

HEARTLAND TRANSFUSION PROJECT

	AR	IA ND SD	KS	MO	NE	OK
AF – Inconclusive if found within 3-4 months of transfusion. Otherwise result is considered to be normal.	✓					
Post Transfusion Valid Hemoglobinopathy Result obtain repeat screen in 120 days			✓			
Post Transfusion Valid Hemoglobinopathy Result obtain repeat screen in 90-120 days						✓
Other Disorders – Not Hemoglobinopathy-repeat screen 4 days after last transfusion			✓			
Transfusion status affects Biotinidase, Galactosemia, Hemoglobinopathy and CF results		✓				
Collect specimen <i>prior</i> to blood transfusion or any type of blood product administration even if infant <24 hours of age NE: Collect specimen when collecting blood for type and cross match		✓			✓	
Collect specimen <i>prior</i> to blood transfusion as early as possible after 24 hours of age or immediately prior to discharge, whichever comes first						✓
Pre-Transfusion specimen collected prior to 24 hours of age collect repeat screen 72 hours after the last transfusion.						
RBC administration collect screen <i>prior</i> to transfusion even if infant <24hours of age with or without TPN; Post Transfusion repeat screen 3-7 days; Collect third repeat screen 30 days post transfusion				✓		
Post RBC Transfusion Collection first screen 24-48 hours; Second screen 10-14 days after transfusion; Third screen 30 days after transfusion; Fourth screen 90 days after transfusion				✓		
Post Transfusion: Collect repeat PKU and Hypothyroidism screen by 7 days of age					✓	

Category II : Repeat Screen Recommendations							
	AR	IA-ND	KS	MO	NE	OK	SD
Post Transfusion Recommendations: Hemoglobinopathy							
120 days conduct an electrophoresis for abnormal Hemoglobin			✓				
90-120 days (3-4 months) if Result 'AF'	✓						
60 days		✓					
90 days				✓			
60-90 days					✓	✓	
Comments: (similarities, differences)							
Post Transfusion Recommendations: Specific Disorders							
60 days Biotinidase, Galactosemia and Cystic Fibrosis		✓					
30 days Galactosemia				✓			
2 days no later than 7 days for CAH, PKU, Galactosemia and MCAD; 14 days for all disorders except Hemo					✓		
Comments: (similarities, differences)							
Post Transfusion Recommendations							
NO screening done: 24-28 hours post transfusion; 10-14 days post transfusion; 90 days post transfusion				✓			
Initial Specimen collected, collect second specimen 72 hours and collect third specimen at 90 days							✓
Comments: (similarities, differences)							
Pre Transfusion Recommendations							
Pre Transfusion Screen done and <24 hours age: 3-7 days; and 30 days				✓			
Pre Transfusion Screen collected before 24 hours of age: collect 72 hours after last transfusion							✓
Comments: (similarities, differences)							

Category III : Result Wording							
	AR	IA-ND	KS	MO	NE	OK	SD
General Comments							
A transfusion prior to collecting the blood spot invalidates all tests			✓				
This child received a blood transfusion, making Hemoglobinopathy studies inaccurate. Please determine the date of the last transfusion and repeat the newborn screen three to four months after the date of the transfusion,	✓						
Red blood cells can interfere with the interpretation of some newborn screening results. Submit another specimen 8 weeks after the last transfusion, unless other test results require immediate recollection and follow-up.		✓					
Transfusion may alter results for some tests. A repeat sample is requested for this newborn.					✓		
Result consistent with transfusion; Out of range, Resubmit filter paper specimen at 4 months of age.						✓	
On the NBS specimen requisition it states "Was Baby transfused prior to specimen collection?" If yes, date of most recent transfusion __/__/__. The laboratory report will comment - Note: Prior transfusions falsely normalize or invalidate newborn screening results. *INTERPRET WITH CAUTION* (Particularly RBC transfusions for Galactosemia.) Recommend repeat GALT testing 90 days after last RBC transfusion. Refer to "State Newborn Metabolic Screening Guidelines."							✓
Comments: (similarities, differences)							
Specific Comments							

<p>Hemoglobin A was found in greater amounts than Hemoglobin F. This may be normal after the newborn period or may occur if a blood transfusion was given, making this test inaccurate. If you determine that this child received a transfusion, repeat the newborn screen three to four months after the date of the transfusion.</p>	✓						
<p>NO RESULT FOR HEMOGLOBINOPATHY: Hemoglobinopathy screening results are non-interpretable due to TRANSFUSION! The blood from the transfusion may mask the presence of an abnormal trait or disease condition. If a pre-transfusion sample has NOT been submitted, PLEASE REPEAT >90 DAYS POST TRANSFUSION.</p> <p>NO RESULTS FOR GALACTOSEMIA: Transferase results are invalid due to possible transfusion. If a pre-transfusion was NOT submitted, repeat the newborn screen 30 days after the last transfusion. It is recommended that a newborn screening specimen be collected prior to transfusion.</p> <p>CF: wording to be determined</p>			✓				
<p>The CAH /17-OH Prog will state: Samples collected within 48 hrs after a transfusion are unsuitable for newborn screening because the transfused blood can mask abnormal test results.</p>							✓
<p>Comments: (similarities, differences)</p>							

Category IV : Follow-up

	AR	IA-ND	KS	MO	NE	OK	SD
Form letter sent to doctor	✓						
By phone and letter to primary care physician.		✓					
has active follow-up in place			✓				
If transfused and show Hb S or C, will be referred to sickle cell centers for follow-up.				✓			
<p>IF after 14 days no response from physician's office, a second letter is sent. If after 14 days no response from physician's office, follow-up coordinator attempts to contact the physician's office via phone. If the physician's office informs the follow-up staff that they are not the patient's physician, the follow-up staff contacts the birthing hospital for another physician of record. If a physician is not known, the follow-up staff will contact the mother by phone and certified letter. Once NNSP receives all the necessary repeat test result(s) the case is closed.</p> <p>PROCEDURE FOR WHEN REPEAT NEWBORN SCREENING SPECIMEN (to follow-up on drawn early CPH, and PKU) IS DRAWN TOO SOON AFTER TRANSFUSION</p> <p>When a repeat specimen is collected prior to 24 hours of age and the infant was transfused prior to obtaining that repeat newborn screening specimen then a letter is sent to the infant's physician and the following is to be done: Repeat at 2 days post transfusion and repeat at 14 days post transfusion.</p>					✓		

<p>A physician is sent a lab mailer, transfusion form, and return envelope 30 days post physician letter, a letter is sent to the parents. Another kit is sent to the parents at 3 – 4 months of age with a 4 month hemoglobin kit. If no response after 90 days from the Hemoglobin kit case is closed, assumed lost. REPEAT SCREEN – only Hemoglobinopathies are run.</p>						✓	
<p>On the NBS specimen requisition it states "Was Baby transfused prior to specimen collection?" If yes, date of most recent transfusion __/__/__. The laboratory report will comment - Note: Prior transfusion falsely normalize or invalidate newborn screening results. *INTERPRET WITH CAUTION* (Particularly RBC transfusions for Galactosemia.) Recomend repeat GALT testing 90 days after last RBC transfusion. Refer to "State Newborn Metabolic Screening Guidelines." The CAH /17-OH Prog will state: Samples collected within 48 hrs after a transfusion are unsuitable for newborn screening because the transfused blood can mask abnormal test results.</p>							✓
<p>Comments: (similarities, differences)</p>							