

State Hygienic Laboratory

Newborn Screening Dried Bloodspot Collection Form- 7 spot card

November 11, 2025

Current Newborn Screening Card

South Dakota		South Dakota Newborn Screening Program Form											
INFANT	<input type="checkbox"/> Initial Screen <input type="checkbox"/> Repeat Screen	Collection Date Year Month Day			Collection Time (24 hour clock)	Collector	Infant's Medical Record #						
	Infant's Last Name						Infant's First Name						
	Infant's Birth Date Year Month Day		Infant's Birth Time (24 hour clock)		Infant's Gender <input type="checkbox"/> M <input type="checkbox"/> F		Infant's Street Address			Apartment			
	City		State		Zip Code		If multiple A,B...etc		Gestational Age at Birth		Feeding Method (Check all that apply) <input type="checkbox"/> Breast Milk <input type="checkbox"/> Formula <input type="checkbox"/> TPN <input type="checkbox"/> None of the above		
GUARDIAN	Current Weight (g)	Transfused Before Collection Any Blood Products <input type="checkbox"/> Yes <input type="checkbox"/> No		If Yes, Date of Last Transfusion Year Month Day			<input type="checkbox"/> Check if Infant is in NICU		<input type="checkbox"/> Check if Infant has Meconium Ileus				
	<input type="checkbox"/> Guardian Mother <input type="checkbox"/> Other Please Specify	Guardian's Last Name				Guardian's First Name							
	Guardian's Birth Date Year Month Day		Guardian's Gender <input type="checkbox"/> M <input type="checkbox"/> F		Guardian's Phone Number								
	Birth Mother's Maiden Name												
HEALTH CARE PROVIDER	Ordering Health Care Provider's Last Name			Ordering Health Care Provider's First Name			Ordering Health Care Provider's Phone Number						
	Facility of Birth (Name, City, State)												
	Primary Care Provider's Last Name			<input type="checkbox"/> Check if same as above			Primary Care Provider's First Name			Primary Care Provider's Phone Number			
	Submitting Facility's Name						DO NOT WRITE IN THIS SPACE						
SUBMITTING FACILITY	Submitting Facility's Street Address												
	City		State		Zip Code								

Expiration Date 2029-05-31

Revvy™ 226 2029-05-31

Atlatom LOT 116265 / 30570008

IA2081901

IA2081901

INSP USE ONLY

Completely Fill All Circles With Blood

ALLOW TO AIR DRY FOR AT LEAST 3 HOURS

DO NOT HEAT

Newly Designed Newborn Screening Card

South Dakota Newborn Screening Program Form									
903™ Expiration Date REF 10539765 Rev AC IVD South Dakota	<input type="checkbox"/> Initial Screen <input type="checkbox"/> Repeat Screen <input type="checkbox"/> Mother's Screen			Collection Date Year _____ Month _____ Day _____		Collection Time (24 hour clock) _____	Collector Initials _____	Infant's Medical Record # _____	
	Infant's Last Name _____			Infant's First Name _____					
	Infant's Birth Date Year _____ Month _____ Day _____		Infant's Birth Time (24 hour clock) _____		Infant's Sex <input type="checkbox"/> M <input type="checkbox"/> F		Infant's Race (Check all that apply) <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Asian <input type="checkbox"/> American Indian/Alaskan Native <input type="checkbox"/> Hispanic <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> Unknown/Other State <input type="checkbox"/> Non Hispanic		
Infant's Street Address _____ City _____ Zip Code _____									
Birth Order If multiple A, B ...etc _____ Gestational Age at Birth (Whole Weeks) _____ Current Weight (grams) _____ Feeding Method (Check all that apply) <input type="checkbox"/> Breast Milk <input type="checkbox"/> Formula <input type="checkbox"/> TPN <input type="checkbox"/> None of the above If Applicable, Date of Last Transfusion Year _____ Month _____ Day _____ <input type="checkbox"/> Check if infant is in NICU <input type="checkbox"/> Check if Infant has Meconium Ileus									
Guardian Information: <input type="checkbox"/> Mother <input type="checkbox"/> Other Please Specify _____ Guardian Last Name _____ Guardian First Name _____ Guardian Birth Date Year _____ Month _____ Day _____ Guardian Sex <input type="checkbox"/> M <input type="checkbox"/> F Guardian Phone Number _____ Birth Mother's Maiden Name _____									
Ordering Health Care Provider's Last Name _____ Ordering Health Care Provider's First Name _____ Ordering Health Care Provider's Phone Number _____ Ordering Health Care Provider's NPI _____ Facility of Birth (Name, City, State) _____ <input type="checkbox"/> Check if same as above - Primary Care Provider's Last Name _____ Primary Care Provider's First Name _____ Primary Care Provider's Phone Number _____									
Submitting Facility Name _____ DO NOT WRITE IN THIS SPACE Submitting Facility Street Address _____ City _____ State _____ Zip Code _____									

