

# Welcome to the 2022 NBS Conference!

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Newborn Screening Follow-up Section  
MDHHS



# Housekeeping Items

- \* Stay muted, so participants aren't hearing background noise
- \* Enter any questions in the chat or email [newbornscreening@michigan.gov](mailto:newbornscreening@michigan.gov)
- \* Remember to check-in one time during the day. This will assist us in tracking attendance and ensure you receive a post-conference evaluation. The link to check in is <https://www.research.net/r/NBSConferenceAttendance> and is also available in the chat.

# Newborn Screening Updates



# NBS in Michigan

- 1965: MI NBS Program began
- 2022: MI NBS panel includes over 50 disorders, plus hearing and critical congenital heart disease screening
  - Metabolic Disorders
  - Endocrine Disorders
  - Hemoglobinopathies
  - Cystic Fibrosis
  - Primary Immune Deficiency Disorders
  - Lysosomal Storage Disorders
  - X-linked Adrenoleukodystrophy (X-ALD)
  - Spinal Muscular Atrophy (SMA)
  - Coming ...Guanidinoacetate Methyltransferase (GAMT) deficiency



# Cost of NBS

- \* Fiscal Year 2022
  - \* \$144.50 for first sample card
  - \* \$131.05 for repeat sample card
  - \* 5.4% increase due to Detroit Consumer Price Index
- \* Fiscal Year 2023
  - \* GAMT deficiency (\$0.39) fees anticipated for inclusion
- \* Fees entirely support:
  - \* Courier
  - \* Laboratory testing
  - \* Follow-up and coordinating centers

# Blood spot screening in MI - 2020

- Infants screened
  - 102,236 infants screened
- Infants diagnosed
  - 304 diagnosed with one of the disorders
  - One infant diagnosed per 336 screened
- 2020 Annual Report will be available at [www.michigan.gov/newbornscreening](http://www.michigan.gov/newbornscreening) when finalized

# Program Updates



# New Operations

- \* Have shifted to working remotely
- \* Faxes are received in real-time and monitored Monday-Saturday
- \* Mail is being opened two days per week
- \* Main NBS phone line should be answered 8 am – 4 pm Monday - Friday and 8 am – 3:30 pm on Saturdays and select holidays



# Quality Assurance Reports



STATE OF MICHIGAN

GRETCHEN WHITMER  
GOVERNOR

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
LANSING

ELIZABETH HERTEL  
DIRECTOR

## NEWBORN SCREENING QUALITY ASSURANCE NOTIFICATION

Covering the period:10/1/2021-12/30/2021

This quarterly report provides data on hospital performance measures. The report gives your hospital monthly and quarterly totals on initial specimens received and also provides a statewide comparison. The Newborn Screening (NBS) Follow-up Program selected six performance measures and set a goal for each measure.

The goals are:

- **Late Screens:** Less than 2% of screens collected greater than 36 hours after birth

- **Receipt by Appropriate Day:** Greater than 90% of screens arrive in state laboratory by the appropriate day
- **Unsatisfactory Screens:** Less than 1% of screens are unsatisfactory (Unsatisfactory specimens based on initial and repeat screens received)
- **Newborn Screening Card Number:** Greater than 95% of electronic birth certificates have the newborn screening card number recorded
- **Returned BioTrust for Health Consent Forms:** At least 90% of specimens have a returned BioTrust for Health consent form that is completed appropriately
- **NBS Cards with Incorrect Demographic Data:** Less than 1% of specimens have errors in the demographic data (i.e. dates, times, birth weights, etc) on the NBS card

