Blood Collection and Transfer to Satellite Fridges

Department / Service:	Pathology	
Originator	Gill Godding	Lead Transfusion Practitioner
Accountable Director:	Suneil Kapadia	Chief Medical Officer
Approved by:	Clinical Governance Group	
Date of approval:	4th September 2018	
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Target Organisation(s)	Worcestershire Acute Hospitals NHS Trust	
Target Departments	All	
Target staff categories	All	

Key amendments to this policy

Date	Amendment	Approved by:
June 2018	Addition of instructions on packing a cool box for transportation	Gill Godding
July 2020	Document extended for six months whilst review and approval process takes places	Gill Godding

This document details the process of blood, blood component and product collection, transfer and return.

The process must be adhered to in order to maintain the integrity of the units and maintain compliance with the Blood Safety & Quality Regulations 2005.

Contents Page

Introduction

Before collecting blood components from the blood bank, ensure the pre-transfusion check list on the transfusion documentation WR2151 has been correctly completed. Only one unit should be collected at a time unless rapid transfusion of large quantities is required (e.g. major haemorrhage).

Errors in collection are a frequent cause of "Never event – incompatible blood component transfused."

All staff responsible for collecting blood from the transfusion laboratory or satellite refrigerators must be trained and competency assessed according to local policies. Training is available from the Transfusion Practitioners.

Staff collecting blood must carry a blood collection slip, which contains the minimum patient identifiers. This must be checked against the details on the laboratory-generated label attached to the blood component pack.

The Blood Safety and Quality Regulations (BSQR) require that the time a component is out of a controlled temperature environment is recorded and 'cold chain' data must be kept for 15 years. Red cells that have been out of controlled refrigeration for more than 30 minutes must not be reissued for transfusion.

Arranging Collection

Check on ICE Order-coms to see if the blood/ blood component is ready for collection.

Blood collection;

- Worcester Royal Hospital contact helpdesk and request blood collection using the prescription to provide patient details.
- Alexandra Hospital Redditch either contact helpdesk and request blood collection using the prescription to provide patient details or contact the blood porter via bleep 0208
- Kidderminster Treatment Centre contact porter via 3530
- Community Hospitals blood collection is carried out by trained nursing staff

All staff collecting and transporting blood by car or taxi must have undertaken GDP (Good Distribution Practice) training. This training is available on request in the transfusion laboratories.

Where to collect blood/ components/ products

	Worcester	**Redditch**	**Kidderminster**	**Community**
Red Cells	Blood issue room Fridge	Issue Fridge	Issue Fridge	Satellite fridge or cool box
FFP/Octoplas	Issue room Fridge	Issue Fridge	Issue Fridge	Cool box
Cryoprecipitate	Blood issue room bench	Collection bench	N/A	N/A
Platelets	Issue room agitator	Agitator	Cool box	Cool box

Albumin	Issue Cupboard	Collection bench	Issue fridge	N/A
Anti-D	Issue Fridge	Issue Fridge	Issue Fridge	N/A
Beriplex & Factors	Blood issue room fridge or bench	Collection bench	Issue fridge	N/A

Unit checks at collection

Using the collection slip, locate the blood, blood component or product for the identified patient.

- Check compatibility label matches all details on the collection slip (first name, surname, date of birth and NHS number) If these do not match alert a member of the laboratory staff. DO NOT TAKE UNITS.
- Sign collection slip and place in tray on the bench next to the register.
- Complete the collection register. The following details are compulsory:

    - Date
    - Surname
    - First name
    - NHS Number
    - Clinical area
    - Donation number/ Batch number
    - Component/product type
    - Signature
    - Time and date, ensuring that you take the time from the clock on the wall.