SN [Barcode] SN [Barcode]

IAXXXXXX IAXXXXXX

Completely Fill All Circles With Blood
ALLOW TO AIR DRY FOR AT LEAST 3 HOURS
DO NOT HEAT

INSP USE ONLY

LOT XXXXXXX WXXX YYYY-MM-DD

903™

What are the changes?



Diagram of a collection card form. The top section contains a barcode, the text "IAXXXXXXX", and instructions: "Completely Fill All Circles With Blood", "ALLOW TO AIR DRY FOR AT LEAST 3 HOURS", and "DO NOT HEAT". The bottom section contains fields for "LOT", "WXXX", "YYYY-MM-DD", and "INSP USE ONLY". There are seven dashed circles for blood collection. A vertical red line separates the top and bottom sections.

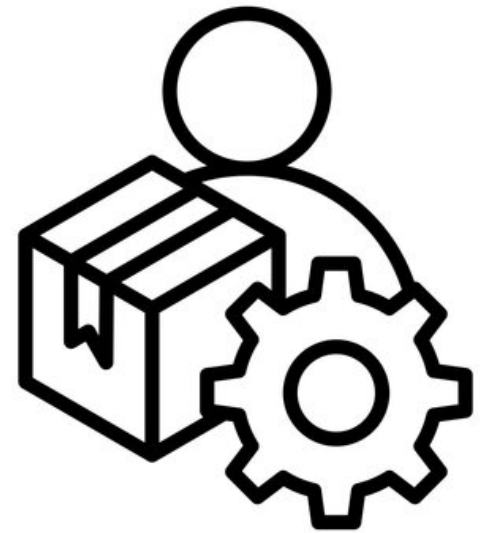
1. New Vendor
2. Increasing collection card blood requirements from 5 spots to 7.
3. Will be adding Race and Ethnicity check boxes
4. Updated language on the instructions on the back of the form.

• Why Now?

- Increased conditions added to the panel increases the need for blood
- Will be adding Race and Ethnicity to better track and serve underserved populations.
- Aiming to help lower poor-quality rate.

