

2 REQUESTS FOR PRE TRANSFUSION TESTING

Date Issued: January 2005
Date Revised: February 2009
Review Date: January 2011
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2.8 Pre Transfusion Testing For Neonates
Section 2
Transfusion Medicine Protocols
Child & Adolescent & Women's & Newborn Health Services
Perth Western Australia

2.8 PRE TRANSFUSION TESTING FOR NEONATES (<16 WEEKS OLD)

The development of antibodies in neonates is extremely rare in the first 4 months of life and any antibodies present are usually maternal IgG antibodies that have crossed the placenta before birth.

In view of this, neonatal compatibility testing consists of a Group and Direct Antiglobulin Test (DAT) performed on a peripheral venous sample from the baby and a G&H performed on a maternal sample.

Cord Blood samples are NOT suitable for testing for neonatal compatibility. These samples are drawn before the baby ID band (with baby UMRN) is attached to the baby and they are only labelled with addressograph labels, which does not comply with the handwritten regulations for crossmatch samples. In addition cord samples are often of a poorer quality than peripheral samples.

If the baby's DAT and the maternal antibody screen are negative blood can be issued on demand during the neonatal period without further compatibility testing. If the baby is discharged and readmitted a new Group and DAT sample is required.

If maternal antibodies are detected full compatibility testing using a valid maternal sample is required. The Blood Bank will advise of sample requirements in these cases.

NOTE: In the case of multiple birth, if babies do not have a first name, use DOB **plus** identify on specimen by Twin I, Triplet II, etc.

If a newborn baby is **registered** with a first name during the hospital admission, when the baby details are updated in TOPAS, **the new baby ID band and patient labels must be used** and old labels discarded. In this case, for patients with on-going transfusion needs, a new crossmatch sample should be sent to Transfusion Medicine.