post around your hospital, please contact Kristy Tomasko at (517) 241-0332 or by email at [tomaskok@michigan.gov](mailto:tomaskok@michigan.gov).

Events will be occurring across the state. Up to date details can be found at: [www.michigan.gov/newbornscreening](http://www.michigan.gov/newbornscreening).

## Regional Training Review



Trainings were provided this past fall by the MDCH Newborn Screening (NBS) Program at six regional sites throughout the Lower Peninsula. A total of 109 people representing 35 hospitals attended. Topics included NBS updates, screening for critical congenital heart disease, the genomics of NBS, frequently asked questions about NBS specimens, improving specimen transit times, how to use performance metrics to improve the NBS process, and an overview of metabolic disorders.

The NBS Program plans to hold similar trainings every two years. It's not too early to start thinking about topics you would like to hear about in 2016. Send your ideas to Lois Turbett, [turbettl@michigan.gov](mailto:turbettl@michigan.gov) or call her at 517-335-1966. What, you don't want to wait until 2016? No problem. Lois is willing to visit you and your staff to discuss any NBS topic that interests you.

Michigan Department  
of Community Health



Rick Snyder, Governor  
Nick Lyon, Director

### NBS Follow-up Program Contact Information

Phone: 517-335-4181

Email: [newbornscreening@michigan.gov](mailto:newbornscreening@michigan.gov)

# Hospital-specific Cutoffs for NBS Specimen Transit Time

Delays in blood spot specimen arrival at the state laboratory may contribute to irreversible health problems for infants with a disorder requiring immediate diagnosis and treatment. Prompt pickup and delivery of NBS specimens reduces turnaround time from birth to reporting of results and initiation of treatment. NBS Program staff created hospital-specific cutoffs based on specimen collection time and each hospital's courier pickup days and times. Any specimen collected more than 5 hours before the designated pickup time for that day should be sent out the same day, along with the remaining specimens collected the previous day. These cutoffs help us monitor transit time more closely to better pinpoint factors that contribute to delays.

The tables below provide examples of hospital-specific cutoffs.

## Saturday courier service (UP only):

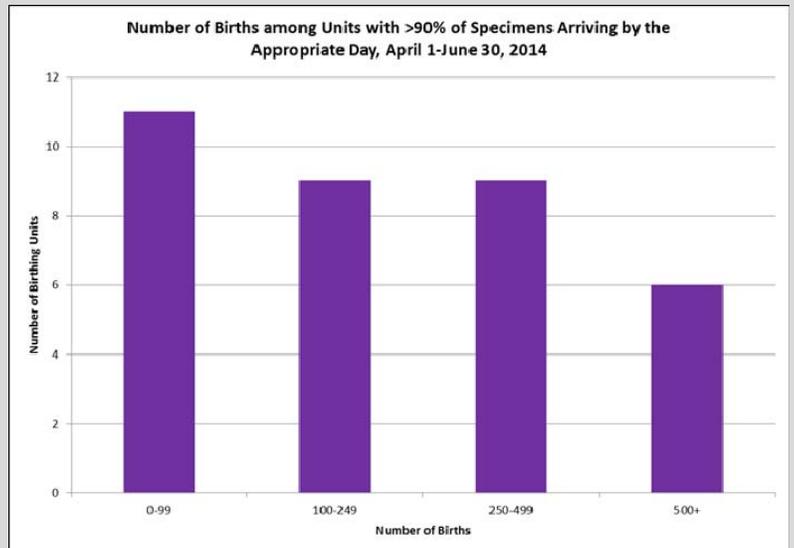
Assume Hospital 1 has pickup Monday-Friday at 5:00 pm and Saturday at 1:00 pm:

Specimen Collection Time	Should arrive on or before*
Friday after 12:00 pm - Saturday at 8:00 am	Monday
Saturday after 8:00 am - Monday at 12:00 pm	Tuesday
Monday after 12:00 pm - Tuesday at 12:00 pm	Wednesday
Tuesday after 12:00 pm - Wednesday at 12:00 pm	Thursday
Wednesday after 12:00 pm - Thursday at 12:00 pm	Friday
Thursday after 12:00 pm - Friday at 12:00 pm	Saturday

## Sunday courier service:

Assume Hospital 2 has pickup Monday-Friday at 9:00 pm and Sunday at 3:00 pm:

Specimen Collection Time	Should arrive on or before*
Friday after 4:00 pm - Sunday at 10:00 am	Monday
Sunday after 10:00 am - Monday at 4:00 pm	Tuesday
Monday after 4:00 pm - Tuesday at 4:00 pm	Wednesday
Tuesday after 4:00 pm - Wednesday at 4:00 pm	Thursday
Wednesday after 4:00 pm - Thursday at 4:00 pm	Friday
Thursday after 4:00 pm - Friday at 4:00 pm	Saturday



\*Specimens could arrive one business day earlier if a specimen is processed in less than 5 hours after collection.