Red Cells

Collection of single units of red cells

- Single units are transported within the acute trust in a red bag found on the bench
- Complete patient details on red bag including collection date and time
- Take unit straight to clinical area without delay and give to the trained nurse looking after the patient

Collection of Multiple units of red cells within the hospital

- Select multiple units from the issue fridge, checking the patient details against the collection slip against every unit
- Take the checked units to the laboratory to pack the cool box and complete the paperwork
- Multiple units of red cells should be transported in a cool box
- Complete transit form LF-U-TRA Internal Blood Transit with details of patient, date and time, and place in the front pocket of the box.
- Pack the box as trained
- Seal box
- Take box to clinical area and give to the trained member of staff that ordered the blood. The box should not be opened at this point. The clinician should sign that they are taking responsibility for the box and its contents.
- The person delivering is then free to leave

The red cells can remain in the box for 4 hours providing that the box is not opened. The laboratory will monitor this time and alert the clinical area 30 minutes before the 4 hours is reached.

Collection of multiple units of red cells for transfer to satellite hospitals

Give the blood collection slip to a member of the laboratory staff and ask them for the units. They will pack the cool box and complete the LF-U- TRA Blood in Transit Community Hospitals Form. The cool box and the form should be transported directly to the community hospital.

Transfer of blood with the patient to other hospitals

This must be avoided if at all possible.

Blood can only be given “in transit” when the patient is accompanied by a transfusion trained registered practitioner.

Inform the transfusion laboratory that you wish to transfer blood with the patient. The laboratory will pack the cool box and complete the LF-U- TRA Inter Hospital Blood Component / Product Transfer Form. Take the cool box and the form directly to the patient.

Do not open the cool box until the patient is ready to be transfused.

On arrival at the other hospital, the cool box should be taken to the transfusion laboratory unless blood is being given or required in theatre

Emergency O negative Red Cells

Location

Emergency O negative units are located in the following areas:

· Stock fridge, WRH Blood Bank
· Stock fridge AHR Blood bank
· Issue fridge, Kidderminster site pathology laboratory (KTC theatres from August 2018)
· Evesham blood fridge
· South bank blood fridge
· Dolan park blood fridge

Collection of emergency O negative units

If emergency O negative red cells are required then the porter should attend blood bank and request them directly from the laboratory staff

Emergency O negative red cells should be transported in the same way as multiple red cells units.

As the blood is not cross matched there are no patient details on the compatibility labels. The details to be entered on the transit form LF-U-TRA Internal Blood Transit are entered using the collection slip.

Ensure traceability slips are accurately completed to allow correct allocation of units to patients.

Fresh Frozen Plasma (FFP)

FFP needs to be defrosted prior to being placed in the issue fridge for collection. Once defrosted, this component must be used within 5 days

Follow the instructions for red cell removal as above. Multiple units of FFP can be carried in a red transportation bag in an emergency or if not urgent then must be transported in a cool box.

FFP can be placed in the same box as red cells proving it is at the same temperature. If the FFP has only just been defrosted and is still warm, put this in a separate cool box with cool packs from the issue fridge.

Octoplas (Solvent detergent plasma)

Octoplas should be transported in the same manner as FFP.

Octoplas requires defrosting prior to use. Once defrosted this must be used within 24 hours.

Follow the instructions for red cell and FFP removal as above. Multiple units of Octoplas can be carried in a red transportation bag in an emergency or if not urgent then must be transported in a cool box.

Cryoprecipitate

Cryoprecipitate needs to be defrosted before being placed on the bench by the register in the issue areas for collection. Once defrosted, this component must be used within 4 hours.

Complete the unit checks and collection register as for red cells.

All units are transported in a red transportation bag found on the bench.
DO NOT PUT CRYOPRECIPTATE IN A COOL BOX OR FRIDGE.

Complete patient details on the red bag including collection date and time. Take unit straight to clinical area without delay

Platelets

Platelets must NOT be placed in a fridge or cool box with cold cool packs.

- Issued units are listed by patient, on the notice on the front of the device.
- Complete the unit checks and collection register as for red cells.
- Remove patients name from the notice on the front of the device.
- Single units are transported in a red transportation bag found on the bench. Complete patient details on red bag including collection date and time
- Take unit straight to clinical area without delay and give to the nurse looking after the patient

External transfer of platelets

Give the blood collection slip to a member of the laboratory staff and ask them for the unit. They will pack the transportation box and complete the LF-U- TRA Blood in Transit Community Hospitals Form. Take the cool box and the form directly to the community hospital.

