

Purpose of this procedure:

This procedure describes how to take and label blood samples, where indicated, from mother and cord following birth for transfusion testing in a way that will ensure accurate identification of blood groups and thus correct decision making regarding anti-D treatment. Correct sampling technique is also designed to ensure that any resulting blood component that may be issued for the mother or baby is correct and compatible.

Misidentification of patients at the time of blood sampling or transfusion is the commonest cause of serious transfusion error. Correct identification of patient and sample are of paramount importance in ensuring safe transfusion practice.

The Procedure:

It is recognised that the standard procedure for taking and labelling a transfusion sample ([Blood Transfusion Procedure: Blood samples for pre-transfusion testing](#)) cannot be followed for cord sampling due to the unique nature of this event. There is therefore a greater risk of mislabelling the cord sample.

There are also contributory factors that can increase the chances of mixing up the cord and maternal samples at the point of birth, for example:

- No identification band available for cord sample
- Unable to label the cord sample immediately due to ongoing management of birth
- Mother and baby have same last name and baby may not yet have first name
- Two samples taken at similar times in a shared area, room or bed-space
- Unique identification number not issued yet for baby

The cord sample

Only those staff groups authorised to take and submit cord samples for pre-transfusion testing e.g. doctors and registered midwives trained in venepuncture, and who have completed appropriate Learnbloodtransfusion *Safe transfusion practice* education, should undertake the following procedure:

- The sample tubes must not be pre-labelled. This is a potential source of mix up between the cord and the maternal sample tubes which could result in misidentification of a blood group which could impact on the safety of subsequent transfusion or decisions about anti-D
- The cord sample must be labelled with the baby's identification details as soon as possible after taking the sample and always before the maternal sample is taken. The sample must not have been out of the eyesight of the person who labels the tube. The tube must be labelled by the individual who took the sample: if this individual is unable to do so (e.g. due to being involved with ongoing management of birth) another attending midwife can label the sample but this individual must have witnessed it being taken and not let it out of their eyesight. The following details need to be written on the tube:
 - o Baby's first name (if this is not yet available, 'baby' must be written. If the baby is from a multiple birth, s/he should be identified as Twin 1 or Twin 2 etc.)
 - o Surname
 - o Date of birth
 - o Date of sample
 - o Signature
- As soon as the baby is registered and their unique identification number is available, this must be added to the cord sample tube. All other identification details on the tube must be checked against the full patient identification dataset prior to adding the unique identification number. A cord sample tube from a home birth will be accepted for processing with the home postcode in lieu of the unique identification number
- The cord sample tube must not bear any of the mother's identification details (e.g. do not label as 'baby of ...' or write the mother's unique identification number on the tube)
- The request form to accompany the cord sample tube must be fully completed in line with the standard request form procedure (see [Blood Transfusion Procedure: Requesting a blood component from the transfusion laboratory](#)). It is important to advise the laboratory of the mother's details, via the request form, at the time of sending the sample
- The cord sample tube and request form must be fully completed prior to taking the maternal sample

The maternal sample

The maternal sample should be taken and labelled in accordance with the main sampling procedure: please see [Blood Transfusion Procedure: Blood samples for pre-transfusion testing](#).

Associated materials/references:

[NHS Lothian Blood Transfusion Policy](#)

[NHS Lothian Blood Transfusion Procedure: Blood samples for pre-transfusion testing](#)