

### Purpose of this procedure:

This procedure describes how to take a blood sample for pre-transfusion testing in a way that will ensure that any resulting blood component issued for the patient is correct and compatible.

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

### The Procedure:

The following procedure **MUST** be followed every time a blood sample is taken for pre transfusion compatibility testing:

- The request form should be completed **BEFORE** the blood sample is taken
- The patient must be asked to positively identify themselves by giving their full name (first and last name) and date of birth prior to being bled
- The full name and date of birth provided by the patient must be checked against the details on the request form and, for in-patients and day-case patients, what is on the patient's identification (ID) band
- Identity must not be assumed even for "familiar" patients who are regular attendees or long-standing in-patients
- See [NHS Lothian Blood Transfusion Procedure: Patient identification requirements for transfusion](#) for guidance on how to proceed if a patient is unable to identify themselves

**All in-patients including day case patients must wear a patient ID band or an alternative risk assessed identification device.**

- **The full name and date of birth stated by the patient must EXACTLY MATCH the information on the patient's ID band or equivalent, and the information on the request form.** If there is any doubt, the patient should be asked to spell out their name to the individual taking the blood sample

The patient's blood sample should be drawn into a transfusion sample tube (blue-top Monovette EDTA tube)

- Once blood has been drawn, label the tube *by hand* with the minimum identifiers **whilst still at the patient's side** taking details from patient's ID band:
  - Surname
  - Forename
  - Date of Birth
  - CHI number (or, if the patient does not possess a CHI or is unidentified, UHPI or emergency number)
- It is essential that all patient identification details on the tube are clear and accurate and that patient names are spelled correctly and consistently
- Pre-labelling of tubes is extremely dangerous and must be avoided
- Addressograph labels on the sample tube will **NOT** be accepted – the sample must be labelled by hand at the patient's side immediately after blood is drawn into the sample tube
- The collection of the blood sample from the patient and the subsequent labelling of the sample tube should be performed as one continuous, uninterrupted event at the patient's (bed)side
- The person taking the sample must sign and date the sample tube
- The person taking the sample must state the date and time of sampling on the request form. The transfusion laboratory may have to reject the sample/request if this information cannot be established
- The person taking the sample must be satisfied that the identity of the patient matches the information on the sample tube, and the request form, and (for in-patients and day-case patients) the patient ID band **BEFORE** signing the request form and sending the sample to the transfusion laboratory
- **If the patient is an out-patient (including those attending antenatal and other clinics)** and therefore not wearing an ID band, the patient must be asked to positively identify themselves verbally by stating their first name, surname and date of birth. This information must be checked against their healthcare record and the transfusion request form. The sampler must only have the healthcare record and request form belonging to the patient being sampled with them at the point of taking the sample. The filled sample tube must be hand-labelled **at the patient's side** taking the patient's details directly from their healthcare record
- Always label the sample fully, complete the sampling procedure and send the sample to the laboratory **BEFORE** moving on to take blood from another patient

**If in doubt, discard the sample and bleed the patient again**

**Aim to send an adequate sample, i.e.**

- Adults usually 4-5 ml in a blue-top Monovette 4.5 ml EDTA tube

- Children over 10 kg 4-5 ml in a blue topped EDTA Monovette 4.5 ml tube
- Children under 10 kg 1.2 ml in blue topped paediatric EDTA 1.2 ml tube (if the sample is from an older child with low body weight, a larger sample may be required to perform a crossmatch. Please discuss with laboratory staff if required)
- Pre-transfusion samples should not be taken from the same limb that has an IV infusion running

**If mother and baby samples are required at birth** (e.g. where mother is RhD negative) the cord sample must be labelled prior to taking the mother's sample. This reduces the risk of sample misidentification. Please refer to [Blood Transfusion Procedure: Maternal and cord blood samples at birth](#) for full explanation of cord sampling procedure.

**The hospital transfusion laboratory will reject samples** that do not correctly and clearly show the minimum patient identification data set (surname, first name, date of birth, CHI number), the signature of the individual who has drawn the sample and the date that it was drawn. The patient's sex must be included on the accompanying request form. Samples that are completely unlabelled or show evidence that they have borne details of another patient will be discarded, even if these details have been completely obliterated and overwritten. Sample tubes labelled with addressograph labels will be discarded. Sample tubes or forms contaminated with blood will also be discarded.

**Transfusion blood samples remain valid** for 7 days at WGH, SJH and RIE. However, if the patient has been transfused or pregnant at any time within the last 3 months their sample will only be valid for 72 hours. Contact the transfusion laboratory for advice. Please note that on the RIE request form the section asking whether the patient has been pregnant or transfused within the last 3 months must be completed: if it is left blank the sample expiry will default to 72 hours.

**During a period of TRAK downtime** it will not be possible to generate a new unique identification number for a previously unknown patient or an incapacitated patient with no confirmed identity:

- In the emergency department, the sequential ED unique patient number can be used in lieu of CHI on the transfusion sample and associated request form
- All non-urgent requests must be held until TRAK is available and a CHI number can be generated
- If patient is previously known, ward staff can obtain the patient's unique identifier from the TRAK Contingency application

### **Blood group check requirement**

Before issuing blood components for transfusion to any patient aged over one year, the laboratory will require that a patient's blood group has been confirmed against a previous blood sample taken from the patient on a separate occasion. This policy was introduced in order to comply with national guidelines from the British Society for Haematology (BSH) and recommendations by the Serious Hazards of Transfusion (SHOT) to reduce the risk of transfusing components of the wrong blood group.

An exception to this requirement is made where waiting to test a further sample would impede the delivery of urgent red cells or other components.

For many patients, the laboratory will already have a record of the patient's blood group from a previous sample. The laboratory staff will inform the requesting clinician if an additional sample is required prior to issuing blood components.

**If blood components are required urgently and the transfusion laboratory does not have a current, valid transfusion sample for the patient** then Group O negative (or positive, for appropriate patients) red cells (and/or Group AB FFP and/or Group A platelets) will be issued. A sample for pre-transfusion testing should be sent urgently to the laboratory and, once the test results are available, they will be used for the issue of further blood components.

**If blood components are required urgently and the transfusion laboratory does have a current, valid transfusion sample for the patient** but does not have a record confirming the patient's blood group from a previous sample, then blood components can be issued without waiting for a further sample. This will be at the discretion of the requesting member of staff. However, an additional pre-transfusion blood sample should be sent to the laboratory urgently so that the results are available if further blood components are requested.

### **Associated materials/references:**

[NHS Lothian Blood Transfusion Procedure: Patient identification requirements for transfusion](#)

[NHS Lothian Blood Transfusion Procedure: Requesting a blood component from the transfusion laboratory](#)