



Newborn Screening Sample Collection: Transfusions

What Constitutes a Transfusion?

For the purposes of newborn screening, a transfusion is defined as the **receipt of any blood product containing red blood cells, such as packed red blood cells (PRBCs) or whole blood**. This includes intrauterine fetal transfusions prior to the baby's birth.

- * You can indicate "no" for transfusion status on the newborn screening card if the infant has only received platelets or fresh frozen plasma.

Sample Collection Timing

When possible, it is best to take the newborn screening sample **prior to the transfusion**— even if the infant is <24 hours old.

- * Red blood cell transfusions impact screening results, specifically for hemoglobinopathies and galactosemia— as the donor blood interferes with the screen.

Pre-transfusion sample obtained:

If the **pre-transfusion sample is taken <24 hours of age**, a **second sample is required between 24-48 hours of life**, to ensure sufficient screening for all diseases.

- * Collecting a pre-transfusion sample allows you to adequately screen for hemoglobinopathies and galactosemia; however, other diseases may be missed if the sample is collected too early, i.e. before 24 hours of age.

NSO may request an additional repeat sample 4-6 months after the infant's most recent transfusion, for example, if the initial sample was unsatisfactory.

Pre-transfusion sample NOT obtained:

NSO understands it is not always possible to obtain a sample prior to a transfusion.

In these cases, obtain the newborn screen at **24-48 hours of life**.

A repeat sample will be required **4-6 months** from the infant's most recent transfusion.

As the health care provider, you should advise the parents, guardians, and/or the infants primary care provider of the need for this 4-6 month repeat screen.

Remember:

1. The healthcare provider who submitted the original sample is responsible for ensuring the repeat sample is collected.
2. If the baby is being transferred to a different hospital, communication should occur between the sending and receiving hospitals to ensure screening is not missed and is completed in a timely manner.

Questions? Contact us:

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