# Requesting a blood component from the transfusion laboratory

Blood Transfusion Procedure

NHS Lothian

## Purpose of this procedure:

This procedure outlines the principles and steps in requesting a blood component from the transfusion laboratory.

## Principles

All transfusion requests must be appropriate, accurate and specific.

- A request for a group and screen means that pre-transfusion testing will be performed but no blood will be issued
- A request for blood components means that the sample will be tested and the blood component/s issued for the patient, based on the urgency denoted on the request form
- To convert a group and screen request to a request for blood components contact the transfusion laboratory to see if they have a valid sample

**Routine requests: date, time, number of units and location of transfusion will always be required**. It will usually take between 2-4 hours to provide a compatible component.

**Urgent requests:** blood component required as a priority, contact laboratory to discuss. If a valid sample is already in the laboratory and if the patient is eligible for electronic issue of blood components, components can generally be available within 5 to 20 minutes of a request being made.

**Emergency requests:** requests for emergency transfusion support must include a phone call to the hospital transfusion laboratory advising them of the situation (for Major Haemorrhage Protocol activation phone 2222).

**Special transfusion requirements:** this relates, for example, to patients who may require irradiated components, phenotyped blood or CMV negative components. Such patients include: some haematology patients, pregnant individuals, babies requiring intrauterine transfusion, neonates, infants and patients with certain congenital immunodeficiency states. Patient groups requiring special components and guidance regarding indications are provided in NHS Lothian Blood Transfusion Guideline: Special requirements in blood transfusion

In addition to asking the patient, check the healthcare record for any transfusion history, evidence of previous transfusion reactions, presence of alloantibodies or alerts regarding any special requirements. It may be necessary to progress with transfusion of blood components that may not meet a patient's special requirements in an emergency if a delay in their provision will compromise the patient.

Whether a patient has special transfusion requirements is a clinical decision which is the responsibility of the medical team in charge of the patient's care. It is the responsibility of the practitioner requesting blood components to check the patient's transfusion history and to ensure any special requirements are communicated to the transfusion laboratory on the request form accompanying the pre-transfusion sample. Special requirements must also be indicated on the patient's subsequent transfusion record (written authorisation section) for each relevant component by the authoriser. There is one exception to this requirement:

> **In the haematology department (adults) ONLY**: irradiated blood component requirements are communicated to the transfusion laboratory via a dedicated Special Requirement Request Form – not on the standard transfusion request form. The Transfusion Special Requirement Request Form can be completed by doctors of registrar grade or above and the haematology Advanced Nurse Practitioners. See Haematology Department Blood Transfusion Policy [NHS Lothian Intranet] for detail of how this system works. The Transfusion Special Requirement Request Form can be found here [NHS Lothian Intranet].

**Neonates and infants:** requests for infants less than 4 months old should include the full maternal and baby details i.e. surname, forename(s), date of birth, sex and CHI on the request form to enable the laboratory to link records. Neonates must receive red cells that are ABO compatible with both mother and baby.

**Babies, infants and children:** it is helpful to indicate the patient's weight in the clinical details section of the request form.

**Out of core hours:** From 17:00 the service provided by the laboratory is an emergency service only. Patients who do not have an urgent need for blood should not be cross-matched overnight unless this is unavoidable (e.g. going to theatre first thing in the morning).

## Procedure

A request to the transfusion laboratory for grouping and/or compatibility testing and to request blood components must be made on a blood transfusion request form, containing the information below. Medical staff and, in agreed settings, appropriately trained registered nurses/midwives can request pre-transfusion testing. It is the responsibility of the person completing the request form to fully complete all details required:

- The patient's forename (no abbreviations), surname, date of birth, CHI (Community Health Index) number (or, if the patient does not possess a CHI or is unidentified, UHPI or emergency number) and sex

- Location and clinical details (diagnosis, indication for transfusion). If the patient is to undergo surgery, state the nature, time and date of the operation. If the patient is pregnant this must be communicated via the request form. Any transfusion history, if available, should be included

- Name of the person making the test or component request and the date and time the sample was taken, plus the name and signature of the person taking the sample, if this is a different individual to the requester

- Component/s required, how many and date/time required (not 'as soon as possible')

- An indication of urgency and any special transfusion requirements must be documented (please see here [NHS Lothian Intranet] for different special requirement ordering arrangements for adult patients in the haematology department only)

- Samples taken in the community should specify where and when the patient will attend for transfusion

**All information should be unambiguous and written clearly. An addressograph label can be attached to the request form to provide the patient's identification details. However, the accompanying sample tube must be handwritten.**

A transfusion sample tube must accompany the signed request form. Please ensure the sample tube expiry date is valid before taking the sample.

**ALL** details must be correctly completed on the sample tube and request form. **The details on the blood component request form and the sample tube are the only direct contact between the clinical area and the blood transfusion laboratory. The accuracy and completeness of this information are therefore of vital importance.**

For patient safety the hospital transfusion laboratory will reject request forms that do not correctly and clearly show the minimum patient identification data set (surname, first name, date of birth, CHI number and sex) and requester's name.

**The person who takes the blood sample MUST sign the sample tube. The person who takes the sample MUST ALSO sign the request form even if they are the same person that has completed the request form.**

The sample tube and form **MUST** arrive in the transfusion laboratory together. Incomplete or missing details on the form or the sample tube will result in the sample being rejected. A repeat sample and form will then have to be requested.

Details of all blood components ordered and the clinical/laboratory indications for the transfusion should be recorded in the patient's healthcare record.

The hospital transfusion laboratory should be informed if requested components are no longer required so they can be made available for other patients.

## Requests for platelets, fresh frozen plasma (FFP) and cryoprecipitate

When platelets, FFP or cryoprecipitate are required, it may not be necessary to send a sample to the hospital transfusion laboratory if the patient's blood group is already known.  These components are blood group compatible but are not cross-matched. Requests for these components should be telephoned to the duty haematologist with a description of the relevant clinical or laboratory parameters justifying the issue (some specialist areas within RIE & WGH do not require authorisation by duty haematologist). If in doubt, contact the hospital transfusion laboratory who will redirect your call if appropriate.

There is no requirement to obtain authorisation by the duty haematologist for the request and issue of non-red cell components if these are required during a major haemorrhage event. The duty haematologist can be contacted via switchboard for advice at any time during the management of a major haemorrhage.

## Associated materials/references:

NHS Lothian Blood Transfusion Procedure: Obtaining blood components in an emergency

NHS Lothian Blood Transfusion Procedure: Blood samples for pre-transfusion testing

British Society for Transfusion (BSH) guidance regarding indication for transfusion of all blood components

NICE guidance NG24: Blood Transfusion