### 1 STATE

	October			November			December			Quarter		
<i>Total number specimens for your hospital</i>	8,330			8,117			8,394			24,841		
<i>Total number of specimens for state</i>	8,330			8,117			8,394			24,841		
	<i>n</i>	<i>%</i>	<i>Goal</i>	<i>n</i>	<i>%</i>	<i>Goal</i>	<i>n</i>	<i>%</i>	<i>Goal</i>	<i>n</i>	<i>%</i>	<i>Goal</i>
<i>Late Screens for your hospital</i>	46	0.6	Met	43	0.5	Met	58	0.7	Met	147	0.6	Met
<i>Late Screens for state</i>	46	0.6	Met	43	0.5	Met	58	0.7	Met	147	0.6	Met
<i>Receipt by Appropriate Day for your hospital</i>	7,612	91.4	Met	7,447	91.7	Met	7,818	93.1	Met	22,877	92.1	Met
<i>Receipt by Appropriate Day for state</i>	7,612	91.4	Met	7,447	91.7	Met	7,818	93.1	Met	22,877	92.1	Met
<i>Unsatisfactory Screens for your hospital</i>	109	1.2	Not Met	159	1.8	Not Met	158	1.7	Not Met	426	1.6	Not Met
<i>Unsatisfactory Screens for state</i>	109	1.2	Not Met	159	1.8	Not Met	158	1.7	Not Met	426	1.6	Not Met
<i>Birth certificates* for your hospital</i>	8,476			8,281			8,523			25,280		
<i>Birth certificates* for state</i>	8,476			8,281			8,523			25,280		
<i>Newborn Screening Card Number for your hospital</i>	8,238	97.2	Met	8,036	97	Met	8,206	96.3	Met	24,480	96.8	Met
<i>Newborn Screening Card Number for state</i>	8,238	97.2	Met	8,036	97	Met	8,206	96.3	Met	24,480	96.8	Met
<i>Returned BioTrust for Health Consent Forms for your hospital</i>	7,222	86.7	Not Met	6,947	85.6	Not Met	7,021	83.6	Not Met	21,190	85.3	Not Met
<i>Returned BioTrust for Health Consent Forms for state</i>	7,222	86.7	Not Met	6,947	85.6	Not Met	7,021	83.6	Not Met	21,190	85.3	Not Met
<i>NBS cards with incorrect demographic data for your hospital</i>	214	2.6	Not Met	168	2.1	Not Met	172	2	Not Met	554	2.2	Not Met
<i>NBS cards with incorrect demographic data for state</i>	214	2.6	Not Met	168	2.1	Not Met	172	2	Not Met	554	2.2	Not Met

\*This is a preliminary estimate excluding all birth certificates with NICU admission marked on the birth certificate.

The number of birth certificates may be different than the number of specimens due to several factors including screening refusals, increased length of time between birth and release of birth certificate to the State, and inclusion of birth certificates of infants in the NICU or SCN if that information was not marked on the birth certificate.

# NBS Card Number Metric


- \* Changing from 7 digits on EBC to 7 accurate digits present
- \* ~97% of birth certificates contain a 7 digit number
  - \* ~5% of the card numbers are inaccurate

# Educational Site Visits

- \* Being conducted virtually
- \* Typically last ~2 hours
- \* NBS nurse coordinator, NBS CCHD program coordinator, NBS operations coordinator, and BioTrust coordinator attend
- \* Goal: Meet with every birth hospital at least once every three years
- \* Email [NewbornScreening@Michigan.gov](mailto:NewbornScreening@Michigan.gov) to schedule or respond when contacted

# New NBS Report Request Form

- \* Used when the requestor is not listed as the primary care provider on the NBS card or in MCIR
- \* Available on NBS website
  - \* Resources for Hospitals and Health Professionals
  - \* Forms
    - \* Provider Access to Laboratory Results



Phone: 517-335-4181  
Fax: 517-335-9419 or 517-335-9739

## NBS Report Request Form

Please be sure ALL FIELDS are filled in before faxing your request.  
Fax this form, along with your cover page, to 517-335-9419 or 517-335-9739.

**CHILD/PATIENT INFORMATION**

Child/patient name	First Name:	Last Name:
Child/patient date of birth	Sex (circle one)      F      M	
Birth facility/city		
Baby from multiple birth delivery	Circle One      Yes      No	Specify birth order (e.g., Twin 1, Twin B, Triplet C)
Mother's name at time of patient's birth	First Name:	Last Name:
Mother's alternate last name(s)		

**PROVIDER INFORMATION**

Requestor's name	First Name:	Last Name:
Facility name/city		
Health care provider's name	First Name:	Last Name:
Health care provider's NPI#:	Credential: (MD, DO, NP, etc.)	
Direct phone number (+ extension) of requestor/provider		
Fax number where report is to be sent		

