



Newborn Screening Bulletin 2022-2

August 11, 2022

Packed Red Blood Cell (PRBC) Transfusions

- As you know, the administration of PRBC transfusions prior to collection of the newborn screening sample can interfere with screening for the hemoglobinopathies and galactosemia. If a previous satisfactory sample has not been received for an infant who was transfused, a repeat should be collected 4-6 months after the last PRBC transfusion to complete screening for these diseases.
- When a pre-transfusion sample is collected prior to 24 hours of age, the results are reviewed by the clinical team at NSO to determine whether the infant has been adequately screened for these diseases; otherwise, a 4-6 month post-transfusion repeat is required.
- Historically there has been a statement on the bottom of the newborn screening report for samples where a PRBC transfusion has been indicated. Submitters are notified only for cases where a repeat is required via a letter from NSO, which is sent 6 months after the last documented transfusion if a repeat has not already been received. Some submitters have been routinely sending us requests to find out earlier if a repeat is needed so they can document, track and follow-up to recall the family 4-6 months post last transfusion.

We are pleased to report that we have made the necessary upgrades to our LIS and workflows to be able to include a statement on the newborn screening report that indicates whether or not a transfusion repeat is required. This change will go live on Monday, August 15, 2022.

- New language on newborn screening report if a transfusion is indicated on the requisition and a repeat is required:
Transfusions are known to affect the results of the Hemoglobin and Galactosemia screens. Transfusion repeat sample required - a repeat post transfusion sample is required in 4-6 months.
- New language on newborn screening report if a transfusion is indicated on the requisition and a repeat is NOT required:
Transfusions are known to affect the results of the Hemoglobin and Galactosemia screens. Transfusion repeat sample not required - this infant has been adequately screened. A repeat post transfusion sample is NOT required.
- NSO will continue to send reminder letters to submitters 6 months following the last documented transfusion in instances where a repeat sample has not already been received. We recommend, however, that all submitters implement a system to track cases and arrange for repeat samples in those where a baby required a PRBC transfusion prior to their screening sample being taken.

