# Administration of blood components

Blood Transfusion Procedure

## Purpose of this procedure:

This procedure outlines how blood components are to be administered to patients, with a key focus on the important checks that must be undertaken to ensure:

**RIGHT BLOOD, RIGHT PATIENT, RIGHT TIME**

The complete pre-transfusion checking procedure must be repeated for every component transfused.

The crucial final patient/component check should be conducted with great care: this is the last opportunity to prevent a transfusion error.

## The Procedure:

All patients receiving blood components should be in a clinical area where resuscitation facilities are available. After a blood component has been removed from approved temperature-controlled storage and taken to the patient's (bed)side the following procedures should be strictly adhered to:

- Blood components must be administered by a registered practitioner (nurse; midwife; medical practitioner (including provisionally registered FY1s); operating department practitioner; clinical perfusionist) who has valid and in-date Learnbloodtransfusion (LBT) *Safe Transfusion Practice* training

- Each blood component must be checked by two members of staff, one of which must be registered (see above). Please see reference to agreed exceptions to this requirement detailed in Blood Transfusion Guideline: Transfer of blood between departments and sites. For guidance regarding which staff members can be involved in the pre-administration checking procedure please see Blood Transfusion Guideline: Roles and responsibilities in blood transfusion.

    - The two individuals carrying out the pre-transfusion checking procedure should complete all the checks independently **(double independent checking).** Both individuals must be rigorous in carrying out the procedure - reliance on the other person may lead to errors

All patients receiving blood or blood components must wear an identification (ID) band (or risk assessed alternative identification device), whether an in-patient or a day patient.

**Transfusions at night must only proceed where there is a clear clinical indication and where there are sufficient staff to permit safe transfusion, including all required patient observations. There can be greater risks associated with monitoring transfused patients and managing complications during the night so, if there is no clear clinical indication to transfuse overnight, consideration should be given to deferral of the transfusion to the following day.**

See Blood Transfusion Guidelines: Practical aspects of blood component transfusion for information on administration sets and equipment to be used.

**Use the National Transfusion Record checklist for each component transfused to ensure the following steps are completed in the right order.**

**If the checking process is interrupted, the entire process should restart from the beginning.**

**If any discrepancy is identified during the pre-administration checking procedure, DO NOT PROCEED. Inform the hospital transfusion laboratory immediately.**

- Ensure that there is a valid written blood component authorisation for the correct patient and check if any additional drugs are required (e.g. diuretics) or if the patient has any special transfusion requirements

- Before collecting the component from temperature-controlled storage check baseline observations (temperature, heart rate, blood pressure, respiratory rate). These must be recorded on the patient's NEWS (or agreed alternative) chart and clearly marked as 'baseline'. This baseline measurement must be taken within 60 minutes prior to starting the transfusion

- Check the component pack for signs of leaking, discolouration, clumping of cells etc. If the pack is damaged or the contents appear abnormal DO NOT PROCEED with the transfusion. Return the pack to the transfusion laboratory for investigation and replacement of the component. If a pack is damaged during the preparation process do not proceed or try to repair the pack

- Ask the patient to state their full name and date of birth and check the patient's response matches the details on the patient's ID band. If the patient's ID band cannot be seen by the two checkers DO NOT PROCEED: escalate to a senior member of the clinical team

- **Check all patient identification details on the component label attached to the blood pack against the patient's ID band** (first name, surname, date of birth, CHI (or emergency) number, sex). See Blood Transfusion Procedure: Patient identification requirements for transfusion for agreed CHI exceptions. **This check must be performed at the patient's side immediately before administering the blood component:**

    - Proceed if patient ID details between component label and patient ID band match exactly

    - DO NOT PROCEED if any discrepancies (however minor) and contact the laboratory for advice

- **Check that the donation number** on the component label matches the donation number on the blood component pack: the donation number is the 12 digit 'G' number

- **Check the patient's blood ABO and D groups** on the component label are identical to the blood ABO and D groups on the blood component pack. In general these groups should be identical. Where this is not the case a specific comment from the transfusion laboratory staff regarding the compatibility of the component for the patient will be found on an attached card. If this comment is not found the component should not be transfused until any discrepancy has been clarified with the transfusion laboratory

- If the patient is known to have any **special transfusion requirements** (e.g. irradiated or CMV negative components) the pack labelling should be checked to ensure that these requirements have been met

- **Check the expiry date** that is printed on the blood component pack. Blood or blood components must not be used if they are beyond their expiry date

- Once the two checkers are both satisfied that the component is the right one for the right patient, **the registered practitioner must connect up the transfusion** to the patient and commence the transfusion. Undergraduate students can connect and commence the transfusion under the direct supervision of the competent registered practitioner, provided they have evidence of completion of the intravenous programme and simulated practice within their Higher Education Institution

- Both checkers should agree the rate of transfusion and **ensure that the flow rate is set correctly**. If an infusion device is being used, the rate of flow must be checked by individuals who have completed the relevant infusion device training. Undergraduate students should always work under the direct supervision of a registered practitioner who is competent on infusion devices

- Once transfusion has commenced, **place completed pink traceability sticker** against the written authorisation for the associated component in the patient's transfusion record, ensuring date, time and names of checking staff members are documented on sticker

- Once transfusion has commenced, **detach blue traceability tag**, ensuring this has been completed with date, time, signature and name of member of staff administering component. Then return blue tag to the transfusion laboratory by the agreed method of transport for the clinical area. This act is to confirm that some or the entire unit has been transfused to the patient

- **Ensure patient knows to inform staff if they feel unwell** and has call bell or alternative method for attracting staff attention

## Pre-administration checking considerations when patients are unable to identify themselves or in the event of major incidents

**Unconscious, sedated or confused patients, babies and small children and any other patients unable to communicate verbally** must be identified by the information given on their identification band. This should be verified by another member of staff, relative or carer.

**Where a patient is identified only by an emergency number** (i.e. generated for an unidentifiable / unknown patient) this number must appear on the patient's identification band. The component label attached to the component pack must be checked to ensure that it carries the same number. When there is more than one unknown patient within the emergency department or medical admissions unit, particular attention must be given to ensuring these patients are identified correctly for transfusion purposes.

**In the event of a major incident** all patients will be identified by a unique identification number which must feature on the patient's identification band. This number will appear on the component pack tag and must be used to identify such patients for the duration of the transfusion episode, even if additional identification information subsequently becomes available.

## Associated materials/references:

All NHS Lothian Transfusion Procedures, particularly:

Patient identification requirements for transfusion

Consent for transfusion

Monitoring of patient during and following transfusion