*The requested document(s) contains confidential patient health information that is legally privileged. This information is intended only for the use of the individual or entity named above. Any unauthorized review, use, disclosure, or distribution of this communication(s) is expressly prohibited.*

*I certify the child listed above is my patient and hereby grant permission to the Michigan Department of Health and Human Services Newborn Screening Program to release the newborn screening record, including laboratory test reports of the child stated above, for diagnosis and treatment purposes only.*

\_\_\_\_\_  
Signature of Health Care Provider

\_\_\_\_\_  
Date

**Please return this completed document with your office fax cover page to the MDHHS Newborn Screening Program at 517-335-9419 or 517-335-9739.**

To access this form visit [www.michigan.gov/newbornscreening](http://www.michigan.gov/newbornscreening) and select "resources for hospitals and health professionals"

# NBS Card Update

Newborn Screening - Michigan Department of Health and Human Services  
Bureau of Laboratories P.O. Box 30689 3350 N. MLK Jr. Blvd. Lansing MI 48909  
DCH-1153 Printed: 10/2021

DON'T USE RED INK

**BABY**

LAST NAME \_\_\_\_\_ FIRST NAME \_\_\_\_\_ SEX  MALE  FEMALE  AMBIGUOUS

BIRTH DATE [M][M][D][D][Y][Y] BIRTH TIME (Military) [H][H][M][M] BIRTH WEIGHT (grams) \_\_\_\_\_ WKS GESTATION \_\_\_\_\_ SINGLE BIRTH  MULTIPLE BIRTH →  A  B  C  D ANTIBIOTICS?  NO  YES **MECONIUM ILEUS?  NO  YES**

COLLECTION DATE [M][M][D][D][Y][Y] COLLECTION TIME [H][H][M][M] COLLECTED BY: \_\_\_\_\_ NICU or SPECIAL CARE?  NO  NICU  SP CARE ANY RBC TRANSFUSION?  NO  YES → [M][M][D][D][Y][Y] TRANSFUSION DATE [H][H][M][M] TPN START DATE [M][M][D][D][Y][Y]

MEDICAL RECORD # \_\_\_\_\_ ETHNICITY  HISPANIC  NON-HISPANIC RACE  WHITE  AMERICAN INDIAN  MIDDLE EASTERN DESCENT  BLACK  ASIAN/PACIFIC ISLANDER  MULTI-RACIAL

TYPE OF COLLECTION:  Heel Stick  Venipuncture  Line Draw (central, other) \_\_\_\_\_ Type of Flush (heparin, saline, other) \_\_\_\_\_ OTHER FEEDING:  BREAST  MILK-BASE  SOY  NONE TPN / AMINO ACIDS  NO  YES

IF NOT BIRTH PARENT:  ADOPTIVE PARENT  FOSTER PARENT  ADOPTION AGENCY

**MOTHER**

LAST NAME \_\_\_\_\_ FIRST NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

MEDICAL RECORD # \_\_\_\_\_ BIRTH DATE [M][M][D][D][Y][Y] HEPATITIS B SURFACE ANTIGEN (HBsAg) TEST DATE [M][M][D][D][Y][Y] RESULT  POSITIVE  NEGATIVE

**PROVIDER**

LAST NAME \_\_\_\_\_ FIRST NAME \_\_\_\_\_ PHONE \_\_\_\_\_ FAX \_\_\_\_\_

**FIRST SAMPLE**

**SUBMITTER**

SUBMITTER NAME \_\_\_\_\_ PHONE \_\_\_\_\_ HOSPITAL CODE (if applicable) 00

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

BIRTH HOSPITAL (if different from submitter) \_\_\_\_\_ MDHHS USE ONLY \_\_\_\_\_

NOTES (ex: transfer, family history of NBS disorder, phototherapy)


DHHS USE ONLY

EXPIRES: 2026-10-31

LOT 114691 / 30510004

MDHHS  
By Authority of Act 568  
P.A. MCLA 333.5431  
PerkinElmer 226

3206001



SN


**CHECKLIST:**

- Newborn Screen
- Hearing Screen
- Pulse Oximetry Screen
- BioTrust Consent Form


DO NOT REMOVE OVERLAY

See attached instructions for specimen collection and sending.

