

THE COLLECTION OF BLOOD COMPONENTS



Name of Candidate: _____
Job Title: _____
Name of Supervisor: _____
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Introduction

In November 2006 the National Patient Safety Agency (NPSA) released Safer Practice Notice 14. This document charges all NHS and independent sector healthcare organisations “to implement an action plan for competency-based training and assessment for all staff involved in blood transfusions”. In addition to passing the competencies, practitioners need to be able to prove that they have undertaken some formal training in handling blood and transfusing blood products.

This workbook has been designed to guide you through the relevant information to enable you not only to pass your blood transfusion competencies, but also to have a more in-depth understanding as to the rationale behind these competencies. It is vital then that you undertake your own research in order to be able to complete the workbook.

All workbooks will be marked; the results will be fed back and will also be held centrally. Candidates will not be eligible to undertake the competency assessments until the workbook has been completed and a pass rate of 90% or more achieved. Candidates who fail to achieve 90% will be shown where they have gone wrong, and will have to re-submit the workbook.

Collecting the blood component is a critical step in the blood transfusion process. Collecting the wrong component greatly increases the risk of a patient receiving an incorrect transfusion. Errors in collection may occur because:

- Patient ID check is not carried out properly
- Elements of the minimum dataset are missing
- The person collecting is unfamiliar with the blood component itself.

The Blood Safety and Quality Regulations 2005

The regulations set standards for quality and safety for the collection, testing, processing, storage, and distribution of blood components. They represent a more rigorous and formal approach to blood transfusion safety than any previous initiatives. It must be remembered that these regulations are law and there are strict penalties for failure to observe them.

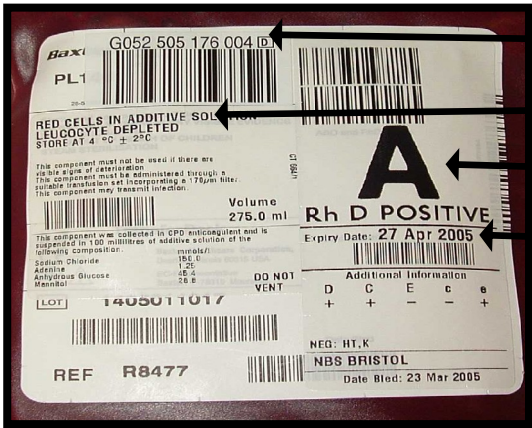
If you collect blood components you must have documented evidence of up-to-date training and competency assessment.

1) Blood Components

One source of error in blood collection stems from a lack of knowledge of the various blood components available. You must be familiar with all blood components.

Each individual component will have 2 labels attached to it, one by the National Blood Service (NBS) containing vital information about the component, the other applied by your Transfusion Laboratory containing patient and component information.

NBS Label on a Unit of Red Cells



Donor Number

Component type

Blood Group

Expiry Date

Pictures of Common Blood Components

Red Cells



Platelets



Fresh Frozen Plasma



Q.1a. List any other blood products you may be asked to collect from the blood transfusion laboratory.

A.

(2)

2) Patient ID Checks

Documentation containing the patient minimum dataset should be obtained from the clinical area. This is first name, last name, date of birth (DOB) and unique patient identification number. The component for collection should also be included (i.e. red cells, platelets or FFP). These details must be complete **before** collection, for example on a collection slip or prescription chart.

Q.2a. *What information is it essential to take to blood bank to ensure collection of the correct blood component for the correct patient?*

A.

(5)

Q.2b. *What would you do if you were asked to collect blood without patient identification?*

A.

(1)

Q.2c. *Specify the collection documentation that is routinely used within your Trust.*

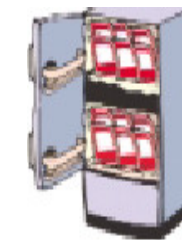
A.

(1)

3) Removal of Components from Storage

For routine transfusions only 1 unit of red cells should be collected at a time. For emergency situations several units may be required and must be transported safely (see section below regarding appropriate transportation.)

Once the blood component has been selected from appropriate storage, the patient minimum dataset on the collection documentation should be matched to the label on the blood component for:



- First name
- Surname
- DOB
- Patient identification number

Check the condition of the pack including expiry date (time of thawing if appropriate), signs of leaking, discoloration or clumps.

After removing the blood component ensure that the storage container (i.e. blood fridge, cool box, or platelet incubator) is securely shut.

Record the removal of the component by writing the date and time of removal on the blood register beside the correct patient and donor number of the component. The person collecting the component must also sign and print their name.

It is vital that your writing is clear and easy to read.

The time and date of removal should also be entered onto the collection slip (or equivalent used within your Trust).

Q.3a. *What would you do if you were unable to find the blood you were sent to collect in the issue fridge?*

A.

(2)

Q.3b. *List 2 differences between the storage of red cells and platelets.*

A.

(2)

4) Removal of Components from Storage Using Electronic Tracking Devices

These will usually require the use of barcode technology related to the unique Patient Identification Number. It is essential that the patient minimum dataset be still used along with the required barcode. The type of component for collection should also be stated.



The person collecting the component should use their personal ID and never that of others.

Once the blood component has been selected, it should be scanned out appropriately.

5) Transfer of Blood Components to Satellite Fridges

Q.5. *According to your Trust policy how are blood components transferred to satellite fridges and how is this transfer documented?*

A.

(3)

6) Transportation to the Clinical Area

Blood components should be delivered to the clinical area speedily and efficiently; the patient is at increased risk when transfusion is delayed.

They should not be out of temperature-controlled storage for longer than 30 minutes without the transfusion being commenced and the units cannot be accepted back into stock after this time.

The blood component should never be left unattended. Ensure that the blood component is actually handed to a member of staff who is designated to administer the transfusion.

Q.6a. *Why should blood components not be stored on the ward?*

A.

(1)

Q.6b. *When delivering blood components to your clinical area it is recommended that they should be concealed from hospital visitors, why is this?*

A.

(1)

Q.6c. *In what circumstances would you leave a blood component in an unattended area?*

A.

(1)

7) Return of Blood Components

If there is likely to be a delay in starting the transfusion then the blood component should be returned to the blood fridge within 30 minutes.

The time and date of return should be entered on the blood fridge register beside the removal entry. It is good practice to print name and designation as well as signature.

If the component is returned after 30 minutes out of controlled temperature storage, it should be handed to a member of laboratory staff who will record this and discard the unit.

Q.7. *Is the procedure for returning units to be discarded “out of hours” the same as it is during the day? If it is not the same please explain the difference.*

A.

(2)

8) Bulk Transportation to Clinical Situations



When more than 1 unit is to be transported it should be carried within controlled temperature storage such as validated transportation boxes intended for the purpose.

When transporting red cells it is important to ensure that cool packs are used and **NOT** ice packs as these will damage the units. The cool packs should fill the dead space both above and below the units to ensure an even temperature.

Platelets should never be cooled.

Q.8. *How long can red cells be safely stored within the transportation boxes used in your Trust?*

A.

(1)

A record should be made of the date and time of packing the boxes so that unused units can be returned to blood bank within the timescale specified within your Trust.

9) Collection of Emergency O Negative or Flying Squad Units



In an emergency when the patient's blood group is unknown, only O Negative red cell units can be transfused. These units are always available should they be required. An example of when they may be needed would be a patient arriving in the A&E department after a road traffic accident, who is bleeding and unconscious. In these situations no formal patient ID documentation is required. The transfusion laboratory should be informed immediately of the destination of the units and should advise the clinical area of a need for a transfusion sample.

Q.9. Describe how and when you would collect emergency O neg units.
A. <div>(2)</div>

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