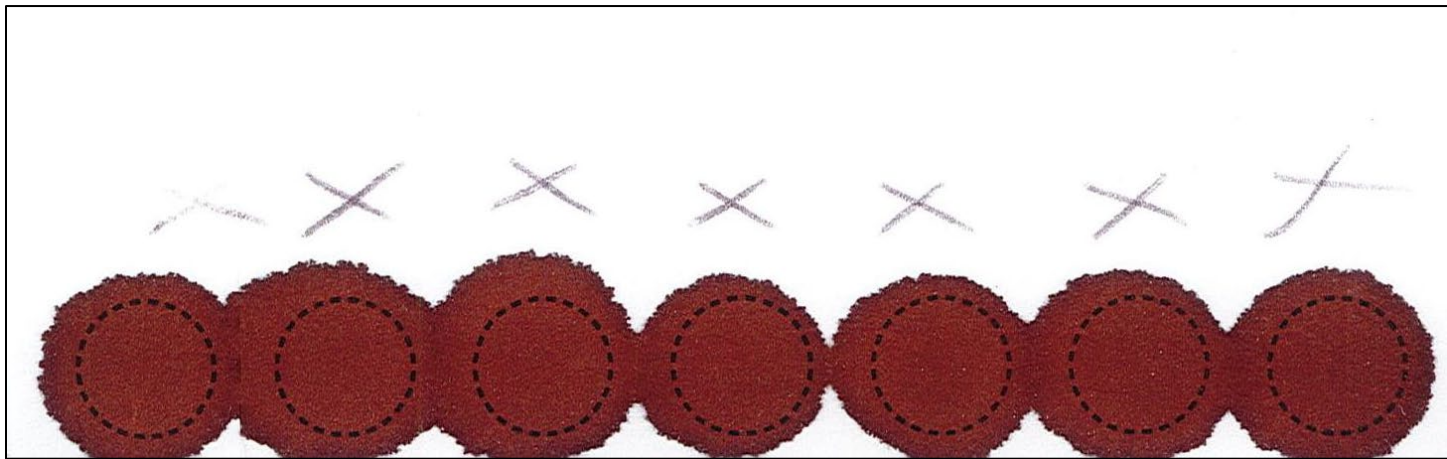
New manufacturing vendor

- A new vendor been selected as the new manufacturing vendor for the collection card.
- The previous vendor's card was frequently having longer absorption times for blood to soak through the card efficiently. We are hoping to see the average absorption time for each lot stabilize at a lower rate allowing for easier collection.



Why Staggered bloodspots?


- Iowa piloted the 7 spots cards designed in a straight line in early 2025 and saw an increased number of bloodspots all running into each other and being deemed unsatisfactory for layering



IOWA

- [illegible]

Phlebotomy 208: Arterial
CNS 13287 1/20/2021



NEWBORN SCREENING
SOUTH CAROLINA PUBLIC HEALTH LABORATORY
 8231 PARKLANE ROAD, COLUMBIA, SC 29223
 803-896-6874

Use By 2028-01-31

**APPLY BLOOD TO ONE SIDE OF CARD
ONE LARGE DROP PER CIRCLE**

01907001

01907001

01907001

LAB COPY

PHONE NUMBER

NBS TEST PANEL REQUESTED

☐ NBS TEST ☐ REPEAT NBS TEST ☐ PHE

DEHC LAB USE ONLY

BABY'S FIRST NAME

MOTHER'S LAST NAME

MOTHER'S ADDRESS

CITY

STATE COUNTY ZIP CODE

PARENT(S) / GUARDIAN'S PHONE NO.

MEDICAL RECORD NO.

PRIMARY MD LICENSE NO.

BABY'S PRIMARY PHYSICIAN

STREET ADDRESS

CITY/STATE/ZIP

BABY'S FIRST NAME

MOTHER'S FIRST NAME

COLLECTOR ID / INITIAL

SEX ☐ M Male ☐ F Female RACE ☐ 1 White ☐ 2 of African ☐ 4 Asian ☐ 5 Hispanic ☐ 6 Other

BIRTH WEIGHT IN GRAMS PRESENT WEIGHT IN GRAMS

MULTIPLE BIRTH ☐ YES ☐ NO

MASTITE A,B,C ☐ ☐ ☐

LAST TRANSDUCTION DATE TIME

FEEDING ☐ 01 BREAST ☐ 02 LACTOSE ☐ 03 NON-LACTOSE ☐ 04 TPN ☐ 05 NPO

GESTATIONAL AGE WKS.

DEHC LAB USE ONLY

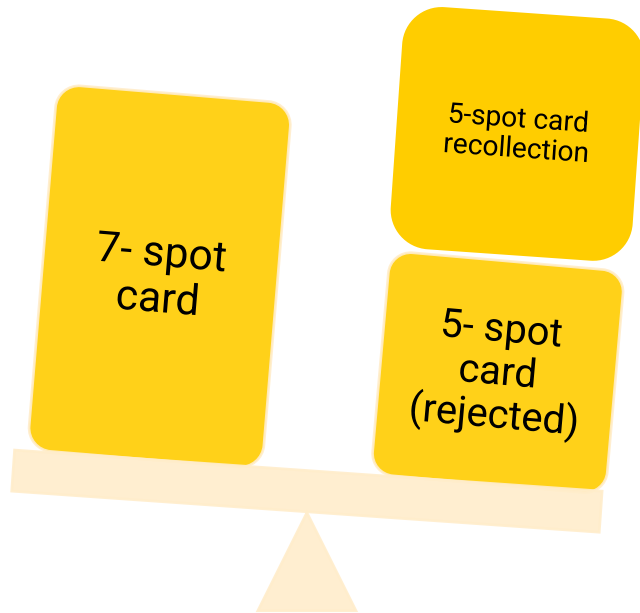
DHEC 1327 (1/2021)

Are all 7 spots required?