Allow blood to dry for a minimum of 3 hours using the overlay for support. Close the overlay when dry. Send specimens at next courier pick-up.



Do not send specimens in plastic bags.



BIOHAZARD

# Important Reminders



# Stellar Performers

- \* Units that meet the goals for all 6 metrics highlighted in quarterly newsletter
- \* 4<sup>th</sup> Quarter 2021
  - \* Bronson Methodist Hospital
  - \* Henry Ford Jackson Hospital
- \* 1<sup>st</sup> Quarter 2022
  - \* Beaumont Hospital – Troy - NICU
  - \* Munson Healthcare Charlevoix

**Spring 2022**

Michigan Department of Health and Human Services  
**Newborn Screening News**

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 2021, two hospitals met all six of the NBS blood spot screening performance goals. We would like to congratulate the following hospitals on their impressive efforts!

- Bronson Methodist Hospital
- Henry Ford Allegiance Health

**Performance Goals for NBS Blood Spot Quarterly Reports**

1. Less than 2% of screens are collected >36 hours after birth.
2. Greater than 90% of screens arrive in the state laboratory by the appropriate day.
3. Less than 1% of screens are unsatisfactory.
4. Greater than 95% of electronic birth certificates have the NBS card number recorded.
5. Greater than 90% of specimens have a returned BioTrust for Health Consent form that is completed appropriately.
6. Greater than 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 517-335-4181.

**In this newsletter:**

- ✓ Spring NBS Conference Registration
- ✓ Missing Blood Spot Specimens
- ✓ Adoption and the NBS Card
- ✓ Adoption and HBsAg Results
- ✓ MDHHS Baby Fair
- ✓ BioTrust FAQ Resources
- ✓ CCHD Follow-up Emails
- ✓ GAMT Deficiency Screening
- ✓ MPS II Recommendation

During the fourth quarter of 2021, 20 hospitals met all three of the critical congenital heart disease (CCHD) screening performance goals. Ten hospitals had 100% of CCHD results reported for newborns with a blood spot screen. Congratulations to the following hospitals on their impressive efforts!

- UP Health System - Bell
- Ascension Borgess - SCN
- ProMedica Coldwater Regional
- McLaren Lapeer Region
- Munson Healthcare Otsego Memorial
- UP Health System - Portage
- OSF St. Francis
- Ascension St. Joseph
- Three Rivers Health
- My Michigan Medical Center – West Branch

**Performance Goals for CCHD Quarterly Reports**

1. At least 90% of newborns with a blood spot screen have pulse oximetry screen results reported.
2. At least 90% newborns with a blood spot screen have pulse oximetry screen results reported to the state less than 10 days after screen date.
3. At least 90% of newborns with a blood spot screen have pulse oximetry screen completed between 20 and 28 hours after birth.

NBS Follow-up Program Contact Information  
Phone: 517-335-4181  
Email: [NewbornScreening@Michigan.gov](mailto:NewbornScreening@Michigan.gov)

MDHHS

# NBS Cards

- \* Keep one month supply of NBS cards available at all times
- \* NBS cards can be replaced for free
  - \* Replacement form and directions are available in Appendix 6 of the NBS Guide for Hospitals

## APPENDIX 6 – NEWBORN SCREENING CARD REPLACEMENT FORM



Date: \_\_\_\_\_

Facility name: \_\_\_\_\_

Attention/Department: \_\_\_\_\_

Address: \_\_\_\_\_

City, state, zip: \_\_\_\_\_

Contact name: \_\_\_\_\_ Telephone: \_\_\_\_\_

Number of cards returned for replacement: \_\_\_\_\_

ID number(s) of the card(s) returned:


- This form should be filled out completely and mailed with the **white face sheet(s) only** of the card(s) intended for replacement to the address below. **It is not necessary to include the remaining portions of the kit.**
- If there is blood on the white face sheet, place it in a biohazard bag.
- **DO NOT send card replacement requests to the NBS Laboratory.** Failure to send your request to the address below may result in no replacement card being issued. Please note: Courier envelopes are for blood spot specimens. **DO NOT** use courier envelopes for card replacement requests.

