

Methods to reduce blood sampling in paediatric patients

Blood loss from laboratory sampling represents a higher percentage of the blood volume in neonates and can result in the need for transfusion. There is therefore a requirement to reduce sampling to a minimum. The aim of this guidance is to help neonatal intensive care units to achieve this with the following suggestions.

- Identify the minimum volume of blood required for reliable testing – this will require discussion with the laboratory.
- When taking blood samples remove the minimum required for the tests requested.
- Consider –
 - capillary Hb measurement instead of a venous sample. Caution required as this can be up to 1g/dl greater than in a venous sample.
 - non-invasive monitoring e.g. transcutaneous blood gas monitoring (Blanchette 2005).
- Check reticulocyte count weekly for 'well' growing preterm infants to judge their haematological response. This assessment may reduce the need for more frequent Hb testing.

In summary identify "is this blood sample necessary and the minimum volume required or is there an alternative method to assess anaemia".