- Results that flag as a borderline or presumptive positive testing are be repeated in duplicate.
- Some tests have second and third tier testing that requires us to send a whole bloodspot to an external lab for confirmation.
- Instrument malfunctions or other errors can require retesting .
- Lot qualifications require comparison to previously run samples.
- More disorders are continually being added to the newborn screening panel requiring us to use more blood than ever to complete the testing.



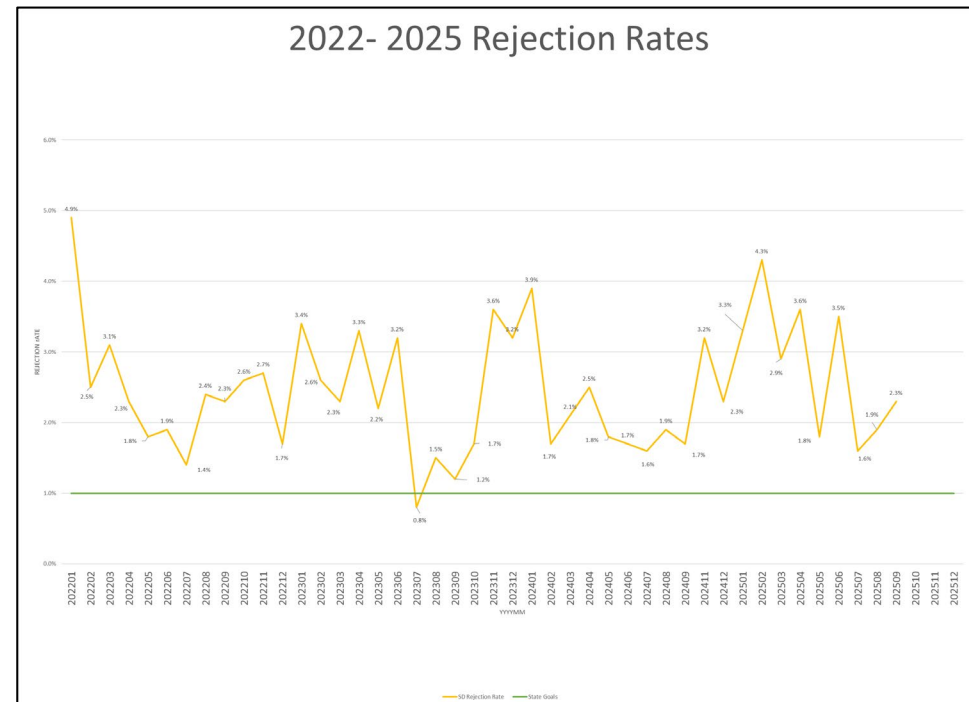
More is Less



- With the use of more blood to complete the testing panel due to the expansion of disorders screened, means there is less room for error in bloodspot quality. Many children must have at least one repeat screen drawn to obtain valid test results.
- A complete valid 7 spot collection card will require less blood than a 5-spot collection card that is deemed unsatisfactory and requires a recollection of another 5-spot card

Poor-Quality Rates

- Poor Quality rates have been elevated for some time due to a number of reasons including:
- Additional need for bloodspots for new disorders
- Collection cards with an increased absorption time
- Pandemic
- Turnover of staffing at facilities
- Turnover of staff at testing lab





Underserved Populations

- South Dakota did not previously collect any information on race or ethnicity on the bloodspot collection cards.
- We cannot adjust for what we do not know.
- We are including race and ethnicity in our new card design to help the newborn screening program review population trends and adjust to better provide equitable care for all infants.

Please Ask the Guardian!

Infant's Race (Check all that apply)				Infant's Ethnicity	
<input type="checkbox"/> White	<input type="checkbox"/> Black	<input type="checkbox"/> Asian	<input type="checkbox"/> American Indian/Alaskan Native	<input type="checkbox"/> Hispanic	
<input type="checkbox"/> Native Hawaiian/Pacific Islander	<input type="checkbox"/> Unknown/Other			<input type="checkbox"/> Non Hispanic	

Babies' gender and ethnicity may not match their physical appearance or that of the guardians. Please ask the guardian what race and ethnicity should be marked.

More than one selection can be made for race.

When will these cards begin shipping?