Blood Products

All blood products are issued on a named patient basis. The collection of blood products follows the same checking and recording process as that of red cells.
All blood products (apart from Anti-D) are transported in a red transportation bag.

Internal Clinical Area/Ward Receipt

The blood, blood component, blood products should be handed to a trained nurse/doctor only.

For individual units the nurse/doctor should check that the correct unit has been collected. The nurse/doctor should then sign the transportation bag and the person delivering the unit is then free to leave.

If delivering a cool box, hand to a trained member of staff, the member of staff should sign the transportation form LF-U-TRA Internal Blood Transit but not attempt to open the box as this would compromise the cold chain.

Satellite Hospital Receipt

The driver will hand the box to a trained member of staff. The trained member will sign the LF-U- TRA Blood in Transit Community Hospitals Transfer form or LF-U-TRA O Negative Transit form.

Platelets must be kept in the box until they are ready to be transfused.

For FFP, Octoplas and Red cells the box is unpacked and contents placed in the satellite fridge. Where there is no satellite fridge the FFP or Octoplas and Red cells must remain in the box until they are ready to transfuse. This must not exceed 4 hours.

When the blood components are placed in the satellite fridge the form is then placed in the documentation folder.

Blood, component or product return from clinical area

Internal single unit return

Return the unit in the transportation bag to the laboratory, hand this to a member of the laboratory staff. If the laboratory staff cannot receive the unit immediately then locate the unit details in the register and document the time and date returned in the end column. Place the unit still inside the transport bag into the appropriate storage device. Ensuring the BMS is aware of your actions

Internal Cool Box Return

If the units in the box are to be returned to the laboratory the box MUST be handed to a member of the laboratory to decide if the cold chain is compromised. The internal blood transit form must be given to the laboratory staff to complete. They are responsible for unpacking the box and returning the units to appropriate storage locations.

If the form is incomplete and the cold chain cannot be established, the units will require disposal and clinical areas will be charged.

Satellite Returns

O negative units

The laboratory will telephone the satellite site to request return the O Rh D negative units. The responsible person must complete the “dispatched from” box on the LF-UTRA Emergency O negative transit form, double checking the unit details. The O Rh D Negative units are packed into the transportation box as specified below. Place the form on top the polystyrene box under the fabric cover. Seal the box as described, attaching the Pink Blood return notice.

Units issued to patients

The responsible person will check the fridge for any units no longer required. Follow the O Rh D negative unit return as above

Quarantine Units

In the event of fridge failure or unit recall the laboratory may ask the responsible person to quarantine units in the satellite fridge. The responsible person must locate the units and arrange for their immediate return to the laboratory.
When completing the transfer form, please indicate that these units are quarantined.

Packing a cool box for blood

Only boxes supplied by the transfusion laboratories at Worcestershire Acute Hospitals NHS should be used.

Packing a cold box for blood/plasma

Up to 6 units of Red cells or Plasma can be transported in a cold box.
If both Red cells and Plasma are required, use 1 box for each.
The boxes used within the trust are UBP 130 and have been validated for temporary 4 hour storage.
The cold packs should be taken from an area of the fridge where it has been stored for at least 24 hours.

- Place a cool pack on the bottom of the box and then around the sides- picture 1
- Place the blood units in the centre.
- Place more cool packs on top of the units to fill the remaining space- picture 2
- Place the polystyrene lid on
- Put the transit form on top
- Seal the box with a cable tie, attaching the blood in transit notice at the same

Picture 1

Picture 2

Packing a cold box for platelets

Up to 2 units of platelets can be transferred in a cool box. ROOM TEMPERATURE cool packs must be used.

