



## Assess patient and obtain consent

Assessment on the need for blood transfusion must always be made carefully, with due consideration given to the patient's condition and laboratory parameters. Reference to available guidelines may help with

the decision. The need for transfusion should be discussed with the patient or his immediate caretaker, and **informed consent** obtained.



## Decide on type and amount of blood product

Doctors prescribing blood products should be familiar with the range of products available at the blood bank and their specific indications. Information sheets for commonly used blood products are available

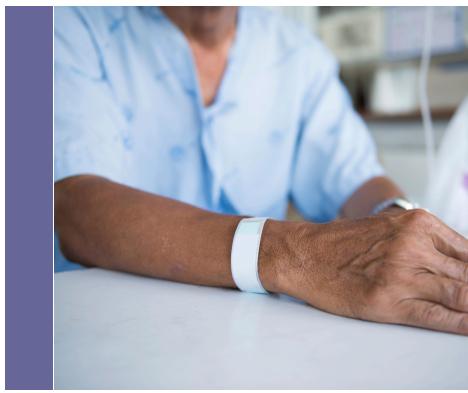
and should be referred to. Always specify any special requirements (e.g. irradiation, leucoreduced). The number of units to be transfused should be the minimum required to achieve a clinical outcome.



## Complete blood transfusion request form

The request form for blood transfusion is an important clinical record and legal document. The **person making the request** should be clearly stated. The **clinical diagnosis, reason for transfusion, type of product requested and number of units required** should be entered. State **how quickly** the blood is required in order that the patient gets 'the right blood at the right time'. Most surgical procedures do not require blood transfusion and

only a Group, screen and hold (GSH) is needed. Refer to the Maximum Surgical Blood Order Schedule (MSBOS) for guidance on how many cross-matched units of blood is recommended for a procedure or if GSH would suffice. Always state the **expected time and date of the procedure**. Incompletely filled request forms can be rejected and may cause delay in testing and transfusion.



## Identify patient

Correct patient identification is of utmost importance in blood transfusion. Incorrectly identifying a patient and obtaining the blood sample from a wrong patient may result in 'wrong blood transfused to the patient' and may have catastrophic consequences from a haemolytic transfusion reaction. Any patient having a sample taken for

pre-transfusion testing should have an **identification wristband**. Before obtaining the sample, ask the patient to state his full name and date of birth and confirm that this matches the identification on the wristband and request form. In a patient who cannot communicate, identification information can be taken from the wristband.



## Obtain blood sample for pre-transfusion testing

Obtain an adequate volume of sample after correctly identifying the patient. In most cases, 3 ml of blood in an EDTA tube would be adequate. **Label the sample tube at the patient's bedside after the blood sample has been taken.** Never pre-label tubes! Verify that the label

matches the identification on the patient's wristband as well as the label on the request form. Document the name of the person taking the sample on the request form together with signature. Transport the sample together with the request form to the transfusion laboratory without delay.



## Pre-transfusion testing in the laboratory

There are several steps in pre-transfusion testing which may vary depending on the patient, type of product requested, urgency and results of testing. Due to the variable process, a definite turn around time cannot be specified. In most cases, a minimum of ABO and RhD grouping with antibody screening would be performed. For routine testing, this may take 2 to 3 hours depending on laboratory test workload. If an

antibody screen is found positive, additional time and sample would be required for antibody identification. The time taken to resolve the antibody will depend on the complexity of results. It is important that the degree of urgency for blood transfusion is communicated effectively to the laboratory so that an informed decision can be made on how best to supply suitable blood for the patient within the 'right time'.



## Collect and transport blood products

Authorised persons should collect blood from the transfusion laboratory. A blood collection form should always be submitted when collecting. Blood products require care and lose their efficacy if

handled incorrectly. Refer to product information sheet for guidance on how they are to be handled. All blood products should be transported promptly in approved blood transport containers.



## Prepare the patient for transfusion

Patients planned for a blood transfusion should be placed in a 'non-isolated area' to facilitate monitoring and quick response if there was an adverse reaction. **Non-urgent transfusions should always be in-progress during normal working hours** when staffing is

adequate. A suitably sized freely flowing venous access device should have been inserted into the patient before collecting the blood from the transfusion laboratory. This is to minimize as much as possible the time the product is 'out of controlled storage'.



## Check identity, inspect blood pack and administer

The administering of blood is the last of the link to the get the 'right blood to the right patient'. It is essential that the checks as on the right be performed at the patient's bedside before commencing the transfusion. If any discrepancies are noted, the unit must not be transfused and the transfusion laboratory contacted immediately.

Advice on administration of blood products can be obtained from the respective information sheet.

- ⊕ Are the patient identification details identical on the patient's wristband, compatibility label on the blood pack and the blood compatibility form provided by the transfusion laboratory?
- ⊕ Do these details match what the patient says (if able to communicate) when asked for full name and date of birth?
- ⊕ Is the expiry date printed on the blood pack still valid?
- ⊕ Does the pack have any unusual discolouration or clots?
- ⊕ Does the pack meet specified requirements for the patient e.g. irradiated, leucoreduced?



## Monitor patient

Blood transfusions are associated with a variety of adverse effects that can manifest immediately, during the transfusion or be delayed until after the transfusion is complete. Patients should be monitored carefully as per recommendations. Advice on monitoring intervals is available from the respective product information sheets.

Those administering blood transfusion should always be vigilant for signs and symptoms that portend a transfusion reaction. Mild fever and urticaria are common adverse reactions that can be managed by

slowing the infusion and treating with antipyretics or antihistamines. Other symptoms such as respiratory distress, pain at the transfusion site, loin pain, backache, high fever, hypotension and severe urticaria could be warnings of a serious transfusion reaction. If a severe reaction is suspected, stop the transfusion; keep the venous access line open with saline and call for medical help. Inform the transfusion laboratory immediately. Information on recognition and initial management of transfusion reactions are available in a separate sheet.



## Document and check response

All steps in the transfusion process should be documented clearly in the patient's clinical and nursing notes. The consequences of blood transfusion such as transfusion errors and transfusion-transmitted infections may not become apparent until several months later. A clearly recorded process greatly facilitates

investigations and quality-improvement processes.

Patients should also be monitored for effectiveness of the transfusion. Post transfusion blood counts would be advised to monitor response to a blood transfusion.