- Based on current Inventory we anticipate these cards will begin being shipped to locations in Spring of 2026
- Exact date and more details to follow as current inventory of 5 spot cards are depleted.
- **Reminder:** Please try to keep a minimum of 2 months supply of cards at your location.

FAQs

- What if the first puncture site quits bleeding before all 7 spots can be complete?
 - A second puncture can be made on the other side of the heel of the other foot. Do not puncture a site more than once.
- Do preemie babies also need to complete all 7 spots?
 - Always attempt to fill in the card completely as possible. If we have sufficient blood to complete initial testing the screen will not be deemed as poor quality.
- Does the blood spot circle in the perforated section need special treatment?
 - NO. This perforation is for internal lab testing when we have to send for confirmational testing.
- Can blood be put outside of the pre-printed circles?
 - Yes. If you need to put a blood spot outside of the pre-printed circles you may do so. Blood spots should not run into another spot

It's not just a form...It's a baby

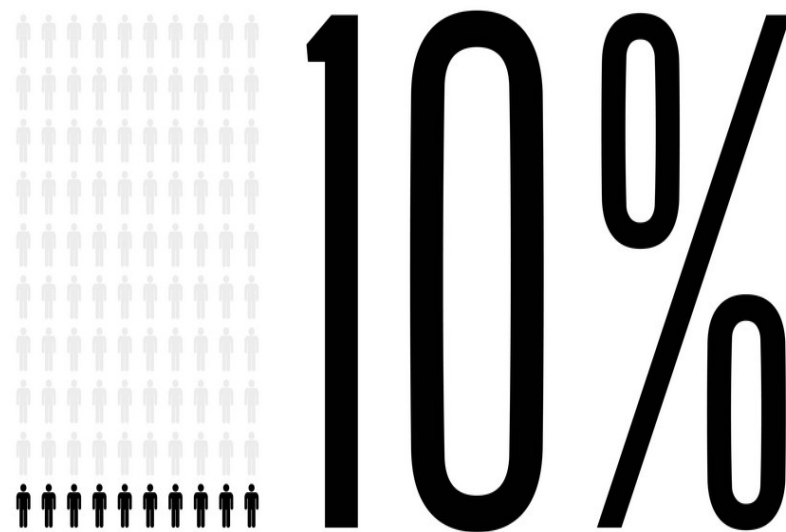
- Filling out the newborn screening form...
 - ✓ Accurately
 - ✓ Completely
 - ✓ LegiblyCould be a matter of life and death
- Inaccurate or missing information may adversely affect screening results and/or the ability to quickly contact the infant's care provider in the event of an abnormal screening result.
- *Any delay may put the child's health at risk.*
- The specimen submitter is legally responsible for the accuracy and completeness of the information on the newborn screening card.



Remember to remove 2nd ply for facility's records.

Impact of Missing or Incorrect Information

- In 2022, 10.2% of all screens submitted to SHL were sent a quality fax requiring further action for at least one of the following reasons:
- Confirmation of collection prior to 24 hours
- Missing or unreadable critical information
- Notification of Unsatisfactory Screen



Missing Information & Quality Faxes Takes Everyone's time



NBS Lab Staff

- **Delay Reporting some methods until all others are completed to allow for faxing and corrections to occur**
- Accession additional repeat screens

Client Services

- Client Service staff send out daily faxes for missing information and unsatisfactory notifications.
- Call any Organization without a valid Fax machine to obtain information
- Monitor inbox and Make Corrections to babies records from returned faxes
- Prepare Unsatisfactory Image files to send to Submitting Organization
- Issue Corrected Reports if corrections are made after results are released.

Submitting Organization

- Receive Fax
- Look Up correct information
- Fax Back Corrected information to NBS program
- Contact Parents of necessary recollection if screen was unsatisfactory
- Collect Repeat Screen if required

Parents

- Bring Baby in for recollection if screen was unsatisfactory

Contact Information

- Data entry questions or corrections:
 - State Hygienic Laboratory at 515-725-1630
- To order forms or collection supplies:
 - State Hygienic Laboratory at 515-725-1630
- Web portal or IT problems:
 - 319-335-4358
 - SHL-WebPortalSupport@uiowa.edu
- Follow-up recommendations or refusals:
 - NBS Follow-up clinical staff at 319-384-5097

State Hygienic Laboratory

→ <https://www.shl.uiowa.edu/screening/index.xml>