SEND FACE SHEET(S) OF CARD(S) TO BE REPLACED AND THIS FORM TO:

Michigan Department of Health and Human Services  
Attention: Newborn Screening  
333 S. Grand Ave., 2<sup>nd</sup> floor  
PO Box 30195  
Lansing, MI 48909



# Updated or Additional Information for NBS Staff

- \* Hospital Discharge Sheet
- \* Notes Section on NBS cards

MICHIGAN NEWBORN SCREENING (NBS) FOLLOW-UP PROGRAM Hospital Discharge Sheet	
NBS web page <a href="http://www.michigan.gov/newbornscreening">http://www.michigan.gov/newbornscreening</a> Phone 517-335-4181 or 877-673-9939	
Fax updated information to: 517-335-9419 or 517-335-9739	
Place infant's hospital label here:	OR Print infant's information here: Name: _____ Date of birth: _____ Circle gender: boy girl ambiguous NBS card (KIT) number: _____
Hospital name: _____	Check nursery type: NBS hospital code: _____ Regular _____ NICU _____ SCN _____
Name of hospital infant transferred to: _____	
Infant's primary care provider (PCP): _____ <small>(fill in to infant after discharge)</small>	
PCP phone: _____	PCP fax: _____
Provide guardian contact information if infant is not released to the care of the mother: Guardian name: _____ Guardian address: _____ Guardian phone: _____	
Name of staff person completing form (see print): _____	
Date: _____	Phone: _____ Fax: _____
Notes: (e.g. parent would not permit NBS, infant has macronium levels, sibling has cystic fibrosis, etc.)	

# Hospital Contact Information Updates

- \* Inform NBS Program of any staff or contact changes
- \* Email changes to [NewbornScreening@michigan.gov](mailto:NewbornScreening@michigan.gov)
- \* Use form to provide updates

## Hospital Contact Updates

Accurate contact information is critical to the Newborn Screening (NBS) program effectiveness. Please review the contact information listed below for your hospital. Any edits, deletions, additions can be made in the right column.

Once complete, please return this form to Angie Aldrich, MDHHS NBS nurse consultant, at [aldricha1@Michigan.gov](mailto:aldricha1@Michigan.gov)

NBS Coordinator: Main contact for NBS related questions. This person facilitates communication between the hospital and the NBS Program, particularly for quality assurance activities and NBS education of hospital staff.	
Name/Title	
Phone	
Fax	
Email	

Back-up NBS Coordinator: Additional contact when NBS Coordinator is unavailable.	
Name/Title	
Phone	
Fax	
Email	

Lab Contact for NBS: Contact for hospital lab newborn screening concerns.	
Name/Title	
Phone	
Fax	
Email	

CCHD Contact: Contact for CCHD missed screens, IT concerns, and other CCHD concerns.	
Name/Title	
Phone	
Fax	
Email	

Courier Contact: Contact for courier concerns or updates	
Name/Title	
Phone	
Fax	
Email	

Early Contact: Contact for verification of demographic information for early specimens	
Name/Title	
Phone	
Fax	
Email	

Additional contact information or comments:

# Grand Rounds

- \* Staff are available to present at Grand Rounds
- \* Great way to connect with clinicians and provide updated information about NBS
- \* Email [newbornscreening@Michigan.gov](mailto:newbornscreening@Michigan.gov) if any opportunities are available

# General NBS Information

- \* Phone: 517-335-4181
- \* Fax: 517-335-9419
- \* Email: [newbornscreening@michigan.gov](mailto:newbornscreening@michigan.gov)
- \* Websites:
  - \* [www.michigan.gov/newbornscreening](http://www.michigan.gov/newbornscreening)
  - \* [www.michigan.gov/biotrust](http://www.michigan.gov/biotrust)
  - \* [www.michigan.gov/cchd](http://www.michigan.gov/cchd)
  - \* [www.michigan.gov/ehdi](http://www.michigan.gov/ehdi)
- \* Mary Kleyn, Manager
  - \* [kleynm@michigan.gov](mailto:kleynm@michigan.gov)
  - \* 517-335-9296