- For the 26,523 first sample specimens during the 2<sup>nd</sup> quarter of 2014, 79% were received in the NBS laboratory on or before the appropriate day.
- 35 birthing units met the goal of >90% of specimens received on or before the appropriate day. These 35 units included 4 NICUs, 2 SCNs, and 29 regular nurseries.
- The hospital units meeting the goal varied in size (see graph). The smallest regular nursery meeting the goal had fewer than 50 births and the largest nursery had over 1,000 births during the quarter. Units meeting the goal submitted an average of 283 specimens during the quarter.

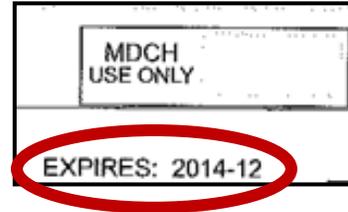
In order to increase the number of specimens received in a timely manner, all birthing units are advised to learn their pickup times for each day, so staff can ensure all specimens are in the designated location before the courier arrives. Hospitals may contact Lois Turbett, NBS Nurse Consultant, with any questions about the courier service. Please contact Lois if you need to verify your courier pickup time or to let her know if the courier is arriving before the scheduled pickup time. She can be reached at 1-866-673-9939 or [turbettl@michigan.gov](mailto:turbettl@michigan.gov).

## Spotlight on Unsatisfactory Specimens - Expired Cards

Please check your inventory for expired first and repeat sample cards that may still be in circulation. You can find the expiration date in the lower right-hand corner of the NBS cards. Cards may be used through the last day of the month in which they expire. Samples collected after the expiration date will be found unsatisfactory and a repeat screen will be requested.

Points to remember when collecting the 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



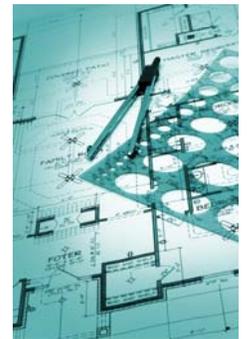
Unsatisfactory specimens can result in:

- 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

## NBS Lab Renovations

Finally, the Newborn Screening Laboratory has completed major renovations for 2014. These renovations helped reorganize the space to prepare for the expansion of newborn molecular screening capacity as well as upgrade the energy efficiency throughout the building.

Renovations were completed successfully without a disruption to the daily testing. After incorporating these changes, the laboratory is better equipped for installation of new instrumentation and more efficient operations. This was also necessary to accommodate new tests added to the screening panel for the Michigan program.



## NBS Quarterly Reports and Stellar Performance

During the third quarter of 2014, five hospitals met all six of the NBS performance goals. We would like to congratulate the following hospitals on their impressive efforts!

- Bronson Battle Creek Hospital
- Huron Medical Center
- Otsego Memorial Hospital
- Promedica Bixby Hospital
- Mercy Memorial Hospital Corporation—Monroe

### 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

We hope you will be able to use 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 1-517-335-4181.

**SAVE THE DATE!**



# Congenital Heart Defect Awareness Week

February 7-14, 2015



## Important Reminders!

### **NEW Card Ordering System UPDATE!**

The anticipated go-live date for the web-based application to purchase newborn screening cards or order educational materials has been pushed back and is tentatively scheduled for early 2015. The system will require payment (either by e-check or credit card) prior to the shipment of any newborn screening cards. Hospital purchasing departments will be notified of the new procedure.

The webpage for ordering cards and materials will be accessible directly as well as through a link from the newborn screening website. Initial validation processes as well as detailed instructions regarding web navigation will be provided once finalized.

### **TECHNICAL ASSISTANCE**

Lois Turbett 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](mailto:turbettl@michigan.gov) to answer your questions. Keri Urquhart is also available to work with hospitals on CCHD pulse oximetry screening and reporting, and can be reached at [urquhartk1@michigan.gov](mailto:urquhartk1@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](mailto:newbornscreening@michigan.gov) or visit our website at [www.michigan.gov/newbornscreening](http://www.michigan.gov/newbornscreening)