· Place 2 layers of ROOM TEMPERATURE cool pack on the bottom of the box - picture 3
· Place the platelets in the centre.
· Place 1 more ROOM TEMPERATURE cool pack on top of the units.
· Place the polystyrene lid on
· Put the transit form on top
· Seal the box with a cable tie, attaching the blood in transit notice at the same time

Picture 3

MONITORING AND COMPLIANCE				
This section should identify how the Trusts plan to monitor compliance with and the effectiveness of these documents. It should include auditable standards and/or key performance indicators (KPIs) and details on the methods for monitoring compliance				
What	**How**	**Who**	**Where**	**When**
These are the 'key' parts of the process that we are relying on to manage risk.	*What are we going to do to make sure the key parts of the process we have identified are being followed?*	*Who is responsible for the check?*	*Who will receive the monitoring results?*	*Set achievable frequencies.*
The key parts of the transfusion processes are: • The decision to transfuse • Patient information and consent • Appropriate prescribing of blood • The request for transfusion • Collection and delivery of blood components • The administration of blood • Monitoring the patient throughout the process • Completion and documentation of the event • Management of transfusion reactions	An Audit will be completed to establish if the key parts of the process are being followed	Transfusion practitioners	Trust Transfusion committee	yearly

CONSULTATION	
This Treatment pathway has been circulated to the following individuals for consultation	
Name	**Designation**
Dr Thomas Skibbe	Consultant Haematologist
Dr Alyson McClung	Consultant physician
Dr Nick Turley	Consultant A&E
Dr Shiju Mathew	Consultant anesthetist
Dr Baylon Kamalarajan	Consultant paediatrician
Mr Steve Goodyear	Consultant surgeon - vascular
Catherine Hilman-Cooper	Consultant Obstetrics
Manon Van Setters	Consultant gynaecologist
Jane Brown	Clinical Governance facilitator
Cathy Lim	National blood service liaison
Rebecca Thompson	Community IV therapy lead
Camran Khan	Transfusion Laboratory manager
Juliette Stone	Senior Sister Theatres
Debra Clinton	Assistant Transfusion practitioner
Jon Dickens	Charge Hand A&E
This Treatment pathway has been circulated to the chair(s) of the following committee's / groups;	
Trust Transfusion Committee	
Safe Patient group	

IMPLEMENTATION
Plan for implementation
How are you going to implement and ensure all relevant staff are aware of this pathway?
The individual members of the transfusion committee will be responsible for informing their relevant clinical directorate
The updated pathway will be presented at the link nurse day. The link nurses will cascade the information to the ward teams

DISSEMINATION
A link of the blood transfusion treatment pathway will be forward to all matrons, and ward managers once the pathway has been ratified

TRAINING AND AWARENESS
This section should refer to training as identified in the Trusts Training Needs Analysis Appendix A of the Trusts Mandatory Training Policy
All staff involved in the transfusion process should be trained and competent in the process they are taking part in. The training is described in the Trusts Training Needs Analysis Appendix A of the Trusts Mandatory Training Policy

SUPPORTING DOCUMENT ONE – EQUALITY IMPACT ASSESSMENT TOOL		
To be completed by the Treatment pathway owner and submitted to the appropriate committee for consideration and approval.		
		Yes/No
1.	Does the treatment pathway affect one group less or more favourably than another on the basis of:	**no**
	Race	**no**
	Ethnic origins (including gypsies and travellers)	**no**
	Nationality	**no**
	Gender	**no**
	Culture	**no**
	Religion or belief	**no**
	Sexual Orientation	**no**
	Age	**no**
2.	Is there any evidence that some groups are affected differently?	**no**
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	**no**
4.	Is the impact of the policy/guidance likely to be negative? If so can the impact be avoided?	**no**
5.	What alternatives are there to achieving the policy/guidance without the impact?	**no**
6.	Can we reduce the impact by taking different action?	**no**
7.	Other comments	**none**

If you have identified a potential discriminatory impact of this key document, please refer it to Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Human Resources.

SUPPORTING DOCUMENT TWO – FINANCIAL IMPACT ASSESSMENT		
To be completed by the Treatment pathway owner and submitted to the appropriate committee for consideration and approval.		
		Yes/No
1.	Does the implementation of this document require any additional Capital resources	**no**
2.	Does the implementation of this document require additional revenue	**no**
3.	Does the implementation of this document require additional manpower	**no**
4.	Does the implementation of this document release any manpower costs through a change in practice	**no**
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	**no**
6.	Other comments	**none**

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval